## Contents

1. Introduction and Key Findings  
   - Report Structure  
   - Why HIIS was commissioned  
   - Study Objectives  
   - The wider achievements of HIIS  
   - How has the study been adapted to reflect changing circumstances during the course of the commission  
   - Key features of the study  
   - Key findings of the study  

2. Study Approach  
   - Approach  
   - Tasks  
   - Issues encountered  

3. Funding Model - Key Elements  
   - The rationale for a CIL  
   - Strategic and local CIL items  
   - The basis and operation of the Funding Model  

4. Viability Considerations  
   - Viability assessment  
   - Standard versus variable CIL rate  

5. Detailed Conclusions  
   - CIL start date  
   - Infrastructure service costs - Strategic items  
   - Infrastructure service costs - Local items  
   - Infrastructure costs by area  
   - Costs by KCDC  
   - CIL cashflow and funding balance issues  
   - Transport infrastructure  

6. Infrastructure by service  
   - Strategic CIL items  
   - Site specific items  
   - Local CIL items  
   - Other items  

7. Underlying issues  
   - Longterm service needs to be defined more clearly  
   - Need to determine potential from public funding  
   - Key transportation challenges  
   - Major cashflow issues  
   - Affordable housing  
   - Code for sustainable homes  
   - Other funding sources  
   - Summary of key conclusions  

8. Our Recommendations  
   - Adopt HIIS Funding Model as the basis for CIL  
   - Charging schedules across the county  
   - Refinement of service provider needs  
   - Review the basis for charging  
   - Establishing management arrangements  
   - Communicate with national and regional interests  
   - Districts to define local CIL charges  
   - Actions to take forward in LDFs  
   - Potential for Joint DPD  
   - Developing local authority skills in infrastructure planning and delivery  
   - Review HIIS in the light of publication of CIL regulations  
   - Potential amendment of floor authority status  
   - HIIS Action Plan
List of Tables

Table 5.1 - Strategic infrastructure costs by category 33
Table 5.2 - Local Infrastructure costs by category 35
Table 5.3 - Infrastructure costs by district 35
Table 5.4 - Infrastructure costs by Hertfordshire KCDC and Other KCDCs affecting Hertfordshire 36
Table 5.5 - CIL cashflow and funding balance (£M) 37
Table 5.6 - Examples of priority interventions 38
Table 6.1 - Local council services cost assumptions 47
Table 8.1 - HIIS action plan 64

List of Figures

Figure 2.1 - Study stages 11
Figure 5.1 - Strategic infrastructure costs by category 33
Figure 5.2 - Public sector funding gap by strategic infrastructure category 34
Figure 5.3 - Local Infrastructure costs by category 34
1. Introduction and Key Findings

Report Structure

1.1 This is a summary of the findings of Hertfordshire Infrastructure and Investment Strategy (HIIS) Study, drawn from the HIIS Final Technical Report (August 2009), the HIIS Transport Technical Report (May 2009) and the HIIS Historic Infrastructure Deficit Report (March 2009).

1.2 This document is structured as follows: this section sets out the context for the study and identifies the key findings; Section 2 outlines the study approach and the key tasks undertaken; Section 3 provides the rationale for CIL and the basis for the funding model; Section 4 summarises the viability assessment; Section 5 provides detailed conclusions from HIIS; Section 6 examines infrastructure by service; Section 7 examines a number of underlying issues and Section 8 sets out the Consultants’ recommendations.

Why HIIS was commissioned

1.3 The Hertfordshire Local Authorities, comprising the ten District Councils and the County Council, commissioned Atkins Ltd, Roger Tym and Partners and URS to undertake the HIIS Study, an assessment of Hertfordshire’s future infrastructure requirements and the identification of funding mechanisms necessary to secure its provision.

1.4 The HIIS Study was commissioned to address the infrastructure implications of the East of England (RSS) which identifies significant growth for Hertfordshire for the period up to 2021 including 83,200 new homes and 68,000 jobs. Four Key Centres for Development and Change (KCDC) are proposed, three of which will be subject to strategic scale housing growth.

1.5 The East of England Plan was submitted to Examination in Public without an Implementation Plan and with therefore little understanding of the infrastructure requirements of growth, particularly at specific growth locations.

1.6 The absence of any one agency to take responsibility for assessing the requirements for growth-related infrastructure and removing gaps in the evidence base led the Hertfordshire Local Authorities to take the initiative and commission the HIIS Study to determine the County’s future infrastructure and investment requirements.

Study Objectives

1.7 A number of study objectives were identified by the Hertfordshire Authorities at the outset of the study:

- To provide District Councils with the evidence base required in the preparation of Local Development Documents;
- To inform local authorities and public sector agencies and service providers in their future service planning;
- To assist utility companies in establishing and articulating their views;
- To establish an Infrastructure and Investment Funding Model that incorporates a Community Infrastructure Levy (CIL) approach to funding services and infrastructure needs arising from growth in the County to 2021 and proposes a levy for incorporation in Local Development Documents (LDD);
- To assist in bids for public funding;
- To provide an evidence base for infrastructure requirements for the Review of the Regional Plan to 2031;
- To provide an understanding of infrastructure requirements at strategic growth locations;
- To inform the development of a new Sub-Regional Economic Strategy; and
- To ensure that the strategy is clear, robust and has the flexibility to allow for changes in the future.

The wider achievements of HIIS

1.8 By commissioning the HIIS Study the Hertfordshire Authorities are leading the way in terms of preparing for a CIL regime in accordance with the provisions of the Planning Act 2008. Once the relevant Regulations are in place, Hertfordshire Authorities will be able to adopt a CIL within a few years, if they choose to do so. Early adoption of a CIL will be instrumental in funding and delivering the infrastructure that is required to support planned growth in the County.
1.9 The HIIS Study is notable for several achievements that will help to move infrastructure planning in the County forward, including:

- **Full stakeholder engagement** - a wide range of stakeholders have been involved in the study which has been important in raising the awareness amongst the key service providers of the challenges of delivering growth-related infrastructure;

- **Location of growth** - the study has contributed significantly to discussions on both the location and characteristics of growth, especially in the KCDCs;

- **Collaboration** - it has encouraged a growing consensus around the need for a collaborative approach to infrastructure planning; and

- **Long term planning** - it has developed an appreciation amongst service providers of the need for long term service planning. At present service providers tend to forecast needs only over the relatively short term: the study has raised awareness that, in order for service provision and infrastructure to meet the needs of future growth effectively, service providers should consider requirements up to 20 years ahead.

**How has the study been adapted to reflect changing circumstances during the course of the commission**

1.10 Since the study was commissioned in spring 2008, there have been significant changes in economic circumstances which have influenced the outcomes of the study. The rapid deterioration of the housing market, as a result of the global financial crisis, has brought the issue of viability - which influences the ability to charge CIL - into sharper focus. Consequently the viability assessment undertaken as part of the study has been reviewed and varying levels of house price decline have been tested in order to inform the most appropriate level of CIL charges that could be adopted across the County.

1.11 As the study progressed the Hertfordshire Authorities extended the scope of the study to include a full assessment of historic infrastructure deficits in more detail. There was an understanding amongst the Authorities that the County has a substantial historic deficit and that a comprehensive assessment of these deficits should be undertaken so that the scale of the problem could be quantified.

1.12 With the help of Hertfordshire’s service providers a rigorous assessment identified a range of infrastructure needs that could both be quantified and justified (to exclude for instance day to day revenue costs and items not normally funded from the public purse).

1.13 In total the county’s potentially fundable historic infrastructure deficit comprises an extensive list of requirements totalling some £2.4bn. In practice very little of this deficit is likely to be tackled using funding from the CIL regime. Instead the conclusions from this work will be chiefly directed towards identifying the need for mainstream public funding (requiring bids for funding from a range of government programmes) and to inform and assist the Hertfordshire Authorities in their LDF work and in the RSS Review.
Key features of the study

1.14 The HIIS has been developed through a collaborative approach to the identification of issues and solutions. Strong management arrangements were put in place from the start of the study. These included regular meetings of the HIIS Reference Group (a regular forum comprising the consultants and a range of public sector agencies, which had the responsibility for overseeing progress on the study and reviewing outputs) and the appointment of a Client Project Manager to co-ordinate responses and day to day communication between the eleven authorities and numerous stakeholders. These arrangements facilitated continuous interaction between the Client and the Consultants throughout the study.

1.15 There has been a high level of political engagement with regular progress reports to the Hertfordshire Infrastructure and Planning Partnership (HIPPP), which acts as an overall client for the study and which comprises representatives of each of the Hertfordshire Local Authorities. This political engagement has kept Hertfordshire politicians informed and has helped to steer the study.

1.16 Stakeholder involvement has been a key feature of the study throughout. Stakeholder workshops explored issues such as historic infrastructure deficit and the funding model and face-to-face meetings with key service providers have been crucial in developing an understanding of existing infrastructure and service provision and future growth requirements.
Key findings of the study

1.17 The chief study findings are as follows:

1. Following an intensive analysis of future needs in close conjunction with Hertfordshire’s service providers, the total growth-related infrastructure bill to 2031 is estimated at £2.666bn at current prices.

2. Few public service providers know their longer term needs, particularly beyond 2021, so this figure is more likely to be an underestimate than an overestimate.

3. There will be opportunities for some of these costs to be met by mainstream public funding. Contributions might also be obtained from Central Government’s special purpose funding programmes such as the Growth Area Fund (GAF) and through the Regional Funding Allocation (RFA). We have taken a measured approach to the latter opportunities and have concluded that service providers could secure in the order of £485m from such funding streams.

4. After deducting public funding which might offset the overall cost, there remains a growth-related infrastructure funding requirement of £2.181bn if growth targets are to be met. This is the figure that we recommend needs to be sought from the Community Infrastructure Levy (CIL) between 2011 (when we propose it is introduced) and 2031.

5. In setting CIL, the Hertfordshire authorities do need to be aware of the critical tensions there are between setting a rate to deliver all the necessary public infrastructure, ensuring that the viability of development sites is not compromised, and maintaining the supply of affordable housing. As we reflect below, CIL charging cannot be considered in isolation and some compromises are inevitable.

6. We estimate that this equates to a CIL charge of approximately £23,000 per dwelling. This comprises £18,000 towards the need for strategic infrastructure (which we recommend should be managed collaboratively by the Hertfordshire local authorities) and a further £5,000 provision for various needs that should be defined locally by individual district councils, such as open space, sports and community facilities. This combination of the £18,000 strategic charge and the (as yet undetermined) local charge will be the overall CIL charge. The assessment of local needs should be done as soon as possible.

7. We have not in our study distinguished between dwelling sizes and types, although there would be the potential to vary charges depending on indices such as floorspace or numbers of bedrooms. The draft CIL Regulations and guidance propose a calculation based on a charge per square metre and the conclusions reached in our study can readily be converted to this unit of charge if confirmed.

8. In the short term it must be accepted that CIL cannot make a significant contribution towards infrastructure needs until the housing market has emerged from its current downturn and house prices have recovered sufficiently. Based on the market research available, our view is that house prices will not recover to the peak levels achieved in 2007, until 2014.
9. However, delays in introducing CIL will have significant consequences in terms of raising finance for growth-related infrastructure. It could be introduced as early as 2011, by which time we are anticipating that house prices might have recovered to 90% of peak levels. However, our analysis suggests that with house prices at that level and a CIL set at £23,000 per dwelling, the viability of development in low and medium value areas would be challenging.

10. During this period we estimate that the maximum amount of CIL that it would be practicable to charge between 2011 and 2014 would be £10,000 per dwelling in middle value areas and no charge could be levied in low value areas. Put another way, an effective public subsidy of infrastructure would be required of £13,000 per dwelling in middle value areas and £23,000 per dwelling in lower value areas, aggregated by the number of houses permitted. Note that this is a generalisation of the economics of development across the entire County. These figures do not represent the effective shortfall in relation to any particular site or indeed any district.

11. We assume that a deficit at this level, even if only experienced for a few years, would result in a critical shortfall of funding for infrastructure. So, the issue then becomes how to deal with viability issues between 2011 and 2014. We have identified three ways of dealing with this:

- The introduction of a CIL could be deferred until 2014.
- It could be accepted that development would only take place, in the short term, on the easiest sites to develop, which in practice means that they would be vacant and not present any physical obstacles to development.
- Steps could be taken to enhance viability by modifying the arrangements for procuring affordable housing, either by reverting to the practice of accepting free serviced land to satisfy the obligation or by focusing HCA support on the lower value areas.
12. All three have their drawbacks. Deferring the introduction of a CIL would almost certainly reduce the overall sums available for investment in necessary infrastructure, so we discount that option.

13. In the short term in middle value areas, it is accepted that the level of CIL might deter development of some sites that are marginal in terms of viability. However, we doubt that the number of potential housing starts affected will be significant. The same approach should also be adopted towards lower value areas and in addition steps should be taken to reduce the net cost to developers of providing affordable housing, perhaps by focusing HCA support in these areas.

14. Viability problems are projected to persist in lower value areas beyond 2014 in which case either:

- districts will have to reassure themselves that development remains viable in the context of the specific characteristics of the sites allocated for development in their area; or
- the effort to reduce the net cost of affordable housing to developers will have to continue.

15. Given the above, then in the early years of its introduction, a CIL charge set across the county at the equivalent of £23,000 per dwelling to meet Hertfordshire’s infrastructure needs can expect to be challenged unless there is financial support for the provision of affordable housing, or a general increase in the availability of mainstream public funding (or a combination of the two). Moreover there is likely to be a considerable timing mismatch between the need for infrastructure and the collection of funding and we anticipate a particular problem in the latter part of the next decade, when infrastructure need is expected to considerably outstrip likely revenues. We anticipate a ‘gap’ between projected income and expenditure of perhaps £230m during the period 2016 to 2020, but believe that this can be substantially alleviated with careful financial management, if attention is paid to service planning by the infrastructure providers and if the Government makes supportive changes to mainstream funding streams.

16. In order to manage the implementation of new infrastructure in a rational way, it will be necessary to pool CIL receipts across the County. Our report emphasises the benefits of the Hertfordshire authorities working together collectively to set infrastructure priorities and to oversee infrastructure investment. We believe that the Hertfordshire Funding Model which has been provided as part of this study should help to underpin collaborative working and facilitate good financial planning.
17. We conclude our report with a series of recommendations to the Hertfordshire authorities on how to take the HIIS findings forward. In the short term there needs to be discussion with a number of key agencies; the commencement of a process which will see a step change in the way in which infrastructure providers plan for service growth and development (with long term service planning becoming the industry standard); and the exploration of appropriate models to manage, distribute and account for expenditure of CIL revenue on infrastructure projects.

18. In the medium to longer term, infrastructure planning needs and the CIL needs to be embedded in the development plan system. The HIIS report provides a starting point for this effort but a lot needs to be done.

1.18 It is vital that new growth in the County is supported by the infrastructure that it needs if successful and sustainable communities are to be created. By providing an important part of the evidence base the HIIS Study will underpin the justification of an appropriate funding mechanism to help achieve the goal of creating the sustainable communities of the future.
Study Approach
2. **Approach**

2.1 In summary the study adopted a ‘bottom up’ approach in which infrastructure needs at the local level have been identified, collected and added together in order to derive an aggregate view of the infrastructure required to respond to growth across the County. This has the significant advantage of producing a more robust outcome which is necessary to underpin sound planning at the local authority level.

2.2 In order to derive a CIL charge that is robust it is sensible to start with a good understanding of what is likely to achievable. The HIIS study has assessed viability and this viability assessment has informed the findings on the level of CIL charge which could be levied.

2.3 The study was undertaken in five broad stages:

---

**Figure 2.1 - Study Stages**

- **Masterplanning**
- **Demographic Analysis**
- **Transport Assessment**
- **Assess Timing of Particular Needs**
- **Assess the Scope to Secure Public Funding**
- **Derive Infrastructure Needs**
- **Derive Costings for Identified Needs**
- **Viability Assessment**

**INFRASTRUCTURE PLANNING**
Provides the evidence that LPAs need to inform their core strategies

**HERTFORDSHIRE FUNDING MODEL**
This determines the level of CIL charge that could be levied

---

It is important, across a range of service providers and infrastructure items, to be clear what constitutes a growth-related item, as opposed to an existing deficit in provision.

As far as possible, this uses information from the service providers themselves.

This is required in order to understand, for the purposes of the funding model, the needs to 2031. This involves an understanding of when development is likely to happen and when service providers need to deliver their particular services.

Review the scope for services of public funding (e.g. capital programmes RFA, GAS, etc) to contribute to the delivery of infrastructure needs.
Tasks

2.4 The five stages of the study entailed several key tasks:

- **Dwelling Trajectories** - To derive robust dwelling trajectories for the period to 2021 it was necessary to make allowance for the effects, over the short term, of the current economic recession. It was considered that the housebuilding rate in 2009/10 is likely to fall to 35% of the 2007/8 rate and then not recover back to the 2007/8 level until 2013/14. In addition the assumption was made that current housebuilding rates, as required by the RSS, would continue from 2021 to 2031.

- **Demography** - Future dwelling requirements inform demographic projections which, in turn, directly determine the required levels of a range of infrastructure services. Indeed, most services are in some way determined by population change. The most important consideration for this part of the work was to understand the size and profile of the population associated with the additional housing. Total population change does not relate directly to the level of housing production, partly due to the long term decline in average household sizes. More information on this and the dwelling trajectories is included in Section 4 and appendix A of the Technical Report.

- **Masterplanning** - A masterplanning exercise was undertaken to understand where the principal housing growth might be located in the County. The exercise focused on the KCDCs (Stevenage/North Hertfordshire, Watford, Hemel Hempstead, Hatfield and Welwyn Garden City) and also included Harlow and Luton/South Bedfordshire, both of which are outside the County but are likely to have a growth impact within Hertfordshire. This work informed discussions with service providers and also provided location specific housing inputs into the transport modelling work. However service providers need to consider the masterplanning further to fully identify future infrastructure requirements from growth. More information on this and the masterplanning exercise is included in Section 3 of the Technical Report.

- **Growth Assignment** - Housing growth not included in locations for which masterplans were prepared was then assigned to other areas in Hertfordshire. Once existing commitments had been taken account of, assumptions were made about the location of growth by District. This focused growth on the existing urban areas.

- **Service Provider Engagement** - One of the major tasks in the study was working with service providers in order to identify the impacts of future growth on their particular service needs. Each service provider has different needs and determines their needs differently, so it was not possible to adopt a common approach: what works for the health service does not work for the emergency services. Regular dialogue was maintained with all service providers and this will need to be continued into the future in order to fully determine infrastructure required to support housing growth.

- **Establishing a Baseline** - Part of the work with service providers was to establish the baseline position i.e. what needs are related to growth and what represent existing deficits. A separate analysis of historic deficit was undertaken and this helped to separate out needs. In reality districts can plan to deal with existing deficits through infrastructure planning (as required by PPS12). However, the draft CIL Guidance is clear that, for the purpose of deriving a CIL, historic deficits cannot be included. Therefore a CIL charge will be unable to provide funding towards addressing these deficits which, as identified in the Historic Deficit Report, are significant. It is recommended that further work is undertaken to explore the potential for public funding to address these deficits.
Issues encountered

CIL Regulations not published

2.5 The draft CIL Regulations were published for consultation at the end of July 2009, after the completion of all the technical analysis undertaken as part of the HIIS study: we have agreed with the commissioning authorities that we would not revisit this work, and that the conclusions from our study should stand. Fortunately we have largely been able to anticipate the content of the draft Regulations, and there are no real conflicts of any substance between what they contain and our recommendations. There are however a few areas where we do not think the Regulations go far enough and we will return to these in the Recommendations section.

2.6 In some relatively minor areas our conclusions do differ from the draft Regulations. We have recommended that CIL is levied only on residential development, because we have concluded that applying it to commercial and industrial development could negatively impact on the economy of Hertfordshire, particularly when coming out of a recession. The draft CIL Regulations propose applying the charge to nearly all classes of development with a few exceptions (householder development, buildings under 100 sqm). We think both approaches have their merits but also feel that if other forms of development are made subject to the charge, our conclusions could readily be applied (although clearly, it is much more difficult to predict the form and timing of non residential development); the effect will be to reduce the charge on residential development, although probably not significantly. In either event, our conclusions reflect the guidance available at the time the report was written.

2.7 Similarly, the draft CIL Regulations propose a charge per square metre for all classes of development including residential, whereas we propose a charge per dwelling. We think the government’s justification for their approach is a dubious one (particularly a suggestion that a flat rate charge per dwelling will encourage larger dwellings to be built in preference to smaller ones) as this flies in the face of reality as this is far more likely to be influenced by market considerations, and the ‘per dwelling’ approach has found favour in most of the ‘tariff’ schemes that have been introduced. However if it proves necessary, our findings can easily be recalibrated to be expressed as a charge per square metre and it will not change our conclusions in any way.

2.8 The Draft Regulations also suggest allowing the level of charge to vary across a district to reflect variations in viability. In Paragraph 15, the consultation document seems to envisage that the prime purpose of this flexibility would be to allow charges to be set at a lower rate in regeneration areas rather than at a higher rate in wealthy areas; clearly in practice the rules they envisage could be used either way. As it stands, CLG values the support for the CIL proposals from key property industry organisations. This is given on the basis that Government will not resurrect the Planning Gain Supplement proposals which were seen as a tax rather than a contribution to meeting defined local needs. Since this element of the proposals can clearly be used to gear contributions to site values, we suspect that it will meet with objections from the industry. However, this will only come to light following the completion of the consultation.

Embedding HIIS into LDFs

2.9 It was important for the study to provide advice on how the HIIS may be embedded in the LDF process. The outputs of the study in this respect are twofold: firstly, to provide districts with sufficient information on which to undertake infrastructure planning to inform their respective Core Strategies; and secondly, to consider how best to embed the HIIS, including the Funding Model, in districts’ LDFs in order to provide the basis for CIL Charging Schedules. Again, the uncertainty about the final Regulations for the CIL has been a drawback but recommendations have been framed such that they can be adopted flexibly by districts without compromising their LDF timetables, and in any event, as noted above, we see very little conflict between our conclusions and the recently published draft Regulations.
Information gaps

2.10 There are many gaps in the information supplied by the service providers. This is not in any way a criticism but rather a reflection of the fact that many service providers are being asked to provide information in a form that they are not used to and their approaches to operational planning are not capable of easily accommodating. Nevertheless, all service providers will need to provide this information in the near future and there is commitment to do so across the board. HIIS sets out further guidance as to what is needed from service providers along with a programme for completing this work. For now, though, the gaps in information mean that the analysis is necessarily incomplete and the study findings will need to be reviewed by Hertfordshire authorities in future.

Economic uncertainty

2.11 The uncertainty in the housing market, given the current economic recession, has had to be factored into the analysis. Inevitably, this requires assumptions to be made, as no one can be certain when the market will start to improve and to what level it will return over the medium to long term. As already discussed, the study has made assumptions about the possible impact of the recession on house building, based on previous recessions. However, given that the RSS requirements are fixed, this has meant that very high rates of growth in the latter part of the RSS period to 2021 are assumed. Whether these levels can be achieved is questionable. Any change to the dwelling requirements as part of the RSS Review will inevitably impact on the infrastructure requirements.

Demographic issues

2.12 A key demographic issue for the study is that of estimating the actual population profile arising from the new housing. It is important to understand that the population of a new development may not necessarily cause a large change in the overall population of the settlement or district in which the development occurs. Service providers need to determine which of their needs should be based on the overall population change, and which are needed for the local population change. It would be desirable to ensure that a consistent approach is taken by all service providers in future.

Management issues

2.13 The study provides a working draft of the Hertfordshire Funding Model. This will form the core of the evidence base for the CIL charge, as well as the basis of a charging schedule for individual Districts. As such, the management and updating of this model is important. The study recommends possible ways that the Funding Model can be managed in order to ensure that there is transparency, consistency and accountability. However, this (or an alternative way forward) will need to be agreed by all of the Authorities and service providers in advance of its testing and operation.
Separating growth needs from historic deficits

2.14 One of the big challenges for the service providers has been to separate out needs related to growth from those that are historic deficits. The only infrastructure area where it is not possible to separate out historic deficit from future need is transport. Therefore, many of the identified transport needs will also directly be addressing current congestion points. But for all other infrastructure needs, growth items need to be separated from deficits, in order to derive a robust CIL charge and it is evident that there is still work to be done by service providers in this respect.
3. Funding Model - Key Elements

The rationale for a CIL

3.1 The Hertfordshire Funding Model, as underpinned by the HIIS study, seeks to provide the evidence for a CIL charge. This is important because the CIL should provide more flexibility than the current planning obligations regime. In line with Government guidance and established case law, the requirement is for planning obligations to be directly related to the specific development in question. From a developer’s point of view, this arrangement provides potential for negotiation; conversely, from the local planning authority’s perspective, the planning obligation approach creates uncertainty about the level of contribution that can be achieved to deliver the required infrastructure for any particular development.

3.2 By contrast, CIL offers more certainty for both the local planning authority and the developer. The infrastructure requirements can be based on broad calculations, whilst at the same time ensuring that the required infrastructure can be delivered. Also by the very fact that these contributions are not tied to a particular site, receipts can be used to deliver a wider range of schemes that might, under the current system, not be possible to fund. This is because at present the funding gap for this wider range of schemes is not being contributed to by new development. In short, CIL appears to provide a sound basis for strategic infrastructure planning which is currently lacking under the planning obligations regime. Moreover, it is a further consideration that not all development is subject to s106 agreements yet still generates infrastructure needs.

Strategic and Local CIL items

3.3 The Funding Model includes both strategic and local CIL items. Strategic items are those that provide for infrastructure needs that cross a number of districts. Some of these, such as transport are obvious, whereas others have required more careful consideration to determine whether they are truly strategic in nature. Individual services may be locally delivered but planned and managed on a strategic scale - this includes Health and Children’s Services/Adult Care.

3.4 We have concluded that investment decisions on strategic CIL should be undertaken collectively by the Hertfordshire local authorities - the 10 district councils plus the County Council. Local CIL covers those infrastructure needs provided locally where we consider investment decisions should most appropriately be determined by the particular district council in which the facility is located. This includes play facilities, sports pitches and community centres.

3.5 We there recommend that each Charging Schedule established by the Charging Authorities (the 10 Hertfordshire districts) should comprise a strategic CIL charge, managed collectively, and a separate local CIL charge, managed by the individual district.

3.6 As investment priorities will vary from district to district, it will therefore be the responsibility of each district to determine its own local needs, through a robust evidence base. The study was able to provide was possible costs for providing local CIL items, derived from comparable evidence from elsewhere. Each district can then either adopt the charges recommended in our study or derive their own charges in order to arrive at an overall charge for local CIL items in the Funding Model.

The basis and operation of the Funding Model

3.7 The essence of the Funding Model is quite simple. It brings together key infrastructure information from each of the service providers to understand:

- The infrastructure items required to facilitate new growth;
- The estimated costs of these infrastructure items;
- The estimated public sector (including mainstream) funding available to pay for this infrastructure;
- The anticipated timing of the infrastructure items, costs and public funding;
- A consideration of viability.
3.8 From the above information the Model can be used to calculate the CIL charge required in order to cover costs.

3.9 The Model will be able to provide the basis for each individual CIL Charging Schedule, showing the items that each district has identified through infrastructure planning as required by PPS12, along with how each item will be funded. In addition the Model shows the associated cashflow position for each infrastructure item.

3.10 We recommend that the Model should have a single administrator - the ‘Modelmeister’ - who will be in charge of inputting new information as it is provided. This new information will come in two forms:

- As growth/development information from the districts in their capacity as local planning authorities;
- As infrastructure requirements and funding information from the service providers.

3.11 The timing of infrastructure costs and funding is an important input into the model, as it effectively enables the Model to act as a ‘cashflow’ for infrastructure costs and funding.

3.12 The start date of the Model is 2011, a reflection of when it is likely that CIL could be operational. As most service providers currently only forward plan in detail for a limited number of years, the first five years of the Model are set out annually. Beyond that, the timing is set out in three blocks, each of five years.

3.13 The Funding Model is currently populated with the infrastructure and funding information gathered to date. As this information will require refinement and updating in the future, the Model has been designed to be able to do this.
4. Viability Considerations

Viability assessment

4.1 One of the key areas of our research has been the issue of development viability. An important consideration around any CIL charge will involve judgments around the ability of new development to meet the costs of the contributions sought through CIL; the draft CIL regulations identify this is a major consideration, and take the view that any CIL charge that compromises the delivery of anything other than a relatively small number of challenging sites is unlikely to be acceptable. Since in practice there will be a wide range of sites proposed for development and some of these (in particular those already in use) will be expensive to develop, CLG is effectively giving Planning Authorities the choice between (a) setting a low CIL which is unlikely to cover the cost of the infrastructure required for sustainability; (b) allocating sites for development that have a low value in their current use; or (c) compromising on other requirements such as affordable housing. The new draft regulations and Guidance offer no obvious way of mediating between these demands and tensions.

4.2 Our study has therefore proceeded on the basis that the level of charge must not significantly compromise the delivery of the overall number of new homes required. As noted elsewhere, the HIIS study aims to identify all anticipated infrastructure needs and costs and, having made a suitable allowance for other forms of public funding, concludes that an overall average charge of £23,000 per dwelling is required if all identified infrastructure to 2031 is to be delivered. This overall charge comprises a figure of £18,000 per dwelling for strategic CIL (as defined in Chapter 5) and a provision of £5,000 for Local CIL (for reasons explained elsewhere, this latter figure will be a variable one). This CIL charge would increase the level of charges incurred by developers to date, partly because of the overall scale of infrastructure required but also because other funding sources are currently expected to contribute relatively little to meeting these needs.

4.3 As explained in much further detail in the technical report, viability studies are based on an assessment of whether the ‘residual value’ of a proposed development site (the worth of the land for development after deducting development costs - including CIL, site specific planning obligations and the provision of affordable housing) is sufficiently high to incentivise landowners to sell their land. We have concluded that for Hertfordshire, a level of CIL charge should be considered affordable if it would result in a residual value of £1.5m per hectare generally or £1.0m per hectare in areas where the great majority of houses will be delivered on sites that will be relatively uncomplicated to develop.

4.4 In this case a major complicating factor has been the decline in house prices brought about as a consequence of the recent recession and the even steeper consequential fall in land values. House prices are the biggest single influence on land prices. In comparison, the impact of potential CIL requirements is modest. So changes in house prices, rather than marginal compromise in the level of CIL actually charged, will drive the viability of the CIL regime. By way of illustration, a 5% increase in the price of a £300,000 house (which might only be equivalent to the short term discounts that developers are offering potential buyers in the recession) would increase a developer’s receipts by £15,000, whilst a 20% decrease in a £23,000 CIL to a level at which it would clearly be difficult to pay for all the infrastructure required, would only cut costs by £4,600 per house. (In practice the relationship isn’t quite so straightforward for cash flow reasons).
4.5 However in the short term it is accepted that this decline will seriously inhibit the potential to introduce a CIL which is capable of making a significant contribution to meeting infrastructure needs. The expectation is that by 2011 house prices will recover to 90% of the peak levels achieved in 2007, and that they will fully recover (albeit without allowing for inflation in the meantime) by 2014. We believe that will make a CIL of £23,000 viable in all but the lowest value areas (such as the extension to Harlow and in parts of Stevenage) after 2014. So for the purpose of this analysis, ‘short term’ is the period between the earliest date at which a CIL might conceivably be introduced (i.e. 2011) and 2014.

4.6 It is important to note that the analysis for the HIIS was based on data about different levels of house prices in new developments across the County as a whole. It does not permit analysis by district, not least because each one has areas of higher and lower cost housing.

4.7 During this period we estimate that if the aim is to ensure that the great majority of sites are worth £1.5m per gross hectare after all planning requirements are met, then the maximum amount of CIL that it would be practicable to charge between 2011 and 2014 would be £10,000 per dwelling in middle value areas and no charge could be levied in low value areas. Put another way, an effective public subsidy of infrastructure would be required of £13,000 per dwelling in middle value areas and £23,000 per dwelling in lower value areas. It is important to note that this is a generalisation of the economics of development across the entire County. These figures do not represent the effective shortfall in relation to any particular site or indeed any district. In addition, because we do not know in practice how many sites will come forward for development during this period, we cannot quantify what this means in terms of an overall figure. But it is at least possible that if a lower CIL is proposed in these middle and lower values at the outset, and it is widely expected that the figure will increase on review and in the context of rising house prices, then developers will be keen to secure permissions as soon as is practicable and a substantial shortfall in the funds available to pay for the necessary infrastructure might arise.

4.8 For both this and for practical administrative reasons it is unlikely to be practical to introduce an evidenced-based CIL at one level in 2011 and to increase it in 2014, so an alternative approach is needed which deals with the problems in areas where viability is a challenge. There are three ways of dealing with this:

- The introduction of a CIL could be deferred until 2014.
- It could be accepted that development would only take place on the easiest sites to develop which in practice means that they would be vacant and not present any physical obstacles to development.
- Steps could be taken to enhance viability by modifying the arrangements for procuring affordable housing, either by reverting to the practice of accepting free serviced land to satisfy the obligation of by focusing HCA support on the lower value areas.
4.9 All three have their drawbacks. Deferring the introduction of a CIL would almost certainly reduce the overall sums available for investment in necessary infrastructure because Section 106 provides a relatively inefficient alternative in this respect. We discount this option because there is no obvious solution to the resulting financial problem.

4.10 However, the other possibilities are also problematic. Focusing development on the easiest sites might compromise the scale of development within existing urban areas. And changing the arrangements for procuring affordable housing might impact on the timing and spread of new social rented housing provision in particular.

4.11 Notwithstanding we propose that a combination of the second and third options is adopted as a short term expedient, with the lowest value areas probably needing both.

4.12 Reducing the target for the price that it is assumed landowners will want for their land in order to bring it forward for development from £1.5m per ha to (say) £1m per ha, would have the effect of deterring development of the following types of sites:

- Those that have significant value in their existing use (i.e. are not vacant or used for agricultural purposes).
- Those which require the most expensive levels of preparation and remediation.
- Those needing significant investment in local offsite access and servicing works.

4.13 It would also discourage landowners who simply believe that they might receive a higher price for their land if they wait until values improve further. But in areas where landowners are willing to sell or land is already held by developers under reasonably priced options agreements, and where developers should incur no significant, disproportionate and unusual costs, then £1m per hectare should be adequate.

4.14 Assuming that this target for the residual worth of development land is reduced to £1m per ha during 2011-2014, development in middle value areas should be viable even if CIL is levied at £23,000 per dwelling. We do not have enough information on the nature of the sites being proposed for allocation in each district, but our general impression is that although this might result in a short term reduction in the number of houses built, in quantitative terms the overall long term impact on a County-wide basis would be insignificant. However sites in the lowest value areas would still theoretically only be able to afford a CIL of around £13,000 per dwelling and further steps would need to be taken in these areas.

4.15 In middle value areas in instances where this would give rise to viability problems in relation to specific sites which planning authorities are motivated to address for specific local reasons, we recommend that they do so by modifying the affordable housing requirement.
Chapter 4: Viability Considerations

4.16 Changing the approach to affordable housing procurement might, in any event, be necessary in low value areas in order to achieve the recommended level of CIL contributions. This is partly because the emerging proposals for the CIL suggest that there will be less flexibility to vary CIL levels in the context of viability issues than there will be to modify affordable housing requirements. It is also because, in the short term, it might be easier to resolve problems by efficiently using potential HCA support for affordable housing costs and (in the context of lower house prices) by deferring, although not reducing, some of the planned affordable housing provision. Clearly one option is simply to reduce the affordable housing requirement but we do not consider that this is a desirable or realistic option. Two further options capable of a significant impact have therefore been identified:

- District Councils could revert to the historic practice of requiring developers to provide serviced land capable of supporting the development of the required number of affordable homes by others. This would place the onus on RSLs and the HCA to provide a greater proportion of the sum required for development.
- Arrangements could be negotiated with the HCA to focus their grant support for affordable housing procurement on the lowest value areas, perhaps using 'cascading agreements' which effectively gear the amount of affordable housing provided on a site to the amount of grant support provided.

4.17 After 2014, viability problems might still be experienced in areas where values are low and exceptional development problems might be encountered. In these cases we would suggest:

- Using focused HCA support as described above.
- Using the limited scope that it is anticipated that CIL guidance will provide to compromise on the amounts charged in individual cases.
- Changing land allocations to focus on sites that are inherently more viable.

Standard versus variable CIL rate

4.18 The above analysis is based on the concept of a standard CIL rate across the country. As CIL breaks the link between a development and a specific item of infrastructure, so it is reasonable to talk about the possibility of a standard Hertfordshire charge to meet all Hertfordshire’s infrastructure needs.

4.19 However the alternative is differing rates within different parts of the county or even within districts. The draft CIL Regulations suggest that this is an option (see paragraph 2.8 above). There are various pros and cons around the establishment of either a standard or variable charge: here we look exclusively at the financial implications of each alternative.

4.20 Varying charges across the county could clearly allow higher rates in higher value areas of the county whilst accepting the need for lower rates elsewhere: in higher value areas a charge in excess of £23,000 could possibly be justified, which could allow reductions in the level of subsidy required in the lower value areas to enhance development viability.
4.21 However in effectively seeking to make judgments on CIL charges based on ability to pay, and in requiring, in effect, cross subsidisation across districts (with higher value districts making up a shortfall from lower charges elsewhere), a variable arrangement runs the risk of moving away from the universality that CIL is supposed to bring. Also, the CIL proposals are not at all clear about whether differing levels of charge can be expressly used as a means of cross subsidy.

4.22 Ultimately this is an issue that will need to be explored further. A number of factors will help this debate, but it is clear that the Hertfordshire authorities will need to build on this work as follows:

- By achieving a better understanding of development economics across the county, and in particular improving the understanding of:
  - any abnormal costs that will be incurred in bringing forward specific major sites; and
  - the mix of types of site within the housing allocations. We would anticipate significant issues with viability if, for instance, the majority of allocated sites have a significant value in their existing use, e.g. older industrial estates.

- By considering collectively infrastructure investment priorities, on the assumption that CIL and all other potential infrastructure funding sources will fail to match the cost of infrastructure needed.
Chapter 5: Detailed Conclusions

5. Detailed Conclusions

5.1 The conclusions below are based on the information provided within the timescale of the study. There are significant numbers of areas where additional work needs to be done to either derive a figure or to verify the figure provided. This must be done before the HIIS is subjected to any form of examination.

5.2 Detailed information on costs, funding and the structure and level of the CIL charge are contained respectively in Sections 5, 6 and 8 of the Technical Report.

CIL start date

5.3 Based on the viability analysis, it is considered reasonable to introduce CIL in 2011. This is based on assumptions that house prices will return to 90% of their ‘peak’ (2007) levels by this date and that steps can be taken to address short term viability issues in accordance with the proposals in Section 4 above.

Infrastructure service costs - Strategic items

5.4 The largest strategic infrastructure categories in terms of costs are transport and education. These account for over 85% of the total strategic infrastructure costs identified.

<table>
<thead>
<tr>
<th>Infrastructure Category</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>£1,106.0m</td>
</tr>
<tr>
<td>Education</td>
<td>£804.0m</td>
</tr>
<tr>
<td>Municipal Waste</td>
<td>£200.0m</td>
</tr>
<tr>
<td>Health</td>
<td>£71.9m</td>
</tr>
<tr>
<td>Police</td>
<td>£35.0m</td>
</tr>
<tr>
<td>Ambulance Service</td>
<td>£12.7m</td>
</tr>
<tr>
<td>Herts Fire and Rescue Service</td>
<td>£7.0m</td>
</tr>
<tr>
<td>Green Infrastructure</td>
<td>£5.2m</td>
</tr>
<tr>
<td>Adult Care</td>
<td>none currently identified</td>
</tr>
<tr>
<td>Children’s Services</td>
<td>none currently identified</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£2,241.9m</strong></td>
</tr>
</tbody>
</table>
5.5 Figure 5.2 below shows education has the largest public sector funding gap, with no mainstream funding currently identified.

Figure 5.2 - Public sector funding gap by strategic infrastructure category

Infrastructure service costs - Local items

5.6 Local infrastructure requirements, based on our high level assumptions, are more evenly spread between categories than strategic infrastructure requirements. Play areas such as Multi Use Games Areas (MUGAs) and Local Equipped Areas for Play (LEAPs) and community/youth centres are the three highest cost categories, although this is likely to vary between districts.
Table 5.2 - Local infrastructure costs by category

<table>
<thead>
<tr>
<th>Infrastructure Category</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUGAs</td>
<td>£83.5m</td>
</tr>
<tr>
<td>LEAPs</td>
<td>£74.2m</td>
</tr>
<tr>
<td>Community and youth centres</td>
<td>£65.2m</td>
</tr>
<tr>
<td>Indoor leisure facilities</td>
<td>£54.4m</td>
</tr>
<tr>
<td>Sports pitches</td>
<td>£27.6m</td>
</tr>
<tr>
<td>Skateboarding</td>
<td>£22.3m</td>
</tr>
<tr>
<td>Urban parks and gardens</td>
<td>£18.5m</td>
</tr>
<tr>
<td>Libraries</td>
<td>£17.5m</td>
</tr>
<tr>
<td>Natural and semi-natural green spaces</td>
<td>£15.0m</td>
</tr>
<tr>
<td>Waste collection</td>
<td>£14.4m</td>
</tr>
<tr>
<td>NEAPs</td>
<td>£11.1m</td>
</tr>
<tr>
<td>Shelters</td>
<td>£7.0m</td>
</tr>
<tr>
<td>Cultural facilities</td>
<td>£5.0m</td>
</tr>
<tr>
<td>Allotments</td>
<td>£4.3m</td>
</tr>
<tr>
<td>Amenity greenspaces</td>
<td>£2.1m</td>
</tr>
<tr>
<td>Churchyard and cemeteries</td>
<td>£1.5m</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£423.4m</strong></td>
</tr>
</tbody>
</table>

5.7 Infrastructure costs by district have been assessed and are shown in Table 5.3. Because some service costs have been assessed on a countywide or general basis (e.g. transport, education) some costs are expressed on a pro rata basis on the assumed level of residential development in the district.

5.8 There is substantial variation in infrastructure between districts on this basis, ranging from approximately £95M in Three Rivers to approximately £440M in East Hertfordshire. The districts include the KCDCs (within Hertfordshire) which are set out in Table 5.4.

Table 5.3 - Infrastructure costs by district

<table>
<thead>
<tr>
<th>Area</th>
<th>Strategic</th>
<th>Local</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broxbourne</td>
<td>£79.8m</td>
<td>£23.5m</td>
<td>£103.3m</td>
</tr>
<tr>
<td>Dacorum</td>
<td>£305.0m</td>
<td>£49.2m</td>
<td>£354.2m</td>
</tr>
<tr>
<td>East Herts</td>
<td>£374.0m</td>
<td>£63.6m</td>
<td>£437.6m</td>
</tr>
<tr>
<td>Hertsmere</td>
<td>£119.7m</td>
<td>£25.3m</td>
<td>£145.0m</td>
</tr>
<tr>
<td>North Herts</td>
<td>£352.8m</td>
<td>£83.1m</td>
<td>£435.8m</td>
</tr>
<tr>
<td>St Albans</td>
<td>£295.0m</td>
<td>£50.8m</td>
<td>£345.9m</td>
</tr>
<tr>
<td>Stevenage</td>
<td>£151.4m</td>
<td>£37.3m</td>
<td>£188.6m</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>£76.2m</td>
<td>£19.3m</td>
<td>£95.5m</td>
</tr>
<tr>
<td>Watford</td>
<td>£337.3m</td>
<td>£24.4m</td>
<td>£361.7m</td>
</tr>
<tr>
<td>Welwyn Hatfield</td>
<td>£151.7m</td>
<td>£46.9m</td>
<td>£198.5m</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£2,242.9m</strong></td>
<td><strong>£423.4m</strong></td>
<td><strong>£2,666.3m</strong></td>
</tr>
</tbody>
</table>
Chapter 5: Detailed Conclusions

Costs by KCDC

5.9 The infrastructure costs by KCDC (within Hertfordshire) are shown in Table 5.5. Approximately 45% of the total infrastructure costs have been assigned to the KCDCs. The costs for individual KCDCs vary substantially, from approximately £90M for the East Luton KCDC to over £290M for the Watford KCDC.

Table 5.4 - Infrastructure costs by Hertfordshire KCDC and other KCDCs affecting Hertfordshire

<table>
<thead>
<tr>
<th>Area</th>
<th>Strategic</th>
<th>Local</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stevenage KCDC</td>
<td>£176.1m</td>
<td>£58.4m</td>
<td>£234.5m</td>
</tr>
<tr>
<td>Hemel Hempstead KCDC</td>
<td>£202.1m</td>
<td>£26.8m</td>
<td>£228.9m</td>
</tr>
<tr>
<td>Welwyn Garden City &amp; Hatfield KCDC</td>
<td>£137.6m</td>
<td>£31.4m</td>
<td>£169.0m</td>
</tr>
<tr>
<td>Watford KCDC</td>
<td>£286.1m</td>
<td>£5.3m</td>
<td>£291.4m</td>
</tr>
<tr>
<td>Harlow KCDC - growth in E Herts</td>
<td>£125.9m</td>
<td>£43.1m</td>
<td>£169.0m</td>
</tr>
<tr>
<td>East Luton KCDC - growth in N Herts</td>
<td>£68.7m</td>
<td>£21.1m</td>
<td>£89.8m</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£966.5m</strong></td>
<td><strong>£186.1m</strong></td>
<td><strong>£1,173.7m</strong></td>
</tr>
</tbody>
</table>

CIL cashflow and funding balance issues

5.10 The table below shows infrastructure costs and CIL revenues on a timeline basis from 2011 to 2031 on the basis of a CIL charge equivalent to £23,000 per dwelling. It shows the overall shortfall of income, both at the strategic and local level and the particular issues encountered in the years 2016 to 2020 where a very substantial funding hole appears.
### Table 5.5 - CIL cashflow and funding balance (£M)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Infrastructure Costs</strong></td>
<td>£64.4m</td>
<td>£74.6m</td>
<td>£183.4m</td>
<td>£159.1m</td>
<td>£94.3m</td>
<td>£897.1m</td>
<td>£471.4m</td>
<td>£297.4m</td>
<td>£2,241.9m</td>
</tr>
<tr>
<td><strong>Mainstream Funding</strong></td>
<td>£14.5m</td>
<td>£14.4m</td>
<td>£115.7m</td>
<td>£83.3m</td>
<td>£15.6m</td>
<td>£108.1m</td>
<td>£107.3m</td>
<td>£25.7m</td>
<td>£484.6m</td>
</tr>
<tr>
<td><strong>Strategic CIL (£18,000/unit)</strong></td>
<td>£47.3m</td>
<td>£67.0m</td>
<td>£78.8m</td>
<td>£92.9m</td>
<td>£98.5m</td>
<td>£541.9m</td>
<td>£445.8m</td>
<td>£354.5m</td>
<td>£1,726.6m</td>
</tr>
<tr>
<td><strong>Strategic Infrastructure Funding Balance</strong></td>
<td>-£2.6m</td>
<td>£6.7m</td>
<td>£11.0m</td>
<td>£17.2m</td>
<td>£19.7m</td>
<td>-£247.1m</td>
<td>£81.7m</td>
<td>£82.7m</td>
<td>-£30.6m</td>
</tr>
<tr>
<td><strong>Local Infrastructure Costs</strong></td>
<td>£11.6m</td>
<td>£16.4m</td>
<td>£19.3m</td>
<td>£22.8m</td>
<td>£24.1m</td>
<td>£132.9m</td>
<td>£109.3m</td>
<td>£86.9m</td>
<td>£423.4m</td>
</tr>
<tr>
<td><strong>Local CIL (£5,000/unit)</strong></td>
<td>£13.1m</td>
<td>£18.6m</td>
<td>£21.9m</td>
<td>£25.8m</td>
<td>£27.4m</td>
<td>£150.5m</td>
<td>£123.8m</td>
<td>£98.5m</td>
<td>£479.6m</td>
</tr>
<tr>
<td><strong>Local Infrastructure Funding Balance</strong></td>
<td>£1.5m</td>
<td>£2.2m</td>
<td>£2.6m</td>
<td>£3.0m</td>
<td>£3.2m</td>
<td>£17.6m</td>
<td>£14.5m</td>
<td>£11.5m</td>
<td>£56.2m</td>
</tr>
<tr>
<td><strong>Overall Funding Balance</strong></td>
<td>-£1.1m</td>
<td>£8.9m</td>
<td>£13.6m</td>
<td>£20.2m</td>
<td>£22.9m</td>
<td>-£229.5m</td>
<td>£96.2m</td>
<td>£94.3m</td>
<td>£25.6m</td>
</tr>
<tr>
<td><strong>Cumulative Funding Balance</strong></td>
<td>-£1.1m</td>
<td>£7.8m</td>
<td>£21.4m</td>
<td>£41.6m</td>
<td>£64.6m</td>
<td>-£164.9m</td>
<td>-£68.7m</td>
<td>£25.6m</td>
<td>-</td>
</tr>
</tbody>
</table>
Transport infrastructure

5.11 Given that transport is the largest infrastructure item in terms of needs and costs, a detailed Technical Report on transport infrastructure was prepared separately. The analysis of the transportation schemes has been underpinned by sound technical analysis and modelling work.

5.12 It should be noted that the Technical Report uses the definitions of ‘Strategic’, ‘Regional’, and ‘Local’ given in the East of England Plan. In this definition, ‘Strategic’ means that a transport link has a national or strategic regional importance, for example providing links to regional transport hubs such as Stansted Airport.

5.13 Based on an assessment of areas of substantial RSS growth where existing deficit and future corridor limitations could restrict growth, a number of interventions have been identified from the Transport Technical Report as examples of those that should be prioritised (see Table 5.6). It is important to recognise that final priorities cannot be made until plans for growth have been completed as part of the LDF process and phasing of growth across the county is identified and confirmed in greater detail.

<table>
<thead>
<tr>
<th>ID</th>
<th>Scheme</th>
<th>Reasons for Prioritisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1</td>
<td>Implementation of HCC</td>
<td>Facilitate reduction in car trips and therefore congestion, particularly for shorter journeys</td>
</tr>
<tr>
<td></td>
<td>cycling strategy</td>
<td></td>
</tr>
<tr>
<td>N6</td>
<td>A1000/ B6426 bus priority</td>
<td>Enhancing bus services around Hatfield rail station and between Hatfield and Welwyn Garden City</td>
</tr>
<tr>
<td>N13</td>
<td>ATM J6-8</td>
<td>Improving north-south movement through the centre of the county and between Stevenage and Welwyn Hatfield</td>
</tr>
<tr>
<td>N18</td>
<td>A4147 corridor Jct improvements</td>
<td>Improved access between Hemel Hempstead and St Albans</td>
</tr>
<tr>
<td>N19</td>
<td>St Albans relief road</td>
<td>Improved access around northern St Albans, facilitating local and other east-west movement</td>
</tr>
<tr>
<td></td>
<td>improvements</td>
<td></td>
</tr>
<tr>
<td>N25</td>
<td>A1(M) J8 Capacity enhancement</td>
<td>Improve access to the A1(M) for growth around Stevenage and A1(M) and reduce existing congestion</td>
</tr>
<tr>
<td>N27</td>
<td>Smarter Choices</td>
<td>Promotion of sustainable travel across the county will have county and local benefits</td>
</tr>
<tr>
<td>R11</td>
<td>Abbey Line passing loop</td>
<td>Improving rail connections between St Albans and Watford</td>
</tr>
<tr>
<td>S252</td>
<td>Watford Junction Rail</td>
<td>Improvement in intermodal connectivity and improvement in road network efficiency within Watford including benefits for the bus network</td>
</tr>
<tr>
<td></td>
<td>Interchange</td>
<td></td>
</tr>
<tr>
<td>S31</td>
<td>Breakspear Way jct improvements</td>
<td>Improved access to the M1 from Hemel Hempstead and between Hemel Hempstead and St Albans</td>
</tr>
</tbody>
</table>
5.14 The principal recommendations from the Transport Technical Report are to:

- Review the transport infrastructure as the growth agenda develops through more detailed proposals and the LDF process, taking note of the growth-related schemes identified in this study;
- Use improved, more detailed modelling as the growth agenda develops into more detailed proposals;
- Look for ways of tackling those items of historic deficit that cannot be addressed through CIL funding. This will help to ensure that the transport network operates effectively across the County;
- Lobbying of Central Government and its agencies (the Highways Agency and DfT Rail) is recommended to ensure that the schemes they are responsible for are implemented in a timely manner to facilitate growth in the County. In particular, there should be substantial rail investment to cater for the lack of capacity post-2016;
- Explore the potential for regional and central government funding sources to fund any additional costs, including those resulting from more detailed scheme development.
6. Infrastructure by service

Strategic CIL items

Education

6.1 The actual projected increase in the population of school age is relatively small. Much of the need relates to the fact that many of the existing schools are in locations that are unsuitable for serving growth. Most of the need is in primary and secondary education (as opposed to post-16 education and Early Years).

6.2 The total cost of providing education to accommodate growth between 2011 and 2031 is £804M. The annual cost grows steadily, reaching a peak requirement of £50M per annum between 2016 and 2021.

6.3 Based on the information provided, we have assumed that no mainstream funding is available to accommodate growth. There may well be some funding available but this will be variable and Hertfordshire’s floor authority status will impact on the availability of these funds.

Transport

6.4 Accessibility is a key consideration both now and into the future. There is a severe deficit in rail services both for passengers and freight and without further substantial investment at a national scale, the effectiveness of the rail network will be severely restricted post 2021. The assessment of the road network has primarily been focused on principal roads, due to the strategic nature of the study and the EERM. Much of the motorway network is already at or over capacity, and on other routes congestion occurs at key junctions both within and between principal urban areas and on key east-west corridors.

6.5 Without further intervention however conditions on the road network will continue to deteriorate. Supplemented by Smarter Choices, the interventions that have been identified substantially resolve the deficit on the motorway network and help improve conditions at a number of key locations on the county road network.

6.6 In 2021, including masterplanned RSS growth, it is expected that the implementation of the HCC cycling strategy will support Smarter Choices and help improve the attractiveness of walking and cycling across Hertfordshire, with new travel patterns ‘habitualised’ by 2021. Infrastructure investment in the bus and coach network will help to improve its efficiency and attractiveness for new and existing residents alike by these modes.

6.7 Due to the strategic nature of the study it was not feasible to identify clearly walking and cycling measures between 2021 and 2031, although the habitualised behaviour should ensure that these modes have an important role to play. The bus network will have most of its infrastructure in place by 2021 but will continue to be able to react to passenger demand within short timescales.

6.8 We recognise that the national transport agenda is changing, and with it local policy too. We anticipate that in future there will be much more emphasis on investment in passenger transport, particularly in terms of improving east-west links, with further consideration given to major projects such as the central Herts Passenger Transport System (CHPTS).

6.9 As things currently stand all interventions identified by the study have been costed, and, including large nationally strategic schemes, the total is £9.6 billion. These larger schemes, totalling £8.5bn, are fully funded but are included in the study in recognition of the important role that they would play in ensuring transport in Hertfordshire operates efficiently. The residual cost for transportation infrastructure, once these centrally funded schemes are discounted, is £1,106m.

1 See section 6 for more detail on floor authority status
6.10 After funding from Local Transport Plans (LTPs) and the Regional Funding Allocation (RFA) are taken into account, there is still a shortfall of approximately £750M. We have noted however that there is considerable additional potential for transportation investment to link into these mainstream funding programmes as CIL revenues will offer the potential for the Hertfordshire authorities to offer up contributions to these programmes to provide, for instance, the scope for match funding.

Adult Care Services

6.11 The County Council has been unable to indicate whether significant new infrastructure will be required to service growth. Demand for adult care services is growing as the population ages and the ways the service is being provided are also changing.

6.12 It has not been possible to attribute any costs or funding to these services. Substantial further work is needed to identify growth needs and determine costs and associated mainstream funding.

Children’s Services

6.13 There will be a need for additional children’s services arising from growth. In the growth locations, the County Council envisage developing a children’s centre alongside or as part of any new primary school. However, specific needs have not been identified.

6.14 It has not been possible to attribute any costs to these services. However, DCSF funding of £300,000 per children’s centre should be available. Substantial further work is needed to identify growth needs and determine costs and associated mainstream funding.

Strategic Green Infrastructure

6.15 Planned growth will place additional pressure on existing strategic green infrastructure (GI) assets, as well as creating a need for new GI. At present the county is working on a detailed assessment of GI needs and a GI strategy that identifies priorities and opportunities for meeting GI needs.

6.16 Hertfordshire County Council has identified several projects that would improve the strategic GI network, which would be required to support growth. These total £5.2M.

Health

6.17 The health authorities have yet to provide a view on what is needed to support growth. Notwithstanding this, it is very difficult to find a suitable approach to calculating planning contributions for health.

6.18 Given the importance of the service to the HIIS, a figure for possible costs of £72M was agreed with the health authorities. Such a figure is based on typical experience elsewhere and it will be necessary to do work on local needs in order to derive clear costs.

6.19 The funding of health services is complex and will depend on how the service is structured in the future. The health authorities have been unable to provide a view on the likely future structure, so it has not been possible to determine possible mainstream funding.

Emergency Services

Police

6.20 Based on current information, there would be an operational requirement for an Intervention Base or Neighbourhood Police Station in each of the KCDCs. Development at North Harlow and East Luton is also likely to require a custody centre, which would be shared by the respective adjoining forces. The total cost would be £35M.
6.21 The Hertfordshire Police Service (HPS) is currently putting forward a formula to justify a charge. This is related to marginal population increases. However, the needs attached to this seem significant and further work is needed in order to accurately determine these needs and therefore costs.

6.22 The funding of the police service comes from a number of sources but it will be increasingly difficult to use these for capital programmes. It is recommended that the full costs of provision are met by developer contributions.

Fire

6.23 Hertfordshire Fire and Rescue Service (HFRS) has identified that if Harlow North becomes 25,000 dwellings then a new fire station to cover the area is highly likely to be required. Should development only total approximately 10,000 dwellings, there is still the potential need for a retained (part time) station. Growth in the north of Stevenage may result in the need for a new station. This could be a new station or a relocation of Baldock in conjunction with a new station.

6.24 It is assumed that two new fire stations are required to serve Harlow North and Stevenage. The total cost is £7M (excluding land acquisition costs).

6.25 It is unlikely there will be significant public funding available to pay for growth, so none is assumed.

Ambulance

6.26 There will be a need for between 2 and 5 new ambulance stations and 20 new vehicles. The new stations will not be required before 2016, with the bulk of the requirement being in the period 2016-2021.

6.27 The total cost would be £12.7M.

6.28 The East of England Ambulance Service NHS Trust (EEAST) is funded largely by the PCTs, with some additional charitable donations. It is therefore assumed that there is mainstream funding to pay for new infrastructure related to growth, but due to the funding ‘time lag’ there is a need for the annualised equivalent of the capital costs of the required facilities for three years.

6.29 We have calculated this at approximately £2.9M, and therefore assumed £9.8M of mainstream funding is available from the PCT (i.e. £12.7M minus £2.9M).

Municipal Waste

6.30 It would be exceptional for a Council to require a contribution towards such facilities because in most areas, the cost of reconfiguring the waste services to respond to targets for recycling and reductions in landfill far outweigh the impact of housing growth. A figure of £200M for the provision of new waste disposal/treatment facilities has been identified by the Hertfordshire Waste Partnership (HWP).

6.31 It is common to use PFI to pay for major schemes such as recycling facilities. Hertfordshire County Council recently received £115.3M in PFI credits to implement a waste management scheme that has the potential to divert 170,000 tonnes of municipal waste annually from landfill. This will cover a large proportion of the costs but the target is to divert 400,000 tonnes annually, so there will still be a shortfall in funding.
Chapter 6: Infrastructure by Service

Site specific items

Utilities

Potable water supply

6.32 New development will require upgrades to existing potable water infrastructure to support this growth, the consultants were unable to gain a clear view from Three Valleys Water as to whether any significant new infrastructure would be required. The Rye Meads water cycle study is due to report this year on the long term implications for potable water for Stevenage, Hertford, Welwyn and Harlow which will provide detail on infrastructure needed to support growth in these areas.

6.33 Funding for potable water infrastructure is through the water company’s asset management plan, with those upgrades to the network that are necessary to serve development funded by each developer.

Wastewater

6.34 Thames Water has indicated that existing sewer capacity in catchment of the Rye Meads sewage treatment works is reaching capacity. The Rye Meads water cycle study is due to report this year on the long term options for meeting the needs of developments planned in Stevenage, Welwyn and Harlow.

6.35 Developers would be expected to pay for the proportion of costs associated with the infrastructure required to support the development.

Electricity

6.36 EDF has identified network supply issues at St Albans, Hatfield, Welwyn, Stevenage and Watford. The planned growth will require major new electricity infrastructure to support growth including a direct underground feed from Wymondley to service the growth at Stevenage, and new substations to support growth at Stevenage, Hemel Hempstead, Hatfield, Welwyn Garden City and Harlow.

6.37 Developers would be expected to pay for the proportion of costs associated with the electricity infrastructure required to support the development.

Gas

6.38 National Grid have identified potential requirements for new gas supply connection points to the exiting gas network at Hemel Hempstead, Stevenage, Welwyn and Hatfield in order to support the growth at the KCDCs that was identified in the masterplanning exercise.

6.39 Developers would be expected to pay for the new infrastructure required to support the development.

Employment

6.40 All possible employment issues - such as workforce skills needs and start-up units - are revenue issues. Therefore there is no capital requirement to be addressed through a charge.

Local CIL items

Open Space, Sport and Recreation

6.41 Planning Policy Guidance Note 17: Open space Sport and Recreation (PPG17), advises that open space standards are best set locally, stating that national standards cannot cater for local circumstances. PPG17 requires all districts to complete an open space assessment in order to determine their individual needs.

6.42 The recommended costs in Table 6.1 below come from analysis of a large number of SPDs and identification of good practice.
Table 6.1 - Local council services cost assumptions

<table>
<thead>
<tr>
<th>Item</th>
<th>Costs Per Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban parks and gardens</td>
<td>£180,000 per ha</td>
</tr>
<tr>
<td>Natural and semi-natural greenspaces</td>
<td>£10,000 per ha</td>
</tr>
<tr>
<td>Sports pitches</td>
<td>£125,000 per ha</td>
</tr>
<tr>
<td>Amenity greenspaces</td>
<td>£20,000 per ha</td>
</tr>
<tr>
<td>LEAPs</td>
<td>£40,000 per facility</td>
</tr>
<tr>
<td>NEAPs</td>
<td>£80,000 per facility</td>
</tr>
<tr>
<td>MUGAs</td>
<td>£60,000 per facility</td>
</tr>
<tr>
<td>Shelters</td>
<td>£5,000 per facility</td>
</tr>
<tr>
<td>Skateboarding</td>
<td>£40,000 per facility</td>
</tr>
<tr>
<td>Allotments</td>
<td>£100,000 per ha</td>
</tr>
<tr>
<td>Churchyards and cemeteries</td>
<td>£50,000 per ha</td>
</tr>
</tbody>
</table>

6.43 Costs for indoor leisure facilities should be determined on a case by case basis as they vary considerably by type of facility. It is assumed that because there is no mainstream funding available, that all costs for parks, open and play space, playing fields and allotment provision will be met by developer contributions. Local authorities can and do allocate capital funding from their budgets for the creation of new indoor sport and leisure space. Therefore there is potential for some capital costs of leisure centre provision to be met from mainstream funding.

6.44 As yet, there is no specific need for a new youth facility identified as part of the growth areas. Clearly there will be a need and it will be important for further work to be undertaken in order to derive a justifiable level of provision.

6.45 Youth centres will cost about £0.4M each.

6.46 Given the limited potential to access existing sources of funding, it is assumed that there is no funding from mainstream sources to cope with growth.

6.47 The need for community facilities must be determined at the local level. In some cases, the upgrade of existing facilities will be sufficient to accommodate growth. As yet, there is no specific need for a new community facility identified as part of the growth areas. Clearly there will be a need and it will be important for further work to be undertaken in order to derive a justifiable level of provision.

6.48 It is assumed that a new community centre would cost the same as a new youth centre, i.e. £0.4M.

6.49 Given the limited potential to access existing sources of funding, it is assumed that there is no funding from mainstream sources to cope with growth.

6.50 All cultural items are one-off items that must be determined at the local level and costed on a case-by-case basis. These are therefore recommended to be considered as local CIL items.
Chapter 6: Infrastructure by Service

Libraries

6.51 Although a County Council service, it will be important for the districts to input into the identification of needs in response to growth. As yet, the service has no clear view on needs, so it is not possible to determine costs.

6.52 It is assumed that no mainstream funding will be available for this service.

Local Waste

6.53 There will be costs associated with new households. They will require collection vehicles, at approximately one per 4,000 dwellings, waste receptacles (i.e. wheelie bins/boxes) and bottle and paper banks.

6.54 It is assumed that vehicles will be leased rather than purchased outright. Typical costs of waste receptacles are £50-£70 per dwelling. Taking into account street-sweeping and litter bins and collection brings the overall figure to £150.

6.55 It is assumed that all costs will be met by developer contributions.

Other Items

Employment and retail development

6.56 The need for infrastructure does not arise only from new housing development. Infrastructure need, will also arise from other major land uses, such as employment and retail development. There may be other uses that should attract a charge but, in reality, the returns from development would be insufficient to be able to justify it.

6.57 Identifying traffic on the roads that is commercial and apportioning the overall transport costs to this, the Consultants have assessed that for every square metre of gross gain in commercial floorspace, there should be a charge of approximately £42 on developers in order to address the shortfall in the funding for the identified transport infrastructure. The same assessment for retail space provides a charge figure of £37 per square metre of new retail space. This calculation is explained in more detailed in section 5 of the Technical Report.

6.58 These charges are not included within CIL and it will be for the Hertfordshire authorities to decide whether this method has sufficient robustness to justify a charge, or whether it needs to be supplemented by further assessment.

Flood Defences

6.59 To date the Environment Agency haven’t given any indication of what might be required to mitigate the impacts of the potential growth locations. Clearly, further work is required to assess this.

6.60 It is the Consultants recommendation that flood defence items are something that should be considered on a site-by-site basis by way of a site-specific basis. Only if a Strategic Flood Risk Assessment identifies significant strategic needs could it be included as part of the strategic CIL.
7. Underlying Issues

Long term service needs to be defined more clearly

7.1 The common theme throughout the assessment of individual service providers’ needs, costs and funding to respond to growth is the lack of information that can currently be provided. This simply reflects the fact that most service providers currently plan no more than 5 years in advance. From the point of view of using CIL, it is recommended that service providers adopt a longer time scale for planning capital expenditure projects. The Local Transport Plan system provides a good model, where transport departments know what is in the current five year plan and are normally looking ahead at priorities for the next five year period.

7.2 If infrastructure planning as envisaged in PPS12 and the draft CIL regulations is to be carried out in the most effective manner, there will need to be a shift to longer term service planning and for the statutory planning system to concern itself as much with the process of implementation as issues of land use.

Need to determine potential from public funding

7.3 Certainly it is necessary for all service providers to be clear on what their capital programmes are for the next five years. In many respects, these programmes are fixed and will represent what can be delivered through known funding schemes over that period. It is beyond that period when there is greater uncertainty and a robust method for determining prospects for securing funding, etc, are needed. This highlights, through the infrastructure process, the need for service providers to be updating their capital programmes at suitably regular intervals.

7.4 The study has revealed that much of this potential from other mainstream funding still remains unclear across a host of service providers. Many deliver the level of service that they can within the confines of their core funding and do not always seek to access other possible forms of funding. Exploration of such alternative sources could be one of the ways that the funding gap is reduced. One of the opportunities that the study has provided has been to get service providers together round a table and given them a better understanding of the requirements of strategic planning for new housing growth.

7.5 Nevertheless, it is recognised that CIL is in its infancy and that to use it as a tool with which to bid for funds will take considerable levels of further work. Certainly it will be incumbent on the service providers and the authorities, having derived a CIL charge following the publication of the Regulations, to ensure that all possible issues have been explored before bids for funding can be made. However, once this has been done, then there are substantial opportunities to make bids for funding from some major opportunities such as the Regional Funding Allocation which, to date, have not been possible.

7.6 It is fundamental that there is a better understanding of the potential of the full range of funding streams available to service providers. The draft CIL Regulations are clear that all mainstream funding opportunities must be explored before seeking developer funding.

Key transportation challenges

7.7 The key challenge has been identifying effective interventions for the transport network that are consistent with current policy to cater for lack of capacity where this exists. This means promoting sustainable transport above use of the private car, and recognition that a ‘predict and provide’ approach is no longer appropriate. At the national level this includes the Smarter Choices initiative and research such as the Eddington Transport Study.

7.8 The interventions initially identified for the transport network have therefore attempted to provide sustainable alternatives for personal travel (including commuting) such as improved cycling facilities and bus routes. Smarter Choices have also been recognised as an important tool for tackling the increased travel demand from RSS growth. However, it has been necessary to acknowledge that improvements to the road network will still be required at some locations. Where possible this has been in the form of minor improvements or enhanced traffic management, and in a small number of cases limited road building.
Chapter 7: Underlying Issues

Major cashflow issues

7.9 As noted elsewhere in the report, there is the prospect of not only, the timing of much of the infrastructure costs identified is assumed to follow the housing development trajectory (such as education and the local requirements). While there are consequently no major cashflow issues in these categories (although this requires more detailed future consideration), approximately half the transport costs have been assumed in the period 2016-20. This period shows a funding deficit of approximately £165M. The cumulative infrastructure funding cashflow shows a deficit in 2011 and 2016-25.

Affordable housing

7.10 The most important cost outside the CIL that will impact on the level that developers will be able to pay is affordable housing. The need for affordable housing is significant in many areas of the country, and Hertfordshire is no different. At the same time, there is an increasing expectation on local planning authorities to demonstrate that their affordable housing policies do not impact on the deliverability of development.

7.11 In reality, this creates a problem for many districts as they are seeking to put in place policies that place significant affordable housing requirements (and therefore costs) onto developers. In isolation, this may not present a problem but when factoring in other infrastructure needs, there is often a shortfall in what can be paid for. The HIIS has shown this situation to be no different in Hertfordshire in low value areas and, under certain circumstances, in medium value areas.

7.12 One possible solution being explored by Central Government is the Homes and Communities Agency’s (HCA) ‘Single Conversation’. This gives local authorities the opportunity to make their case for a subsidy towards the provision of affordable housing, where they can demonstrate significant needs that cannot be addressed by other means. The Hertfordshire authorities with lower value house prices and/or problematic sites may be able to secure this subsidy, so freeing up developer funding to address infrastructure needs through the CIL. Another is to return to the practice of developers simply providing RSLs with land on which the latter can provide affordable housing, thus relieving them of the burden of further subsidy of construction costs. But this has implications for the pace of delivery of that affordable housing and also for any policies to achieve mixed tenure communities.

7.13 More detailed district-by-district testing of individual targets for affordable housing provision is therefore needed. The assessment used to inform the view of the Consultants of what is likely to be affordable by low, medium and high value areas was based around the regional monitoring target of 35% affordable housing for all planning permissions granted after the publication of the RR (Policy H2). However, there may be some districts wishing to seek a level of 40% and others only 25%. This will clearly have an impact.

Code for sustainable homes

7.14 The Code for Sustainable Homes will, by virtue of creating greater requirements for new houses to be more energy efficient, also result in greater costs for their development. The study assumes that the current timetable for the introduction of the Code is maintained, i.e. Code Level 3 in 2010 and Code Level 4 in 2013, and the assessment of the possible CIL level that could be charged takes this into account. However, there may be aspirations to achieve higher Code levels either within this timescale or over the longer term. The additional cost burden that this will create could serve to reduce the affordable CIL level.
Other funding sources

7.15 Related to the earlier point about making better use of mainstream funding sources, it will also be necessary to explore new funding opportunities as they emerge. Two possible opportunities that are coming through at the regional level at present are the Regional Infrastructure Fund and the Regional Funding Allocation, the latter of which has just announced new funding streams to include transport, regional economic development, housing and regeneration.

Summary of key conclusions

- A CIL charge of £23,000 per unit is required to help fund all the infrastructure requirements currently identified;
- Transport and education account for approximately 85% of the strategic infrastructure costs;
- Local infrastructure costs are more evenly spread between different categories;
- The KCDC’s account for approximately 45% of total infrastructure costs;
- There are significant cashflow issues; even with a proposed standard charge CIL of £23,000 per dwelling (there is a funding deficit of £230m in 2016-20 as approximately half of the transport costs are to be incurred in this period; and
- With a variable CIL, affordable charges in high and medium value areas could meet the required average of £23,000 per unit (assuming a return to 90% of peak house prices by 2011). Under these circumstances there would be a greater prospect of addressing the shortfall, depending on the contribution that could be secured in low value areas. The latter would depend on how easily the sites could be delivered and the ability of subsidy or CIL relief to meet other needs such as affordable housing. None of these figures can be considered to be definitive as further work is needed on them.
Our Recommendations
8. Our Recommendations

8.1 A number of recommendations arise out of the HIIS Study and are set out below.

Adopt HIIS Funding Model as the basis for CIL charging schedules across the county

8.2 The Hertfordshire Funding Model, although currently incomplete because of the various strands of further work required, has been devised such that it can provide the basis for the individual Charging Schedules across the County. It provides the detailed evidence base for the CIL charge and also identifies the necessary level of requirement to support a local planning authority's infrastructure planning, as required by PPS12. It is through the individual Charging Schedules of the 10 local planning authorities that the CIL will be expressed.

8.3 It will be important to agree on how often the Funding Model is updated. In reality, new information will be coming forward at regular intervals and could, in theory, impact on the level of CIL charge. However, it is impractical to be constantly reviewing the CIL charge regularly, not least that it would remove the advantage of certainty that it brings to districts, service providers and developers alike. It is recommended that the CIL charge should be reviewed and updated every 3-5 years, as per the need to review the LDF process on which its legal basis is grounded.

Refinement of service provider needs

8.4 The service providers need to work with one another, with the districts and with the County Council to determine more clearly their needs in response to growth and to justify this. Without a robust evidence base for any individual service provider's share of the charge, both infrastructure planning within the development plan and proposed CIL Charging Schedules may be viewed as unsound. (The draft CIL Regulations provide scope for generalisation and approximation when estimating costs but it would be unwise to take this to mean, for instance, that provisional budgets to cover anticipated but undefined needs will be acceptable). The recent Secretary of State decision in Greenhithe, Dartford, emphasises the importance of proper justification for charges before they are set.

8.5 The Draft CIL regulations also emphasise that service providers and others need to take account of public funds that are or which might reasonably be expected to become available, when estimating the cost of meeting the identified needs. However, as it stands they do not indicate how much discretion will be allowed in this respect.

8.6 In particular, there will need to be a consistent basis for determining demographic projections of future population and households. The work done in the HIIS Study has been used to inform the transport modeling and also to accompany the masterplanning work which the service providers should be using to determine their future needs. The intention should be that they adopt these future projections to define their own needs or at least incorporate an agreed approach into their own forecasting models. It will therefore be necessary, as early on in the process as possible, for the service providers to meet and agree a common approach to the demographic projections.
Review the basis for charging

8.7 The potential for either a single and or a variable CIL has been considered in the HIIS Study. At this stage, based on the information available and the viability analysis undertaken, it is considered that a variable CIL may be a mechanism through which higher levels of CIL receipts could be collected rather than a standard CIL. However, it will be necessary for service providers’ needs to be refined (as discussed above) and further sensitivity testing done on viability on a district-by-district basis, in order to determine whether this is the case.

Establishing management arrangements

8.8 The day-to-day working of the Funding Model needs to be agreed by the Hertfordshire Authorities. With a range of service providers, the County Council and ten local planning authorities wishing to input information into the Model, it will be important that the arrangements for this process are clear and transparent. The Consultants recommend that a single person or body - the Modelmeister - is given responsibility for inputting new information into the Model and for distributing collected funds, as necessary.

8.9 The local CIL element of the Funding Model should be the sole responsibility of the individual districts to collect information from other service providers, update and generally maintain. It will be advantageous for districts to share information with one another, in order to ensure a broad consistency in charging levels.

8.10 Whilst this study proposes a potential management structure for the Hertfordshire Funding Model for the authorities to consider further, there are in addition various management structures that have already been established across the country to identify, plan for, fund and deliver infrastructure. These need to be explored in further detail to determine which approach is right for Hertfordshire.

Communicate with national and regional interests

8.11 The Hertfordshire Authorities and service providers are understood to be the first to undertake and complete a CIL study. In many respects, they are leading the way but also potentially the first to have to tackle intrinsic problems that will arise. In light of this, it is important that an early dialogue is opened up with GO-EAST and CLG to understand whether the HIIS is likely to be compatible with the emerging CIL Regulations. Indeed, this provides the opportunity, through the CIL consultation process, to influence the way the final CIL Regulations are shaped. There are other elements of the HIIS that also impact on strategic agencies. In particular, recommendations on affordable housing grants will require early dialogue with the Homes and Communities Agency (HCA) in order to understand the potential for these recommendations to be put into practice. Equally, the role of EEDA is vital, particularly as a source of funding. Recognising their input into the HIIS Study as a member of the Reference Group, it will be important to open early dialogue that picks up on these and other relevant matters of technical detail.

8.12 In addition the outcomes from this study are available for use as part of the evidence base for a variety of functions, including the review of the East of England Implementation Plan.

Districts to define local CIL charges

8.13 The HIIS does not just address strategic charges. It also accounts for and includes charges at a local level within the CIL.

8.14 It is most appropriate that districts define their own local charges. Each District will have its own view on the importance of particular local infrastructure items and will also have different standards for the provision of infrastructure to address needs. The HIIS has, therefore, left districts to input this information into the Funding Model. Recommendations - based on practice across the country - have been made on appropriate levels of charge for each item.
Actions to take forward in LDFs

8.15 The HIIS study represents the core of the evidence base that the Hertfordshire Authorities need to underpin their Core Strategies. There are two strands of the overall study and associated Funding Model which provide this evidence. The first are the overall CIL Charging Schedules, covering both strategic and local CIL items, which the districts, the County Council and the service providers should take forward and put in place in order to secure the necessary funding from developers to address any shortfalls in public funding. Each district will have its own Charging Schedule, through which the strategic CIL and their own local CIL, will be expressed.

8.16 The second strand to the study is the Funding Model and its contribution towards each District’s infrastructure planning, a requirement of PPS12. The HIIS shows, as far as is possible given the information provided by the service providers, the information required of an infrastructure planning, namely:

- The strategic items required to be provided in the District;
- When they should be provided;
- Who should provide them;
- How much they will cost; and
- How much public funding will be available.

8.17 Further work will be necessary by each District in order to complete robust infrastructure planning, principally relating to the information coming from service providers. It will also necessarily be shaped by each District’s respective preferred spatial strategy.

8.18 The Funding Model can represent the charging schedule for each district’s infrastructure planning purposes. Each district should update the local CIL items individually for their LDF purposes, both leading up to its examination as part of the Core Strategy Examination in Public and subsequently in order to guide development and monitoring. Districts may prefer to revise the way the Funding Model is presented in order to provide a more straightforward charging schedule that is fit for understanding the strategic, rather than detailed, infrastructure requirements, as required by PPS12. The Funding Model currently is capable of showing information in a variety of different ways, so it will be preferable for it to show the information required to inform the Core Strategy.

Potential for joint DPD

8.19 In order to take forward HIIS and the Funding Model as the basis for infrastructure planning within the development plan and for proposed CIL charging schedules, it will be necessary to embed it within the LDFs of all ten of the Hertfordshire local planning authorities. To incorporate HIIS within a Development Plan Document (DPD) and take it individually through ten LDF examination processes would be a waste of resources and would also open up a potential failure to achieve universal adoption. Such a scenario is unlikely, which is part of the rationale for a countywide study, but could still theoretically occur.
Chapter 8: Consultants’ Recommendations

8.20 Paragraph 66 of opinion provided by leading counsel on the HIIS states that:

‘It may well be considered more appropriate for the HIIS to be taken forward by the Borough and District Councils through a Joint DPD. This would allow all objectors to be heard, enable the HIIS consultants to make an effective contribution at one examination, and enable the inspector to have a proper overview of the issues. It should also probably be relatively straightforward for Local Development Schemes to be altered to accommodate this discrete process and if it can be brought forward soon, would greatly assist each Borough and District as an evidence base to support the various Core Strategies.’

8.21 It is, therefore, considered possible to take the HIIS forward as a Joint DPD, which, if declared sound, could be adopted by all ten of the districts.

8.22 The local CIL elements of the overall CIL will be determined and set locally. Therefore, it will be necessary for each of these to be examined through separate DPDs within each district’s LDF. In order to ensure that viability is not compromised, the local CIL charge for each local authority should be capped at £5,000 per dwelling.

8.23 More information on the potential for a joint DPD is included in Section 10 of the Technical Report.

Developing local authority skills in infrastructure planning and delivery

8.24 One of the key lessons to be learned from the HIIS study is that local authorities currently do not have the appropriate skills to define long term infrastructure needs and ensure their delivery. This element of the work would involve defining those key skills and resources needed within the Hertfordshire authorities and indeed other service providers to ensure these tasks are being adequately addressed.

8.25 The Homes and Communities Agency has recently announced an action plan entitled “Delivering better skills for better places” with the idea of developing such competencies very much in mind. It will be important to tap into this and other potential programmes to assist both in service planning and the development of Infrastructure Delivery Plans within LDFs.

Review HIIS in the light of publication of CIL regulations

8.26 Our recommendations have been informed by both the draft CIL Guidance and by our professional judgement. Now that draft CIL Regulations have been published and made the subject of consultations, it will be important to review the HIIS and determine whether any changes need to be made to the approach and associated justification for the CIL charge.

8.27 Equally, however, the conclusions from HIIS will of course greatly inform any collective response that the Hertfordshire authorities may wish to make to the draft CIL Regulations. Having studied the draft Regulations and accompanying consultation document, we have concluded that they are relatively weak on issues such as delivery, arrangements to pool revenues and the prioritisation of investment decisions - all of which have proved to be key features of the HIIS study.
Potential amendment of floor authority status

8.28 One of the key determining issues for setting the CIL is the amount of mainstream public funding that can be accessed. Much of this funding comes from Central Government as supported borrowing. The level of this support is determined by the application of a ‘floor damping’ mechanism to revenue budgets. This means that local authorities in more prosperous areas, such as Hertfordshire, which has floor authority status, get more than they might be entitled to on a strict application of the relevant national funding formulae. The Government deems this sum to be adequate to meet their needs and strictly reduces access to any additional funding.

8.29 In short, as a floor authority Hertfordshire will have access to less additional support than others. This will, therefore, place additional upward pressure on the CIL charge and could make it unviable. It is recommended that the County Council should explore the possibility of getting its floor authority status amended, as was permitted for Kent County Council.

4 This is where the local authority receives an annual sum equivalent to the notional annual cost of financing the capital investment required
## HIIS Action Plan

8.30 Table 8.1 sets out a proposed plan of action and responsibilities for taking forward the HIIS work.

### Table 8.1 - HIIS Action Plan

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action</th>
<th>Projected Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Engage with key national and regional partners</td>
<td>Further discussions with key agencies would include the Government Office, DCLG, EEDA and the Homes and Communities Agency. Discussions would focus both on the Hertfordshire Authorities’ experiences in putting together HIIS (and the issues that it raises) and how to take the HIIS work forward.</td>
<td>No specific output, although the views of these agencies are expected to influences the actions of the Hertfordshire Authorities in taking the HIIS Funding Model forward.</td>
</tr>
<tr>
<td>2 Further refinement of service providers needs</td>
<td>A key conclusion from this study is that key service providers do not currently do enough to plan service development and infrastructure planning in the longer term, and the need to do so will become imperative with the requirements for infrastructure planning being a key aspect of the Development Plan system. The HIIS report contains a number of recommendations for working with the services concerned and there needs to be concerted work over coming months.</td>
<td>Long term service development and infrastructure delivery plans from all key infrastructure providers.</td>
</tr>
<tr>
<td>3 Preparatory work around infrastructure planning</td>
<td>Local authorities require a much more detailed understanding of PPS12 infrastructure planning for their LDFs: guidance is currently weak. There is the need for a common Hertfordshire-wide approach to this issue. The HIIS study provides the basis for taking such work forward.</td>
<td>The undertaking of infrastructure planning by each district as part of the evidence base required for demonstrating infrastructure needs and the means for delivering it within the Development Plan process.</td>
</tr>
<tr>
<td>4 Local authority skills requirements</td>
<td>Local authorities currently lack the appropriate skills to define long term infrastructure needs and ensure their delivery. To take HIIS forward there is the need to define what skills are needed and how they can be delivered.</td>
<td>A cross Hertfordshire training plan for delivering skills in infrastructure planning and delivery.</td>
</tr>
<tr>
<td>5 Determine Funding Model management arrangements</td>
<td>To explore in further detail the various management arrangements for the Funding Model open to the Hertfordshire authorities. Included within in such consideration will be the potential for an LAA/MAA, and the idea of an Integrated Development Programme put forward by EEDA. Investigations would involve the views and experience of national/regional agencies (see task 1).</td>
<td>An agreed management structure.</td>
</tr>
</tbody>
</table>
### Chapter 8: Consultants’ Recommendations

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action</th>
<th>Projected Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Consultations on the draft HIIS with key interests including developers</td>
<td>The legal opinion obtained from Leading Counsel suggests that the Hertfordshire Authorities need to engage with a range of external interests through formal public consultations to test out the HIIS Funding Model recommendations and secure if possible buy-in to its principles. The development industry needs in particular to be engaged for its views.</td>
</tr>
<tr>
<td>7</td>
<td>Respond to draft CIL Regulations</td>
<td>CIL draft Regulations have been published for consultations. The Hertfordshire Authorities need to make use of their experience in establishing the principles of the HIIS Funding Model - and the issues that have been raised during the course of its preparation - in a collective response. Because of the pioneering nature of HIIS there is every likelihood that the views of the Hertfordshire Authorities will be judged important.</td>
</tr>
<tr>
<td><strong>Longer Term Actions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Adopt the HIIS Funding Model</td>
<td>Agreement amongst the 11 Hertfordshire Authorities that HIIS and the Funding Model should form the basis of the strategic/local infrastructure charging schedules for the local planning authorities, subject to a number of points of principle and matters of detail being resolved.</td>
</tr>
<tr>
<td>9</td>
<td>Agree a local charge regime</td>
<td>Each District to determine the level of local charges they will seek within the Funding Model using the HIIS Menu of Charges.</td>
</tr>
<tr>
<td>10</td>
<td>Refine the Funding Model schedules/costs of infrastructure required</td>
<td>The HIIS report and Funding Model has been able to take strategic charges as far as has been practicable within the study timetable, but further work is needed. In particular an updated assessment of infrastructure need is required with the help of service providers (see task 2), agreed Local CIL charges need to be factored in (see Task 9), and cashflow/timing issues explored in further detail.</td>
</tr>
</tbody>
</table>
### Chapter 8: Consultants’ Recommendations

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action</th>
<th>Projected Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Determine the most appropriate basis for a strategic CIL charging regime. Further work done on viability, particularly on a district-by-district basis, to determine whether a variable strategic CIL may be more appropriate than a standard cross county strategic CIL.</td>
<td>An agreed level of charge, either in the form of a single strategic CIL or a variable strategic CIL.</td>
</tr>
<tr>
<td>12</td>
<td>Preparation of a countywide DPD. Subject to the views of the Government Office, elements of the HIIS strategy can be developed into a countywide DPD on infrastructure needs, funding and delivery, to be adopted by each local planning authority.</td>
<td>A prepared countywide DPD on infrastructure needs, funding and delivery.</td>
</tr>
</tbody>
</table>