1. **INTRODUCTION**

**Background**

1.1 The review of the 2009 Hertfordshire Infrastructure and Investment Strategy (HIIS) has been jointly commissioned by the Hertfordshire Infrastructure Planning Partnership (HIPP) and the Hertfordshire Local Enterprise Partnership (Herts LEP) in response to a number of changes relating to infrastructure planning and delivery that have come about since the original report’s publication.

1.2 As the LEP has developed its key activities, it has asked a number of questions about whether or not it has a role in the planning and delivery of strategic infrastructure.

1.3 A clearer picture of the LEP’s likely role in the planning and delivery of infrastructure in Hertfordshire emerged through Phase 1 the Growing Places Fund (GPF) programme, when the LEP was allocated approximately £11m to invest in enabling infrastructure across the county. Supported by the HIPP, the LEP has now successfully allocated Phase 1 funding to a number of key infrastructure projects.

1.4 Although likely to be successful, the GPF process revealed a number of underlying weaknesses in relation to Hertfordshire’s ability to respond to emerging funding opportunities. There were also concerns that although Hertfordshire’s agencies have a fair understanding of infrastructure requirements, there is a lack of an overall strategy for establishing infrastructure priorities, and no overall ‘key player’ or partnership to take the lead on infrastructure delivery within the county.

1.5 This refresh revisits the original HIIS undertaken in 2009 and is the first step towards exploring future opportunities for co-ordinating the delivery of infrastructure within Hertfordshire.

**The Review of HIIS**

1.6 The refresh is a quick and focused review of the 2009 HIIS. Given the rapidly changing environment in which infrastructure planning and delivery is currently taking place, it will remain a working document to reflect any future changes in the way in which infrastructure is provided at both the local, sub-regional and national scale for some time to come.

1.7 Recognising both the localism agenda and the progress made in many respects of infrastructure planning at the local level since the HIIS was undertaken - as well as the potential role of the LEP in bringing forward more strategic infrastructure proposals, and to help address the concerns about the lack of a co-ordinated approach to infrastructure planning and delivery in Hertfordshire - the refresh focuses primarily on the issue of strategic infrastructure.

1.8 There is no established or agreed definition of what is meant by ‘strategic infrastructure’. However, this review makes a first attempt to reassess the basic definitions of ‘strategic’ and ‘local’ identified in the original HIIS in order to take forward proposals for strategic infrastructure planning in Hertfordshire.

1.9 The review looks at the need to take forward the conclusions of the original HIIS to reflect recent changes in infrastructure planning; to explore, at a high level, the changes in requirements across a number of infrastructure types; to outline new funding opportunities; and to seek to define the relationship between strategic and local infrastructure and potential management issues associated with future infrastructure delivery in Hertfordshire. It does not revisit historic infrastructure needs, developer contributions (including the impact of the new Community Infrastructure Levy) or viability as these were either not considered to have changed significantly since the HIIS was undertaken, or are being looked at in other work streams.
I. INTRODUCTION

Table 1: Areas of HIIS that have been reviewed

<table>
<thead>
<tr>
<th>HIIS key area of work</th>
<th>Reviewed?</th>
<th>Reason for decision on whether or not to review</th>
</tr>
</thead>
</table>
| 1. Historic infrastructure needs  
(the infrastructure deficit) | No        | HIIS gave us detailed information on the historic deficit and there is no real need to revisit it               |
| 2. Defining future infrastructure needs            | Partial only | HIIS provided a mass of information, most of which is either current or being developed further in any case. Any review should only focus on how this might help in developing a schedule of strategic infrastructure requirements, anything prompted by the new agendas, and an examination of the link between growth and infrastructure need |
| 3. The link between growth and infrastructure need | Yes       | This is a key area where HIIS failed to make much of an impression. Whilst information on where growth is located remains patchy, this is an area that needs further exploration |
| 4. The cost of infrastructure need                 | Partial only | As noted in 2 above, HIIS remains sound on a number of issues and there is only a limited need to revisit this |
| 5. Managing infrastructure planning and delivery   | Yes       | This is a critical area where the debate has moved on considerably since HIIS was published: it should be the central element of any review |
| 6. The relationship between strategic and local infrastructure need | Yes | Comments as for 5 above: this is an area where it should now be possible to throw much more light on the subject than in 2009 |
| 7. The importance of developer receipts (s106/CIL) | No        | District Councils are already looking at this as part of their CIL work and in many ways the debate has moved on in different directions |
| 8. Engaging with infrastructure providers          | Partial only | There is already a good level of engagement of infrastructure providers. However as part of this review and the work on strategic infrastructure provision there is some scope for re-engagement both in the lead up to and within the proposed infrastructure planning workshop |
| 9. Viability issues                                | No        | Viability is being explored at a district level, as part of CIL work. By late spring all of Hertfordshire’s authorities will have a viability model they can utilise for any similar work |
2. WHY REVIEW HIIS?

The Original HIIS – What was achieved?

2.1 The original HIIS was completed in October 2009. It was commissioned to establish a full picture of infrastructure requirements in Hertfordshire and was a proactive response by the county’s local authorities and infrastructure providers to the challenges of delivering housing and employment growth set out in the East of England Plan.

2.2 It was also the first stage in helping local planning authorities identify their infrastructure needs at the local level so that these could be planned for (and their delivery considered) alongside the preparation of local planning documents.

2.3 The preparation of an Infrastructure Delivery Plan is now an essential element of each local authority's planning process, as well as a key prerequisite for the introduction of a Community Infrastructure Levy.

2.4 HIIS therefore is proving invaluable for infrastructure planning processes and offers a number of benefits for both local authorities and delivery agencies across the county, including:

- in infrastructure planning work being undertaken by the Hertfordshire district councils
- as a benchmark in the development of longer term service plans by Hertfordshire’s infrastructure providers
- to inform the overall picture of infrastructure planning in the county
- as the basis for an ongoing debate on key infrastructure issues
- in the processes of joint working, with the establishment of a HIIS Reference Group (now renamed the CIL Reference Group) and the recent collaboration of 8 Hertfordshire authorities in a joint CIL viability study

Why review it now?

2.5 The original HIIS was a first attempt in the county to address the issue of infrastructure planning and delivery, and as such the wider context of infrastructure planning has moved on considerably since the original report. It was largely unsuccessful in shedding light on the complex management and funding issues associated with infrastructure delivery, and provided only a very basic assessment of the relationship between strategic and local infrastructure.

2.6 Furthermore, other changes in the policy and the planning system since 2009 mean that a new set of circumstances need to be considered.

2.7 These changes include the ongoing impact of the recession; the adoption of the National Planning Policy Framework; the removal of the regional tier of planning and the new emphasis on localism; new funding mechanisms (New Homes Bonus, Growing Places Fund etc); and the emergence of the LEP and its potential role in infrastructure planning and delivery.

2.8 Additionally, the recent experiences of the Growing Places Fund programme has indicated that Hertfordshire is not yet in the place it needs to be in terms of having a depth of infrastructure projects ready and able to take advantage of new funding.

2.9 In the wider context of infrastructure planning in 2013, taking a parochial view is unlikely to be in anybody’s interest. It is expected that Hertfordshire will continue to inhabit a world where infrastructure need will outstrip the availability of finance to deliver it, and not all infrastructure providers will necessarily take a proactive approach in ensuring that what is needed is actually delivered. The co-ordination and pooling of resources and funding sources is almost certain to result in better outcomes, and therefore a collective debate over future infrastructure requirements with a range of interests is a necessary one.
2. WHY REVIEW HIIS?

What’s currently missing from infrastructure planning in Hertfordshire?

2.10 As set out above, the HIIS proved an invaluable tool for local authorities in progressing infrastructure planning at the local level. Since the HIIS was completed, we have seen infrastructure planning in Hertfordshire continue to develop, with many local authorities engaging with infrastructure providers. However, there remain a number of gaps within the evidence and the current approach is limited by a divergence in the preparation timescales of local planning documents. In some instances local authorities have found it difficult to engage infrastructure providers on a meaningful basis to obtain a long term picture of infrastructure needs across the whole of Hertfordshire.

2.11 Infrastructure planning within the county lacks a consistent approach, with some authorities exploring issues in considerable detail with others as yet only in a position to list information already available to them and yet to reach the stage of relating detailed infrastructure requirements to their growth strategies.

2.12 Furthermore, there is no formal process in place for the planning and delivery of strategic infrastructure, unlike many other areas of the UK. Where infrastructure partnerships exist in Hertfordshire they tend to occur on an ad hoc basis but (as demonstrated by the recent joint work to secure the Croxley rail link) where they are present they can prove to be invaluable.

2.13 Considerable challenges are posed to the planning and delivery of strategic infrastructure as the ‘bigger picture of growth and demand’ sought by infrastructure providers is not yet in place. Its continued absence will make it difficult for both local authorities and infrastructure providers to plan for the future with any certainty.

Figure 1: Existing arrangements and current gaps for infrastructure planning in Hertfordshire
3. THE CHANGING WORLD OF INFRASTRUCTURE PLANNING

The changes affecting the infrastructure planning process

- The ongoing impact of the recession
- A new streamlined planning system; the removal of the regional architecture and introduction of the ‘duty to cooperate’
- The promotion of localism and devolution of responses to the local level
- New roles in the planning and delivery of infrastructure
- Changing infrastructure priorities
- Changes to funding regimes

What are the main changes that have affected infrastructure planning?

3.1 The way in which infrastructure is planned for, funded and delivered has changed significantly since the original HIIS was undertaken. There have been a number of policy, financial and governance changes impacting on construction and development practices, and in turn this has affected the way in which infrastructure is prioritised and delivered.

3.2 Subsequent impacts of these changes have a direct relationship with infrastructure delivery in Hertfordshire and as a result have affected the validity of the original HIIS.

3.3 These consequences (such as the relationship between spatial aspects of growth and infrastructure need and changing priorities) have been explored as part of this review and are covered in more detail in later chapters. However, an overview of the principle changes is set out below.

The ongoing impact of the recession

3.4 The effects of the recession have been more severe and prolonged than anticipated at the time the HIIS was undertaken. This has had a number of implications for infrastructure planning, including a renewed focus on infrastructure that will help secure the economic recovery.

The new planning system and the ‘Duty to Co-operate’

3.5 The publication of the National Planning Policy Framework (NPPF) is having an effect on the way in which land use planning is undertaken, particularly with the emphasis on deriving local solutions and bringing forward sustainable development.

3.6 There is clear direction in the NPPF that local planning documents (in particular Local Plans) should include “strategic policies to deliver both strategic and local infrastructure” (Para 156). The NPPF gives particular attention to the importance of infrastructure delivery, addressing issues of viability and ensuring that there is “a reasonable prospect of infrastructure being delivered in a timely fashion” (Para 177).

3.7 Furthermore, the NPPF emphasises the statutory ‘duty to cooperate’ in the context of infrastructure planning: It is local authorities should consider producing joint planning policies on strategic matters and informal strategies such as joint infrastructure and investment plans (Para 178 & 179) and to “work collaboratively on strategic planning priorities to enable sustainable development in consultation with Local Economic Partnerships and Local Nature Partnerships” (Para 188).
3. THE CHANGING WORLD OF INFRASTRUCTURE PLANNING

Removal of regional architecture

3.8 One facet of the former regional planning system was that infrastructure need requirements for the East of England was considered within a national and regional context. In the light of its removal there is a need to ensure that the ‘bigger picture’ is considered more locally in relation to infrastructure, and that items of regional or sub regional importance are considered through local processes.

The promotion of localism and devolution of responses to the local level

3.9 Responding to the governance and policy changes outlined above, there is a need for local authorities to derive more localised solutions to both the funding and delivery of infrastructure. Any approach taken forward by Hertfordshire authorities, whether individually or collectively, will need to ensure that infrastructure planning process responds to the localism agenda.

New roles for organisations in the planning and delivery of infrastructure

3.10 Since 2009 there have been a number of significant changes in responsibilities for planning and delivering new infrastructure, with the emergence of ‘free schools’ and Clinical Commissioning Groups (from 2013) in education and health respectively and, for transport, the creation of Local Transport Bodies, operational from 2015. We can expect that these changes will result in new ways of delivering infrastructure, and shifts in investment priorities.

3.11 HIIS envisaged the creation of a ‘CILmeister’ - an independent entity charged with directing infrastructure spending - a role which is now considered entirely out of step with localism. Organisations must therefore respond to the need to promote infrastructure planning and delivery at the local level whilst also considering how agencies can come together to define and deliver new infrastructure. Particular consideration needs to be given to the role that the Hertfordshire LEP, HIPP or any new infrastructure partnership may be asked to develop.

Funding Regimes

3.12 The original HIIS sought to establish anticipated developer contributions (primarily through CIL) as the principal source of funding for infrastructure. However, as work has been undertaken to prepare CIL charging schedules within the county it has started to become clear that CIL is only likely to make a modest contribution towards the cost of new infrastructure provision and is likely to be viewed as a ‘top up’ rather than primary funding source – particularly for strategic infrastructure items.

3.13 As such it is expected that CIL will be unlikely to contribute much more than 20% towards the overall infrastructure bill, and therefore there is a need for innovative approaches to infrastructure funding and the ability to consider all funding sources collectively.

3.14 A number of new funding sources are beginning to emerge, many of which (such as the New Homes Bonus and Growing Places Fund) are geared up towards rewarding growth.

3.15 Hertfordshire will need to make sure that there is an integrated and coordinated approach to infrastructure delivery to ensure that the county has the best possible platform on which to perform, and consideration needs to be given to how the county can improve its bidding capacity for infrastructure funds. HIIS did not give much thought as to how bidding strategies aimed at maximising other funding sources could be developed, so this is an area that needs to be addressed as a matter of urgency, as the recent experience from the Growing Places Fund has demonstrated.
3. THE CHANGING WORLD OF INFRASTRUCTURE PLANNING

The GPF Process – areas of concern identified for future infrastructure planning and delivery

3.16 The GPF Phase 1 programme (at approximately £11m) is relatively small when considered against the cost of major projects. Consequently the scale and complexity of projects coming forward are likely to be relatively modest in comparison to some of the more ‘strategic’ infrastructure items considered within this review.

3.17 Notwithstanding this, the issues that have been encountered with the GPF programme are likely to apply equally, if not more so, to larger scale projects.

3.18 Table 2 sets out the areas of concern relating to GPF Phase 1, and identifies a number of areas that need to be explored further in terms of longer term infrastructure planning and delivery in Hertfordshire (and specifically as part of any renewal of the GPF programme).

<table>
<thead>
<tr>
<th>Key area of concern</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative lack of depth of supportable projects from the list of bids submitted</td>
<td>Whilst it should be stressed that the projects that are being supported are of high quality and therefore entirely appropriate in terms of GPF criteria, only 5 of the 15 submissions were considered supportable, largely for the reasons set out below. Without the existence of these 5 schemes, Hertfordshire would have struggled to identify suitable projects to take up its allocation.</td>
</tr>
<tr>
<td>Limited number of projects ‘ready to go’</td>
<td>Even of the bids that were initially considered for support, only one had a development partner in place and only one had established a repayment mechanisms for the fund; no private sector monies had been secured nor had any State Aid issues been considered. Additionally all 5 projects required planning consent.</td>
</tr>
<tr>
<td>Absence of a ‘chest of projects’</td>
<td>What this points to is a need to create a ‘chest of viable projects’ that can quickly take advantage of new funding opportunities. This is likely to be as true of major strategic proposals as it is of the smaller ‘GPF scale’ projects.</td>
</tr>
<tr>
<td>The ability to recycle initial funding is critical</td>
<td>What GPF has told us is that projects that are able to recycle the initial outlay i.e. repay the pump priming investment to allow the recycled capital to be ploughed back into further investment) are likely to set the ‘gold standard’ in terms of eligibility, provided other qualifying criteria are also met.</td>
</tr>
<tr>
<td>Projects must deliver tangible benefits in terms of homes, jobs and other important outputs, either directly or indirectly</td>
<td>Whilst certain projects will fulfil criteria that might be difficult to quantify, where possible there needs to be consideration between the project’s cost and what it achieves in terms of tangible outputs. Too few of the GPF submissions gave the appropriate amount of thought to this.</td>
</tr>
<tr>
<td>Project management, governance and accountability arrangements need to feature strongly from the outset</td>
<td>These are elements that should not be an afterthought. With some GPF submissions there were uncertainties about management and delivery responsibilities that undermined their credibility.</td>
</tr>
<tr>
<td>A system for establishing relative priorities between projects needs to be created</td>
<td>Those involved in assessing the GPF programme submissions will have been aware that they were doing so ‘on the hoof’ – working without the benefit of a set of predetermined priority projects. Whilst this was not an immediate problem, it would be better if criteria for overall investment priorities were in place for future funding rounds, whatever form they should take.</td>
</tr>
</tbody>
</table>

Table 2: The GPF Process – areas of concern identified for future infrastructure planning and delivery
4.1 The original HIIS was pioneering in its approach to infrastructure planning in Hertfordshire, bringing together representatives from all infrastructure and service providers to provide a collective picture of infrastructure needed to support future growth.

4.2 Significant progress has been made in relation to infrastructure planning since the HIIS was undertaken with a strong focus on local delivery through the preparation of Infrastructure Delivery Plans and Local Investment Plans. However, the absence of a co-ordinated approach has resulted in an inconsistent level of infrastructure planning across the county other than the high level assessment in the HIIS. Given the changes in the way in which some infrastructure services are now provided, the emergence of new funding regimes and the identification of new requirements, much of the information in the HIIS relating to infrastructure need is out of date.

4.3 It is not the purpose of the review to undertake a detailed re-evaluation of infrastructure needs and costs as this will be taken forward through the future preparation of Infrastructure Delivery Plans within the county. However, the review does undertake a high level review of infrastructure need across Hertfordshire.

4.4 Building upon work undertaken by local authorities in the preparation of their Infrastructure Delivery Plans and re-engaging infrastructure providers, the review highlights the key changes that are likely to impact upon the key assumptions in the HIIS.

4.5 Taking onboard the recommendations of the HIIS, the identification of local infrastructure needs has progressed significantly and a number of infrastructure providers are now clearer about longer term needs than they were previously.

4.6 To support local planning processes, a number of evidential studies and service planning exercises have been undertaken at the local level to identify longer term infrastructure needs. These studies have built upon the high level assessment in HIIS and have helped identify specific locational requirements, phasing, funding and appropriate delivery mechanisms.

4.7 In some cases, these studies have identified further infrastructure requirements which were not considered as part of the HIIS. For example the Cheshunt and Waltham Cross A10 Study has identified additional infrastructure requirements arising through the local planning process.

4.8 There have also been a number of changes in responsibility for the planning, funding and delivery of infrastructure (as set out in Chapter 3). These have resulted in a strategic prioritisation and delivery framework for infrastructure provision (set out in the Treasury’s National Infrastructure Plan). Apart from a few major infrastructure projects of national importance, the National Infrastructure Plan places an increased emphasis on the implementation and funding of infrastructure locally.

4.9 The implementation of infrastructure projects is being devolved to the local level through the introduction of localised investment and delivery bodies such as the Local Enterprise Partnerships and the forthcoming Local Transport Bodies.
4.10 Despite the progress made with infrastructure planning and the shift towards a local emphasis on delivery, there remains no consistent approach to infrastructure planning between individual local authorities, and the level of detail available on a countywide basis varies considerably.

Infrastructure Need over the Review Period

4.11 In response to the changes and challenges identified in the refresh, a number of infrastructure and service providers have changed the way in which they plan for and deliver infrastructure across the county.

4.12 Drawing on new policies, strategies and evidence since 2009, the refresh identifies the key changes and highlights progress made within each service area that will need to be considered within any future preparation of Infrastructure Delivery Frameworks in Hertfordshire. Where appropriate, the review provides an update on specific infrastructure schemes in Hertfordshire where progress has been made since 2009.

4.13 Through discussions with service providers and using evidence published since the HIIS was undertaken, this review attempts to develop the infrastructure planning process in Hertfordshire by distinguishing between major, strategic, local and neighbourhood infrastructure need to help establish the scope of such need, and identify what types of infrastructure may be best suited to either local or strategic Infrastructure Delivery Plans for the county. The relationship between strategic and local infrastructure requirements is explored in more detail in Chapter 7.

4.14 The HIIS review did not explore the need for a number of local infrastructure items such as libraries, museums, and cemeteries which were originally assessed as part of the HIIS; as it was considered that local communities are best placed to determine the need for these facilities at the local or neighbourhood level and under the localism agenda many will be delivered by single agencies, or by the local communities they serve.

4.15 An overview of changes in infrastructure need over the HIIS review period is set out in Figure 2.

Figure 2: Example of additional infrastructure planning work undertaken by Local Education Authority - Primary Planning Areas Surplus/Deficit at Reception for 2012/13
### 4. UPDATE HERTFORDSHIRE'S INFRASTRUCTURE NEEDS

#### Table 3: Overview of Infrastructure Need over HIIS review period

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>Need identified in Original HIIS</th>
<th>Changes occurring since original HIIS was undertaken</th>
<th>Additional evidence produced/need identified since HIIS was undertaken</th>
<th>Possible Funding Sources</th>
<th>Delivery Partners</th>
<th>Scale of Intervention</th>
<th>Specific Projects brought forward since HIIS was undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Community Services (formally ACS)</td>
<td>No specific need identified due to absence of long term service planning approach by provider</td>
<td>Continued move towards more bespoke and personal levels of support for older people, adults with disabilities and/or mental ill health and carers. Move away from local authority built accommodation and care centres and move towards commissioning from private sector providers or in partnership with RSLs.</td>
<td>Hertfordshire County Council developed service plan for the Accommodation of Older People (2009). Action Plans to bring forward a range of accommodation options as alternatives to residential care for each district.</td>
<td>Revenue funding from local authority / PCT budgets</td>
<td>Brought forward in partnership with local authorities, Primary Care Trusts and other delivery partners. Additional support services are commissioned from a range of voluntary and community arrangements</td>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>Emergency Services</td>
<td>Identified need for additional provisional to support growth across all service areas. Physical Infrastructure attributed mainly towards major growth locations</td>
<td>Unlikely that the scale of provision anticipated in HIIS required following changes in anticipated growth within major growth locations Move towards more locally determined service requirements.</td>
<td>Local requirements identified through IDPs Likely need for the incremental expansion of facilities to meet future population increases</td>
<td>Revenue funding from service providers / limited capital funding</td>
<td>Hertfordshire constabulary East of England Ambulance Service Hertfordshire Fire and Rescue</td>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>Children's Services</td>
<td>Need for additional Children's Centres to support growth locations</td>
<td>Children's Centres building programme complete and no further capital building programmes planned. Focus towards providing facilities by utilising flexible spaces within existing or new community centres.</td>
<td>Revenue funding from local authority budgets</td>
<td>Local authorities</td>
<td>Local</td>
<td></td>
<td></td>
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</table>
### 4. Updating Hertfordshire’s Infrastructure Needs

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
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<th>Specific Projects brought forward since HIIS was undertaken</th>
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</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td>Identified a significant need for education provision across the county</td>
<td>More detailed work undertaken by LEA to identify education needs and secure delivery (ongoing). In addition to growth related requirements, there is an increasing need to accommodate natural growth from changing demographic changes and secure sufficient provision for existing communities. Increase in Academies and Free Schools resulting in the increased complexity of planning, funding and delivery BSF programme scrapped</td>
<td>Detailed work carried out by LEA in relation to short term education needs and further engagement with local planning authorities to identify and secure long term needs (ongoing). School provision forecasts</td>
<td>Revenue and Capital Budgets Government Grants Developer contributions / CIL</td>
<td>Local Education Authority Local authorities Free schools Academy Schools</td>
<td>Local Strategic</td>
<td>Primary Expansion Programmes (PEP) Further primary and secondary expansion programmes planned.</td>
</tr>
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## 4. Updating Hertfordshire’s Infrastructure Needs

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<tr>
<td>Telecommunications</td>
<td>Were not assessed as part of Original HIIS</td>
<td>Telecommunications have been identified as a key priority within LIPs and Local Economic Development Strategies. Two projects are underway in Hertfordshire to improve broadband access – ‘Broadband for Business Parks and Local Broadband Plan.</td>
<td>Local Broadband Plan prepared for Hertfordshire and increasingly proactive approach taken by local authorities and LEP to improve provision of high speed broadband.</td>
<td>Broadband Delivery UK Service Providers Local Authorities Local Investment Programmes</td>
<td>Service Providers Local Authorities LEP</td>
<td>Local / Strategic</td>
<td>Broadband for Business Local Broadband Plan</td>
</tr>
<tr>
<td>Flood Risk Management</td>
<td>Not considered as part of the HIIS</td>
<td>Better understanding of flood risk and associated infrastructure need</td>
<td>Production of SFRAs and SWMPs being prepared by Hertfordshire County Council as LLFA. New growth unlikely to require significant investment as should be directed away from vulnerable areas but investment needed to protect existing development – interventions likely to range from neighbourhood to strategic.</td>
<td>Scope of funding currently under review but likely to require partnership approach Developer Contributions / CIL Private Finance Local Investment Programmes</td>
<td>Environment Agency LLFA</td>
<td>Local Strategic</td>
<td></td>
</tr>
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</table>

REFRESH OF HERTFORDSHIRE’S INFRASTRUCTURE INVESTMENT STRATEGY (HIIS) - JANUARY 2013
## 4. Updating Hertfordshire’s Infrastructure Needs

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<tr>
<td>Transport</td>
<td>Identified a significant need for transport infrastructure including a number of key projects associated with growth areas. A number of high cost schemes associated with growth areas.</td>
<td>Significant changes in relation to planning / funding and delivery. For example: • Coalition white paper on Local Transport (2010) • The abolition of Regional Funding Allocations and proposals for Local Transport Bodies. • HA Pinch Point Programme • New rail franchise opportunities A number of schemes associated with growth areas now unlikely to be required – some new schemes (i.e. A10 improvements) identified</td>
<td>LTP3 (inc. Implementation Plan and update of daughter documents) Urban Transport Plans Inter Urban Route Strategy (being prepared) Delivering a Sustainable Transport System (2010). Cheshunt and Waltham Cross A10 Study Highways Agency Diamond Modelling for 6 southwest Herts authorities, 2011, (assessing impact of planned growth on strategic road network)</td>
<td>Government Funding Capital Budgets Private Investment Developer Contributions / CIL</td>
<td>Highways Agency Local Highway Authority Public Transport Providers LEP / Local Transport Body</td>
<td>Neighbourhood Local Strategic Major</td>
<td>Croxley Rail Link – Funding awarded delivery expected 2016 BIGHERTS / BIGIDEAS Hatfield Station Interchange A1 Tunnel widening and refurbishment M25 widening Hitchin Flyover</td>
</tr>
<tr>
<td>Green Infrastructure</td>
<td>Broad assessment of anticipated need based on provision standards</td>
<td>Production of local and strategic Green Infrastructure Plans covering the whole of Hertfordshire and some surrounding areas have identified a number of local and strategic requirements to enhance provision across the county.</td>
<td>Local Green Infrastructure Plans (2011) Strategic Highlight Green Infrastructure Plan (2011)</td>
<td>Local Investment Programmes Private Investment Developer Contributions / CIL</td>
<td>Local Authorities Private Sector Local Nature Partnership Voluntary / Community Agencies LEP</td>
<td>Neighbourhood Local Strategic</td>
<td>Various local and Strategic projects identified in GI Plans are being progressed</td>
</tr>
</tbody>
</table>
### 4. UPDATING HERTFORDSHIRE’S INFRASTRUCTURE NEEDS

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</tr>
</thead>
</table>
| **Health**          | Significant investment based on investment levels elsewhere but the Hertfordshire health providers would need to do more to define precise needs | Significant changes to the arrangements for delivering health care since 2009;  
• New single PCT (NHS Hertfordshire)  
• Forthcoming introduction of Clinical Commissioning Groups (CCGs)  
• Forthcoming introduction of National Health Commissioning Board  
• Shift towards providing healthcare within communities rather than hospitals. | NHS Hertfordshire – Five Year Strategic Plan (2010)  
Commissioners Investment and Asset Management Strategy (2010)  
There will be an ongoing requirement for the additional provision of both primary and secondary healthcare to meet demands of growth and changing demographics – but there remains an incomplete, long term picture. | Government Funding  
Capital and Revenue Budgets  
Private Investment  
Developer Contributions / CIL | NHS  
Local Authority  
Health and Wellbeing Board  
NHCB  
CCGs | Local Strategic | Consolidation of hospital services in east and north Hertfordshire. |

| **Renewable / Low Carbon technologies** | Not considered as part of the HIIS | Planning and delivery of RLC technologies has risen on the national political agenda and recognise the role they have in encouraging a transition to a low carbon economy. | Work has been undertaken to assess the potential for RLC technologies in Hertfordshire;  
• EoE Renewable Energy Capacity Study (2011)  
• District Heating Opportunities in Herts (2011) | Local Investment Programmes  
Developer Contributions / CIL / Allowable solutions  
Carbon offset funds  
Private Investment | Local Authorities  
Private Sector  
Local Communities  
LEP | Neighbourhood Strategic | |
## 4. UPDATING HERTFORDSHIRE’S INFRASTRUCTURE NEEDS

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>Need identified in Original HIIS</th>
<th>Changes occurring since original HIIS was undertaken</th>
<th>Additional evidence produced/need identified since HIIS was undertaken</th>
<th>Possible Funding Sources</th>
<th>Delivery Partners</th>
<th>Scale of Intervention</th>
<th>Specific Projects brought forward since HIIS was undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>A need was identified for investment in utilities (Gas / Water / Electric) to support future growth but given the short planning timeframes of providers (5 years), it was difficult to assess future need. The most significant investment was associated with major growth locations.</td>
<td>Utility company’s continue to plan and operate on relatively short timescales compared to the planning process. For some areas (i.e. potable water), some ‘strategic’ work has been undertaken to assess sub-regional impacts of growth / climate change etc but the evidence remains limited. It is unlikely that the scale of investment envisaged in the HIIS and associated with large scale growth will be required over the review period.</td>
<td>Rye Meads WCS (2009) SW Herts WCS Scoping Report (2010) WRSE Modelling (ongoing)</td>
<td>Government Funding Private Investment Developer Contributions</td>
<td>Service Providers Developers LEP</td>
<td>Local Strategic</td>
<td></td>
</tr>
</tbody>
</table>

### Potential barriers to identifying an effective implementation of infrastructure needs

4.16 Despite the progress made with service planning and the identification of future infrastructure needs, a number of barriers still remain in identifying, planning and implementing long term infrastructure requirements.

4.17 The infrastructure planning process is still complicated and in part restricted by regulatory and business planning process. The review of infrastructure need has identified a number of areas that may continue to prevent an effective approach being achieved in Hertfordshire unless they are effectively addressed.

4.18 The main barriers can be summarised as:

- Divergence in planning horizons
- Devolution and privatisation of infrastructure provision
- Increasing shift from capital to revenue funding
- Continued reactive approach by some service providers
- Strategic influence
5. RELATIONSHIP BETWEEN THE SPATIAL ASPECTS OF GROWTH AND INFRASTRUCTURE NEED

Why do the growth assumptions need updating?

5.1 For the purpose of infrastructure planning, it is necessary to have an understanding of the scale and distribution of growth. The original HIIS was based on the growth figures and locations set out in the East of England Plan, and a number of assumptions about the location of new development in the Key Centres of Development and Change (KCDCs).

5.2 These assumptions have (or are in the process of being) superseded by the progression of local planning processes and no longer accurately reflect the scale or distribution of growth within the county. Recognising the ongoing uncertainty in relation to growth, the review sets out the position of local authorities at this point in time, and this area of work will need to be revisited as local authority growth aspirations become clearer.

5.3 The review looked to identify the potential scale and distribution of growth up to 2031, but with a focus on the short to medium term growth where there is more certainty. It did not consider the impact that changes to growth will have on population projections, the impact of which should be given further consideration through the preparation of Infrastructure Delivery Plans.

Residential growth assumptions (2001 – 2031)

5.4 Following the coalition government’s decision to revoke Regional Spatial Strategies, a number of local authorities across Hertfordshire have either reviewed (or are in the process of reviewing) their growth levels.

5.5 In the absence of an RSS target, divergent Plan periods and the need to generate a comparable growth level for the review, the growth level for the HIIS review was based upon;

- Targets set out in adopted / emerging Core Strategies
- Completions Data (2001 – 2011)
- Trajectory data where the start of the Core Strategy is 2012 or later.

It was also assumed that in the absence of the RSS, growth associated with neighbouring authorities would not come forward. However, in response to the duty to cooperate, local authorities may be required to consider wider growth requirements that may transcend local authority boundaries and is another area that will need to be kept under review.

5.6 Having reviewed the growth aspirations of local authorities, it is expected that there will be approximately 22,000 fewer dwellings coming forward post RSS (over the period 2001 - 2031). This results in a 18% reduction in the number of dwellings coming forward over the HIIS review period than in the original HIIS. This would result in a 34% reduction in the ‘to build’ figure (the numbers actually required to be constructed before 2031) compared to the HIIS.

5.7 Even when taking into account completions since the original HIIS, these figures still represent a significant difference in the number of dwellings to be built to 2031 (Table 4).

<table>
<thead>
<tr>
<th>District</th>
<th>HIIS ‘to build’ figure 2009 - 2031</th>
<th>HIIS Review ‘to build’ figure 2011/12 - 2030/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broxbourne</td>
<td>5,909</td>
<td>4,800</td>
</tr>
<tr>
<td>Dacorum</td>
<td>13,528</td>
<td>9,268</td>
</tr>
<tr>
<td>East Herts</td>
<td>15,126</td>
<td>13,904</td>
</tr>
<tr>
<td>Hertsmere</td>
<td>5,838</td>
<td>4,680</td>
</tr>
<tr>
<td>North Herts</td>
<td>20,800</td>
<td>7,000</td>
</tr>
<tr>
<td>St Albans</td>
<td>10,903</td>
<td>5,000</td>
</tr>
<tr>
<td>Stevenage</td>
<td>8,236</td>
<td>6,120</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>4,395</td>
<td>3,319</td>
</tr>
<tr>
<td>Watford</td>
<td>5,853</td>
<td>4,487</td>
</tr>
<tr>
<td>Welwyn Hatfield</td>
<td>10,838</td>
<td>8,000</td>
</tr>
<tr>
<td>Hertfordshire Total</td>
<td>101,426</td>
<td>66,578</td>
</tr>
</tbody>
</table>

5.8 HIIS identified two main timeframes for growth, ‘up to 2021’ and ‘2021-2031’. Although beneficial in identifying the timescales of growth for different infrastructure needs, the identification of the short, medium and long term growth assumptions was applied as part of the review to help address the divergence in infrastructure planning timetables and the changing approach to infrastructure planning.

5.9 The review used housing trajectory data to estimate the level of growth expected to come forward in the short term (2011 – 2016) and the medium / long term (2017 – 2031).

5.10 Up to 2016, the majority of development is expected to come forward on small or medium sites (up to 100 dwellings) although there are some larger sites (100 – 500) expected to emerge towards the end of the first five year period which may impact more significantly upon local infrastructure and require more significant upfront investment (Table 5).

5.11 Given the need for local authorities to demonstrate a 5 year land supply, there is a reasonable degree of certainty as to where growth is likely to come forward within this period. In contrast there is still uncertainty as to the location of growth in the longer term and further engagement with local authorities is required.

5.12 Overall there are significant changes proposed in the levels of growth within the former KCDCs and the HIIS masterplanned areas. A review of the former KCDC has identified up to 44,000 fewer dwellings coming forward in the masterplanned areas than assumed in the HIIS, with Watford the only masterplanned area being unaffected. However, as local planning processes are taken forward, it is clear that some growth will continue to be directed towards the former masterplanned areas, but no where near the scale that the HIIS anticipated.

<table>
<thead>
<tr>
<th>District</th>
<th>Projected Completions 2011 - 2016</th>
<th>Includes strategic/large scale development sites?</th>
<th>Residual ‘to build’ figure 2017 - 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broxbourne</td>
<td>58 190 255 257 319 1,079</td>
<td>AoS to be determined through Site Allocations</td>
<td>3,721</td>
</tr>
<tr>
<td>Dacorum</td>
<td>408 412 575 799 729 2,923</td>
<td>Includes start of development at Maylands and HH Town Centre 2015/16</td>
<td>6,345</td>
</tr>
<tr>
<td>East Herts</td>
<td>378 401 507 691 705 2,682</td>
<td>Includes start of Bishop’s Stortford ASR</td>
<td>11,222</td>
</tr>
<tr>
<td>Hertsmere</td>
<td>182 466 405 322 313 1,688</td>
<td>Includes start of development at Estree Way Corridor</td>
<td>2,992</td>
</tr>
<tr>
<td>North Herts</td>
<td>333 333 333 333 333 1,665</td>
<td>Includes 200 Dwellings to north Royston</td>
<td>5,335</td>
</tr>
<tr>
<td>St Albans</td>
<td>383 427 563 370 329 2,072</td>
<td>Includes early development at Harper Hospital/Civil Centre/Spencer Park</td>
<td>2,928</td>
</tr>
<tr>
<td>Stevenage</td>
<td>213 222 245 573 577 1,854</td>
<td>Includes development at Bargbury End (300/400) and SNAP7 (340/1000)</td>
<td>4,266</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>213 167 258 204 184 1,026</td>
<td></td>
<td>2,293</td>
</tr>
<tr>
<td>Watford</td>
<td>321 497 427 379 70 1,694</td>
<td></td>
<td>2,793</td>
</tr>
<tr>
<td>Welwyn Hatfield</td>
<td>273 205 600 642 464 2,184</td>
<td></td>
<td>5,816</td>
</tr>
<tr>
<td>Hertfordshire Total</td>
<td>2,762 3,320 4,168 4,570 4,023 18,867</td>
<td></td>
<td>47,782</td>
</tr>
</tbody>
</table>

Table 5: Projected phasing of dwelling completions 2011/16 by district figures.
5.13 Given the ongoing uncertainty in relation to long term growth, it was not possible for the review to revisit the assumptions made by the HIIS in relation to the allocation of growth outside of the masterplanned areas. However, in light of the proposed changes to planned growth levels; the reduced importance of KCDCs and the post HIIS identification of sites and broad Areas of Search at the local level, the apportionments included in the HIIS are no longer suitable to inform infrastructure process and need to be updated.

5.14 When considering the relationship between the scale of growth and its distribution coming forward to 2031 it can be assumed that much of the difference is likely to be as a result of a reduction in housing in the KCDCs. This is likely to have significant impacts on the required level of infrastructure investment as a number of the high value items identified in the HIIS were linked to the scale of development expected in these areas.

### Employment Assumptions (2001 – 2031)

5.15 Since the HIIS was undertaken, there have been a number of re-runs of the East of England Forecasting Model (EEFM) used to determine future employment growth in the county.

5.16 The Autumn 2012 model run identifies a net increase of 79,300 jobs over the HIIS review period.

5.17 HIIS was unable to provide any certainty as to the likely distribution of employment growth. The Hertfordshire Strategic Employment Sites Study (2011) which allocated future employment growth within three travel to work areas identifies 12 key strategic locations or clusters that present the greatest opportunity for supporting economic growth in Hertfordshire. Discussions with local authorities have indicated that approximately 24,580 jobs will come forward in these locations to 2031. This is likely to be an underestimate as the full potential of all of the strategic sites is yet to be determined.

5.18 In terms of phasing, the EEFM identifies that the majority of growth will come forward in the first ten years, with smaller growth expected between 2021 and 2031, although this is likely to depend on the ongoing impact of the current economic situation. There will be a need to develop a better understanding of infrastructure requirements and indicative timings if the necessary infrastructure to support future employment opportunities is to be delivered in a timely fashion.
5. RELATIONSHIP BETWEEN THE SPATIAL ASPECTS OF GROWTH AND INFRASTRUCTURE NEED

Potential impacts of growth on infrastructure delivery

5.19 It was beyond the scope of the review to explore detailed infrastructure requirements in relation to expected residential and employment growth up to 2031. Therefore the identification of specific infrastructure items will need to be explored through the preparation of Infrastructure Delivery Frameworks.

5.20 Notwithstanding this, it is expected that the overall level of infrastructure required to support future growth will be less than that envisaged in the HIIS. It is expected that there will be less reliance on standalone infrastructure and there will no longer be the need for the delivery of larger schemes (such as the A414 – M11 link road) identified in the HIIS – at least over the review period.

5.21 Subsequently, there will be a more pressing need to consider the cumulative impact of development on local infrastructure and when considered alongside the existing deficit, the need for significant investment in infrastructure is likely to remain, whilst larger sites (500+) may have infrastructure requirements that are beyond the scope and certainty of CIL funding.

5.22 Any reduction in large scale development is likely to result in a greater reliance on CIL payments and / or the pooling of s.106 contributions to facilitate the delivery of essential infrastructure which is likely to require a co-ordinated and joined up approach.
6. THE FUNDING OF HERTFORDSHIRE’S INFRASTRUCTURE

The Role of CIL

6.1 HIIS calculated that a sum of £23,000 per dwelling would be needed from CIL charges to meet the funding of new infrastructure (once other known sources of funding had been taken into consideration). On former RSS figures this would have meant that in an average year CIL would need to raise £110m to enable all infrastructure needs to be met.

6.2 Taking account of the anticipated fewer dwellings to be provided, the HIIS review assumes that this would result in a 20% reduction in infrastructure need and consequently a similar 20% reduction in required CIL (if it is to meet all future infrastructure funding needs). On the basis of the reduced housing figures set out in Chapter 5, CIL revenues of £88m a year would be required.

6.3 These assumptions are based on a simplistic linear relationship between growth and infrastructure need and is unlikely to be a true representation, but is instead used for illustrative purposes. (It does not take into account the backlog of infrastructure need identified in HIIS - the Historic Infrastructure Deficit - estimated by HIIS at £2.4bn).

6.4 It is not yet possible to determine what level of CIL will be achievable in Herts as it is yet to be implemented across any of the local authorities. However, using the emerging outcomes from viability work being undertaken it is possible to make an educated (albeit rough and ready) calculation as to what a likely CIL revenue will be when fully operational across Hertfordshire (Box 1).

6.5 Although only a best guess, the anticipated CIL contribution is broadly similar to that seen elsewhere in the UK. Whilst the original HIIS recognised that the CIL would fall short of funding all of Hertfordshire’s infrastructure, what is clear from the review is that future contributions from CIL is likely to be much less than originally anticipated.

Box 1: A rough and ready calculation of potential CIL income for Hertfordshire

A ‘very rough’ calculation of likely CIL income for Hertfordshire

The first charging schedules are proposing a CIL rate averaging around £120/m² for residential development. If an average size property is taken as 80m², this means an average charge per property of £9,600.

We then need to make a series of discounts on this figure:

Firstly no CIL is payable on most affordable housing. Across Hertfordshire one can assume an overall average of 35% affordable housing provision. The £9,600 figure needs to be reduced by 35% = £6240

Furthermore CIL is charged only on the net increase in floorspace. Percentage deductions for this will vary wildly across the county depending on individual circumstances, but for the purposes of an overall calculation, an average 20% reduction is proposed. This would reduce the ‘per dwelling’ figure to around £5,000

Then there’s a cost to administer CIL - possibly up to 5% of revenues collected. For this exercise we have cancelled out this cost by matching it with the likely CIL revenues to be raised from non residential uses, which are likely to be relatively small - not all authorities will charge for non residential CIL and the amount of non residential development will be a relatively small proportion of overall development. So it seems reasonable to assume that the CIL income collected from non residential development will be cancelled out by the cost of administering CIL.

The calculation from Chapter 6 is for an annual average development rate of 3,200 dwellings, so when one applies an average CIL collection rate of £5,000 per dwelling, then CIL will be expected to raise around £16m a year, approximately 18% of the total value of all infrastructure that the HIIS considered was needed. So on that basis, CIL will fund just under a fifth of all future infrastructure required.
6. THE FUNDING OF HERTFORDSHIRE’S INFRASTRUCTURE

Limitations of CIL

6.6 The limitations of using CIL to fund infrastructure were highlighted by a study of Baldock’s infrastructure needs undertaken by the Hertfordshire CIL Reference Group (Box 3). Although representing only one area of Hertfordshire, the town of Baldock provides a snapshot of issues that are likely to be experienced across the county.

6.7 If CIL is to be used as a ‘top up’ fund then it will make a useful contribution to infrastructure delivery in Hertfordshire; but, if seen as a ‘total funding solution’ then it will be many times oversubscribed and unable to fund the necessary level of infrastructure.

Box 2: What CIL would buy you in Hertfordshire as a whole if a proportion of it was identified as funding ‘strategic infrastructure’ and directed towards one of the potential County strategic infrastructure projects below: how many years would it take to deliver it using just CIL?

<table>
<thead>
<tr>
<th>Infrastructure project</th>
<th>Approx Cost (£m)</th>
<th>% total CIL directed towards strategic projects</th>
<th>10%</th>
<th>20%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croxley Rail Link</td>
<td>116</td>
<td>10%</td>
<td>64</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>A Secondary School</td>
<td>25</td>
<td>20%</td>
<td>14</td>
<td>7</td>
<td>2.7</td>
</tr>
<tr>
<td>A1 (M) Improvements</td>
<td>164</td>
<td>50%</td>
<td>91</td>
<td>46</td>
<td>18</td>
</tr>
<tr>
<td>Junctions 6-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.8 For example when looking at the role CIL has in potentially funding strategic infrastructure (Box 2) it can be seen that there are a number of limitations to the contribution it can make, and subsequently unlikely to be able to fund some of the larger scale projects in Hertfordshire.

Box 3: Baldock Infrastructure study - the key outcomes

Baldock Infrastructure Study - Key Outcomes

- The total cost of growth related infrastructure for Baldock over the next 20 years is estimated at £24.64m (equating to just over £18,500 per dwelling)
- This figure is almost certainly an underestimate (there’s no figure, for example, for the provision of any strategic infrastructure)
- The amount of CIL anticipated to be collected over that period is £7.37m (or just over £5,800 per dwelling). This suggests that CIL will pay for around 31% of all known infrastructure
- However not all the CIL money collected would necessarily be spent on town infrastructure. Firstly there’s the cost of administering CIL - this could be as high as 5% of all revenues as it will be complex to administer
- Secondly it may be reasonable for Baldock to make a contribution towards strategic and sub strategic infrastructure - that infrastructure which needs to be provided beyond town boundaries to enable it to continue to function. A 20% CIL contribution might not be unreasonable
- Lastly there will be a requirement to direct a ‘meaningful proportion’ of CIL income towards parishes. (Baldock town is unparished, but most of its new development takes place outside town boundaries in parished areas). The contribution made to these parishes could be as high as 10% of CIL collected
- This might mean that as much of 35% of CIL revenues would be directed towards purposes other than town infrastructure
- The true figure for the contribution of CIL towards town infrastructure over the next 20 years could be just over £5m or £3,800 per dwelling or just over 20% of the town’s infrastructure needs
6. THE FUNDING OF HERTFORDSHIRE’S INFRASTRUCTURE

The need for innovative funding mechanisms

6.9 What has became clear from the review of CIL - and also in recognition of the additional constraints on public funding sources - is a need for new innovative funding mechanisms for infrastructure delivery that bring together ‘packages’ of different funding sources.

6.10 The review has identified a number of examples both across the UK (Greater Manchester Transport Fund) and in Hertfordshire (Croxley Rail Scheme) where local authorities (or consortia of local authorities) have established effective funding and delivery partnerships to bring forward large scale, strategic infrastructure projects.

Sources of funding for new infrastructure

6.11 Although increasingly limited, there remain a number of traditional funding sources for new infrastructure such as capital programmes, established government programmes and private sector investment.

6.12 The review undertook an overview of new sources of funding (Box 4) that have (or are planned to) come forward and are likely to be available to infrastructure promoters in Hertfordshire and be brought into the ‘funding pool’ which is increasingly important in relation to infrastructure delivery.

Potential new sources of funding to deliver new infrastructure

- **Community Infrastructure Levy (CIL):** referred to extensively in this report. Regulations introduced April 2010, first charges made November 2011. Our estimate is that CIL could fund around 20% of an authority’s infrastructure needs.

- **Joint European Support for Sustainable Investment in City Areas (JESSICA):** an EU/European Investment Bank initiative to promote investment in urban development projects, allowing the use of EU Structural Funds to make repayable investments in projects forming part of an integrated plan for sustainable urban development. A pioneering example is the North West Evergreen Fund, established to undertake such investment in Greater Manchester, Lancashire, Cheshire and Cumbria.

- **Green Investment Bank:** a proposal initiated by the Coalition Government in 2010 with the task of attracting private funds for financing investment in low carbon business and government infrastructure. Expected to be fully operational by 2015/16.

- **Local Sustainable Transport Fund:** the Department for Transport announced in January 2011 the release of £560m to be spent up to 2014/15 on projects to enable economic growth (in particular job creation) and carbon reduction through sustainable travel modes.

- **Growing Places Fund:** a £500m fund announced in November 2011 to act as an enabling fund to generate economic activity by addressing immediate infrastructure and site constraints and promote the delivery of jobs and housing.

- **Business Rate Retention:** The Local Government Finance Bill proposes that local councils be allowed to retain a proportion of their business rates and direct it towards local spending. The amount to be retained, and how it can be spent, will be announced shortly.

- **Tax Increment Financing:** also in the Local Government Finance Bill is a proposal to allow local authorities to borrow against future income from business rates enhanced as a result of the investment.

- **New Homes Bonus:** a fund whereby the government provides additional funding to local authorities by match funding the additional council tax raised by new properties and empty homes brought back into use, with an additional amount for affordable homes, for the following 6 years. Allocations for 2012/13 of £431m were announced recently.

- **Local Transport Bodies:** not a funding mechanism in itself but a recently announced proposal to give local communities and businesses control of the decisions and budgets relating to large transport schemes in their area from 2015.
7. THE RELATIONSHIP BETWEEN STRATEGIC AND LOCAL INFRASTRUCTURE NEED

7.1 Using broad definitions, infrastructure needs in the HIIS were determined to be either ‘local’ or ‘strategic’ depending on their strategic coverage. This classification was used to reflect the anticipated workings of CIL at the time.

7.2 This approach no longer accurately reflects the realities of infrastructure planning and is no longer valid when considering the wider implications of infrastructure delivery in a devolved landscape. The review considers that many of the ‘strategic’ items identified in the HIIS (schools, emergency services, local green infrastructure) are most appropriately described as local investment serving local communities.

The Categorisation of Infrastructure

7.3 In order for Hertfordshire to adapt to the changing world of infrastructure planning, it is important to categorise infrastructure needs so that these can be planned for, funded and delivered at the most appropriate scale.

7.4 As part of the review, infrastructure is categorised into four areas; major, strategic, local, neighbourhood (Table 7). In addition, it is felt that there is a need for a subdivision of the strategic category; into ‘strategic’ and ‘sub strategic’ infrastructure.

7.5 Strategic projects are those considered to be the larger / more geographically extensive, which will require greater co-ordination and co-operation between a range of delivery partners, whilst sub-strategic projects, although still significant in size, will be more local in context but will still require the co-operation and co-ordination from a range of agencies.

Strategic Infrastructure

7.6 In the context of what the HIIS review has set out to achieve - and in recognition of a need to co-ordinate a response to the complex and changing world of strategic infrastructure delivery - specific attention has been given to identifying those infrastructure items that could form part of more formalised arrangements for infrastructure planning and delivery in Hertfordshire. This allows the refresh to identify a way forward in relation to the delivery of strategic infrastructure, identifying a potential programme of action to bring forward large scale investment in infrastructure within Hertfordshire.

7.7 The HIIS refresh stops short of a definitive list of strategic infrastructure items but, using examples from elsewhere in the UK, sought to establish a definition of infrastructure that was not based solely on cost but also on the complexity and impact of the proposals, one that could be used to develop a Strategic Infrastructure Plan for the county.
## 7. THE RELATIONSHIP BETWEEN STRATEGIC AND LOCAL INFRASTRUCTURE NEED

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub Category</th>
<th>Description</th>
<th>Included in strategic infrastructure plan?</th>
<th>Examples of the type of project could be…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major national and regional infrastructure</td>
<td>None</td>
<td>These are the major national and regional items of infrastructure that the government has identified in the National Infrastructure Plan and involves delivery responsibility beyond the key Hertfordshire agencies. They will typically be long term projects costing upwards of £1bn and often have a long lead in and delivery timescale. As such the infrastructure planning partners in Hertfordshire may be promoting such requirements and lobbying for early implementation but are otherwise likely to play a major role.</td>
<td>There would be references in any Strategic Infrastructure (SI) Plan to the need to provide such infrastructure, what impact it would have on the Plan and how Hertfordshire could lobby for its provision, but it would not form part of the Plan itself as the intention of the Plan is to concern those infrastructure projects over which Hertfordshire has a direct influence.</td>
<td>H52, M25 widening, major airport expansion/new airports, Electricity Market Reform</td>
</tr>
<tr>
<td>Strategic Infrastructure</td>
<td>Strategic (countywide scale) infrastructure</td>
<td>These are projects which Hertfordshire’s infrastructure planning partners can have a lead role in promoting and possibly implementing. They will tend to be the larger scale projects ( £20m and upwards) although they will include projects that are potentially smaller in scale but have countywide influence (e.g. strategic green infrastructure, super high speed broadband). They will also have ‘more than a local influence’ in terms of the benefits of implementing them. Ultimately they are the projects that the county’s infrastructure planning partners consider worth prioritising to ensure concerted action by a range of agencies and possibly funding streams.</td>
<td>Yes very much so, the main purpose of the Hertfordshire Strategic Infrastructure Plan - should one be produced, - would be to highlight these projects, set out the economic, social and environmental benefits of achieving them and establish the partnerships, funding mechanisms and delivery responsibilities for securing their implementation.</td>
<td>Croxley Link, A120 Little Hadham by-pass, countywide renewables investment</td>
</tr>
<tr>
<td></td>
<td>Strategic (sub county) infrastructure</td>
<td>These are the projects of strong local significance but which will collectively have a major impact (for example through stimulating local recovery) keeping Hertfordshire moving, making a major contribution to the county’s overall quality of life which are of sufficiently complexity and potentially need some intervention to make them happen. They will typically be of the scale of £1 m - £20m but their local scale suggests that it will be a question of local partners including businesses working together to drive through local solutions. What links them is the need to ensure that such projects are ready to implement at the earliest opportunity.</td>
<td>Sub county strategic projects would perhaps not be a part of the SI plan, although some reference could be made to them. Instead selected projects could be identified to be worked up in detail for incorporation in an ‘Infrastructure Projects Chest’ of projects ready to take advantage of funding opportunities as and when they arise.</td>
<td>‘GPF scale’ projects</td>
</tr>
<tr>
<td>Local Infrastructure</td>
<td>None</td>
<td>Projects delivered locally which would typically be delivered by a single agency and have general local impact, where the delivery issues tend to be limited to that agency and the community the investment serves.</td>
<td>These are essentially local matters and there seems little merit in including them in any SI Plan.</td>
<td>Schools, local transport schemes, libraries, allotments, sports pitches</td>
</tr>
<tr>
<td>Neighbourhood Infrastructure</td>
<td>None</td>
<td>Projects derived by locally elected councils (i.e. parish and town councils) using the ‘meaningful proportion’ of CIL receipts passed to them plus the equivalent sums directed towards neighbourhood funding in non parished areas, as well as the neighbourhood infrastructure delivered by district councils and non elected neighbourhood groups</td>
<td>To be determined - locally elected councils will establish their own investment priorities free from the control of others provided spending meets the requirements of the CIL Regulations. District Council spending on neighbourhood infrastructure may be closely related both to the presence/absence of locally elected councils and the level of CIL resources and the resources directed to such bodies.</td>
<td>To be determined: (it should be noted that locally elected councils could direct funding towards any type of project, not just those that are essentially neighbourhood scale in nature)</td>
</tr>
</tbody>
</table>

Table 7: Categorisation of Hertfordshire’s future infrastructure requirements
7. THE RELATIONSHIP BETWEEN STRATEGIC AND LOCAL INFRASTRUCTURE NEED

Towards a Strategic Infrastructure Plan for Hertfordshire

7.8 Through analysing the challenges associated with future infrastructure planning and delivery, and from examples elsewhere, the review identifies the key elements that would need to underpin any Strategic Infrastructure Plan brought forward in the county (Table 8).

Table 8: Potential key elements of a Strategic Infrastructure Framework for Hertfordshire

<table>
<thead>
<tr>
<th>Key Element</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Vision</td>
<td>A vision of where Hertfordshire is heading in the future, from which all other elements of the Strategic Infrastructure Plan will emanate</td>
</tr>
<tr>
<td>2 Key themes</td>
<td>The themes which will respond to the vision</td>
</tr>
<tr>
<td>3 Priority interventions</td>
<td>Where intervention can best make the difference to respond to these themes. Could be topic or geographically based, or possibly both</td>
</tr>
<tr>
<td>4 Projects</td>
<td>The specific projects that demand concerted action to secure delivery</td>
</tr>
<tr>
<td>5 Agencies and partnerships</td>
<td>The key players involved in delivering projects and the partnership(s) they need to form to secure them</td>
</tr>
<tr>
<td>6 Potential funding packages</td>
<td>How funding can come together to deliver the identified infrastructure projects</td>
</tr>
<tr>
<td>7 Implementation programme</td>
<td>A potential programme to deliver the infrastructure investment</td>
</tr>
<tr>
<td>8 Outputs</td>
<td>What the Strategic Infrastructure Plan aims to achieve</td>
</tr>
</tbody>
</table>

7.9 It is considered that any Strategic Infrastructure Plan for the county should come together around a number of key themes, which are likely to include:

- **a transport theme** (‘Keeping Hertfordshire Moving’);
- **economic regeneration** (‘Promoting Hertfordshire’s Recovery’);
- **around sustainability** (‘Driving the Low Carbon Agenda’);
- **focusing on growth** (‘Responding to the Needs of Growth’);
- **environmental quality** (‘Greening Hertfordshire’)

7.10 Following on from this, a number of key infrastructure projects and potential funding sources could then be identified within the plan around a number of different infrastructure types. An illustration of this is set out in Table 9.

Table 9: A ‘very tentative’ Strategic Infrastructure Plan for Hertfordshire

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>Key area of investment</th>
<th>Specific projects?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>Strategic Highways</td>
<td>Outputs from the Inter Urban Route Strategy</td>
</tr>
<tr>
<td></td>
<td>Strategic Rail</td>
<td>Croxley Link</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abbey Line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stevenage Station</td>
</tr>
<tr>
<td>Utilities</td>
<td>Water Cycle</td>
<td>Contributions to upgrade of various STWs</td>
</tr>
<tr>
<td></td>
<td>Electric Supply</td>
<td>(Rye Meads, Deephams, Maple Lodge) +?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity upgrades</td>
</tr>
<tr>
<td>Health</td>
<td>Hospitals</td>
<td>Watford General upgrade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lister Hospital upgrade</td>
</tr>
<tr>
<td>Economic Development</td>
<td>Physical Infrastructure</td>
<td>Improved transportation infrastructure to major employment sites e.g. Gannels Wood</td>
</tr>
<tr>
<td></td>
<td>IT</td>
<td>Road, Knebworth Innovation Park, Leavesden?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ultra High Speed Broadband?</td>
</tr>
<tr>
<td>Climate Change/ Low Carbon Transition</td>
<td>Major renewables projects</td>
<td>Maylands DH and/or Watford Health Campus</td>
</tr>
<tr>
<td>Strategic Green Infrastructure</td>
<td>Investment of key elements of Strategic Green Infrastructure study</td>
<td>The ‘Reconnect’ project</td>
</tr>
</tbody>
</table>
8. THE MANAGEMENT OF INFRASTRUCTURE PLANNING AND DELIVERY

8.1 The review confirms that the original HIIS was an important catalyst in terms of infrastructure planning within Hertfordshire. Since publication the county has seen a continued development of infrastructure planning processes which sees local authorities maintaining an ongoing dialogue with infrastructure and service providers.

8.2 Nevertheless a number of limitations have been identified, and these are in particular likely to pose considerable challenges to the future planning and delivery of strategic infrastructure. The current approach to strategic infrastructure planning in Hertfordshire is relatively light touch and lacks the rigour and structure required to support the delivery of strategic infrastructure items in the new world of infrastructure planning.

8.3 Anecdotal evidence explored as part of the review (Table 10) suggests that Hertfordshire doesn’t perform as well as some of its neighbours, and its lack of a co-ordinated approach to infrastructure delivery is in stark contrast to those counties who have sought to address the challenges and complexities of infrastructure planning by bringing forward infrastructure projects in a co-ordinated manner; in doing so prioritising investment towards key growth and regeneration areas.

Examples include;

• Essex – Integrated County Strategy
• Cambridgeshire – Integrated Development Programme

8.4 Should a piecemeal approach to infrastructure planning (particularly strategic infrastructure) continue, the ability for Hertfordshire to effectively deliver the necessary infrastructure to support future growth and to support the economic recovery may be compromised.

8.5 The examples of both Essex and Cambridgeshire demonstrate a solid approach to co-ordinating strategic infrastructure needs and the importance given to cross boundary investment and prioritisation, although they do not address some of the complexities or issues facing local authorities and strategic infrastructure providers as a result of devolved responsibilities.

5 reasons to believe why Hertfordshire is not performing as well in infrastructure planning as it should

1. The county’s infrastructure deficit (calculated by HIIS in 2009 at £2.4bn) is evidence of historic underperformance.

2. At the time of writing less than half of the 10 Hertfordshire district councils have published Infrastructure Delivery Plans.

3. Hertfordshire is the only county in the Southeast of England that has never established a Local Delivery Vehicle (a partnership to plan and deliver new infrastructure).

4. Experience from the Growing Places Fund (see elsewhere in this report) suggests that the Hertfordshire lacks a chest of readily deliverable infrastructure projects.

5. The impression from HIIS of a number of infrastructure providers relatively unclear of their short, medium and long term infrastructure needs has been reinforced by this review.

8.6 With new roles and responsibilities in relation to infrastructure planning being introduced for local authorities (such as the establishment of district councils as CIL charging authorities), there are a number of disciplines being introduced which will impact locally but will also affect on how infrastructure provision is addressed.

Managing local complexities of infrastructure planning and delivery
8.7 Through engaging with infrastructure providers and participation within the CIL Reference Group, the HIIS review identifies a range of concerns from a number of infrastructure providers, in particular about their future engagement with the infrastructure planning process. The main concerns of strategic infrastructure providers can be summarised as:

- Reduction in the direct receipt of developer contributions;
- Whether charging authorities will make available levels of contributions similar to those currently secured through s.106;
- The ongoing importance of developer contributions to fund strategic infrastructure;
- Will infrastructure providers be meaningfully engaged in infrastructure planning process?;
- The level of priority strategic infrastructure will receive from CIL charging authorities;
- How to deal with cross boundary issues; and
- Potential issues relating to a piecemeal approach across Hertfordshire.

8.8 As with strategic approaches, the review identifies four examples of where local authorities or groups of local authorities are responding to the challenges and complexities of infrastructure planning in a world without regional strategies and the need to respond positively to the localism agenda, whilst at the same time recognising the importance and relevance of strategic infrastructure.

- Huntingdonshire – pioneers in CIL infrastructure management arrangements
- Milton Keynes – infrastructure planning as an annual cycle
- Shropshire – taking a holistic approach to infrastructure planning and delivery
- Greater Norwich Development Partnership – authorities co-operating together on infrastructure planning

8.9 These examples reiterate the importance of a consistent and co-ordinated approach. They appear to have combined the new infrastructure planning responsibilities and the increased focus on localised solutions to future infrastructure need whilst at the same time incorporating the need to consider strategic infrastructure on an above local basis.

8.10 The review has identified six key overarching features that should be applied to any management arrangements for infrastructure planning in Hertfordshire:

- Transparency
- Fairness
- Accountability
- Inclusiveness
- Innovation
- Co-ordination
9. FINDINGS AND CONCLUSIONS

9.1 The original HIIS has proved invaluable in relation to Hertfordshire’s development of infrastructure planning since its completion. However, the review also identifies significant challenges and has therefore come forward at an important time when the county stands in many ways at the crossroads on this issue.

9.2 Although there remain a number of uncertainties relating to the provision of infrastructure, the review has uncovered a number of significant changes in relation to both the scale and distribution of growth, investment and provider priorities and funding that all combine to suggest a new approach to the way that this issue is tackled in future.

9.3 Despite the progress that has been made, a number of the barriers identified at the time of the original HIIS still remain (e.g. a divergence in planning timescales) and there must be concerns that this continue to impede progress. It will be important to consider those actions across the county that will enable local authorities and service providers to identify and prioritise infrastructure provision.

9.4 It is clear from the review that the biggest challenge in relation to infrastructure provision is the planning, funding and delivery of strategic infrastructure. A particular issue that the Hertfordshire authorities will need to confront is the fact that the benefits of strategic infrastructure provision are unlikely to be spread equally. How easy will it be for Hertfordshire authorities to sign up to a collective approach to planning and delivering strategic infrastructure against such a background?

9.5 The reliance on CIL to deliver high levels of new infrastructure - the hope of the original HIIS - now appears unattainable in reality and it is unlikely that contributions from CIL will contribute more than 20% towards the overall infrastructure costs. As a result there will be an increased reliance on ‘funding packages’ that will require the pooling and management of a range of funding sources (both new and existing) by a number of delivery partners. There have been good examples where this has taken place - including in Hertfordshire - but is currently the exception rather than the norm.

9.6 In conclusion Hertfordshire has a way to go before it can consider itself to be fit for purpose in the new world of infrastructure planning, but there are a number of examples of good practice that Hertfordshire can draw upon so there isn’t a need to reinvent the wheel.

Next Steps

9.7 The refresh proposed three actions (Table 12 overleaf) that would address both the ongoing and emerging issues in relation to strategic infrastructure planning.

9.8 It is suggested that this review remains a ‘live’ document until after the proposed infrastructure planning conference, allowing the findings to be flexible in light of ongoing consultation.

Table 11: an infrastructure planning health check for Hertfordshire

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willingness to engage with other parties</td>
<td>★★★★☆</td>
<td>HIIS (its review) and engagement by some local authorities shows some commitment but much more needed</td>
</tr>
<tr>
<td>Partnerships to deliver infrastructure</td>
<td>★★★☆☆</td>
<td>Some evidence but collaborations like Croxley remain the exception rather than the rule</td>
</tr>
<tr>
<td>Detailed evidence of infrastructure need</td>
<td>★★★☆☆</td>
<td>An uneven picture, with some providers doing better than others</td>
</tr>
<tr>
<td>Knowledge of where growth will be located</td>
<td>★★★☆☆</td>
<td>Essential information for the planning and delivery of infrastructure, but the picture is currently patchy</td>
</tr>
</tbody>
</table>
### 9. FINDINGS AND CONCLUSIONS

<table>
<thead>
<tr>
<th>Proposed action</th>
<th>Why do it?</th>
<th>What would be achieved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preparation of a Strategic Infrastructure Plan for Hertfordshire</td>
<td>Without doubt, as we have been able to demonstrate in this review, Hertfordshire suffers from the absence of a strategic infrastructure plan when promoting both public and private investment in new infrastructure. Now is the time to address this.</td>
</tr>
<tr>
<td>2</td>
<td>Create an ‘Infrastructure Projects Chest’</td>
<td>The Growing Places Fund programme has confirmed what many were probably already aware of – that the County does not have a stock of potential infrastructure projects ready for immediate implementation should the funding opportunities arise. Given the fact that now, as never before, funding programmes are increasingly likely to be based on ‘achieving immediate and lasting impact’ this is something that needs to be quickly addressed.</td>
</tr>
<tr>
<td>3</td>
<td>A full appraisal of new sources of funding for infrastructure</td>
<td>As noted in the review there are a whole raft of innovative funding opportunities for new infrastructure, many of which are yet to be tried and tested, and whose applicability to Hertfordshire’s specific circumstances remain uncertain. These need to be explored in depth.</td>
</tr>
</tbody>
</table>

Table 12: A longer term programme of collaborative infrastructure planning work