

Leicester & Leicestershire HMA Authorities
**GROWTH INFRASTRUCTURE
ASSESSMENT**



TYM & PARTNERS
Planners and Development Economists

with

URS

Final Report
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ROGER TYM & PARTNERS

Fairfax House
15 Fulwood Place
London
WC1V 6HU

t (020) 7831 2711
f (020) 7831 7653
e london@tymconsult.com
w www.tymconsult.com

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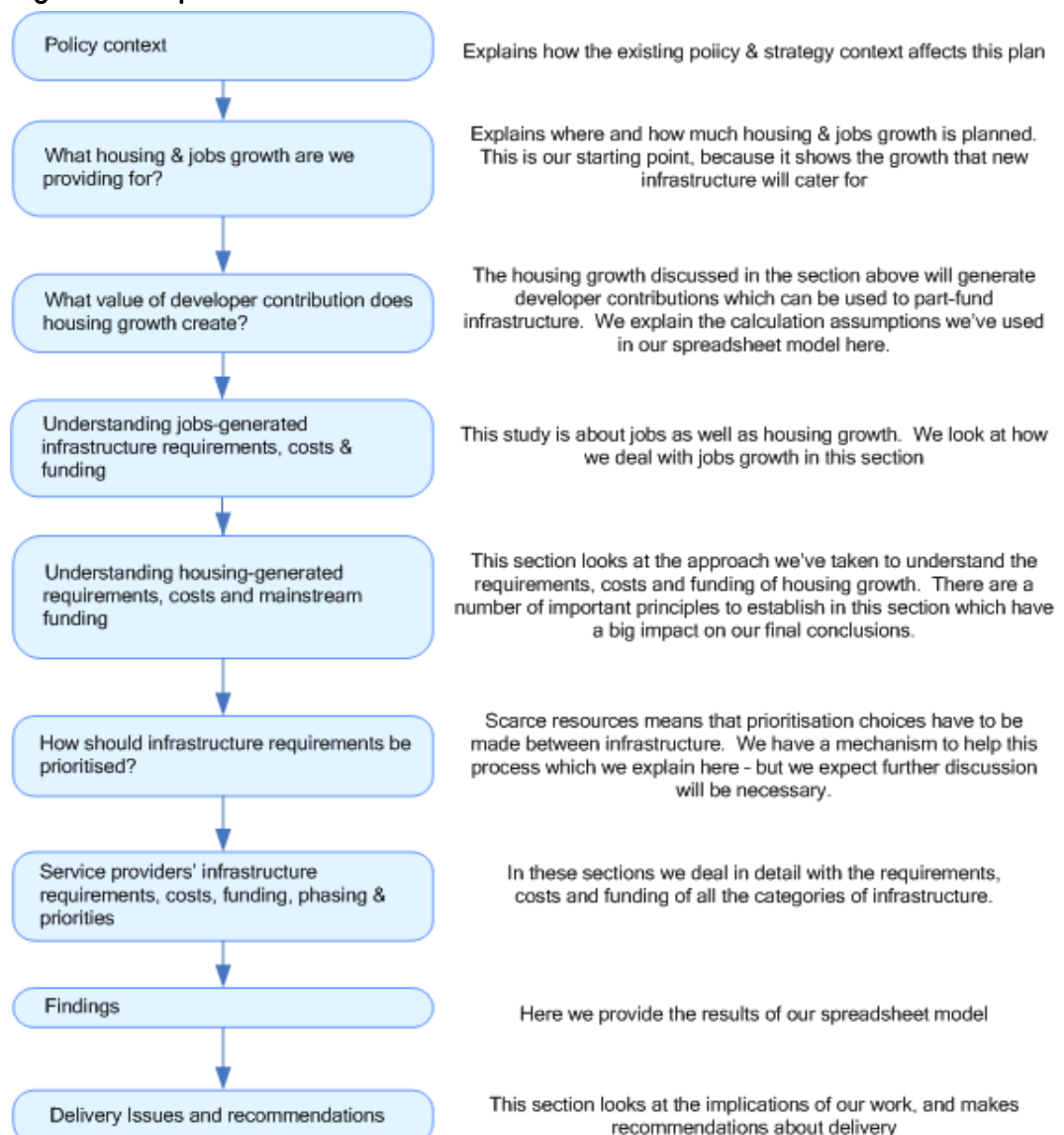
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1 INTRODUCTION

- 1.1 This report is the Leicester and Leicestershire Growth infrastructure assessment. The report was written by Roger Tym & Partners with specialist transport input from URS.
- 1.2 Our brief is to understand the infrastructure implications of housing and jobs growth in the Leicester and Leicestershire Housing Market Area (HMA) to 2026. We will show, at a high level, the infrastructure requirements that arise from growth; how much this infrastructure costs; and how this infrastructure might be funded. We also look at how the infrastructure requirements of growth might be delivered.
- 1.3 This is necessarily a long and detailed report. However, we have tried to clarify the issues, rather than further obscure them. A quick understanding of the report can be reached by simply reading the “headline” sub-titles, whilst more detail is contained in the supporting text.
- 1.4 The diagram below shows how we have structured this report.

Figure 1.1 Report structure



- 1.5 The approach we took information gathering, and the contacts we talked to, is explained in Appendix 1. A list of written sources used in this document is contained as Appendix 2.

The scope and emphasis of this assessment

The area we are looking at

- 1.6 The Leicester and Leicestershire Housing Market Area (HMA) comprises the whole county of Leicestershire. The HMA borders the Northamptonshire part of the MKSM Growth Area to the South, and the Coventry / Nuneaton / Burton New Growth Points to the West. The HMA local authority partners are Blaby District Council, Oadby and Wigston Borough Council, Charnwood Borough Council, Harborough District Council, Hinckley & Bosworth Borough Council, Leicester City Council, Leicestershire County Council, Melton Borough Council and North West Leicestershire District Council.
- 1.7 The Leicester Principal Urban Area (PUA) sits inside the HMA. It comprises the whole of Leicester City (a Unitary and Principal Authority) and Oadby & Wigston Borough; plus parts of Blaby District, Charnwood Borough, and Harborough District.

The types of infrastructure we are looking at

Defining infrastructure

- 1.8 Generally, infrastructure has been defined as “the basic physical and organisational structures (eg buildings, roads and power supplies) needed for the operation of a society.”¹
- 1.9 Our brief defines infrastructure to include the following categories that enable a development to go ahead.² These are as follows.

¹ Concise Oxford English Dictionary

² Defined by the County Infrastructure Board and the City’s Major Development Sites Infrastructure Programme Board

Figure 1.2 Infrastructure categories

Transport	Flood defence
Education	Emergency services
Health	Utilities (telecoms, electricity, gas, water, sewage, CHP)
Social services	Waste management
Leisure/ parks / green infrastructure	Libraries, culture and community facilities

Pri

mary infrastructure is the focus of this infrastructure assessment

- 1.10 Within the overarching category of infrastructure, the development industry distinguishes between “primary” and “secondary” infrastructure. We are dealing with primary infrastructure in this assessment. We therefore need to clarify which types of infrastructure are seen as primary, and which are not. These definitions are not entirely watertight, but the definitions below are fit for our purposes here.

Defining primary infrastructure

- 1.11 Primary infrastructure is required to accompany development in order to allow new households to function within a wider community, examples include schools, health, leisure and community facilities, parks, green infrastructure, and off-site transport connections to wider networks.
- 1.12 This infrastructure will be largely used by the community living and working in the development but others would not be excluded from using these facilities.
- 1.13 It is possible, even likely, that some primary infrastructure is provided off-site. It is assumed that some developer contribution will be required to support the provision of primary infrastructure. In many instances, other mainstream central or local funding will also be used to support the delivery of primary infrastructure.
- 1.14 Primary infrastructure is generally capital investment. We are therefore concentrating on capital investment in this assessment: after all, infrastructure is generally understood to be a capital item. It is, however, the case that some revenue payments are made in Section 106 contributions, and individual developer contribution payments on specific sites will no doubt reflect these requirements.

Defining secondary infrastructure

- 1.15 Secondary infrastructure is the infrastructure that developers need to provide within large development sites in order to create developable plots that a) function properly and b) are able to find a market. In this category, then, will be access roads and internal transport, site-specific drainage, sewage, flood prevention, gas, electricity and telecoms connections from development plots to existing mains services (which could normally lie outside the site boundary). These will be paid for by developers as part of their normal build costs. Developers also generally pay for small scale open and play

spaces together with on site and adjacent landscaping, and so this falls within the definition.

- 1.16 This infrastructure is generally located within the development site boundary, but there are some exceptions to this rule.
- 1.17 Because we assume that all sites will require secondary infrastructure, and because it will be paid for by developers, we have not separately itemised secondary infrastructure requirements, costs and funding in this assessment. Developers build these costs into their appraisal of land values. We have taken the same approach, so generic costs of secondary infrastructure are therefore factored into our assessment through our assessment of land values and developer contributions. A separate itemisation of all costs and requirements as part of this assessment would be a) redundant and b) unacceptably complicated.
- 1.18 Note that there will always be some sites that require secondary infrastructure that is simply unaffordable in the context of single scheme. Care should be taken to avoid allocating land thus afflicted in the first instance.

National infrastructure is beyond our scope

- 1.19 It is important to note that Circular 05/2005 states that the requirement for a developer contribution should be 'directly related to the proposed development' and 'fairly and reasonably related in scale and kind to the proposed development'.
- 1.20 The precise limits of what this might mean in practice were debated within Government in the course of preparing CIL guidance. We understand that the general approach adopted was that infrastructure that is commonly seen as a core competency of national Government was to be excluded from developer contributions. The exceptions were agreed to be the infrastructure provided by the Environment Agency and the Highways Agency.
- 1.21 We have therefore adopted this approach in our assessment. This means that areas of infrastructure provision which are the core competency of national Government and their agencies (say defence infrastructure, prisons and law courts) are excluded from this assessment.

Privately-funded infrastructure is beyond our scope

- 1.22 We interpreted our brief as being to focus on the public costs of providing the infrastructure required to meet the growth proposals for the Leicester and Leicestershire HMA, as being those which will require additional public expenditure.
- 1.23 We have therefore not considered infrastructure expenditure funded by the private sector in great detail. This is substantial. Utilities (energy and water suppliers) are all in the private sector, and in theory at least, recoup the capital expenditure to meet growth from charges on new customers.
- 1.24 However, this does not mean that we have ignored privately-funded infrastructure in this assessment. With the relevant service providers, we have investigated the extent to which privately-funded infrastructure may represent an obstacle to jobs and housing growth. We also note that private sector retail and commercial leisure facilities are an

important component of perceptions of the quality of life and extensive provision will be required to meet the needs engendered by the growth proposals.

Our objectives in this assessment

- 1.25 Our central concern is to understand requirements, costs and funding of infrastructure required to support growth. This will assist the planning, budgeting, coordination and funding of infrastructure provision. It begins to give an indication of the strategic pieces of infrastructure that will be required to support growth within the HMA. The phasing we have provided is intended to give a view of when infrastructure should come on stream. This assessment will aim to pull out the key issues, and map a likely way forward. As we discuss further in paragraph 2.30, it will contribute to the evidence base for local authorities' Core Strategies, although further detailed work will be necessary. The assessment is intended to support planning authorities' growth infrastructure and funding plans, although further detailed supporting work may be necessary. This assessment will also be sufficiently detailed to draw conclusions, allow sensitivity/scenario testing and produce recommendations.
- 1.26 Finally, the process of producing and maintaining an infrastructure assessment will bring about a more holistic approach to the planning of infrastructure to support future housing growth.

This assessment can only provide a strategic overview

- 1.27 Our objective is to provide a focus for long term strategic financial decisions that will inevitably need to be refined and realigned as the process and time unfolds. The assessment is not intended to set out every piece of infrastructure required to support every single potential site. The detail of site-specific work will add refinement and may require cost and priorities to be reassessed, but the process is valuable as it offers a framework for decisions against which the need for such matters as more detailed planning can be highlighted at an early stage.
- 1.28 Rather, it begins to give an indication of the strategic pieces of infrastructure that will be required to support growth within the area. As particular sites comes forward, it is very likely that there could be localised issues and impacts, which whilst it is not within the remit of this assessment to cover, will nevertheless need to be addressed to enable development to proceed.

There are a series of important caveats to be attached to this work

- 1.29 There are a number of important points which must be borne in mind when using this document.
- Infrastructure providers reserve the right to update the information provided to ensure that it is relevant and useful. As might be expected at this early stage in the process, there are gaps in knowledge and understanding of what is needed and how it might be paid for. This is a point appreciated by PPS12.³ The estimates will

³ PPS12 states that that "the Government recognises that the budgeting processes of different agencies may mean that less information may be available when the core strategy is being prepared than would be ideal." DCLG PPS12 (9)

need to be refined over time. The assessment can, therefore, only ever be a snapshot of current infrastructure needs, commitments, options and ideas.

- The estimates of infrastructure requirements, costs and funding provided here involve a high level of spatial and temporal generalisation. Quite simply, it is not realistic to match resources to needs to places with the degree of precision necessary to reach sound decisions on what might make development viable or sustainable on any one given site or with any one service provider.
- This infrastructure assessment is not a policy document. Information included in the assessment does not override or amend the various agreed/adopted strategies, policies and commitments which local authorities in Leicestershire and other infrastructure providers currently have in place. In many respects the assessment reflects existing strategies, policies and commitments, but it also includes information and evidence which will help shape future policy making and investment decisions.
- Our calculations of site value do not purport to offer a valuation of any particular piece of land. They were prepared with the objective of giving a high level indication of the amount of developer contribution which could be available from development across the HMA. They are not suited to any other purpose.
- It is not possible to translate our findings here into a Community Infrastructure Levy (CIL) charge, tariff figure, planning charge or Section 106 Development Study Document. This work can be seen as a very early step in work to develop an HMA-wide approach to CIL, Developer Contributions or Section 106 strategy, but more detailed inputs would be required at a local authority level before this work could be used for this purpose.
- Developers and Local Planning Authorities will not be able to use this work to negotiate Section 106 agreements. These estimates are not at the level of accuracy that allows this function to be performed. Instead, service providers' development contribution guidelines, policies and strategies and the development contribution practices and procedures undertaken by the County Council and local planning authorities should always be used.

2 POLICY CONTEXT

Introduction

- 2.1 In this section we examine relevant policy. This is not intended to be an exhaustive review and will instead concentrate on the key details.

The Regional Spatial Strategy Review process

- 2.2 The Draft Regional Spatial Strategy (RSS) 2006, the EIP Panel's Report on the Draft (2007) and the Secretary of States response to the Inspectors Report on the Draft RSS (2008) provide the regional policy guidance on growth.
- 2.3 The panel report on the draft Regional Spatial Strategy (RSS) for the East Midlands provides a strategic spatial development strategy for the East Midlands up to 2026. It identifies the scale and distribution of new housing provision and priorities for economic, environment, transport infrastructure, agriculture, energy, mineral and waste treatment and disposal. The draft RSS is expected to be approved by the Secretary of State in early 2009. In the meantime a partial review of the draft RSS has commenced, looking at the "key spatial planning issues" to 2031.

The draft RSS seeks to concentrate development in urban areas

- 2.4 The regional approach to selecting land for development is focused primarily on 'urban concentration' in order to achieve a more sustainable pattern of development. Within this, there is a focus on making use of previously developed land and buildings. There is a priority on the regeneration of urban areas in order to promote urban renaissance through housing, employment and infrastructure development to make urban areas more attractive and reduce the out-migration of population, particularly from Leicester and Nottingham.
- 2.5 Policy 4 of the Draft RSS (2006)⁴ has a policy on concentrating development in urban areas, with a focus of significant development to be located within Principal Urban Areas (PUA) and growth towns. Appropriate development of a lesser scale should be in the identified Sub-Regional Centres (SRCs), and some limited development to meet identified need within rural areas.
- 2.6 The Three Cities Sub-Area (TCSA) contains the PUA of Derby, Nottingham and Leicester. Policy 13 of the draft RSS expands on policy 4, highlighting the focus for regeneration and growth to be in Derby, Leicester and Nottingham and adjoining settlements. The TCSA contains a number of Housing Market Area (HMA) groupings, including one covering the Leicester and Leicestershire Housing Market Area.

⁴ This has been renumbered as Policy 3 in SoS Proposed Changes.

The draft RSS' implications for Leicester and Leicestershire HMA

- 2.7 At HMA level, the Panel Report housing provision was updated from the Regional Spatial Strategy by taking into account the 2004 based projections and adjustments to assumptions about vacancy rates.
- 2.8 District level housing provision in the draft RSS has been driven by the policy of urban concentration and sustainable urban extensions, and where the latter should best be located, controlled by the HMA total. This overall policy driver has not been altered by the Panel report or the Secretary of State's Proposed Changes.
- 2.9 The following priorities have been identified to provide the strategic context for determining housing provision within this HMA:
- Strengthening the role of Leicester as the PUA through urban intensification and planned sustainable urban extensions;
 - Strengthening the sub-regional roles of Coalville, Melton Mowbray, Loughborough, Hinckley and Market Harborough;
 - Meeting affordable housing needs in a way that promotes a more sustainable pattern of development.
- 2.10 Turning to the PUAs, the Secretary of State in response to the draft RSS considers that there is a need for housing provision to be planned in a co-ordinated way rather than as an amalgam of individual district plans. There is an expectation, therefore, of joint plans, either as formal joint core strategies, or at the very least closely aligned strategies⁵. We shall consider this point further in our section on Delivery Process section.

Strategic Regeneration Area

- 2.11 A key priority for the development of the Leicester PUA is the restructuring of central Leicester, focusing on intervention at the Strategic Regeneration Areas (SRAs) of Waterside, Abbey Meadows, St Georges and the New Business Quarter (NBQ). There are signs of this physical transformation taking shape all around the City Centre with new employment, cultural, retail and city living developments. However, it is recognised that there is still much to do, and the SRA sites present some considerable challenges which will require a sustained, joint approach over a number of years to achieve the physical and economic restructuring of central Leicester. These areas are large parcels of brownfield development and bring with them a range of requirements that are not necessary for greenfield areas in order to create a physical transformation.
- 2.12 In spatial terms, the regional policy of urban concentration focuses particularly around the Leicester PUA area. This means channelling the greatest concentration of development and resources within and around the main urban centre of Leicester; combined with the delivery of employment and other infrastructure to ensure the long

⁵ Panel Recommendations R4.5 GOEM (2008) 4

term vibrancy, competitiveness and sustainability of Leicester as the main centre for the sub region.

- 2.13 'There are also have plans for restructuring the central areas of most of the sub regional centres within Leicestershire and for channelling growth in the form of sustainable urban extensions within close proximity of key centres to help with their regeneration and economic restructuring e.g. Hinckley, Loughborough, Melton and Coalville.

New Growth Point Policy

NPG policy aims to accelerate housing delivery

- 2.14 New Growth Point (NGP) status has been approved by the Government to a number of settlements in the East Midlands where there is potential to accelerate the delivery of new housing growth. The 3 Cities & 3 Counties (6 Cs) Growth Point is the largest and most complex of these; encompassing Derby, Leicester, Nottingham and their respective counties, it aims to deliver 163,000 homes by 2026, an increase of 23% on the 2003 baseline. The level of housing to be provided for the NGP is determined through the draft RSS (i.e. it is not additional to the draft RSS).
- 2.15 The New Growth Point status is not a statutory designation but is a long term partnership between Government and local partners linked to early delivery of housing and ensuring that infrastructure and service provision keep pace with growth. The 6C's NGP provides a mechanism for bringing authorities together to ensure a co-ordinated approach to planning for infrastructure and growth. In 2007, with revisions in 2008, each growth point area was invited to submit a Programme of Development (PoD) relating to infrastructure to help support the early delivery of housing growth and provide a housing trajectory showing how growth is expected to be delivered.

The NGP is accompanied by additional infrastructure funding

- 2.16 The NGP status includes additional funding for infrastructure to help achieve the accelerated rate of delivery and provide investment in green and environmental infrastructure to ensure that the level of housing proposed can be developed embodying the principles of 'sustainable communities'. The funding will also support economic development initiatives to strengthen the role of the city centre and key economic drivers.
- 2.17 For 2008-09, the 6C's partnership was allocated nearly £12m capital funding and £1.2m revenue funding for various infrastructure projects identified in the PoD. This funding is based on delivery of early housing and affordable housing targets, the trajectory for which is based on lengthy discussions with GOEM and would be part of an annual 'refresh' submission.

Eco-towns

- 2.18 There is a proposal for an eco-town to the south east of Leicester (largely within Harborough District, but with some in Oadby and Wigston Borough Council areas) for

some 15,000 homes. If this is approved by the Government it will impact on the infrastructure and phasing of the wider HMA delivery.

- 2.19 However, for the purpose of this assessment, the infrastructure requirements for the eco town are explicitly excluded from this work - as the eco-town proposal is not yet a commitment.

Sustainable Community Strategy (SCS) objectives

Districts have signed up to a county-level Sustainable Community Strategy

- 2.20 Leicestershire Together is the “partnership of partnerships” in Leicestershire. It includes all of the organisations and partnerships that deliver public services in the County (excluding the City itself).
- 2.21 Leicestershire Together has published the Sustainable Community Strategy (SCS). The SCS is accompanied by a Local Area Agreement (LAA2) which works as a new performance framework for Leicestershire between 2008 and 2011.
- 2.22 There are seven overarching themes which provide the framework for the SCS and LAA2:
1. Improved life chances for vulnerable individuals and places
 2. Stronger, more cohesive communities
 3. A safe and attractive place to live and work
 4. A more effective response to climate change
 5. A prosperous, innovative and dynamic economy
 6. A healthier Leicestershire
 7. More effective and efficient service delivery
- 2.23 These themes are delivered through 49 “outcomes” in 18 themes. Particularly important to this assessment are the themes of housing, transport, economic development, and “cleaner and greener”. This Growth infrastructure assessment is intended to assist in the delivery of these priorities.
- 2.24 The county has agreed a Local Area Agreement target NI 154 and 155 (Net additional homes provided and affordable housing respectively) with GOEM. The NGP PoD states that no additional account has yet been taken in the LAA of the current downturn in the housing market due to the credit crunch, as this is a national problem rather than a local one. However, the effect of the downturn has been both immediate and severe in the Leicester and Leicestershire HMA, and it will result in further reductions in actual completions until the market picks up again.⁶

The city has its own Sustainable Community Strategy

- 2.25 The One Leicester strategy forms the SCS. It is published by the Leicester Partnership - the citywide group that represents the main public, private, voluntary and community organisations in Leicester.

⁶ NGP Programme of Delivery Oct 1 2008 para 2.2.6

- 2.26 The SCS states that there are seven levers for change that will make Leicester a truly sustainable city and improve quality of life. Whilst all are broadly relevant to this assessment (we are, for example, covering health infrastructure and childrens' provision) two in particular show the emphasis of partners in the city with regard to the infrastructure work we are carrying out here. These levers set broad principles for our assessment.
- The first is "Planning for people not cars". The SCS and LAA states that "we want to make Leicester a city for people and families, rather than a city for cars. Over the next 25 years we will use the planning system and investment to transform Leicester into a city of attractive buildings, leafy walkways, cycleways and pleasant, green open spaces."
 - The second is "Reducing our carbon footprint". The SCS and LAA states that "We want Leicester to play its part in tackling global warming by having the lowest 'carbon footprint' of any major city in Britain. Global warming is a major issue facing the world and we can take a lead in tackling its effects."⁷
- 2.27 LAA targets back up the strategy. The City Council has LAA targets for net additional homes (NI 154) and affordable housing (NI155).

The districts also have or are developing Sustainable Community Strategies

- 2.28 The seven districts are producing sustainable community strategies for their own areas, which are in various stages of production. However there has been agreement between the districts and the County to prepare these in line with the Leicestershire SCS, so they are expected be in line with the priorities identified in the 'places' section of the Leicestershire Together document.⁸ The heavy emphasis on providing homes, particularly affordable homes, is particularly noticeable theme across both the city and Leicestershire districts.
- 2.29 There are a number of other common themes across these strategies - which include transport, quality infrastructure and sustainable development.

The evidence base that LDF Core Strategies need on infrastructure

- 2.30 There has been a growing recognition of the link between spatial plans and infrastructure provision in achieving timely and sustainable delivery of spatial growth. This has taken on a greater importance in recent years through planning documents.

Local government is required to play an infrastructure co-ordinating role

- 2.31 The Local Government White Paper on Strong and Prosperous Communities published in October 2006 referred to local authorities playing a positive co-ordinating role in the delivery of infrastructure to ensure that the right infrastructure is provided at the right time. An increased emphasis on 'place shaping' was also made.

⁷ See, for example, LAA 2008-11 page 6 <http://www.leicesterpartnership.org.uk/>

⁸ Pages 60 to 87

The Planning White Paper, CSR 07 and PPS12 emphasise the need for an infrastructure planning evidence base

2.32 The Planning White Paper 2007 states that 'local authorities should demonstrate how and when infrastructure that is required to facilitate development will be delivered'. This has also been a major theme in the H M Treasury's CSR07 Policy Review on Supporting Housing Growth.

2.33 Planning Policy Statement 12 (PPS12) highlights the importance of ensuring that the core strategy of Local Development Frameworks is supported by a robust evidence base on infrastructure planning.⁹ PPS 12 states that:

"The core strategy should be supported by evidence of what physical and social infrastructure is needed to enable the amount of development proposed for the area, taking account of its type and distribution. This evidence should cover who will provide the infrastructure and when it will be provided. The core strategy should draw on and in parallel influence any strategies and investment plans of the local authority and other organisations."

2.34 The document also notes that:

'Good infrastructure planning considers the infrastructure required to support development, costs, sources of funding, timescales for delivery and gaps in funding. This allows for the identified infrastructure to be prioritised in discussions with key local partners.'

2.35 It states what should be considered as part of the infrastructure evidence base and emphasises the need for the alignment of investment plans of a range of key infrastructure providers. In particular, PPS12 states that the planning process infrastructure evidence base should take account of:

- The scale, type and distribution of development proposed for the area;
- The physical, social and green infrastructure needed to enable the development proposed;
- The phasing of development;
- The cost, sources of funding and gaps in funding (recognising that the budgeting processes of different agencies could mean that less information may be available when the core strategy is being prepared than would be ideal);
- The uncertainty of investment plans and undue reliance on critical elements of infrastructure whose funding is uncertain;
- The prioritisation of infrastructure requirements in discussion with key partners;
- The responsibility for the delivery of infrastructure.

2.36 Key infrastructure providers are to be encouraged to reflect the core strategy within their own future planning documents and seek alignment between their infrastructure planning and the planning process.

⁹ PPS12 June 2008, paragraphs 4.8 to 4.12

2.37 PPS 12 also states that infrastructure planning should include specific infrastructure requirements for any strategic sites which are allocated in the core strategy. So in the case of the Leicester and Leicestershire housing market area, we need to be clear as to what we refer to as strategic sites. Sites have been classed as being strategic are “those which are key to the delivery of the overall strategy.”¹⁰ This report provides detailed information as far as it is available on these strategic sites. Please refer to paragraph 6.19 onwards for more information.

There is no detailed guidance on what an infrastructure planning evidence base should consist of

2.38 Unlike some areas of the core strategy where the evidence base requirement is accompanied with a guidance manual on how to prepare the evidence, (for instance in the case of retail, strategic housing land availability and employment), there is no such provision for undertaking the evidence base for infrastructure assessment.

2.39 Given the shortage of guidance, the key point to emphasise is that we are mindful of the need to create a realistic infrastructure assessment that will aid spatial growth delivery. But the content of the evidence base is not defined and is likely to vary depending on local circumstances.

Here, we are relying on our understanding of best practice in order to comply with inspectors’ likely requirements for an evidence base

2.40 Given this lack of guidance, we have relied more on our own work and expertise in this field. This has been cited by the Planning Advisory Service as good practice. We have also reviewed Inspector’s Reports on core strategies to improve our understanding of the expectation from Infrastructure Plans.

2.41 From our review work and experience, it appears that the key is to ensure that we capture the infrastructure needed and identify the range of providers including the developers and others who will be responsible for funding the infrastructure. Further:

- The infrastructure assessment will be of no use if it is an unrealistic ‘wish list’ that has no likelihood of getting delivered and will hinder the overall delivery of the planned growth.
- The infrastructure assessment is a way of ensuring that aspirational growth proposals in spatial plans are clearly grounded in terms of the likelihood of their delivery through a rigorous process that considers infrastructure ‘showstoppers’, funding, phasing, joint collaboration and delivery mechanisms and builds these considerations into the core strategy and monitoring framework.
- At this stage in the development of the infrastructure assessment, where all the detailed modelling and master planning is not yet available, it is important to note a point by the Inspector in his response to the Joint North Northamptonshire Core Strategy. The Inspector stated that ‘I do not believe that for soundness, the

¹⁰ Planning Inspectorate (2007) LDFs: Lessons Learnt Examining Development Plan Documents para 3.11

specific solutions need to be identified in the Core Strategy, only that *appropriate solutions* would need to be found.’

- The Inspector will want to see there is a realistic prospect of delivery and if gaps in funding are identified then a mechanism should be in place to demonstrate how these are to be addressed in the future.
- The need for infrastructure to support housing growth and the associated need for an infrastructure *delivery planning process* has been highlighted in the Government’s Housing Green Paper. We consider this as an essential element of Infrastructure Planning and is considered later under the Delivery Process of the final report.

Community Infrastructure Levy (CIL) and policy on developer contributions

2.42 Recent reports, which we rely heavily on here, have stated that the CIL will be applied to new developments to raise money from developers to pay for facilities such as schools and waste treatment plants.¹¹ The Planning Bill is currently having its first reading in the House of Lords and is scheduled for implementation from October 2009.¹² The devil, however, is in the detail and three specific aspects are still in dispute.

- Several large local authorities, including Manchester and Bristol, are pressing for assurance that the CIL will not replace Section 106 agreements currently negotiated directly between councils and developers.
- Many councils have been lobbying for land value increases to be included in the levy because they are worried the proposed CIL cannot effectively measure the viability of the schemes on which it will be imposed.
- From the legal point of view, there are concerns the CIL will breach European legislation because councils charging a lower levy could be seen as unfairly subsidising projects in their areas. A further complication arises in London where the CIL, as currently drafted, will be chargeable by both the Mayor and individual boroughs.

2.43 The government has said that CIL will not replace planning obligations under Section 106, but local authorities and developers remain concerned about possible overlap between this scheme and the idea of planning gain supplements originally proposed in 2004 but officially rejected last year. This situation remains unclear.

¹¹ 3Fox International Ltd Newsletter 16 October 2008

¹² Planning Magazine 16 January 2009 *Levy delayed until Autumn*

3 WHAT HOUSING AND JOBS GROWTH ARE WE PROVIDING FOR?

Introduction

- 3.1 In this section we explain what the sources of our data on jobs and housing growth in the HMA says. This is important, as this assessment must start from an agreed and consistent set of assumptions about housing and jobs growth.
- 3.2 This is a strategic assessment. We have attempted to maintain a focus on the big issues that count, and have ensured that we avoided the type of detail which can quickly render an assessment of this type unusable.

Where is housing growth located? How is it phased?

Our starting point is the districts' housing allocation from the East Midlands Regional Spatial Strategy

- 3.3 The draft RSS numbers (Secretary of State figures in response to the Panel report) has provided us with starting point for the housing growth numbers used in this assessment. We have chosen to use these numbers as our starting point because a) draft RSS numbers will be the ones used at Inquiry; and b) LDFs will look to draft RSS numbers as a starting point to base their spatial growth plans on.
- 3.4 The planning period starts at 2001, meaning that some of these homes have either already been built or have secured planning consent based on current infrastructure planning.

We then concentrate on outstanding growth that remains "in the pipeline"

- 3.5 We are seeking to identify the housing growth that remains in the pipeline, and use this as a basis for our assessment. In particular, we are looking at the number of homes which do not yet have planning consents (or developer contribution agreements), as it is these homes which require future infrastructure planning, funding and costing.
- 3.6 There is one exception to this rule. Several sites within the Abbey Meadows and Waterside regeneration areas have recent planning consents for high density apartment schemes. All of these developments are unlikely to be implemented in their current form due to infrastructure deficits and the housing market downturn. Revised proposals incorporating a broader housing mix on some of these sites may well come forward in the future. It is therefore important to include the total planned housing development for the SRA strategic sites.

We've been provided with remaining housing numbers by districts

- 3.7 This actual figure of 'outstanding dwelling / employment provision' has been derived from a workshop held on 6th October at Leicestershire County Council with representation from most of the local authorities represented in the HMA. This information forms the basis for our infrastructure spreadsheet model. These numbers are shown in Table 3.1.

- 3.8 This information is provided with a strict caveat. The information provided in the table below is indicative only. In all cases, the work we have undertaken here, and the information we have used, in no way prejudices future planning decisions. Planning decisions will, of course, be determined through the proper local development framework process.
- 3.9 Because their planning work is at varying stages of the LDF process, some local authorities have found it difficult to provide us with a settled view of where growth will be located. In some instances, local authorities have responded by providing us with one possible or even notional location, on the grounds that our assessment will be able to provide better value if this “guess” about the direction of growth is proved correct.

Table 3.1 Leicester & Leicestershire HMA Housing Requirement

Draft RSS Housing Requirement for Leicester and Leicestershire HMA	Residual Dwelling Provision for infrastructure assessment
Leicester	15,900
Blaby	6,150
Charnwood	10,000
Harborough	5,900
Hinckley & Bosworth	6,855
Melton	2,810
N W Leicestershire	9,700
Oadby and Wigston	1,051
Total Housing Provision	58,366

Source: RTP / Leicester and Leicestershire planning authorities

Directions of housing growth have been mapped

- 3.10 The direction of housing growth is important to a assessment of this type. Only by knowing spatial direction of where growth is proposed can we begin to make estimates of infrastructure which are dependent on particular geographical locations - such as transport requirements, off-site flooding, and (to a certain extent) education.

We have categorised some sites as ‘strategic’

- 3.11 A significant proportion of growth envisaged is to be found in large Sustainable Urban Extensions (SUEs) and Strategic Regeneration Areas (SRAs) across the HMA.
- 3.12 However, a good proportion of growth in many districts is to be found in small sites with fewer than 100 dwellings. These sites are too numerous for us to deal with separately in an exercise of this type, and in any case such sites may not be of a scale to demand significant additional infrastructure spending when viewed individually. We have therefore packaged together these sites to arrive at an area-wide total. However, these sites are accounted for in this work.
- 3.13 We have mapped this growth in Appendix 3 and 4, and shown how we have packaged together the sites. The maps at Appendix 3 and 4, and the tables shown on the maps, come with the same strict caveat that we have provided in introducing our HMA Housing Requirement table above.

We have used the phasing of housing growth shown in the New Growth Point Programme of Delivery

- 3.14 The housing trajectory used to develop the infrastructure assessment has a very important bearing on the requirement and thus the planning and funding for infrastructure.
- 3.15 We have used the New Growth Point (NGP) Programme of Delivery (PoD) Refresh 1 Oct 2008 submission phasing of housing delivery as a basis for our assessment. This principle has been agreed with the steering group. The PoD phasing modifies the phasing assumptions in the draft RSS Proposed Changes (July 2008). It has been derived through lengthy discussions with GOEM. The PoD phasing is compliant with funding bids produced for NGP and the targets that have been included as part of the Local Area Agreement (LAA) NI 154 targets for 2008-11. We are aware that this trajectory does not take account of current delivery and market issues, and know that the client team are shortly about to enter into further discussions with GOEM about how far this can be adjusted to take account of the current economic market.
- 3.16 To amend the trajectory would mean creating an infrastructure assessment that is inconsistent with these documents, and out of step with a range of documents produced by the city, county and districts.
- 3.17 NGP PoD phasing is as follows.

Table 3.2 The NGP PoD phasing in the PUA (Oct 2008)

PUA	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17
SUE (Ashton Green)			0	0	200	200	200	200	200	250	300
SUE (Hamilton)			300	350	350	250	250	0	0	0	0
LRC Abbey Meadows			0	0	0	300	300	400	400	350	400
LRC Waterside			0	0	0	350	400	400	400	300	350
LRC St Georges			50	150	100	100	100	100	100	150	200
SUE (Blaby)			0	0	0	0	0	100	300	300	300
SUE (Charnwood)			0	0	0	0	100	200	350	350	350
Blaby	166	266	130	120	103	57	37	39	37	35	20
Charnwood	145	118	112	191	202	151	157	127	116	116	116
Harborough	44	111	77	34	20	0	0	0	0	0	0
Leicester	1,215	942	1,100	1,250	1,300	650	500	500	600	500	350
O&W	154	39	90	90	90	90	90	90	90	90	90

Table 3.3 The NGP PoD phasing outside the PUA (Oct 2008)

NON-PUA	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17
Barwell SUE			0	0	0	80	80	80	80	80	160
Earl Shilton SUE			0	0	0	0	0	80	80	80	160
Loughborough SUE			0	0	0	0	100	200	300	250	250
Melton Mowbray SUE			0	0	0	0	100	100	100	100	100
Coalville SUE			0	0	70	100	150	200	200	200	200
Blaby	52	63	197	195	196	137	69	121	104	102	123
Charnwood	822	806	657	549	554	435	348	277	155	155	155
Harborough	406	475	316	437	274	170	191	170	170	145	52
H&B	438	398	513	816	631	422	407	285	285	283	100
Melton	199	237	157	124	142	245	217	115	85	80	110
NW Leics	336	354	122	224	345	373	489	354	367	317	426

Source: Cities and Counties New Growth Point, Refreshed Programme of Development, Annex D, Leicester and Leicestershire HMA Infrastructure Projects (1st October 2008)

Some adjustments were necessary to accommodate the longer timescales and revised growth details

3.18 We have had to apply some adjustments to the PoD phasing, for instance:

- We have to expand the phasing timescales from 2017 to 2026. The PoD phasing is only up to 2016/17, whereas the infrastructure assessment is up to 2026.
- In every instance, we have maintained the levels of growth provided to us by the local authorities. In most cases this has meant that outstanding units have been distributed evenly between the final two five year groupings (2016/17 - 2020/21 and 2021/22 - 2025/26). Thus for Ashton Green this equates to a completion rate of 217 units per annum (the PoD rates for Ashton Green varies between 200 - 300 pa) and a total of 3,500 units instead of the 1,550 units included in the POD
- Market Harborough is not identified as an SUE in the POD, but is designated as an SUE in our Infrastructure assessment. We have thus added this allocation and phased it between the five year groupings of 2016/17 - 2020/21 and 2021/22 - 2025/26¹³.
- The PoD provides a single district wide figure for all non-SUE and SRA sites and these do not clearly equate to the figures we now have for the non SUEs. For instance, the PoD assumption for Leicester City of 5,650 residential units between 2009/10 - 2016/17 is higher than the infrastructure growth figure for non SUE and SRA areas of 3,800 units. Similarly, we have a much lower figure for the non SUE growth in Charnwood (1,500 units) than in the PoD (4,573 units). However, our estimated residential development in NW Leics (5,200 units) is higher in comparison to the PoD (3,017 units), which is due to the increase in overall housing units for N W Leicestershire.

¹³ This accounts for any possible delays that might arise due to investment in sewage capital works necessary by 2017.

- In these instances where the PoD estimated completions for 2009/10 - 2016/17 are already in excess of our assumed total up to 2026, we have used the PoD percentages in the relevant years, and applied these to our estimated unit completion numbers.

3.19 Our assumed phasing, based on the PoD, used in the spreadsheet model is set out below.

Table 3.4 Phasing used in this infrastructure assessment (based on POD)

PUA	2009/10	2010/11	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	TOTAL
SUE (Ashton Green)	0	200	1,050	1,125	1,125	3,500
SUE (Hamilton)	350	350	0	0	0	700
LRC Abbey Meadows	0	0	1,750	725	725	3,200
LRC Waterside	0	0	1,850	575	575	3,000
LRC St Georges	150	100	550	450	450	1,700
SUE (Blaby)	0	0	700	2,150	2,150	5,000
SUE (Charnwood)	0	0	1,000	2,000	2,000	5,000
Blaby	0	0	0	0	0	0
Harborough	34	20	0	223	223	500
Harborough %	7%	4%	0%	45%	45%	100%
Leicester	1,250	1,300	2,750	-750	-750	3,800
Leicester %	19%	19%	41%	21%	0%	100%
O&W	90	90	871	0	0	1,051
O&W %	9%	9%	83%	0%	0%	100%

NON-PUA	2009/10	2010/11	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	TOTAL
Barwell SUE	0	0	400	1,050	1,050	2,500
Earl Shilton SUE	0	0	240	880	880	2,000
Loughborough SUE	0	0	850	1,325	1,325	3,500
Melton Mowbray SUE	0	0	400	300	300	1,000
Coalville SUE	0	70	850	1,790	1,790	4,500
Market Harborough incl. SUE (all) - RTP addition				1,400	1,400	2,800
Blaby	195	196	533	113	113	1,150
Blaby %	17%	17%	46%	10%	10%	100%
Charnwood (PUA + Non PUA)	740	756	586	-291	-291	1,500
Charnwood (PUA + Non PUA) %	16%	17%	55%	6%	6%	100%
Harborough	437	274	846	522	522	2,600
Harborough %	17%	11%	33%	20%	20%	100%
H&B	816	631	908	0	0	2,355
H&B %	35%	27%	39%	0%	0%	100%
Melton	124	142	742	401	401	1,810
Melton %	7%	8%	41%	22%	22%	100%
NW Leics	224	345	1,900	1,366	1,366	5,200
NW Leics %	4%	7%	37%	26%	26%	100%

Source: RTP based on NGP Pod (Oct 2008)

However, this phasing will require revision

3.20 The PoD trajectory will be reviewed at some point in early 2009. This is to be welcomed. We are aware that recent events mean that the NGP PoD phasing will require heavy revision. The credit crunch is likely to affect the HMA severely and will result in reductions in actual completions for some time to come.

3.21 The infrastructure assessment will therefore need to be amended in line with this adjusted phasing.

Where is jobs growth located?

We have considered the New Business Quarter, LSEP Employment Land Study and District recommendations and mapped them

- 3.22 Our assessment takes account of planned jobs growth based on figures for strategic employment growth planned for the SUEs and the New Business Quarter in Leicester as part of the SRA. We have compared the information provided to us by each of the local authorities with recent employment land allocations suggested in the Leicester and Leicestershire Economic Partnership HMA Employment Land Study report (2008).
- 3.23 On the whole the scale and allocations from the two sources are similar. However, there are some discrepancies between the planned employment growth information provided by the local authorities and the study. For instance, in Hinckley, the study makes a recommendation of 38ha of employment land, whereas the Borough Council are providing for some 50ha of employment land. In such cases, we have adopted the local authority figure for the purpose of this study. We have followed the LSEP study in labelling these sites as “strategic” on the map.
- 3.24 There are two employment sites of regional importance on the map. These are a) the Loughborough Science Park and b) the Castle Donnington Freight Distribution Centre. Both of these will have some ‘specialised’ infrastructure requirements that will be determined as their plans develop.

We have also mapped significant retail sites

- 3.25 We have mapped significant retail sites that do not have any current planning obligations attached to them relating to the RSS period of 2001 -2026 (so excluding any consented sites).
- 3.26 We have mapped
- any individual retail site larger than 500sqm net floorspace; and
 - Individual sites which within a given geographical area which, added together, total more than 500sqm net floorspace.
- 3.27 We have split these by convenience and comparison retail. We are assuming that retail growth of less than 500sqm is not likely to be significant in either infrastructure or funding terms. We have not picked out particular retail sites as being strategic, as we lack a specific policy basis upon which to make this choice. All retail sites are likely to be important to districts.
- 3.28 We have mapped these outstanding retail and employment sites in the maps in Appendix 3 and 4. With regard to employment and retail allocations it is worth repeating the caveat offered above for the housing numbers. **The information provided on the map is indicative only. In all cases, the work we have undertaken here, and the information we have used, in no way prejudices future planning decisions. Planning decisions will, of course, be determined through the proper local development framework process.**

4 WHAT VALUE OF DEVELOPER CONTRIBUTIONS DOES HOUSING GROWTH CREATE? HOW SHOULD DEVELOPER CONTRIBUTIONS BE ALLOCATED?

Introduction

- 4.1 Securing the maximum reasonable contributions possible from development will be an important way of funding, and therefore delivering, the infrastructure required to support growth.
- 4.2 Consequently, an estimate of developer contributions is a key output of our infrastructure cost and funding spreadsheet model. The spreadsheet model has been provided under separate cover. The spreadsheet model can be updated as factors such as market conditions, build costs, and planning targets change. In this chapter we set out the assumptions that have been used as part of this exercise, and how much developer contribution is potentially generated by growth using these assumptions. The assumptions we use, and the approach we take, should be reviewed periodically.
- 4.3 Finally, we discuss how this developer contribution sum has been allocated in our assessment.

Our approach

- 4.4 Our basic approach to estimating potential levels of developer contributions generated by housing growth in this study is to look forward, rather than backwards.
- 4.5 There is past evidence of contributions secured from housing developments (through S106 agreements), but this is unlikely to be an accurate basis looking forward. Not only has the market changed significantly recently, with large falls in house prices, there are also other development variables such as affordable housing and sustainability requirements that are likely to be different and maybe need to be tested outside this study.

Hybrid residual / discounted cash flow analysis used to estimate future developer contributions

- 4.6 We have developed a hybrid residual / discounted cash flow analysis to estimate potential developer contributions arising from residential development to help fund new infrastructure requirements resulting from growth. This can be regarded as a type of “development appraisal” model.
- 4.7 Our analysis still needs to make assumptions on value and cost items relating to development (such as build costs, sales values etc), but the “residual” we have had estimate is the potential developer contribution available based on these assumptions, rather than residual land values or developer’s profit/return which are often the item that needs to be estimated by the development appraisal.

- 4.8 Our approach to estimating the potential developer contribution available from residential development in the HMA is summarised below:

Figure 4.1 Estimation of developer contribution approach

$$\begin{aligned} & \text{Total Development Value} \\ & \quad \text{Minus} \\ & \text{Reasonable Land Acquisition Costs} \\ & \quad \text{Minus} \\ & \text{Total Construction Costs} \\ & \quad \text{Minus} \\ & \text{Reasonable Developers Profit} \\ & \\ & = \text{Surplus Worth available for developer contribution}^{14} \end{aligned}$$

We have used development “categories”

- 4.9 Due to the large area and number of potential development sites within the HMA to accommodate the assumed growth levels, we have applied this analysis to different development “categories”. These categories reflect known differences in the HMA, such as greenfield and brownfield development sites.

- 4.10 These categories are set out in detail later on in this section.

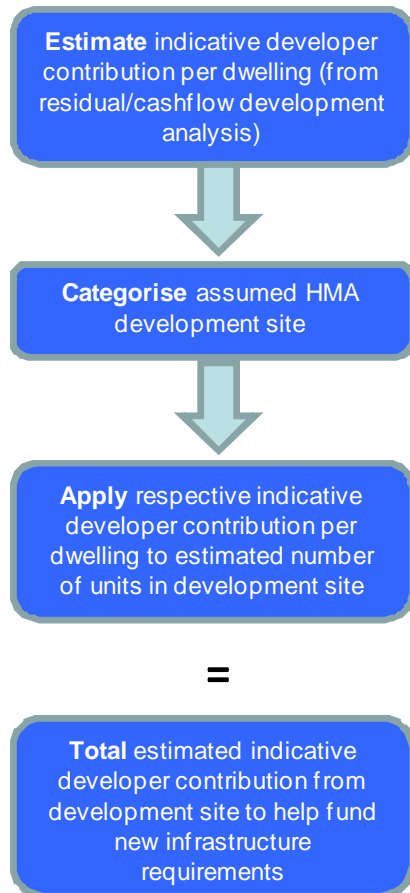
Estimating developer contributions in the spreadsheet model

- 4.11 The output of the developer contributions analysis using our residual / discounted cash flow approach is an estimated indicative developer contribution per dwelling for each of the assumed development “categories”.
- 4.12 We have classified each assumed HMA development site based in the spreadsheet model, and applied the appropriate estimated indicative developer contribution to the assumed number of units in the development. This gives the total estimated developer contribution funding, with the timing of contributions related to the assumed phasing of development.

¹⁴ Developer contribution can be in the form of Sec.106 payments, non-financial contributions a tariff etc.

4.13 The calculation used in our study is summarised below:

Figure 4.2 Estimation of developer contribution calculation



The contribution analysis tool forms part of the spreadsheet model

4.14 The hybrid residual / discounted cash flow analysis we have developed (the contribution analysis tool) is integrated, and therefore forms part, of the spreadsheet model.

4.15 The development assumptions made in the contribution analysis tool can be easily changed by the user (e.g. assumed affordable housing requirements). The effect on the estimated indicative developer contributions, and the corresponding effect this has on infrastructure funding in the spreadsheet model, can also be easily updated.

4.16 A summary of the assumptions in our contribution analysis tool for the purposes of this study are provided at the end of this section, and discussed in detail below.

Important caveats

4.17 We have made some general points about how this assessment should be used in Section 1. Below, we make caveats directly relating to the estimation of developer contribution funding available by the contribution analysis tool and its use in the spreadsheet model.

Calculations used here are not based on, and do not constitute, “Red Book” valuations

- 4.18 It is very important to note that the indicative developer contribution estimates in our study (and within the spreadsheet model) are produced at a high level with a number of assumptions made. The figures that will be reported from this exercise need to be treated as indicative figures on the basis of the inputs and assumptions made. They are not based on, and do not constitute, “Red Book” valuations (RICS Valuation Standards 6th Edition). It is not our intention in this work to attempt to provide a substitute for a detailed site viability assessment.

We have had to make assumptions for sites across the HMA

- 4.19 Development is not a homogenous product; all the development sites identified to accommodate the identified growth are different. At a fundamental level, the location of each site is unique. However, there are also likely to be potentially large differences in the value a site will generate from development, the cost of such development (including site acquisition costs) and the timing of when the development will be delivered.
- 4.20 Given that each development site is unique, the amount of surplus value (where it exists) that can be captured for developer contributions will therefore also be unique. In addition, the exact surplus value that a development site has generated will not be known until all the value and costs have been realised.
- 4.21 Consequently, estimating this with limited information available is difficult, especially where there are a range of development sites to assess. Even the developer, armed with detailed information about the site (crucially including what it has paid for the site, or the calculation mechanism where there is a legal agreement with the landowner such as an option agreement - see below) can only estimate some of these value and cost items. Developers themselves can therefore only estimate if there will be any surplus value available. Our analysis is no different in this respect, and necessarily has to work with less detailed information than would be available to a site developer.

Our analysis is only at a high level. This work should not be used to calculate developer contributions from specific sites

- 4.22 Based on the above comments, and the fact that the contribution analysis tool forms only part of the overall spreadsheet model, our approach in this study only provides a very high level assessment of developer contributions. Although the spreadsheet model itself sets out estimated indicative developer contributions for individual sites, our analysis has not been at an individual site basis.
- 4.23 Consequently, this information should not be used for any purpose other than the infrastructure assessment. We would recommend more detailed site specific viability analysis is undertaken in this respect, and to refine the spreadsheet model as necessary.
- 4.24 We have not used standard development appraisal software (such as Circle Developer) that might allow site-specific valuations. This is for a number of reasons. Firstly, they are not tailored to assessing long term residential development schemes

which are likely to form a large part of the expected growth in Leicestershire. Most in our experience work on the assumption that money will be borrowed by a developer to pay for a scheme in which their key financial aim is to achieve a satisfactory margin (profit) on cost whereas volume housebuilders manage equity funding and aim to achieve a target return on the capital they employ. We understand the emerging DCLG guidance on appraising Eco-towns recommends using a NPV (return on capital employed) approach.

- 4.25 Secondly, appraisal packages are standardised and are therefore not designed to be integrated with infrastructure spreadsheet models. In our experience, they are also not as user friendly to allow predetermined key variables to be changed (e.g. affordable housing percentages). By using our own developer contribution analysis in Excel, this means it can be directly linked into the spreadsheet model. The assumptions made are also set out in the contribution analysis tool part of the spreadsheet model so that future changes or testing of assumptions can be undertaken.

No specific developer contribution mechanism is assumed

- 4.26 Development contributions are currently secured through the Section 106 system (governed by Circular 05/05). Although the Community Infrastructure Levy (CIL) is proposed to work alongside and partially replace the Section 106 system, the maximum level of contribution that development could afford (without becoming unviable) under each system is largely the same, although timing and certainty of required contribution will affect this level.
- 4.27 The purpose of this assessment is not to determine a CIL charge and implementation mechanism. However, we still need to include developer contributions that could realistically be secured to help fund the infrastructure requirements identified in the assessment. We therefore propose to calculate this based on the level of financial contribution that could be reasonably secured from development, regardless of the particular mechanism (whether Section 106 or CIL).
- 4.28 We have assumed the timing of contribution payments is spread out over the life of the development. This is envisaged in the latest CIL guidance and contributions in the majority of large residential and mixed use developments are either spread or back ended. Our specific assumptions on timing are set out in more detail below.

Estimated developer contributions are highly sensitive to the assumptions

- 4.29 The estimate of developer contributions potentially available to contribute to infrastructure requirements generated by our developer contribution analysis tool are extremely sensitive to the assumptions made.
- 4.30 Given the diversity of development sites, and also current and future changes in market conditions and regulations governing development, we recommend these assumptions are regularly reviewed, tested and compared with actual evidence on contributions secured both inside and outside the HMA.

The assumptions we use in the developer contribution analysis tool/spreadsheet model

4.31 Although all the development assumptions set up in our developer contribution analysis tool that forms part of the spreadsheet model can be altered by the user, we have made a number of initial assumptions for the purposes of this study that have been discussed and agreed with the client group. These are set out below.

We have put development sites into categories

4.32 The following key variables will affect the general level of developer contribution that could be available from growth, and how much variation there is between sites:

- The level of land values needed to maintain an adequate flow of land onto the market (or the site acquisition cost where it has already been acquired by a developer)
- The types of sites earmarked for development in the context of their existing use value and preparation costs.
- Whether there are different markets in terms of demand, supply and general sales values the earmarked sites are located in.
- Policy issues such as layout and design rules and requirements for affordable housing in the context of the potential availability of Housing and Communities Agency grant.

4.33 As stated above, it is not possible within the scope of this assessment to estimate the level of contribution available for each individual site. However, there are likely to be large differences between sites in terms of the key variables outlined above that need to be reflected as far as possible. For example, sites in the city centre, such as the Waterside development, have an existing use value (due to existing occupiers on the site) which will increase the site assembly (acquisition) costs whereas we understand the majority of other sites (such as Ashton Green) are essentially “greenfield” sites with much lower existing use values and therefore site assembly costs.

4.34 These categories reflect brownfield/ greenfield status, density and value. In the brownfield category, we have also categorised by site use

4.35 As set out in Figure 4.2, we have categorised each identified development site in the spreadsheet model.

4.36 In order to attempt to reflect some of the key differences between sites in the HMA that will effect the potential level of developer contribution that could be secured to help pay for new infrastructure requirements resulting from housing growth, we considered three key variables relating to sites through discussions with the client group:

- Site type (i.e. greenfield or brownfield)
- Site location (in terms of value of the location)
- Site development density (the likely residential density the site could be developed for)

4.37 The assumed development categories we agreed with the client group based on these key variables (with the number of assumed sites in each category in our spreadsheet model shown in brackets) are summarised below:

4.38 Assumed “Greenfield” Development Sites:

- Low Density/Low Value (0)
- Low Density/Medium Value (0)
- Low Density/High Value (0)
- Medium Density/Low Value (6)
- Medium Density/Medium Value (14)
- Medium Density/High Value (18)

4.39 Assumed “Brownfield” (inc. SRA) Development Sites:

- Medium Density Residential (3)
- High Density Residential (4)
- Medium Density Mixed (4)

4.40 This produces nine development categories. The developer contribution analysis tool has a hybrid residual/cashflow for each category, which therefore produces nine different estimated indicative developer contributions (on a per dwelling basis).

Generic development site size used as basis for contribution analysis

4.41 There is a wide range of development sizes assumed in the HMA; from small town centre developments to large SUEs up to 5,000 units.

4.42 We have used a notional 25 gross hectare (15 ha net for greenfield and 17.5ha net for brownfield) development site¹⁵ in the contribution analysis tool. This equates to approximately 525 - 750 units (depending on the density assumed).

Housing density assumptions

4.43 We have adopted the following assumptions on a dwellings per hectare (dph) basis:

Table 4.1 Housing density assumptions

	Low	Medium	High
Tested Density	35 dph	50 dph	80 dph
Density Range	<42dph	42 - 65 dph	>65 dph

Source: RTP

¹⁵This does not necessarily equate to the average development size in the HMA area, or a single phase of development - for example, if some significant initial development costs (such as an access road into a development site) are only attributed to a first phase of development, the potential developer contribution available could be zero. However, as these costs will not need to be incurred in subsequent phases, the level of developer contribution would be much higher in comparison. A development of a sufficient scale therefore needs to be used as a basis for the development appraisal so an average developer contribution per unit across all phases can be estimated.

- 4.44 In specifying these categories, we have been guided by previous density ranges of development in the Leicester and Leicester HMA.

Higher density brownfield (urban) sites are assumed to be at 80dph

- 4.45 At their very highest, some unimplemented permissions for high rise apartment developments in Leicester city have densities of 500 - 800 dph. An example is the No. 1 Westbridge site. Given the recent performance of the housing sector, and the doubt that we have that this market will survive in its previous form (echoed in the NGP PoD), we have treated these densities as an outlier. We have therefore not used them in this assessment.
- 4.46 The MHT Leicester Square scheme, Sanveygate and St George's South mill conversions have averaged at 200-300 dph. In these cases net and gross density is the same; all are apartment schemes.
- 4.47 Other recent developments which do include a proportion of larger family units (4 storey terraces) - for example, Barratts' Freemans Meadow development or the Bloors development at Anstey Lane/Blackbird Rd on the former Marconi site have net residential densities of about 70 dph.
- 4.48 Seeing these latter two city schemes together, we have used an upper end density of 90 dph. As a "reality check", it should be noted that this upper end is similar to traditional terraced housing areas.

Medium and lower density sites are assumed to be at 50dph and 35dph respectively

- 4.49 Looking across the region, and taking into account planning policy at both regional and national level, we have used a central value of 50 dph for medium density housing. The lower density number used is 35 dph. This would be typical for larger, suburban housing with larger gardens.

Sales value assumptions

- 4.50 The other key variable used to classify development sites is by sales value, in this case housing prices on a £ per square metre (£ psm) basis. We have again adopted a low, medium and high approach, using representative areas to estimate sales values for each value level used.

Sales values have a disproportionate effect on land values and potential developer contributions

- 4.51 As stated above, development appraisals are highly sensitive to changes in key variables. If land values stay the same, a small decrease in sales values will have a disproportionately greater negative effect on surplus value (i.e. developer contribution available). Land values will change to reflect this (which will also decrease by a greater percentage), and therefore allow for some surplus value to be created for developer contributions, depending on whether landowners are prepared to sell at the reduced price. However, where the land has already been acquired at a fixed cost by a developer (i.e. there was no mechanism agreed for reflecting changes in costs or values), the potential for developer contribution is likely to be eroded.

Sales values change over time

- 4.52 The sales values on a development are arguably the greatest determinant of potential developer contributions that can be secured to pay for infrastructure requirements arising from housing growth. As our hybrid residual / discounted cash flow analysis is extremely sensitive to changes in assumptions, sales values can change significantly over time, and our spreadsheet model extends to 2026, the sales values assumptions are critical and need to be regularly reviewed.

House prices are falling

- 4.53 We are currently in an unstable housing market, with house prices having fallen significantly in the last year.
- 4.54 Key sources of data are the reports issued by the RICS, the Halifax and Nationwide Building Societies, and indices prepared by the FT and DDCLG.¹⁶ All are prepared on slightly different bases. The FT index in October 2008 pointed to a 4.3% per cent decline in house prices over the last year and the DDCLG index slightly less. These are based on transactional data which can lag underlying changes in market pricing.
- 4.55 In contrast, figures produced by the Halifax and Nationwide are based on mortgage offer prices with the attendant difficulty that they ignore homes bought without mortgages. They have reported annual falls of over 12 per cent.
- 4.56 Nationally, the RICS report includes a poll of agents expectations which can provide a useful forward indicator. This hinted at a decline in the rate of price falls but was gloomy overall and referred to relative weakness in the market weakness in the Home Counties. Economists Global Insight together with agents Savills and the Nationwide have separately estimated that the peak to trough fall in house prices could be around

Future sales prices are unlikely to return to previous "peak" levels until 2013

- 4.57 Current forecasts for residential values broadly estimate the following trajectory for sales values:
- 2008-11: Sales values 25% lower than "peak" levels
 - 2011-13: Sales values 10% lower than "peak" levels
 - 2013 +: Sales values return to "peak" levels

We have used 'peak' house prices as the basis for our study

- 4.58 Given the timescales of the study, and the current uncertainty and instability in the housing market, neither current nor previous house prices on their own are likely to be an accurate basis for assumptions on sales values in the HMA within the spreadsheet model.

¹⁶See RICS research at <http://www.rics.org/Newsroom/Economiccommentary/spotlight.htm>; Halifax House Price Index at <http://www.hbosplc.com/economy/HousingResearch.asp>; Nationwide House Price Index at <http://www.nationwide.co.uk/hpi/>; FT house price index at <http://www.academetrics.co.uk/ftHousePrices.php>; DDCLG statistics at <http://www.communities.gov.uk/corporate/publications/statistics/>

- 4.59 As there is less market evidence of current house prices than before the “credit crunch”, and there is likely to be limited development activity until previous “peak” house prices are reached again, we have used such “peak” prices as the basis for estimating sales values for the different development categories.
- 4.60 Clearly, developers cannot sell houses at this price at the moment. To take account of that fact, we have assumed that developer contributions are reduced until 2013. We explain more below.

‘Peak’ house price assumptions

- 4.61 Set out in Table 4.2 below are our assumptions on “peak” sales values for the different value levels (i.e. low, medium and high) that form part of the development categories. The values have been estimated from Land Registry information on the sale of new houses between approximately 2007 and 2008, new developments and discussions with property agents.
- 4.62 Given the large area the HMA covers, we have used the following “representative” areas for each of the relative value levels:
- Low Value - Coalville
 - Medium Value - Hamilton
 - High Value - Market Harborough

Table 4.2 Assumed “peak” sales values by category

	Low	Medium	High
Tested Value	£1,884psm	£2,153psm	£2,422psm
Value Range	<£2,019psm	£2,019 - £2,288psm	>£2,288psm
Representative Area	Coalville	Hamilton	Market Harborough
Typical selling price for a house using these assumptions	£165,000	£190,000	£215,000

Source: RTP; Land Registry

- 4.63 The only development category with employment assumed in the calculations is the brownfield mixed use category. We have assumed approximately 14,000 sq m of B1 employment space at £188 per sq m rental value and 8% yield.
- We have assumed reduced developer contributions until 2013 to take account of how house prices have fallen from their previous peak*
- 4.64 Developers are currently approaching, or considering approaching, local authorities to renegotiate developer contribution (Section 106) requirements for development already granted planning permission. Without detailed site information (which may not be possible to obtain from developers and/or landowners), it is difficult to assess which development sites assumed in this assessment will be impacted by the projected fall in sales values set out above in terms of their ability to still generate developer contributions towards infrastructure costs.

- 4.65 As modelling different house price levels up to 2013 (and their corresponding effect on the estimated developer contributions based on the other assumptions made) is outside the scope of this study, we have assumed only half of the estimated indicative developer contributions will be secured up to 2013 in the spreadsheet model.
- 4.66 As set out in 4.52, we recommend that sales values are monitored closely following the completion of the assessment, the developer contribution assessment is amended according to new information/projections on the housing market and “real life” evidence of what developer contribution packages that are secured is reflected in any required refinement of the spreadsheet model.
- We have assumed estimated developer contributions beyond 2013 using “peak” sales values*
- 4.67 Beyond 2013, we have used the estimated indicative developer contribution levels based on previous “peak” sales values. Again, house prices should be monitored closely following this study when new information becomes available.
- Affordable housing assumptions*
- 4.68 The level of developer contribution available to pay for infrastructure will depend on other developer contributions required by the Local Authority. A key contribution in this respect is affordable housing.
- Variations in affordable housing policy and site variation affects the achievability of affordable housing targets. This presents this strategic assessment with problems*
- 4.69 Nationally, different districts have different affordable housing targets. It appears to be the case that these targets are not always (or even often) reached in reality. This situation is replicated within the Leicester and Leicestershire HMA. In some instances, districts’ policies explicitly recognise that different proportions of affordable housing are possible in different areas.
- 4.70 These district and site-specific variations present a strategic assessment such as this with a number of uncertainties:
- The actual level of affordable housing required in each case follows negotiation as often as policy.
 - The level of HCA grant that can be relied upon across the HMA is not readily ascertainable. The receipt of grant makes a big difference to developer receipts especially where the requirement is for social rented accommodation.
 - The mix of housing in terms of tenure and type varies between areas and schemes.
- 4.71 Additionally, the state of flux around CIL policy further complicates matters. Whilst Circular 05/2005 appeared to privilege affordable housing contributions over other S106 obligations, CIL guidance does not. However, consultation with stakeholders showed that, politically, affordable housing was the most important claim on developer contributions.
- 4.72 Notwithstanding this local variability there is a need for a general assumption to underpin the analysis of development viability used in the spreadsheet model.

Our approach to affordable housing

- 4.73 The two main approaches to using new development to provide affordable housing is either through requiring a developer to provide a set percentage of units as affordable to a Registered Social Landlord (RSL), or provide a set percentage of its land for an RSL.
- 4.74 We understand from stakeholders that most LPAs usually take the first approach - that is, to apply percentage affordable housing targets to the overall proposed dwelling numbers on the site.
- 4.75 Following discussions with stakeholders, we have adopted a requirement for 30% affordable housing on the "greenfield" site categories. Following the findings of the Strategic Housing Market assessment, we have used 78:22 split between socially rented and intermediate affordable housing units.
- 4.76 We have been asked to adopt a 15% figure in the "brownfield" development site categories (which includes the Strategic Regeneration Area sites in Leicester City). We understand this reflects the viability of such development.

Factors affecting affordable housing values

- 4.77 An RSL will pay the developer less for the affordable housing in a development than private buyers pay for private units. This is taken into account in our model.
- 4.78 Assuming an RSL acquires the units rather than the land for affordable housing, the value a developer will receive from the RSL will largely depend on the following three key factors:
- The tenure type (i.e. whether the units are for socially rented or intermediate affordable housing)
 - "Open market" values (i.e. what "private" units are sold for)
 - The level of grant funding available
- 4.79 Our approach to these variables is as follows.

Accounting for tenure type: more value is achieved from intermediate affordable housing

- 4.80 A developer will receive more for intermediate affordable housing units from an RSL than for socially rented units. This reflects the respective value of such affordable housing to the RSL.
- 4.81 Often a developer will receive less than half the "open market" (or private) value for socially rented units where no grant funding is available. In contrast, where there is grant funding available, a developer can receive almost full market value from an RSL for intermediate affordable units.

Accounting for open market values: we have assessed the value of affordable housing as a percentage of market value

- 4.82 Higher "open market" (or private) residential values usually correspond to a developer receiving more from an RSL for the affordable housing units.

4.83 We have made assumptions on “open market” residential values for the different development categories (see Table 4.2 above). Our approach is therefore to apply a percentage of these “open market” values to the affordable housing element in our generic developments (for each assumed development category) within the spreadsheet model.

Accounting for grant levels: affordable housing grant is changing

4.84 A developer will receive more from an RSL where grant funding is made available by the Homes and Communities Agency (previously the Housing Corporation).

4.85 The Housing Corporation’s (HC) previous national policy on grant funding was none would be available, unless the need for public subsidy could be demonstrated. Importantly, the HC wished to ensure it did not subsidise land values i.e. help maintain high land prices to the benefit of land owners. We understand from meetings with its successor, the Homes and Communities Agency (HCA), that it is still following the principle that developer contributions in the first instance should bring forward affordable housing in accordance with the overall percentages, mix of tenure and house type as set out in the local authorities SPD for affordable housing.

4.86 The HCA’s investment strategy is currently under development. Although the HCA has published an East Midlands Investment Statement 2008-11, we understand its investment model is changing and therefore using historic data on grant rates for affordable homes in planning for future investment may not be accurate.

4.87 In addition, it would not be appropriate to use an average of the investment identified for districts as the investment will be targeted at particular sites, to counter local social and economic problems and issues, make best use of brownfield land and other specialist supported and rural developments.

We have assumed nil grant funding on some greenfield development categories

4.88 The need for grant funding needs to be justified on an individual site or need basis. It is therefore difficult to apply assumptions of likely grant funding to particular “categories” of development (such as greenfield or brownfield sites).

4.89 However, we have agreed with the HCA to adopt a nil based grant position for National Affordable Housing Programme (NAHP) grant where development is unlikely to require grant funding.

4.90 We have interpreted this as all the assumed greenfield development categories, except for the low value category. We have investigated the assumptions to use regarding the level of affordable housing grant with the HCA. Not wanting to set a precedent, the HCA starts from the assumption that no affordable housing grant will be forthcoming. However, given the current assumptions we have been instructed to use regarding affordable housing requirements, such an assumption would render the level of developer contribution available to fund infrastructure very much lower, and render an increased number of sites effectively unviable.

We have assumed some grant funding on development categories likely to have viability issues

- 4.91 We have therefore used assumptions regarding the amount of affordable housing grant listed below in the table in the expectation that this will make our study more accurately reflect recent practice. These numbers are not based on specific research and are instead typical averages we are aware of from our work on the issues of infrastructure planning and viability. We have assumed a £20,000 per unit grant for this low value greenfield category, and £30,000 per unit grant for the “brownfield” development sites to reflect the latter’s likely greater viability issues.
- 4.92 These grant level assumptions can be straightforwardly adjusted in the developer contribution analysis tool part of the spreadsheet model when more accurate data is forthcoming from the HCA. We recommend the affordable housing policies and assumptions are considered in more detail due to the complexity and current state of change in this area.

We have combined the above factors to make some affordable housing value assumptions to input to the spreadsheet model

- 4.93 Table 4.3 below sets out the assumptions in the spreadsheet model regarding how much the RSL pays the developer for the affordable housing units. It should be noted we have assumed that the grant level per unit will not be applied equally to the socially rented and intermediate affordable housing; the latter will normally be allocated less due to its higher value to an RSL. We have based this high level assessment on our general experience elsewhere.
- 4.94 These assumptions can be changed or tested in the spreadsheet model. We recommend they are reviewed in due course through consultation with local RSLs.

Table 4.3 Affordable housing value assumptions (% of market value)

Grant Level	Social Rented Assumed Value (% of market value)	Intermediate Assumed Value (% of market value)
No Grant	45%	75%
£10,000 per unit	50%	80%
£20,000 per unit	55%	85%
£30,000 per unit	60%	90%

Source: RTP

- 4.95 As Table 4.3 shows, we have assumed that the developer receives a higher percentage of market value for intermediate affordable units. Indeed, close to full market value (i.e. 100%) is achieved on intermediate housing with a £30,000 per unit HCA grant funding. In contrast, on socially rented affordable units where no HCA grant funding is assumed (i.e. on medium and high value greenfield development category

sites), the amount received by the developer is assumed to be less than half of that achieved on private units .

Land acquisition cost assumptions

- 4.96 Land acquisition costs form a significant part of the overall development costs and are particularly important as they are usually one of the first major costs incurred by a developer.
- 4.97 The value of residential building land is approximately £2,000,000 per ha, based on the Valuation Office Agency - Property Market Report July 2008 and our discussions with local agents although this may have reduced now due to market conditions. However, there is little evidence of this as the land market has effectively stopped functioning.

How developers assess the value of land

- 4.98 Residential building land values at this level (assuming these are serviced sites which need no primary infrastructure such as major roads and utilities to develop the site) will usually be paid by developers where planning permission has been granted (or the acquisition will be subject to permission being granted). Developers in a competitive situation with other developers will therefore calculate what price they can afford to pay for the land by undertaking a “residual development appraisal”. This appraisal calculates how much value is left over (i.e. the residual) to pay for land after all the development value and cost items have been estimated (including the desired level of profit - although as set out above, in reality housebuilders assess required rate of return as opposed to profit).
- 4.99 A developer will make assumptions/estimates within this of the Sec.106 requirements/costs. This is summarised below:

Figure 4.3 Residual land valuation approach

$$\begin{array}{r} \text{Total Development Value} \\ \text{Minus} \\ \text{Total Construction Costs} \\ \text{Minus} \\ \text{Developer contributions (e.g. Sec.106 requirements)} \\ \text{Minus} \\ \text{Developers Profit} \\ \\ \text{= Residual Land Value} \end{array}$$

- 4.100 In this instance, there would be no development surplus (other than the developer’s assumed Sec.106 requirements) to pay for infrastructure as the surplus value will have been used to buy the land on a “residual” basis. This is an issue where a local authority requires greater contributions than a developer allowed for when it paid for the land (unless greater value or cost savings are made).

Developer “options”

- 4.101 Most medium to large “greenfield” development sites that have been (or could be) allocated for housing by the LPA are “optioned” by developers rather than purchased

outright. One key reason is due to the risks involved in trying to calculate a set price for a development on a residual basis (where many costs and other variables such as development density are unknown).

4.102 A developer will usually pay the landowner (such as a farmer) a non-returnable, but relatively small, option fee (e.g. £100,000) to secure the legal right to acquire the land in agreed circumstances. Within the option agreement, there will be a mechanism for calculating what price will be paid by the developer for the land. This usually includes a minimum (or “base”) land price (e.g. £500,000 per ha) the landowner will receive if the developer exercises the option, and a mechanism for calculating a share of any further value created by the development (usually a percentage of open market value). This additional value will take into account development costs, such as infrastructure costs required to service the site for residential development.

4.103 However, developers usually closely guard details of their option agreements, and consequently obtaining this information is difficult (unlike, say, house prices which are publicly available through the Land Registry).

Land acquisition costs are based on a broad estimate of land value needed to provide owners with an adequate incentive to bring land to the market

4.104 The land acquisition cost assumption is an important variable in estimating the developer contribution available to help fund infrastructure.

4.105 We understand many of the sites in the HMA are large “greenfield” sites and are unlikely to be fully serviced and ready for development (i.e. significant site preparation is still required) - they are therefore likely to be optioned by developers on a similar basis as discussed above rather than being acquired outright at a single price. Consequently, land acquisition costs in these instances will not be £2,000,000 per ha, but much lower to reflect likely servicing and site preparation costs and the risks inherent in such large developments.

4.106 Prior to identification for residential development, they were also likely to have a low current use value, such as for agriculture. The current value of agricultural land in the East Midlands according to the VOA is approximately £20,000 per ha (excluding farm and other buildings). Even if there is a significant reduction in the price a developer will offer a landowner (through an option agreement) for “greenfield” sites, this will still represent a substantial uplift in land value for the landowner.

4.107 However, there is a level of land value that is still needed to provide landowners with an adequate incentive to bring land to the market (i.e. for acquisition by developers). A key factor is the extent to which landowners believe that delaying a sale might result in a reduced developer contribution, perhaps as a result of a successful challenge to the scheme or a change in Government policy.

4.108 We have adopted a land acquisition cost for all the greenfield development categories of £500,000 per gross hectare, based on our knowledge of the sort of values landowners have accepted in the past. It should be noted this is 25 times more than agricultural values - there is potential for this to be reduced in the future if developers offer less due to reduced sales values and rates, or long term policy changes (such as

CIL) that requires greater developer contributions. This is discussed in more detail in Section 31.

- 4.109 We have assumed £2,000,000 per ha for the brownfield development categories to reflect the higher existing use values found on these sites, such as industrial uses. We understand this broadly reflects existing use values on the SRA sites.
- 4.110 We have assumed half of the land costs are paid at the start, and half mid-way through the development.

Build cost assumptions

Build cost increases are levelling off

- 4.111 Average build costs have risen by around 25% since the end of 2003 although the rate of increase is now levelling off. We have used build costs (i.e. excluding site preparation, external works etc which are separately set out below) of £766 per sq m and £1,342 per sq m, which are used as base costs in DCLG's Cost Analysis of The Code for Sustainable Homes (July 2008), and is broadly consistent with our market knowledge and conversations with representatives of the client group.

Code for Sustainable Homes standards will drive build costs up in future

- 4.112 The introduction of the Code for Sustainable Homes (CSH) Standards will significantly add to costs when they are introduced (DCLG have not announced any plan to delay this). Unfortunately, there are relatively few houses built to these standards to use as comparables to assess the increased costs above "base" build costs.
- 4.113 We have used an average of the estimated percentage build cost increases for varying CSH standards in our spreadsheet model from DCLG's Cost Analysis of The Code for Sustainable Homes. These are as follows:
- Code Level 3 - cost increase of 5%
 - Code Level 4 - cost increase of 11%
 - Code Level 5 - cost increase of 21%
 - Code Level 6 - cost increase of 37%

- 4.114 Unfortunately, there are still relatively few houses built to these standards, so we would recommend these figures are reviewed in the future.

We assume costs in line with Code Level 3

- 4.115 We have assumed Code Level 3 across all developments in the funding model, although this can be changed to reflect increased sustainability requirements with its associated cost increase.

Pre-development and secondary infrastructure cost assumptions

- 4.116 We have assumed £250,000 per gross ha for pre-development and secondary infrastructure costs (site preparation including drainage, distributor roads and utilities). Although this is at the lower end of such costs, we have made a general allowance for site specific or abnormal costs (see below). This is staggered through the development, with half at the start of the development, and the remaining half at intervals throughout the development. We have also allowed 15% of build costs for

external works (such as landscaping and public open space) and 10% of build costs for professional fees and other minor costs.

- 4.117 As with many of the variables, it is not possible to be site specific as each development will have unique costs in this respect, but these general levels are based on experience elsewhere.

Site specific, or “abnormal” development cost assumptions

- 4.118 There are likely to be additional development costs specific to individual developments which reflect their individual characteristics. These are usually described as “abnormal” costs. For example, one site may require off site infrastructure works such as a stretch of access road or additional utilities, a second remediation/decontamination and a third acquisition of existing buildings or land (with associated demolition costs).
- 4.119 It is not possible to assess all these site specific (or additional) development costs for each site. Indeed, they may not be known at this stage.
- 4.120 We have therefore adopted an additional £500,000 per ha for the assumed greenfield development sites as an average to cover some (but not all) of these additional costs that may exist in the HMA development sites.
- 4.121 For the assumed brownfield development sites we have adopted £2,000,000 per ha to reflect the likely higher abnormal costs associated with such sites, for example decontamination, demolition, asbestos removals, utility disconnections, reinstating services and site access roads.

Sales rate assumptions

Sales rates are key to the cashflow of a development

- 4.122 Cashflow is critical to a developer. The quicker residential units are sold, the quicker a developer can pay off loans, or achieve a higher rate of return on its own capital employed and reinvest these funds elsewhere. Conversely, a slow sale of residential units means costs already incurred, including land acquisition costs and site preparation costs, will continue to accumulate finance costs until sales income can pay off outstanding balances, or reduce the return on capital employed.

There has been a big slow-down in build and sales rates

- 4.123 DDCLG data suggests that market housing starts in June 2008 were 27 per cent lower than the June 2007.¹⁷ In contrast housing starts by Registered Social Landlords were at their highest quarterly level in eleven years. In September the NHBC estimated a quarterly fall of 50% compared with the previous year. Perusal of the interim reports from housebuilders which are mostly released in July and August shows comparably steep falls in completions during the half year. Some of these will be on committed schemes which points to the possibility of further decline, a conclusion backed by

¹⁷ <http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/housingmarket/>

anecdotal evidence suggesting that the rate of new private sector starts will be markedly lower still during the coming year.

We have made sales rates assumptions

- 4.124 We have assumed a sales rate of 25 private (as opposed to affordable) residential units per quarter in our development appraisal model for our assumed development site of 25ha gross. A developer is only likely to construct units at a rate it is able to sell units within a reasonable period. In other words, it will not build all private units at one time if this will “flood” the market and mean many are left unsold for a significant length of time.
- 4.125 Exact sales rates will depend on the strength of the market, demand for the particular development and its size (e.g. a large development site may have more than one developer constructing residential units at one time, which offers a greater diversity of product and is likely to increase sales rates). Our assumption represents what we believe at this stage is a reasonable level of sales for a single medium sized development based on our general market knowledge and experience. In our development appraisal model, at a medium development density and 30% affordable housing, this equates to a total of 525 private units. At a sales rate of 25 units per quarter, the development takes 21 quarters (or just over 5 years) for all the units to be sold.
- 4.126 As with sales values, these reflect closer to rates experienced at the “peak” of the market rather than now; although we have reflected slower build rates in the overall phasing of development, we have utilised this base case for the purposes of calculating an estimated developer contribution as alternating this to reflect current market conditions would require additional viability assessments, in addition to the ten categories of development identified above.

Development mix assumptions

- 4.127 The CACI housing market demand research studies (for SRA) and the Leicester & Leics Strategic Housing Market Assessment point to the demand and need for larger housing units (not necessarily just for family occupation). The SHMA concludes that there is an existing surplus of private flats, especially when combined with the substantial new purpose built student accommodation. Clearly, future housing demand will be linked to economic conditions and new job opportunities.
- 4.128 Through discussions with the client group, and our general development knowledge from other areas, we have assumed the following development mix at this stage:
- Assumed Greenfield development sites: 90% houses / 10% apartments
 - Assumed Brownfield development sites: 65% houses / 35% apartments

Average unit size assumptions

- 4.129 We have been asked to use the following average unit sizes to the above development mix in our development appraisal. This reflects the findings of the Strategic Housing Market Assessment (Dec 2008). This is shown in the following table.

Table 4.4 Average unit size assumptions

	Apartment	House
Private Residential Units	71 sq m	96 sq m
Affordable Units	71 sq m	96 sq m

Source: Strategic Housing Market Area Assessment December 2008 for HMA Authorities

- 4.130 These assumed unit sizes are likely to be larger than developers have been building in the HMA. They may also have a negative impact on the per sq m sales values assumed in Table 4.2 (as these were based on typical values previously achieved); we therefore recommend the relationship between sales values and unit sizes is considered in more detail, and the assumptions refined as necessary.

Developer contribution payment timing assumptions

- 4.131 Finally, we have assumed developer contributions are spread over the life of the development.
- 4.132 In terms of Sec.106 payments/contributions, the timing of these will be specific to the individual development. For larger developments, these aren't usually "front loaded" (i.e. are not at the start of the development as this adversely effects a developers cashflow as it may already have other significant site preparation/infrastructure costs in this respect), and are therefore phased or "back ended".
- 4.133 Where tariffs are used, these are usually based on a set payment structure that ensures some monies are paid upfront. For example, the Milton Keynes tariff is structured as follows:
- 10% upon implementable consent
 - 15% before start on site
 - 75% on a quarterly basis after the first completion is sold or rented. The payment size relating to the proportion of dwellings sold or rented.
- 4.134 The latest CIL guidance envisages the levy is paid by "instalments", but that these will not be individually negotiated as a Sec.106 is. As the client group has not committed to a CIL or a tariff at this stage, but the majority growth in the HMA is from medium and large sites, we have therefore adopted a simple timing structure that follows the sale of units i.e. developer contributions are spread over the sales period.

Summary of main assumptions

Table 4.5 Developer contributions analysis assumptions

Variable	Greenfield Categories	Brownfield Categories
Development Density	35 - 50dph	50-80dph
Net/Gross Site Ratio	60%	60%

Sales Value	£1,884 - £2,422psm	£2,200psm
Affordable Housing	30% of residential units (78% socially rented / 22% intermediate)	15% of residential units (78% socially rented / 22% intermediate)
Affordable Housing Grant Funding	£0 - £20,000 per unit	£30,000 per unit
Land Acquisition Cost	£0.5m per ha	£2.0m per ha
Build Costs	Apartments: £1,184psm Houses: £766psm	Apartments: £1,184psm Houses: £766psm
Sustainability Costs (Code for Sustainable Homes)		Code Level 3 assumed Code Level 3: + 5% build costs Code Level 4: +11% build costs Code Level 5: +21% build costs Code Level 6: +37% build costs
Site Specific / Abnormal Costs	£0.5m per ha	£2.0m per ha
Secondary Infrastructure Costs	£0.25m per ha	£0.25m per ha
External Works	15% of build costs	15% of build costs
Fees & Other Costs	10% of build costs	10% of build costs
Sales Rates	100 units pa	100 units pa
Average Unit Sizes (Private & Affordable)	Apartments: 71 sq m Houses: 96 sq m	Apartments: 71 sq m Houses: 96 sq m
Developer's Required Rate of Return	17%pa	17%pa

How much developer contribution is potentially generated by growth?

Our spreadsheet model shows limited estimated developer contributions based on the assumptions made. In many instances, there are notional negative developer contributions

- 4.135 Based on the assumptions made for the purposes of this study, our spreadsheet model generates the following contributions (per unit), for the different development categories.
- 4.136 In many instances, there are notional negative developer contributions. The negative figures entail that some form of subsidy would be required to produce a financially “viable” development (i.e. no surplus worth would be available for developer contributions).

Table 4.6 Estimated surplus worth available for developer contributions

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	-£35,330
Low Density/Medium Value	-£19,763
Low Density/High Value	£876
Med Density/Low Value	-£17,650
Med Density/Medium Value	-£2,084
Med Density/High Value	£18,556
Brownfield Development Category	
Medium Density	-£135,528
High Density	-£118,995
Mixed Use	-£133,570

Source: RTP

Only two development categories produces a surplus worth available for developer contributions

- 4.137 The above analysis shows that, based on the assumptions used, only the Low Density/High Value and Medium Density/High Value development categories produce a surplus worth that could be secured for developer contributions. Given that we have assumed only 17 (out of 57) development sites are in these categories, this would equate to limited developer contributions available to help fund infrastructure requirements relating to growth. It would also mean a limited number of sites would be funding infrastructure requirements, which may not be equitable.

Brownfield development sites have acute viability problems on basis of assumptions made

- 4.138 It should be noted the brownfield categories produce the highest negative figures from our spreadsheet model due to the high land and abnormal costs that have been assumed. These sites are likely to be even more diverse in nature than the greenfield sites, and therefore the figures given above should not be used as a guide to viability due to the generic, and high level assumptions that were required for this assessment.
- 4.139 In reality, some sites have already been acquired, cleared and prepared, and therefore these costs may have already been incurred. However, based on our analysis for the purposes of this study, it still appears unlikely these will be able to provide any developer contributions to help fund infrastructure requirements from housing growth.

Table 4.7 Developer contribution assumptions in spreadsheet model

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	£0
Low Density/Medium Value	£0
Low Density/High Value	£876
Med Density/Low Value	£0
Med Density/Medium Value	£0
Med Density/High Value	£18,556
Brownfield Development Category	
Medium Density	£0
High Density	£0
Mixed Use	£0

Source: RTP

There is the potential to achieve higher contributions on some sites with lower abnormal costs

- 4.140 Our assumption of £500,000 per ha costs on greenfield sites reflects a relatively conservative generic allowance to cover a number of potential “abnormal” development works as it is not possible to assess these on a site by site basis in the HMA.
- 4.141 In reality, some sites could be relatively straight forward to develop and therefore incur lower abnormal costs than we have assumed. In such cases, greenfield sites in development categories that we have assumed no developer contributions in our spreadsheet model may be able to provide contributions (assuming all other variables remain the same).

- 4.142 Set out below as an example are the estimated indicative developer contribution levels assuming only half the abnormal costs are incurred (i.e. greenfield abnormal costs of £250,000 per ha and brownfield abnormal costs of £1,000,000 per ha).

Table 4.8 Example of estimated surplus worth for developer contributions based on lower abnormal costs

Greenfield Development Category	Indicative Surplus Available for Developer Contributions
Low Density/Low Value	-£20,198
Low Density/Medium Value	-£4,632
Low Density/High Value	£16,007
Med Density/Low Value	-£5,770
Med Density/Medium Value	£9,797
Med Density/High Value	£30,436
Brownfield Development Category	
Medium Density	-£88,170
High Density	-£79,830
Mixed Use	-£88,065

Source: RTP

Sense-checking our findings by looking at previous levels of developer contributions

- 4.143 Each local authority has its developer contribution policy; some include “standard charges” i.e. set contributions for each dwelling types relating to a particular infrastructure requirement. In addition, the County Council has its Statement of Requirements for Developer Contributions in Leicestershire, which will be reflected in some local authority contribution policies.
- 4.144 Although we have not analysed this information as it is outside the scope of this assessment, from our experience elsewhere the combination of district and county council developer contribution requirements has been up to approximately £20,000 per residential unit (depending on the type and size of unit), although these contributions were achieved in a much stronger property market than at present.
- 4.145 However, the contributions sought by a local authority and the amount actually secured often differ significantly as developers negotiate this down on the basis of viability and necessity. In addition, developers may also negotiate lower affordable housing requirements than stated in a local authority’s policy.
- 4.146 We have been provided with some information from the County Council on contributions for a range of different developments. This indicates that contributions on larger sites equated to £2,000 - £6,000 per unit, with generally lower amounts on

smaller sites. This is consistent with our market knowledge, which suggests contributions of around £5,000 per greenfield unit are typical.

- 4.147 We recommend further work is undertaken to refine the potential funding that could be secured for infrastructure requirements by developer contributions.

Sensitivity testing of land costs, affordable housing and sustainability requirements

- 4.148 To understand how the level of developer contributions that could potentially be secured from new housing growth to help fund infrastructure could vary depending on market conditions and requirements imposed, we have analysed a limited number of key variables within our contributions analysis tool.

Land costs

- 4.149 Land values change disproportionately to changes in house prices (assuming all other variables remain constant); a small decrease in house prices can result in a relatively large decrease in land values. The way that developer contributions assumptions have been adjusted to reflect the fact that house prices have fallen has been explained above.
- 4.150 There is limited activity in the development land market at the moment due to the effects of the “credit crunch”. It is therefore difficult to gauge how much land values have fallen in response to falling house prices.
- 4.151 Our developer contribution analysis for the purposes of this study has been based on “peak” house prices. Land costs therefore need to be based at a level which reflects this and reflects a level of land value provides landowners with an adequate incentive to bring land to the market (i.e. for acquisition by developers).
- 4.152 Even if house prices return to “peak” levels as assumed in this study, the development market may be different in the future. In particular, sustainability and affordable housing requirements may be higher in the future (as assumed in our analysis). The level of developer contribution to help fund infrastructure required by local authorities in granting planning permission may also be higher in the future. This could result in reduced expectations by landowners, particularly greenfield landowners, on the value they will receive for their land from developers.
- 4.153 If a lower land cost of £300,000 per ha is assumed (which would still represent an increase of over ten times that of current agricultural land values), three of the development categories produce surplus worth that could be secured for developer contributions.
- 4.154 In the brownfield categories, we have assessed land costs at £1m per ha as an example, although this is likely to depend more on existing use values (such as existing employment occupiers on a site) rather than landowners perceptions. However, as noted in Section 4, some brownfield sites that have been acquired and prepared for development may come back on the market due to the current economic conditions. In these instances land costs may be even lower to reflect their actual current land value (as opposed to the previous costs incurred in securing and preparing the land).

Table 4.9 Estimated surplus available for developer contributions (assuming lower land values)

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	-£22,369
Low Density/Medium Value	-£6,803
Low Density/High Value	£13,837
Med Density/Low Value	-£7,961
Med Density/Medium Value	£7,606
Med Density/High Value	£28,245
Brownfield Development Category	
Medium Density	-£91,857
High Density	-£74,459
Mixed Use	-£89,236

Source: RTP

Affordable Housing

- 4.155 Affordable housing is a key opportunity cost to a developer i.e. the value it receives from an RSL is usually much lower (depending on grant funding) than could have been received if there were no affordable housing requirements and the land could have been developed for “market” housing.
- 4.156 If a reduced affordable housing requirement of 15% is assumed for all development sites in the HMA, with 60% socially rented and 40% intermediate housing, and a grant of £20,000 per unit on all greenfield development categories, the following indicative development surpluses are generated that could be secured for developer contributions.

Table 4.10 Estimated surplus available for developer contributions (assuming lower affordable housing requirements)

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	-£28,775
Low Density/Medium Value	-£8,814
Low Density/High Value	£11,318
Med Density/Low Value	-£12,175
Med Density/Medium Value	£10,775
Med Density/High Value	£33,726
Brownfield Development Category	
Medium Density	-£134,086
High Density	-£117,502
Mixed Use	-£132,207

Source: RTP

Testing of other variables

- 4.157 As our spreadsheet model allows key variables to be easily changed by the user, we would recommend further sensitivity testing is undertaken following this study.

How should developer contributions be allocated?

- 4.158 Our calculations show a significant gap between infrastructure costs and available mainstream funding. Developer contributions are calculated may help to fill some of that gap.

We have not allocated developer contributions to particular service providers

- 4.159 We treat any developer contributions as an unallocated sum to be used by planning authorities against particular local priorities of their choosing. We do not allocate this funding to particular infrastructure issues, such as choosing whether education, or social services, or police ought to have first call on developer contributions. That would require us to make essentially political decisions which should instead be made by elected members or their officers.
- 4.160 Instead, we have shown a “lump sum” developer contribution which should be allocated to different service provider themes after the appropriate discussion.

5 UNDERSTANDING JOBS-GENERATED INFRASTRUCTURE REQUIREMENTS, COSTS AND FUNDING

Introduction

- 5.1 Whilst our main focus is on housing developments, this assessment looks at the infrastructure requirements of employment development, and how those requirements might be costed and funded.
- 5.2 We have split employment development into the two categories of a) non-retail employment, and b) retail employment. We explain our approach to infrastructure requirements, costs, and funding below.

Our approach to non-retail employment sites

We assume that there are no primary infrastructure requirements arising from non-retail employment sites

- 5.3 On non-retail employment sites, we are dealing with infrastructure requirements on a light touch basis. In this assessment, we see employment sites as relatively self-contained with no separate infrastructure requirements.
- 5.4 We assume that most employment sites would create local site-specific impacts. These are almost always in the form of secondary infrastructure, and are almost always transport related. Requirements for infrastructure are relatively modest for most employment sites, although clearly there are exceptions here. The New Business Quarter, for example, has transport infrastructure requirements which we have picked up in our transport chapter. The Freight Distribution Centre and the Loughborough Science Park are also likely to have transport and green infrastructure implications, but no details exist on this as yet, and so we have not been able to include them in our assessment.
- 5.5 Our spreadsheet model therefore records infrastructure requirements on these sites as being zero, with the exception of the NBQ.

We assume that the costs of infrastructure on non-retail employment sites are picked up by developers

- 5.6 With the exception of the NBQ listed above, we can reasonably expect any secondary infrastructure requirements to be picked up by the developer without a call on the public purse. Funding is therefore in effect private.
- 5.7 Our spreadsheet model therefore records infrastructure costs and funding on these sites as being zero.

We assume that non-retail employment makes no developer contribution

- 5.8 The ability of employment sites to contribute towards funding of 'wider' infrastructure is modest. We do not wish to give any impression that we are 'taxing' job creation. If we

did, employment may go elsewhere. Accordingly, we do not wish to load employment provision with significant further infrastructure charges.

Our approach to retail employment sites

Retail employment may give rise to primary transport infrastructure requirements only

5.9 The main form of infrastructure requirement for retail uses will be transportation. Where available at a strategic level, we shall take account of these infrastructure requirements.

5.10 We assume that there are no other infrastructure requirements.

We assume that all infrastructure costs are picked up by the developer

5.11 On funding, we assume that 100% of any known transport requirements will be funded by the retail developer. Funding is therefore private, so our spreadsheet model does not include it.

We assume that retail development generates developer contributions for use against wider social and economic impacts

5.12 Large retail sites (both within and at the edge of town centres) can and generally do make some additional planning contribution beyond transport. In our experience, though, the level of contribution varies greatly. Contributions to public transport improvements are typical. Some schemes have paid for improvements in public realm in the centres where they are located. Some superstore operators have also been known to offer planning gain to pay for 'community benefits' - for instance swimming pools or other sports facilities - largely unrelated to their scheme.

5.13 The exact sum of developer contribution can only be ascertained during the actual detailed planning negotiations and will vary considerably from scheme to scheme. Without assessing each individual retail development assumed in the assessment, it is therefore impossible to estimate this. However, in order to allow some contributions from retail, we have assumed for the purposes of this assessment that convenience retail (i.e. foodstores) generates a developer contribution of £2 million, whereas comparison retail (such as retail warehousing and in-town retail development) produces a contribution of £1 million. As actual future development will generate significantly more or less than this, depending on size, location, site assembly costs etc, we would recommend this is assessed in more detail, although it should be noted that the quantum of contributions generated by retail development will be relatively low in comparison to that of residential development.

We do not allocate any remaining developer contributions to particular service providers

5.14 In line with our approach on housing developer contributions, we will treat any remaining developer contributions as an unallocated sum to be used by planning authorities against particular local priorities of their choosing. As with our approach to developer contributions arising from housing, we do not allocate this funding to

particular infrastructure issues. To do otherwise would pre-empt decisions properly made on a case by case basis by planning authorities.

6 UNDERSTANDING HOUSING-GENERATED INFRASTRUCTURE REQUIREMENTS, COSTS AND MAINSTREAM FUNDING

Introduction

- 6.1 This section explains the approach taken to infrastructure requirements, costs and funding in the subsequent sections of this assessment.

Estimating infrastructure requirements of growth

- 6.2 This part of our work looks at the infrastructure *required* to support planned infrastructure growth.

This work focuses on the infrastructure requirements of future growth. We have not looked at “historic infrastructure deficits”, but we are looking at “missing infrastructure”

- 6.3 This infrastructure assessment will focus on the infrastructure requirements of *future growth in housing and jobs* in the HMA. It does not deal with general infrastructure demand and public spending in the city and county in the future.
- 6.4 Some areas of the country have made the point that their infrastructure is already working beyond capacity. They argue that these “historic infrastructure deficits” should be made good before new growth can be put in place. Whilst these arguments may or may not be sound, broadly speaking, our approach has been to cover the infrastructure required to ensure that infrastructure loads are not *worsened* by new growth. Because this work may be a very early (but by no means sufficient) first step towards a CIL tariff, we have excluded any historic deficits. CIL guidance implicitly suggests that it would not be reasonable to use the infrastructure assessment to load the costs of general social change, or already existing infrastructure deficits, onto developers and landowners.
- 6.5 There two nuances here, however. Whilst we’ve avoided incorporating historic deficits into our study, in the case of transport this is very difficult to achieve with great precision. Whilst we have been careful to focus on the transport needs of new growth, it is not always possible to disentangle the different impacts of a) trend rises in transport demand, b) housing growth, and c) historic deficits in the absence of specific transport assessments. Secondly, we will look at what we have termed “missing infrastructure”. Whilst it may also apply elsewhere, the best example of “missing infrastructure” is found in central Leicester’s regeneration areas, where land previously used for employment is now being put to housing use. Such areas can lack basic amenities which need to be provided. This category is being broadly dealt with by this assessment.

We have not formally dealt with demographic changes, but have taken these into account informally

- 6.6 There are two demographic issues which need to be borne in mind with this assessment. The first is the changing demographic profile of the population; the second is the relationship between the provision of new housing stock and the population growth.
- 6.7 Very broadly, the demographic story in the HMA is one of a younger population in Leicester city (which demands more childrens' provision), and an ageing population in the districts (which demands more older peoples' social care). This means that new housing in central Leicester may be taken up by a younger cohort with different needs to the residents of new housing in the districts, which may be reflected in different infrastructure requirements.
- 6.8 There is then the matter of the relationship between new housing stock, and population growth. It is often the case that some of the residents of proposed new houses will already live in the same local authority area. In areas where the average household size is reducing, an increase in housing stock may not result in a commensurate increase in the local population, even allowing for new occupants of the vacated houses. For example, new housing might cater for divorcees, or suppressed households, who previously lived in existing households within the HMA. This reduces the extra pressure on the local community infrastructure as a result of the proposed development. It is therefore possible that jobs and housing growth may simply represent an alteration in the location of demand, or lower population densities.
- 6.9 Time and budget does not allow us to deal with these issues formally. In any case, there is no work available which separately identifies the demographics of the occupants of the new housing mentioned in the draft RSS. We will therefore use demographic projections provided to us by the County to take broad account of these effects, and make the assumption that the population in the new housing is similar in profile to that in the existing housing. We use County demographic work which shows that the number of people per household is falling over the plan period.
- 6.10 We have relied on service providers being broadly aware of these issues (in some cases, such as education, an understanding of these matters is core to their work).
- 6.11 We explain more about how demographic change affects funding levels later in this chapter.

We have avoided the "wish list" approach to infrastructure requirements. We have used a rule of thumb in order to determine reasonable infrastructure requirements

- 6.12 It is not desirable to load an infrastructure assessment with a gold-plated "wish list" of perceived needs. PPS12 is clear that Core Strategies need to

- Have evidence of deliverability, with evidence strong enough to stand up to independent scrutiny;¹⁸ and
- Have evidence of “what physical, social and green infrastructure would enable the amount of development proposed for the area, taking account of its type and distribution”.¹⁹

6.13 The key concepts here those of a) enabling development, and b) deliverability. Clearly, infrastructure provision should not be so elaborate and costly that it forms a barrier to development. However, this does not mean that we have excluded large infrastructure projects on the grounds of cost. Some transport schemes, for example, are very expensive, but may bring large benefits. These schemes will have to go through the proper assessment process. It is not our role to exclude them at this stage.

6.14 In this assessment, we have tried to provide a pragmatic approach that balances deliverability with providing for sufficient infrastructure to ensure the growth is properly catered for. It is not our proper role to barter with service providers in order strip infrastructure requirements or costs out of their plans. But we have tried to calibrate our method to help us gauge a realistic level of infrastructure provision, in the following ways.

- Our rough rule of thumb is that the infrastructure requirements for growth in this assessment should be broadly in line with the levels of infrastructure enjoyed by the rest of society.
- Wherever possible, our approach has been to work from first principles. We have provided service providers with a map showing the location and quantum of jobs and housing growth. We have invited them to explain what requirements they have, given this planned growth, and invited them to explain why this infrastructure is required. This process has built a realism and transparency into the approach.
- We have attempted, wherever possible, to take account of service providers’ existing spare capacity. This has the effect of reducing infrastructure requirements, and so their costs and funding requirements.
- We have built in a prioritisation mechanism into our work. This has allowed us to put more aspirational infrastructure kit further down the priority list. We make the point below in the prioritisation section that our prioritisation decisions are simply a starting point for further debate, and we expect further adjustments to be made outside our brief. The new governance structures discussed in our final chapter provide a good mechanism to do this.
- We have not dealt with historic deficits in our assessment. As we pointed out above in section one, our work is intended to be one early step towards the creation of a Community Infrastructure Levy (although it is by no means sufficient to do that). CIL guidance suggests that dealing with historic deficits is not a legitimate requirement of developers.

¹⁸ DCLG (2008) Planning Policy Statement 12 (17)

¹⁹ Ibid (8)

- 6.15 The costs of legitimate infrastructure requirements may exceed the available funding (be it mainstream funding, developer contributions, or a combination of both). Clearly, in these instances there is a funding gap to be plugged. Our method is designed to show these instances clearly.

Service delivery is continually being reconfigured. Strategies change. This affects levels of infrastructure required to support new growth

- 6.16 In this assessment, we are aiming at a moving target. Public services, and hence the infrastructure they demand for delivery, are in a constant state of flux. For example, Lord Darzi's review of NHS delivery will not be the last of its type, but has implications for infrastructure requirements. Similarly in health care, technology is likely to affect infrastructure requirements over the next few years in ways which may be difficult to predict. In other service areas, joint use community / education/ PCT buildings infrastructure are currently being examined, all of which alter infrastructure demand; and funding levels (and, consequently, legitimate infrastructure requirements) vary with political exigencies of the moment. Most service providers do not plan beyond three years, and so cannot by definition be expected know their requirements in (say) ten years time.

- 6.17 This means that infrastructure requirements as a result of growth are difficult to predict and are necessarily subject to a considerable margin of error. The requirements listed in an infrastructure assessment should thus be kept under review and updated as important changes are introduced.

In most instances, the precise nature of growth is unknown - meaning that being precise about the required infrastructure is not possible

- 6.18 It is important to point out that we are dealing with infrastructure requirements at a high level. In the great majority of cases, we are working far in advance of detailed site masterplanning work. In each instance, Environmental Assessments and Transport Assessments will be carried out that would map out likely infrastructure needs and costings in more detail and precision. We are therefore certain that more detail will emerge as the planning process proceeds, and that this detail will supersede the assumptions made here. The spreadsheet model provided with this assessment has therefore been designed to be updated with this detail, and assumptions amended.

We split housing sites into strategic and non-strategic categories. The amount of detail we provide on infrastructure requirements will vary, depending on the strategic status of the site

- 6.19 In line with PPS12, we differentiate between strategic and non-strategic sites. We have developed an agreed definition of strategic sites in the HMA with the client group. Sites have been classed as being strategic as "those which are key to the delivery of the overall strategy."²⁰ Sites defined as strategic for the purposes of this assessment are:
- all district SUEs (including Melton and Harborough);

²⁰ Planning Inspectorate (2007) LDFs: Lessons Learnt Examining Development Plan Documents para 3.11

- City strategic regeneration areas (Ashton Green, Abbey Meadows, Waterside, Hamilton and St Georges).
- 6.20 Non-strategic sites are all other sites in the HMA.
- 6.21 On *strategic housing sites only*, where possible we show infrastructure requirements in some detail. For example,
- Where possible, we show what growth on strategic sites is *likely to* mean in spatial planning terms: what this is and where (eg there will be X schools required in Y place); and
 - We specify the costs relating to these specific infrastructure items
- 6.22 These figures are based on our discussions with service providers and, in some instances, our formula-based calculations.
- 6.23 On *non-strategic housing sites*, in most instances we generally show the cost of the infrastructure requirements, but not the specific requirements themselves. The costs of these schools are apportioned between the non-strategic housing sites based on the number of new dwellings in the funding model. However, we will not identify where any school buildings should go, or provide specifics about what physical provision this is likely to translate into. This is because it is not always realistic to calculate in fine grained detail what is necessary to support individual non-strategic developments. This would necessitate a very detailed study of existing capacity. There are instances where we will look to pick up this detail through conversations with service providers, but generally in this assessment we will seek a global overview.
- 6.24 More information on the method used in each theme area is provided in the relevant section.

Estimating the costs of infrastructure for growth

- 6.25 Each subsequent section on service provision looks at the costs of infrastructure required for growth. The cost of infrastructure required for growth is just that - the costs of the infrastructure necessary to allow growth to take place.
- 6.26 Here again we explain our overall approach.
- We've used service providers' cost estimates where possible, and "ready reckoner" figures where necessary*
- 6.27 Where possible, we have used service providers' own estimates of the cost of their infrastructure requirements. However, in many cases these estimates do not exist. In these instances, we have used various sources including case studies, published guides and interpretations of data from cost guides such as Spons and the Building Cost Information Service (BCIS). We have also used case studies and benchmarks from elsewhere when appropriate.
- 6.28 Cost figures do not allow for contingencies and internal project management costs but usually include professional fees (such as architects, surveyors, and so on). Costs are provided at current 2008 prices unless stated otherwise. They do not include VAT or any other tax.

Estimating mainstream funding for infrastructure for growth

6.29 Our aim in these sections is to show the mainstream funding available for the infrastructure in question. We have a broad definition of “mainstream funding”, by which we mean funding from the public purse via local and regional authorities, public agencies and central Government. This might include Private Finance Initiative (PFI), or special purpose funding such as Growth Infrastructure Fund (GIF).

6.30 It is important to note that, as we have pointed out above, these estimates are necessarily going to be subject to a relatively wide margin of error. (We have noted that Government accepts that this knowledge is likely to be imperfect).

6.31 Note that we have estimated levels of funding that could reasonably come from the development contribution process in the Findings section.

The principles we use when estimating mainstream funding requirements

6.32 Our approach to estimating infrastructure mainstream funding is framed by several general principles drawn from the spirit of the guidance and which take into account the fact that where there are constraints on the amount that can be raised from developers without the counter-productive discouragement of new housing and employment space provision.

We have assumed that service providers use mainstream funding to cope with the needs of growth wherever possible

6.33 We start from the basic assumption that, where possible, mainstream funding should be used in the first instance to pick up the capital infrastructure requirements following a growth in population in a given area. We have adopted this principle in order to

- avoid the inefficiency, possible perverse incentives and lack of transparency caused when developer contributions are used to fund services which should be paid for by mainstream funding (see below in our remarks on double funding); and
- free up more funding for service themes - such as open space and community facilities - for which there are often no obvious other capital funding streams.

6.34 This approach is important, because it works to reduce the funding shortfall overall that our model shows. It also tends to reduce the demands placed on developer contributions, because assumption is that mainstream funding will be available to pick up costs rather than immediately turning to developer contributions for funding.

Developer contributions are generally intended for capital expenditure, not revenue

6.35 Although there are at times exceptions, developer contributions (either in the form of Section 106 or CIL) are not intended to subsidise the revenue costs incurred by service providers. The exception is in the “time lag” instance mentioned in more detail below - where revenue expenses are incurred in advance of the additional population resulting in an increase in capitation based funding. The lag experienced varies between services but three years seems to be a typical average.

Funding for some service providers is related to population - so as population grows, funding grows

- 6.36 Some service providers have a funding formula which calculates funding by reference to population sizes. This means that as population grows as a result of new housing, their Government funding rises. However, this is not the whole picture: there are a number of components of these funding formulas (including factors such as population deprivation, rurality, and so on).
- 6.37 Service providers in this position include Education (which receives a local authority grant, but one ring fenced by central Government), Health / PCTs, Police, Fire Service, and the Ambulance Service.
- 6.38 Local authorities are also funded on a formula that includes population numbers and their characteristics. The services that local authorities provide (such as libraries and waste) can therefore be said to be at least partially funded on a per capita basis.

Population is projected to grow, but average household size will fall. We use child per household estimates supplied to us

- 6.39 County demographers have provided us with population projections for the City and County areas. We have provided this in the tables below.
- 6.40 There is no separate household size assumption for new housing in the draft RSS. For Leicester and Leicestershire HMA, County demographers looked at the increase in the number of projected households for the period, as given in the DCLG revised 2004 based household projections. Households moving to new houses generally have different characteristics to households overall, but no assumptions were made about this in the draft RSS evidence.
- 6.41 The overall average household size projected goes from 2.38 for Leicestershire and 2.43 for Leicester City for 2006 to 2.21 for Leicestershire and 2.17 for Leicester City in 2026.
- 6.42 Where we need household size figures for our assessment, we have used quoted figures to take an average of the household sizes across 2011 to 2026, and applied this to the anticipated housing growth. On this basis, Leicester city has 2.28 people per household over the plan period, and Leicestershire excluding the city has 2.24 people.

Table 6.1 Household estimates/ projections

		2001e	2004p	2006e	2011p	2016p	2021p	2026p
Leicester	Average household size	2.49	2.458	2.43	2.36	2.301	2.25	2.207
Leicestershire CC	Average household size	2.427	2.402	2.382	2.317	2.256	2.208	2.17
Leicester	All households pop	110922	112692	116520	118217	122311	126251	130117
Leicestershire CC	All households pop	245887	254024	260854	275322	290909	305627	318564
Leicester	one person	35886	37188	38941	41080	44243	47297	50218
Leicestershire CC	one person	61844	66764	70522	79776	90050	100269	109610

Source: Leicestershire County Council. E denotes estimate; P denotes prediction.

Table 6.2 Average household sizes

	2001e	2004p	2006e	2011p	2016p	2021p	2026p	Average 2011-26
Leicester City	2.49	2.46	2.43	2.36	2.30	2.25	2.21	2.28
Leicestershire	2.43	2.40	2.38	2.32	2.26	2.21	2.17	2.24
All HMA area								2.33

Source: Leicestershire County Council. E denotes estimate; P denotes prediction.

- 6.43 In some instances (particularly for play space), planning standards are expressed per child. County demographers suggest that according to the revised 2004 based figures for Leicestershire, there were 470 children per 1000 households.²¹ This is projected to fall to 400 per 1000 by 2016 and 376 per 1000 by 2026. For Leicester City the revised 2004 based figures give for age 0-15, 530 per 1000 households in 2004, 490 in 2016 and 460 in 2026. For our calculations, we have used the midpoint 2016 figure of 490 children aged 0-15 years for Leicester city, and 400 in Leicestershire outside the city.

We need to avoid “double funding” service providers - funding them once through the development process, and again from capitation-related mainstream funding

- 6.44 Double funding occurs when service provider agencies that receive capitation based funding seek reimbursement from developers of the capital cost of providing facilities.
- 6.45 We believe that this double funding has become increasingly common practice over the past few years, as more service public agencies have used Section 106 payments as a means of bolstering their budgets. In our view, developers have for the most part acquiesced to this in order to reduce uncertainty and expedite planning permissions and in the context of a situation in which the overall scale of demands made through Section 106 Agreements was more affordable during times when markets were strong.
- 6.46 Double funding is undesirable. In effect, one part of the economy is paying hidden subsidies to another part. This would artificially depress activity in one part of the economy (in this case the example might be house building and employment space development) and inflate it in another part beyond the level anticipated by either policy or strategy. Firstly, this is a textbook example of a cause of economic inefficiency.

²¹ Equivalent to 118,900 under 16s for 254,000 households. Source: Felicity Manning, Leicestershire County Council, email 11 Dec 2008

Secondly, whilst the effect of this process may be no bad thing, if this is the choice that society wishes to make, then it should be made explicitly and balanced against possible reductions in overall delivery of housing and employment.

Sometimes, service providers can legitimately argue that their capitation-based funding does not reflect the real costs of service provision in growth areas

- 6.47 In theory, then, double funding is a bad thing. But in reality, service providers can legitimately argue that their capitation-based funding does not reflect the real costs of service provision to new housing and jobs. It seems to us that they can argue this on the following grounds.
- Capitation related funding does not provide for the capital implications of step changes in the location and distribution of demand for their service. Service providers can reasonably argue that their funding assumes that they are able to use existing capital assets - such as buildings - which are already in existence. Capital funding is therefore modest, and relates to the upkeep and maintenance of existing facilities. Their capital funding is therefore not adequate to deal with step changes in the location and distribution of demand for their service. A lack of buildings and plant in the right place may mean that service quality targets (eg response times) are missed.
 - Time lags aren't provided for in capitation-related funding. Service providers can reasonably argue that population in their area can rise, but population-related funding does not adjust quickly enough to adapt. Service providers are therefore "out of pocket" until mainstream funding recognises this population change. There is therefore an argument that service providers should receive revenue funding equivalent to the cost of providing additional services until such time as their capitation funding increases as a result of the increase in population. We accept that this is a problem. However, the Government appears to wish to avoid significant planning contributions going to revenue funding: documentation on CIL shows the general direction of travel of the Government in this respect, and points out that planning contributions are primarily aimed at capital and not revenue expenditure.²² Also, the problem may be shrinking: the Government is aware of the issue, and suggests that future funding will respond more quickly to population change. (Comprehensive Spending Review 07 has mentioned this as an issue). Work for Buckinghamshire has suggested that recent changes in health service funding have cut the time lag in their case to a more manageable level.²³

6.48 We have aimed to make some allowance for these problems.

6.49 Other arguments sometimes made by service providers looking for developer contributions seem to us to be weaker. They are as follows.

²² Work from the DCLG is implicit rather than explicit on this point. See DCLG (2008) *The Community Infrastructure Levy* para 2.19 onwards

²³ Buckinghamshire County Council, Aylesbury Vale District Council, Aylesbury Advantage (2008) *Buckinghamshire Infrastructure Study* (Hewdon, Colin Buchanan & Partners)

- Providers are locked into business plans. Service providers sometimes argue that they are locked into planning cycles which mean that they have no ability to fund facilities until the next planning round. However, this argument has less traction given current economic conditions. We have not seen detailed business plans which go beyond three years from the current time. The credit crunch means that there will be falls in the amount of new housing built in the next few years. Together with improved sub-regional governance arrangements described in section 31, we think that this problem can be overcome in practice if care is taken to ensure that growth is understood and anticipated by service providers.
- Insufficient funding. Some service providers argue that they are struggling to provide the service required from within their existing budgets. This may be the case, but we would suggest that this is a matter for the agency in question and their funders to resolve. It is not the role of the planning system to covertly subsidise service provision, no matter how socially worthwhile that provision may be.

Too much detail on funding can be obstructive. Our approach allows the necessary latitude to service providers

- 6.50 Too much detail on funding is actively unhelpful, for the following reasons.
- If service providers are going to make best use of their own resources, they will require the flexibility to juggle funding streams (whether S106, CIL, or mainstream funding). It would be counterproductive (and probably impossible) to effectively pin them down to specific investments and contributions. Too much detail could 'tie their hands' and lead to inflexibility if they need to juggle budgets to cater for slippages in overall programmes.
 - Funding streams alter frequently, making commitment difficult and detail redundant.
- 6.51 As a result, in the spreadsheet we provide, there is no direct read-across from specific infrastructure requirements (such as a school, or a GP surgery) to a particular funding stream at any level. We treat mainstream public sector infrastructure funding on a service rather than geographical basis. An example helps: there may be new schools required in Blaby, but because the LEA works across the whole County, it is impossible to isolate the exact infrastructure funding that will be allocated to education in Blaby.
- 6.52 Our work shows whether the new development is covered by mainstream public sector funding applied over a spatial scale by the relevant service provider. This will be based in part on service providers' views. These views may be subject to debate.

7 HOW SHOULD NEW INFRASTRUCTURE REQUIREMENTS BE PRIORITISED?

Introduction

- 7.1 There must be a mechanism that will allow the prioritisation of public investment in infrastructure if the infrastructure assessment is to arrive at intelligent and reasoned choices about scarce infrastructure spending. Ultimately, it will be necessary to prioritise both within theme areas (say, prioritising the most important road projects) and also *between* theme areas (say, deciding to invest in open space, rather than road space).
- 7.2 There is no definitively “right” answer here. These are normative questions, which concern the most desirable course of action given a certain budget. External consultants have little business in prescribing priorities to these differing courses of action. Properly, these decisions rest with elected representatives and their officers, in order to allow different areas and interests to express their different priorities.
- 7.3 However, it is our role to assist the process of making these decisions. We therefore have categorised different infrastructure spending into different level of priority, in the expectation that subsequent work, outside our brief, will review the choices made.

How we have prioritised infrastructure

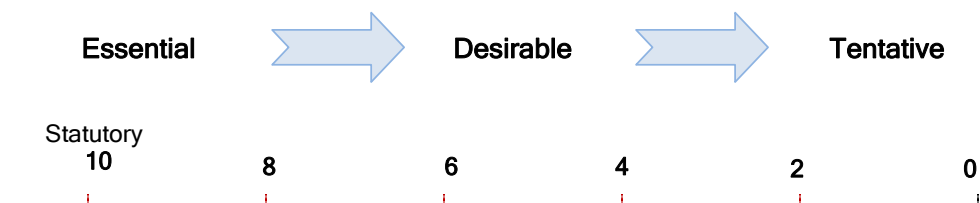
The prioritisation categories

- 7.4 It is our objective here to prioritise public investment.
- 7.5 Existing work by Leicester City Council on developer contributions has set up different categories of infrastructure priority. We have used these categories in order to make this assessment compatible with previous work. They also have the great merit of being both simple and effective.
- 7.6 Categories are as follows.
- **Essential requirements:** this would apply to infrastructure which would be required by statute or regulation, and would enable the development to go ahead. Education is in this category. Other infrastructure spending - such as water, gas and electricity connections - are clearly essential to housing and jobs development, but because they are generally privately funded, they fall outside our prioritisation categories.
 - **Desirable:** There are a range of other infrastructure investments that could be considered. Some areas are likely to have different needs: for example, we note that many central Leicester sites will need investment in environmental quality and public space if they are to be attractive enough to prospective purchasers.
 - **Tentative:** These might be long term ideas or more speculative concepts. Given competing demands, these projects are highly unlikely to get done, but it will be important to show that they have been logged.
- 7.7 We have shown our scale on the figure below.

We use a points system to cope with “grey areas” between these categories

- 7.8 There is inevitably a grey area between the categories of “desirable” and “tentative”. As we pointed out above, much depends on the choices of elected representatives, and the amount of money that there is available to purchase infrastructure. (Tight budgets would mean that only statutory requirements were met; more funding might mean that the “desirable” projects were funded; and still more funding would see the projects classed as “tentative” funded).
- 7.9 Because these definitions are necessarily fluid, then, we have decided to make a rough prioritisation of each infrastructure using a points system.
- 7.10 Statutory requirements (in the “essential” category) are awarded 10 points in our spreadsheet model. Effectively, these projects are outside the points system: they have to be implemented if the growth is to go ahead. Clearly, high priority demands should be first in the queue for funding from whatever source.
- 7.11 For the desirable and tentative projects, we have used a sliding scale. Highly desirable projects might be awarded a maximum of 8 points. Very tentative projects, which would not be particularly realistic now, might be awarded 1 point.

Figure 7.1 Prioritisation scale



Source: RTP

How the prioritisation “points” system can be used

- 7.12 The system may be used to calculate the rough costs of growth at a particular point. If there were a large number of infrastructure projects with high points score attached to a growth at a particular site, it would tend to suggest that developing this site was likely to be expensive. Further analysis of the spreadsheet model can be undertaken by users in order to calculate, for example, how much essential infrastructure at a given site might cost, in comparison with other sites. Note that this process would need to be undertaken carefully. The costs of area-wide infrastructure projects would need to be taken into account if this calculation was to be done successfully.
- 7.13 This prioritisation system is a blunt instrument. Ideally, prioritisation should not solely involved the extent to which whatever is proposed is regarded as critical, but also what is needed at any particular point in time. We recognise that it might be better to fund a level 5 facility now than to save money for a Level 8 priority that isn’t needed for a decade.
- 7.14 As we suggested above, our work here is meant to start debate. Prioritisation categories should not be viewed as being fixed. Infrastructure in different sites and different financial circumstances may need to shift categories in future.

8 TRANSPORT

Introduction

- 8.1 This part of our assessment looks at the transport infrastructure required to support planned infrastructure growth arising from jobs and housing growth; the cost of that infrastructure; and how that infrastructure might be funded.
- 8.2 We begin by reviewing the transport policy context within which we are operating, and review the transport modelling work already undertaken. We then deal with the requirements, costs and funding of transport infrastructure. Finally, as requested, we provide some “critical friend” advice on the issues surrounding growth and transport demand.
- 8.3 At this stage, this exercise is necessarily high level, given that it precedes the detailed transport assessment that would accompany the masterplanning process.

Policy Context

National policy seeks to reduce transport and consequent demand for new infrastructure

- 8.4 The publication of Planning Policy Guidance 13 in 1994 (revised in 2001), followed by A New Deal for Transport in 1998 and the White Paper Transport 10 Year Plan 2000 set the context and direction for transport policy in the UK. The policies enshrined within these documents demonstrated an acceptance that unrestrained growth in road traffic was neither desirable nor feasible based on concerns related to rising congestion levels, the effect of road traffic on the environment (both natural and built) and worries that an emphasis on road transport discriminated against vulnerable groups in society such as the poor, the elderly and the disabled.
- 8.5 The latest major statement of government transport policy is the White Paper entitled “The Future of Transport: a network for 2030” which was published in July 2004, and sets out how the Government will maximise the benefits of transport while minimising the negative impact on people and the environment. The Government is seeking a coherent transport network that can meet the challenges of a growing economy and the increasing demand for travel with:
 - The road network providing a more reliable and free-flowing service for both personal travel and freight, with people able to make informed choices about how and when they travel;
 - The rail network providing a fast, reliable and efficient service, particularly for interurban journeys and commuting into large urban areas;
 - Bus services that are reliable, flexible, convenient and tailored to local needs;
 - Making walking and cycling a real alternative for local trips; and
 - Ports and airports providing improved international and domestic links.

Regional and local transport policies broadly follow the national approach

- 8.6 Transport policies and objectives in the Government framework have been cascaded and refined through the regional and sub-regional planning process to direct transport decisions across Leicestershire. In this context, The East Midlands Regional Transport Strategy (RTS), found in the Draft East Midlands Regional Plan (RSS8) provides a series of regional transport objectives.²⁴
- 8.7 Both the County and City Council have worked closely to take forward national, regional and sub regional transport policy to develop their respective LPT2 submissions. This is vital given the strong interdependence between the city and the surrounding county urban area.
- 8.8 The Leicestershire LTP2 2006-2011 cites six objectives and initial targets for the period up to 2011 focussed on:
- Tackling congestion, by increasing the use of public transport, walking and cycling with less growth in car mileage and more effective use of congested roadspace;
 - Improving access to facilities including employment, education, health care and food shopping, particularly where analysis shows the greatest levels of social deprivation;
 - Reducing road casualties through local safety schemes and speed management activities as well as continuing road safety education, training and publicity campaigns;
 - Improving air quality in the traffic-related air quality management areas through action plans and robust monitoring of nitrogen dioxide levels against national target levels;
 - Reducing the impact of traffic through local communities, near schools and within town centres by reducing vehicle speeds and in exceptional cases re-routing the traffic; and
 - Managing transport assets in the most cost-effective way through robust condition monitoring, timeliness of intervention and economies of scale in repairs and renewal.
- 8.9 The Central Leicestershire LTP2, which is comprehensive for Leicester, also details the congestion and accessibility policy for all of urban Central Leicestershire.
- 8.10 At a lower level, the drivers for change aim to bring about: a step change in the quality and quantity of bus services and facilities, a behavioural change in getting to both work and school, encouraging walking and cycling, offering better travel information for all travellers and the optimisation of the use of the network by technology.
- 8.11 The key policy interventions for congestion are to improve the bus services; introduce Park and Ride; increase parking restraint; encourage cycling and walking. Network

²⁴ Objectives are to support sustainable development in the region's PUAs, Growth Towns and Sub-Regional Centres; promote accessibility and overcome peripherality in the region's rural areas; support the region's regeneration priorities; promote improvements to inter-regional and international linkages; improve safety across the region and reduce congestion; and, reduce traffic growth across the region and improve air quality.

efficiency will also be improved by better coordination of traffic signals and improved signing

- 8.12 We have assumed that commitment to schemes identified by the respective LPT2 will be substantially complete by the end of the plan period.

Planning Policy Guidance sets the “tests of soundness” for the transport components of Core Strategies

- 8.13 PPS12 is clear that effective implementation is fundamental to ‘sound’ Core Strategies, which means they must be²⁵:

- Deliverable - by saying how the strategy and supporting infrastructure will be delivered, by whom, and when.
- Flexible - by saying how it will handle contingencies and what triggers alternative approaches.
- Able to be monitored - by enabling the reprioritisation of any previous assumptions made regarding infrastructure delivery.

- 8.14 While this applies to Core Strategies as a whole, we consider it is a reasonable framework against which the ‘soundness’ of the various transport schemes will be gauged when moving forward to Development Plan Documents (DPDs), which has a bearing on the transport aspects of this report. Our judgement in this respect is reinforced by reference to Planning Advisory Service (PAS)²⁶ advice, from which it is apparent that the overall aim for transport and its associated infrastructure delivery schedule should be to address two key questions:

Q1. Have transport problems and opportunities in the area been identified?

Q2. Has adequate infrastructure been programmed to support Core Strategy alternatives?

PAS work gives more detail on the issues that the transport evidence base needs to cover

- 8.15 In response to these questions we have turned to PAS guidance on the key evidence base outputs that are necessary to determine the significance of the identified transport schemes as they currently stand, which is reproduced in Table 8.1 below.

- 8.16 It is clear that these are the questions that the transport evidence base should answer. Links should also be made with housing, employment, retailing and town centres, open spaces and other issues and activities where transport and accessibility are key issues.

- 8.17 While the table is a useful guide to transport evidence in support of a Core Strategy we recognise that this project is more embracing. The fundamental principles do however

²⁵ Dept Communities and Local Government (2008) - Planning Policy Statement 12 (PPS12): Creating strong safe and prosperous communities through Local Spatial Planning (24)

²⁶ Planning Advisory Service: *Evidence Base Tool* - <http://www.pas.gov.uk/pas/core/page.do?pagelId=85656>. The tool is available from the PAS website at www.pas.gov.uk, provides a guide to the evidence that is useful to support production of DPDs.

remain relevant in terms of delivering an overall transport strategy uniting the Leicestershire authorities, founded on firm evidence.

Table 8.1 : PAS Guidance on Transport Evidence Base

	Key analyses identified in National PPGs and Practice Notes that should be in evidence base	Key evidence base outputs that should result from the analysis.
Question 1	<ol style="list-style-type: none"> 1. Accessibility analysis. 2. Identification of local transport problems and opportunities including environmental and social consequences 3. Identification of proposed and potential transport infrastructure and improvements. 4. Identification of potential freight sites and routes 5. Identification of the land use implications of new transport infrastructure including need for safeguarding and development opportunities linked to improved connectivity and accessibility. 	<ol style="list-style-type: none"> 1. Identification of route networks for all networks including proposed improvements. 2. Use of accessibility analysis to inform the spatial strategy for other land uses. 3. Compatibility assessment with regional economic and spatial strategies and Regional and Local Transport Plans. 4. Identification of issues and opportunities linked to key transport proposals.
Question 2	<ol style="list-style-type: none"> 1. Identification of relevant transport needs and costs to support the scale of growth and spatial strategy considering all modes 2. Identification of potential time lags between the phasing of development and supporting infrastructure. 3. Identification of how infrastructure would be funded and who would be responsible for delivery. 4. Risk assessment and assessment of contingencies. 	<ol style="list-style-type: none"> 1. Summary diagram identifying the location of key improvements. 2. Identification of potential synergies with development to inform spatial strategy alternatives. 3. Identification of how infrastructure would be funded. 4. Phasing programme identifying the timing of infrastructure improvements. 5. An assessment of whether there is a reasonable prospect of provision. 6. Identification of how spatial objectives could be achieved with differing infrastructure scenarios.

8.18 This leads us to an examination of the extent to which these questions have been answered in terms of the transport infrastructure schemes identified to date. In terms of our research and discussions at the series of workshops it is reasonably clear that some questions have more complete answers than others, which is often a reflection of where the various authorities are in the LDF process.

The Local Transport Plan is a key delivery vehicle

8.19 Notably there is a reference in the PAS table to the role of Local Transport Plans. PPS3²⁷ requires that once identified, a continuous five-year supply of deliverable sites is maintained spanning a 15-year horizon to deliver housing requirements. Significantly this aligns with parallel timetable arrangements for delivery of the LTP, which will support delivery of the spatial plan; as a consequence there needs to be a strong bond between growth delivery and the policies and programme established by the LTP.

²⁷ Dept Communities and Local Government (2006) - *Planning Policy Statement 3 (PPS3): Housing*

- 8.20 The transport scheme list should be more than a 'shopping list'. Recommendations provided by the Department for Communities and Local Government²⁸ guides our understanding that in view of resource constraints, there is a need to avoid a simple 'shopping list' of desired provision, which is unlikely to be attainable. This underpins the potential value and concept of the Infrastructure Model, which can be used and updated as a common vehicle to give careful and balanced consideration to the deliverability and prioritisation of potential infrastructural requirements.
- 8.21 It would be impractical to include every detail of the transport impact or potential of development in every location in the present overarching study. For this reason, further detailed transport assessment will be essential to add evidence and detail to the infrastructure assessment.

Growth and transport assessments already undertaken

- 8.22 As discussed in detail in Section 3 the Panel Report of the East Midlands Regional Plan puts forward an aim of accommodating 94,100 new homes from 2001-2026 within Leicestershire HMA.²⁹ A proportion of this would be met through implementing a series of SUEs (Sustainable Urban Extensions).
- 8.23 The responsibility for planning and evaluating the required transport infrastructure lies with the County Council for Leicestershire and the City Council for the Leicester Urban Area working closely with the district councils in their role as local planning authorities preparing and implementing the Local Development Frameworks for areas outside the City.

There has been a shortage of funding for assessing transport implications of growth

- 8.24 It is clear from our research that Leicestershire County Council has treated the target for new dwellings in Leicestershire by 2026 seriously. Around half of the 50,000 dwellings in the County's area have been subjected to some modelling and assessment, while the balance requires further scrutiny. Mostly the planned SUEs are "uncontroversial" in terms of transportation priorities, with the differing aspects of Coalville and Hinckley being taken into account.
- 8.25 However, the NGP PoD notes that there has been a shortage of revenue funding in 2008-09, which has caused real difficulties in obtaining an evidence base to support the process of bringing forward Sustainable Urban Extensions (SUEs), for example in funding transport modelling to provide data to support site selection.³⁰

²⁸ Dept Communities and Local Government (2008) - Infrastructure Delivery - Spatial Plans in Practice: Supporting the reform of local planning (12)

²⁹ EIP Panel Report Table 2 - Allocations 2001-2006 by HMA November 2007 quoted NGP Programme of Development refreshed 1 Oct 2008 p22

³⁰ New Growth Point Programme of Development 1 October revision, p7

Assessment and research which has been undertaken shows that the baseline position is of excess transport demand in a number of points on the network

- 8.26 While both the Leicestershire and Central Leicestershire LTP2 seek to address various issues to 2011, further challenges lie ahead. To determine these issues we have reviewed a series of documents. A recent EMRA publication highlights there are key implications for transport in the Leicester and Leicestershire HMA³¹:
- The existing network in Leicester PUA is congested at peak times. Longer distance routes using the M1 are also constrained by congestion levels in peak periods;
 - Surface access to East Midland Airport (EMA) is constrained by highway capacity on the surrounding highway and limited public transport accessibility;
 - Commuter rail links to Leicester from the main towns in the HMA are relatively good and there is good long distance access to London, Birmingham and the north. This would support development in the existing urban areas;
 - Significant transport capacity improvements will be required to support development around the urban areas, both roads and public transport. Most of the transport development would be within or adjoining the city so it will be essential to provide high capacity, sustainable links from these developments into the city centre;
 - Transport development in the rest of the HMA will need to focus more on improving the current levels of public transport accessibility and tackling individual highway capacity issues; and
 - The M1 and the A6 between Leicester and Loughborough are congested at peak times but other strategic routes, such as the A46 and the M69 still have capacity to carry more traffic.

Work has been undertaken that looks at the effects of congestion management. It showed the amount of travel was likely to increase significantly over the next 20 years

- 8.27 Our review of work stemming from the 6Cs Congestion management study³² has confirmed that radial routes running in and out of the city and on the city ring roads are the worst affected by congestion, where delays are at their most severe in the peak periods. The study used GPS-tracker surveys to produce a detailed picture of the areas where travel time was lost owing to congestion and early-stage transport modelling gave an indication of the potential impact of a Congestion Management package.
- 8.28 The study, which uses PTOLEMY³³, concludes that the amount of travel within the 3 Cities sub-region is likely to increase significantly over the next 10 to 20 years without

³¹ East Midlands RSS Partial Review: A Statement of Conditions & Issues. (October 2008) EMRA

³² 6Cs Congestion Management Study - Project Report (April 2008) 6Cs Partnership

³³ PTOLEMY strategic, integrated land use and transport model covering Nottingham, Leicester, Derby (known as 'the Three Cities') and their surrounding areas, a sub-region in the East Midlands - <http://www.ptolemy-model.org/background/role-and-local-models/strengths-of-the-models.html>

significant intervention and that car use was the prime issue to be addressed rather than car ownership.

- 8.29 The study has examined the potential for congestion charging to address this alongside core complementary measures to support an Innovative Package scenario to include such items as high-quality radial bus corridors, 'red routes' on radial routes where practicable, reducing bus delays at signalised junctions and crossings, improved pedestrian crossings along the inner ring road and bus service improvement to include further Park and Ride. The measures suggest a personalised rapid transit system (PRT) for the city. One of the conclusions reached was:

'that an innovative Package including congestion charging and a range of other complementary measures could more effectively tackle future congestion and produce better economic net benefit than continuing with the current strategy under the usual public sector funding constraints. The congestion charging element would generate an income stream sufficient (with additional capital funding from the Government's Transport Innovation Fund) to support the complementary transport measures.'

Congestion management was not taken forward

- 8.30 The NGP PoD points out that ultimately however, no agreement could be reached on the merits of an application for further Transport Innovation Fund (TIF) pump-priming money to continue the project and it has now closed. Through other joint-working protocols, other ways of promoting cross-regional transport initiatives are being explored.³⁴

Priorities for coping with congestion

- 8.31 The Central Leicestershire LTP, Central Leicestershire Transport Trends and Model Reports and Leicestershire's Loughborough Town Centre Study indicates that the possible priority congestion action areas, including national and regional roads, are:
- Junctions on the Leicester Outer Ring Road e.g. A426, A50, incomplete ORR between A46 & A6, also Fox Hunter roundabout near to M1.
 - Loughborough town centre;
 - Main radials into Leicester between 0730 & 0930 hrs weekdays
 - These documents also indicate other areas of significant peak time congestion in other town centres. These include isolated roads in Hinckley, Melton Mowbray and Coalville.

The major focus for modelling has been to the north, northwest and southwest of Leicester

- 8.32 Modelling coverage of the County is currently quite limited; Leicester and the surrounding suburbs are covered by the Central Leicestershire Transport Model, with separate models covering Loughborough and Melton. Elsewhere study work has relied on manual assignment methodology. The primary focus to date has been to the north,

³⁴ New Growth Point Programme of Development 1 October revision, p18

northwest and southwest of Leicester. This is not unreasonable as these are the areas where the majority of new housing, outside Leicester itself, is planned for implementation. The Loughborough-Leicester Corridor and the Loughborough SUE have received most attention, as there are significant issues. Elsewhere in Leicestershire, the broad conclusion is that in transport terms the proposed SUEs could be accommodated at Hinckley and Coalville, provided that the required packages of supporting highways and transportation measures identified by the County are affordable.

- 8.33 Eastern Leicestershire is comparatively rural, with only a Melton Mowbray SUE being considered. A bypass for Melton Mowbray is being considered for funding after 2014 and can almost be seen in isolation.
- 8.34 The SUEs proposed for the Leicester Principal Urban Area (PUA) are much closer to Leicester itself and will have a significant impact on local transport. These have been modelled at a more general level, given that their timescales are a number of years in the future.
- 8.35 The Hinckley SUE, together with Earl Shilton and Barwell, is about to be modelled in more detail. There are cross-boundary issues with Warwickshire and PARAMICS modelling will inform on potential impacts on the A5 and M69. While transport links in the area are good with the close proximity of the M69 to the southeast and good Class A road links, the area does suffer from congestion.

Transport infrastructure for Charnwood is yet to be decided

The debate about Thurmaston SUE

- 8.36 Modelling work undertaken on behalf of Charnwood Borough Council suggests there is insufficient justification for a link road to the east of Syston and Thurmaston related directly to the Thurmaston SUE. This does however conflict with County proposals for the area. The County does wish to see this road put in place.
- 8.37 There is some level of agreement however as Charnwood do acknowledge that what is needed is a package of transport measures including new highway infrastructure that can be demonstrated as necessary to:
- Provide access to the development area;
 - Mitigate any wider impacts of development in particular on Barkby and Barkby Thorpe (with Charnwood suggesting there is no evidence to date of any significant impacts on other villages); and
 - To link into the City and the Hamilton development area.
- 8.38 Ultimately further work will be needed once an SUE location is confirmed to establish through Masterplanning the detail of the transport measures. We have included both schemes in our spreadsheet model. We have done this in order to present a conservative view about road building costs. However, we have not attached the link road costs to the Thurmaston SUE in our spreadsheet model and have instead treated this as a piece of road infrastructure that will have impacts across the HMA.

Progress with work to assess transport issues in the Loughborough Sub Regional Centre (Loughborough and Shepshed)

- 8.39 One of the main issues to arise from the assessment work to date surrounds the potential SUE in Loughborough. The town itself is heavily oriented to the west in terms of infrastructure, urban morphology and geography. However, the local road network is quite congested at peak times. Its location close to junction 23 of the M1 is also problematic as the motorway has congestion issues itself.
- 8.40 During 2006/ 07 Leicestershire County Council undertook traffic flow modelling of a range for growth options in Leicestershire to support their case at the Examination of the Regional Spatial Strategy in Summer 2007. The main findings relating to Loughborough may be summarised as:
- Options based on a western relief road and upgrading of Epinal Way did not appear to deliver adequate mitigation without exacerbating congestion and environmental problems.
 - A large SUE located east of Loughborough based on 8,000 dwellings could help fund an Eastern Relief Road and related package of measures. An ERR was seen as the best highway solution to resolve general traffic issues in the town.
- 8.41 The County's work assumed substantial new road capacity was essential before real improvements could be made to public transport, walking and cycling.
- 8.42 In the Examination the Inspector took exception to this proposal of implementing significant infrastructure to justify an increase in housing numbers. In response Charnwood commissioned MVA to review the modelling work in terms of transport infrastructure in the mix with a number of alternative locations for large sites around Loughborough/ Shepshed and to the north of Leicester. This work using a congestion based boroughwide model concluded the congestion impacts of development would be lowest for a west of Shepshed option and an option south west and south of Loughborough. West Loughborough came next. All these options had a lower impact than east of Loughborough and all were much less expensive to implement. MVA also concluded that a well designed western relief road could be as beneficial as an eastern route in providing wider traffic benefits.
- 8.43 Having regarded all planning considerations the Borough Council's Core Strategy Further Consultation document (2008)³⁵ identified West Loughborough north of Garendon Historic Park and Gardens towards Shepshed coupled with a Science park extension next to the University, as the growth option for the town. In response the County Council raised objections on grounds that MVA's work was not soundly based and they reiterated the conclusion of their earlier work that an Eastern Relief Road should form the basis of a transport solution for the town.
- 8.44 The Borough Council as planning authority is tasked with determining development and use of land and delivering the council's core strategy that will provide the vision for

³⁵ Charnwood 2026 - Planning for Our Next Generation Further Consultation (Oct 2008) Charnwood Borough Council

delivering strategic development needs, including housing, leisure and retail. In view of Charnwood's role in the planning process it was agreed with the client at a progress meeting on 7 November 2008 that this would form the focus for the SUE in the Loughborough area.

- 8.45 Ultimately the LDF process must resolve the detail of the land use pattern based on a balance of evidence from various sources, consultation and judgement. Sustainable transport will be an integral part of the solution, and should be based on a consistent modelling approach that examines the options and potential sustainable transport interventions reliably in the mix with other matters related to other land use, environmental and potential delivery risk considerations.
- 8.46 To resolve clear differences in approach the Borough Council is commissioning further modelling work by MVA using a methodology agreed with the County Council to test the congestion implications of potential growth options with an upgraded, multi-modal version of County's Loughborough Traffic Model. The results expected by Summer 2009 will provide the transport element of the overall evidence base that will be used to justify the growth option for inclusion in the Core Strategy Submission document.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Our starting point is the Local Transport Plan for the City and County

- 8.47 In this assessment, we have assumed that the overall levels of transport investment is likely to be based on the total 'package' of integrated transport measures defined by Local Transport Plans and will therefore require a reasonable estimate for the total proportion of transport demand created by new development provided for by the Growth Agenda.
- 8.48 Some allowance is likely to be necessary to reflect the likely intensity of development and its location relative to existing services and network capacities.

Historic deficit cannot be ignored as it affects timing and prioritisation. However, at this stage it is difficult to know exactly how new transport infrastructure might be used by residents of new houses, or might instead simply "mop up" trend growth

- 8.49 We have explained in the introduction that our objective is to understand the implications of *growth in housing and jobs* affects infrastructure requirements. This means that we have to "tune out" changes in infrastructure requirements due to other factors - such as trend growth in transport demand.
- 8.50 While our general approach has been to concentrate on the transport implications associated with growth only, historic deficits in transport should not be entirely "tuned out", as they can have a bearing on scheme deliverability, scheme timing and priorities.
- 8.51 Even if it was desirable to "tune out" trend growth, it is extremely difficult at this stage in the planning process to do so to any level of accuracy. In many instances, it is impossible to ascribe a particular piece of transport infrastructure to a particular

housing growth site. However, this infrastructure investment may be necessary to create sufficient capacity to get a number of developments away. In these instances, we have listed these developments in the general district and county lines of the spreadsheet.

8.52 Better evidence will be required to separate historic deficit from development and thereby ascribe cost and programme to the various agencies responsible for delivery and funding in more detail.

8.53 This evidence will tend to emerge from transport assessment accompanying masterplans. The specific transport infrastructure requirement for any given development is influenced by its trip generation potential, which is tied with both land use mix and location relative to the existing network and services.

Our approach to understanding the costs of the growth infrastructure requirements

8.54 The cost of infrastructure required for growth is just that - the capital costs of the transport infrastructure necessary to allow growth to take place.

8.55 In general, urban centre development will reduce the need to travel, and generate shorter journey distances and, therefore, the contribution should be lower than that for out of town development.

Distinguishing between primary and secondary infrastructure in our transport section

8.56 As stated in the introduction chapter to this plan, a strategic assessment of this type must concentrate on primary (rather than secondary) infrastructure. Primary infrastructure comprises public transport and the road network outside the development sites. Secondary infrastructure is everything that developers need or can be expected to provide within development sites to achieve serviced development except the primary strategic infrastructure. It includes local access to development sites and all on-site roads.

8.57 At times, it can be difficult to distinguish between the two precisely. In this transport section, it is useful to provide some additional information to assist in the categorisation. Primary infrastructure is as follows:

- The provision or funding for off-site measures that are essential to ensure that on-site facilities will be effective;
- Contributions to off-site public transport, cycling and walking measures, in the general area or corridor within which the development lies, including road-based improvements such as bus lanes.

8.58 Infrastructure that can be classed as either primary or secondary infrastructure (depending on individual circumstance) is as follows:

- The provision or funding for necessary local highway infrastructure improvements designed to cater for additional private road-based traffic, where this is based on a target for reduced traffic levels;

8.59 Secondary infrastructure is as follows:

- Provision of on-site walking, cycling and public transport measures such as footways and bus shelters.

Our compilation of effective transport interventions

- 8.60 In simple terms, this is a list of schemes required to ensure that each growth site is adequately connected to the transport network. Looked at on a site-by-site basis, it might be the case that some sites need relatively little additional infrastructure investment, because enough spare capacity exists in the system. Other sites might need significant investment, as they require substantial new connections and/ or generate an impact where there is insufficient capacity available to cater for predicted demand.
- 8.61 The compilation of this information enables a picture to be drawn of infrastructure provision at the start of the study period in 2011 and considerations at this time related to the infrastructure necessary at the end in 2026. Detail of the scheme list and any relevant comments supplied on status with each submission is included for reference in the Appendices.
- 8.62 The scheme list has been determined from information supplied by the various authorities to provide the best estimate at this time. Districts and County have, in some instances, a differing approach to the requirements and cost of transport infrastructure required. This reflects the emerging status of the LDF process and the fact that a number of schemes address cross boundary issues and thereby fulfil different strategic aims and authority objectives. We have been in the position of having to choose one approach for inclusion in our spreadsheet model. This has been a difficult process. Our approach has been as follows.
- Where there are differences in the requirements between districts and county, we have gone with the Districts' views of requirements. This is our approach to the Garandon and Thurmaston issue. We discuss this elsewhere in this transport section.
 - There are two competing opinions around the infrastructure requirements around Syston. The district link road
 - Where there is variance in cost estimates provided by Districts and County, we have "split the difference" and picked a central value.
- 8.63 Overall, the consequence of these different views of requirements, and different cost estimates amount to a difference of £92.5m. For clarity these schemes which have been subject to these different approaches are tabulated in the Appendices. As more detail emerges from the application of the LDF process and delivery of future LTPs, this will be refined in response to more detailed masterplanning and scheme appraisal.

Table 8.2 Transport schemes by local authority

Area	Description	Infrastructure Item	Total
Blaby	Rail	Blaby Train Station re-opening to passenger traffic	-£10.0m
	Road	Strategic traffic links to A563 (Lubbesthorpe Way) (SEE COUNTY05).	-£8.9m
	Road	Improve link between A47 and Beggars Lane (either upgrade Beggars lane or provide new route on alternative alignment) (SEE COUNTY04)	-£5.8m
	Bus.	Increase capacity at Meynells Gorse (Park and ride site)	-£5.0m
	Walk/ Cycle.	Linkages to Leicester Forest East (LFE for public transport, walking cycling and local traffic including possible bus only link to A47)	-£3.8m
	Road	Establish lcoal bus linkages to Junction 21 area.	-£3.7m
	Road	Improvements to A47 corridor (Public transport and general traffic) - including Desford crossroads	-£3.3m
	Road	Enderby relief road (Provide link through the Warrens Industrial Estate to Leicester Lane to avoid increased traffic through Enderby)	-£2.7m
	Road	Bus corridor to City via A563 including new bus lanes	-£1.6m
	Blaby Total		
Charnwood	Road	Barkby/ Barkby Thorpe bypass + link to A563 in Leicester	-£17.4m
	Bus (all in SUE, not Science Park)	High quality bus provision to key destinations (Loughborough and Shepshed town centres, Dishley employment area, University/ Science Park). Upgrade key corridors with shelters, bus stops, bus lanes and signal priorities for buses. Improve existing ser	-£10.0m
	Road	Road link to A607 Melton Rd	-£8.0m
	Road	Road link between A607 Melton Rd and Barkby Rd, Queniborough	-£8.0m
	road (all in SUE, not Science Park)	A512 to A6 north link road, plus link from this road to Hathern Rd, Shepshed	-£7.3m
	Cycling, Walking (all in SUE, not Science Park)	High quality walking and cycling networks to key destinations within reasonable distance (Loughborough and Shepshed town centres, Dishley employment area, University/ Science Park plus schools).	-£6.0m
	Demand Management	Smarter Choices (Information and marketing, Personalised travel planning, & travel plans)	-£0.2m
	Demand management (all in SUE, not Science Park)	Smarter Choices (Information and marketing, Personalised travel planning, workplace travel plans, school travel plans)	-£0.2m
	Road	Package of complementary junction improvements and traffic management measures to help mitigate traffic impacts from development in nearby communities	-£0.1m
	road (all in SUE, not Science Park)	Package of complementary junction improvements and traffic management measures to help mitigate traffic impacts from development in nearby parts of Loughborough and Shepshed.	£0.0m
Charnwood Total			-£57.1m
Harborough		A6 Corridor - Oadby Park and Ride (Ref in TIF)	-£3.1m
		Lutterworth - New cycle routes and infrastructure for town centre	-£1.0m
		Market Harborough - New cycle routes and infrastructure for town centre	-£1.0m
		Market Harborough - Completion of 'Millennium Mile' cycle/ walkway link from Harborough Rubber Works site across St Mary's Road to Station.	-£0.5m
		Market Harborough - Increase cycle parking provision at rail station	-£0.0m
		Main Centre Car Parks - Expanded capacity to accommodate RSS growth	TBC
		Lutterworth - Traffic management measures within town centre to include One-way system Church St/ George St/ Market St area + environmental improvements and traffic calming on Church Street	TBC
		Market Harborough - Midland Mainline Railway Station off St Marys Road - Expansion of car parking to satisfy commuter demand	TBC
		Public/ Community Transport	TBC
Harborough Total			-£5.6m

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Hinckley and Bosworth	Road, pedestrian, cycle	Improvements to A447 Ashby Rd-widening of A447 Ashby Rd to 4 lanes from site access to A47. Scope for new A447 link road at southern end to east or west of Ashby Rd connecting Ashby Rd into new junction on A47.	-£3.5m
	Road, Pedestrian, cycle	Improvements to A47 east of Ashby Rd and Earl Shilton bypass. Substantial improvements at A47 junctions with Ashby Rd, The Common and Station Rd. Dualling of western section of Earl Shilton bypass between Station Rd and Carrs Lane.	-£3.2m
	Bus, Cycle, Pedestrian,	Links to existing urban area for buses, walking, cycling and local traffic	-£1.2m
	Bus	Public transport linkages from new developments to Barwell and Earl Shilton and improved public transport linkages between Barwell, Earl Shilton, Hinckley town centre and HNPR employment areas	-£0.9m
	Road, Pedestrian, cycle	Traffic calming measures in Barwell and Earl Shilton. Traffic calming and traffic management measures along The Common and routes through Earl Shilton/ Barwell.	-£0.3m
	Pedestrian, cycle	Improvements on linkages into town centre, inc alterations to signal operation at Leicester Rd/New Buildings	-£0.2m
	Pedestrian, cycle	Pedestrian and cycle linkages from new developments into Barwell and Earl Shilton	-£0.1m
Rail	Elmsthorpe Train Station	TBC	
Hinckley and Bosworth Total			-£9.4m
Leicester City	Tram	TRAM LINE (Line 1)	-£400.0m
	Tram	TRAM LINE (Line 2)	-£350.0m
	Bus	NEW BUS STATION	-£67.0m
		CONGESTION (Quality Bus Corridors, junction improvements, ATC etc. to 2026)	-£60.0m
	Walk/Cycle	CITY CENTRE IMPROVEMENTS	-£55.0m
	Walk/Cycle	IMPROVED CROSSINGS OF INNER RING ROAD	-£30.0m
	Rail	RAIL STATION IMPROVEMENTS	-£20.0m
	Cycle/Road	LINK ROAD AND RIVER BRIDGE (Waterside)	-£15.0m
	Bus	PARK-AND-RIDE (Enderby)	-£8.8m
	Cycle/Road	CANAL BRIDGE (Waterside)	-£7.0m
	Cycle/Road	CANAL BRIDGE (Abbey Meadows - BUSM)	-£5.5m
		PUBLIC REALM	-£5.0m
	Cycle/Road	SANVEY GATE JUNCTION IMPROVEMENTS (Waterside)	-£4.5m
		SWAIN STREET JUNCTION IMPROVEMENTS (NBQ2)	-£4.0m
	Bus	A47 HUMBERSTONE ROAD QUALITY BUS CORRIDOR	-£3.7m
	Cycle/Road	FRIDAY STREET IMPROVEMENTS (St. Johns)	-£3.0m
	Bus	A426 AYLESTONE ROAD QUALITY BUS CORRIDOR	-£2.7m
	Walk/Cycle	FILL IN SUBWAY PLUS NEW PEDESTRIAN/CYCLE CROSSING (NBQ2)	-£2.0m
	Bus	PARK-AND-RIDE (St. Nicholas Place)	-£2.0m
		GRANBY STREET IMPROVEMENTS (NBQ2)	-£1.7m
	Walk/Cycle	RIVER FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	-£1.5m
	Bus	A50 QUALITY BUS CORRIDOR	-£1.2m
	Walk/Cycle	CANAL FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	-£1.0m
		CHARLES STREET IMPROVEMENTS (NBQ2)	-£1.0m
		SMARTER CHOICES	-£0.6m
		MELTON ROAD/ TROON WAY JUNCTION IMPROVEMENTS	-£0.5m
	Cycle	CYCLE WAY	TBC
	ASHTON GREEN (Infrastructure to support 3,500 dwellings)	TBC	
Leicester City Total			-£1052.7m

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Melton	Cycle	Melton Mowbray cycle network	-£0.5m	
Melton Total			-£0.5m	
North West Leicestershire	Road	Castle Donington new Road	-£9.6m	
	Road	South Coalville new Road	-£9.6m	
	Road	Bardon New Road (See COUNTY13)	-£8.8m	
	SFRI	Junction 24 SFRI (Rail - Strategic Freight)	£0.0m	
North West Leicestershire Total			-£28.0m	
Oadby & Wigston			£0.0m	
Oadby & Wigston Total			£0.0m	
Leicestershire County	Road	Environmental improvements in south west Leicestershire including possible Lutterworth and Sharnford bypasses.	-£30.0m	
	Road	Melton Mowbray Bypass (See MEL01).	-£29.0m	
	Bus, Cycle, Road	Diversion of length of Hinckley Northern Perimeter Road and of A47 in Nuneaton to the west of junction and new junction on A5 (See COUNTY08)		-£12.6m
		Improve A511 Stephenson Way - Coalville.		-£11.0m
	Road	Kibworth Bypass (See HAR01).	-£10.0m	
	Road	Improve Hinckley Northern Perimeter Road (See HB03).	-£8.0m	
	Road	Improvements to A47/A5 'Longshoot' junction: Alternative A: Diversion of length of Hinckley Northern Perimeter Road and of A47 in Nuneaton to the west of junction + new junction on A5 Alternative B: New link road from A5 Dodwells Bridge south to new junct		-£7.5m
		Improve Hinckley Northern Perimeter Road. Dualling of HNPR between Outlands Dr and Ashby Rd inc substantial improvements at HNPR/Wykin Rd and HNPR/Stoke Rd junctions (See COUNTY09).		-£7.3m
	Road	Improve A511 between Coalville and M1 J22, including 'Birch Tree', Bardon Chapel' roundabouts - Coalville.	-£7.0m	
	Road	Syston Eastern Link Road	-£7.0m	
	Road	Improve link to A607, including ASDA roundabout	-£5.0m	
	Road	Improvements to the Grange Road(Station Rd/ Ashburton Rd), Coalville and Ellistown (Midland Rd/ Ibstock Rd/ Whitehall Rd) crossroads	-£4.0m	
	Leicestershire County Total			-£138.4m
HMA	Bus & Road	Glenfield Park and Ride and quality bus corridor (See CITY11 & BL09).	-£24.0m	
		Bus corridor from Barkby Thorpe area to City Centre (additional to A607 Melton Road corridor proposed by Leicester City Council) (See CITY03)	-£17.0m	
	Bus (all in SUE, not Science Park)	Bus based Park and Ride site on A6 north (See COUNTY06)	-£10.0m	
		A6 Corridor - Kibworth Bypass (ref in the LTP2) (See COUNTY17)	-£10.0m	
	Bus (all in SUE, not Science Park)	Bus based Park and ride site on A512 west (See COUNTY06)	-£10.0m	
	Bus & Road	Park and Ride - Birstall (See CITY10)	-£5.5m	
	Cycling, Walking	High quality walking and cycling networks to key destinations within reasonable distance (Hamilton District Centre, Thurmaston District Centre and Syston Town Centre, Watermead Country Park, local schools and employment areas)		TBC
		Road	M1 J23 improvements	Costs Not Inc.
		M1 capacity improvements (widening or hard shoulder running)	Costs Not Inc.	
		Completion of dualling of A512 east of M1 J23	TBC	
HMA Total			-£76.5m	
Total			-£1412.9m	

The scheme list is the start of the process - not the end

8.64 It should be noted that these initial findings are the first stage in sieving issues. More work will be required to develop them. They provide the basis for enhanced appreciation in the key areas identified with outstanding or uncertain needs in the future, and how the various financial contributions may be updated in any future reviews of the Planning Obligations and Infrastructure.

Essential infrastructure requirements of growth

8.65 While delivery of the projected housing growth is subject to the normal planning processes and constraints, there are in some locations additional or key constraints that impinge directly on whether particular schemes can be delivered. This section looks at these key pieces of strategic infrastructure, without which a development is unlikely to go ahead. These are outlined in Table 8.3.

Table 8.3 Potential “showstoppers” in Leicester PUA

Housing Development	Key infrastructure	Issues
Housing growth in and around PUA and in the Sub-Regional Centres	Improvements to the public transport system, including possible rapid transport and/ or tram	Beyond and in addition to the more localised infrastructure measures below it is essential that the public transport system has sufficient capacity to accommodate future levels of usage to deliver sustainable developments
Ashton Green new settlement	Birstall Park and Ride	Ashton Green to be largely self-contained, but journeys to Leicester must have high public transport use due to congested road corridor (A6). Park and Ride essential.
Charnwood SUE	Syston Eastern Link	In the County’s view, the Syston/ Thurmaston area already heavily congested. Link will provide important local access, without necessarily encouraging longer distance trips. Charnwood Borough Council disagrees, believing that this link road is not justified.
	A607 Quality Bus Corridor.	In the County’s view considered essential to meet growth in travel demand in corridor, not just for SUE. Charnwood Borough Council disagrees, believing that a definitive view should await completion of MVA work in Summer 2008.
	Direct bus corridor to City	SUE to be part of City, therefore many trips between them. Dedicated bus corridor would provide fast and direct link. Essential to serve growth in this corridor.
Blaby SUE	Enderby Park and Ride	At planning stage, will provide congestion relief on A5460 and A563, potentially redirecting some traffic away from location of SUE
	Dedicated east-west bus link between SUE and A563	Must take vast majority of trips to city centre, providing significant journey time benefits over car

Housing Development	Key infrastructure	Issues
	North-south road link	In an isolated location, so must be reasonable outlet for cars to ensure SUE is attractive place to live.
Housing growth in Northwest Leicestershire District	Glenfield Park and Ride	Park and Ride essential in A50 corridor to meet growth of traffic from Coalville area. Not obvious that Glenfield is optimum location.
Abbey Meadows	Pedestrian and cycling links over River Soar and Grand Union Canal	Essential to facilitate optimum modal split, together with providing good access to city centre.
Waterside	Link Road and River Bridge	Very important for walking and cycling links, together with amenity value
	Junction improvements to Sanvey Gate	Essential for access to site and to facilitate public transport in vicinity of site.
New Business Quarter	Leicester Station upgrade	Development of NBQ inextricably bound up with station enhancement programme.
	Granby Street improvements	Part of station upgrade, NBQ development and city centre regeneration. All bound up together.
	Swain Street junction improvement.	Access to NBQ will be very difficult without remodelled junction.
City Centre	Reduce availability of car parking	To be achieved along with public transport improvements.
	Increase bus use and thereby numbers travelling into city centre.	Need to increase bus use by increasing number of services, reduce congestion caused by buses and reduce time spent in city centre by buses, make buses easier to use.
		Introduce hopper bus to link key locations inside and outside Inner Ring Road.

How can new infrastructure be funded?

Our approach to understanding the funding of the growth infrastructure requirements

8.66 This section estimates the mainstream funding available for the infrastructure in question. Our overall approach has been to look at past funding, and extrapolate that funding forwards into the future. We explain the approach we have taken to each funding stream below.

Highways Agency TPI funding is available, but focussed on key strategic routes

8.67 The Highways Agency Targeted Programme of Improvements includes schemes that the HA will be undertaking and for which RFA funding is not sought.

8.68 It is assumed that the HA schemes that feature in the TPI list and will not go forward for RFA funding will be fully funded by the HA, these are only schemes on the M1, M6, and A14.

Regional Funding Allocation (RFA) is also available

- 8.69 To inform the model at this time we have assessed the RFA is as an amount across all schemes in the study area based on currently provisional figures up to 2019. A package of schemes has been put forward to 2014, which represents the regions problems for that period. A provisional bid has been developed up to 2019, which is to be further developed and refined in the light of DaSTS³⁶ (Developing a Sustainable transport System). We have assumed RFA priorities remain constant to 2026. Funding should be considered to approximate to 2008 prices.

Local Transport Plan (LTP) funding can also be anticipated

- 8.70 We have assumed in the table below that the average annual funding for the LTP2 period will continue at a comparable rate over the growth period of 2011 to 2026. Funding should be considered to be in, approximately, 2006/7 prices, as this is when the planning guidelines were available.

Growth Point Funding (GPF) can be anticipated

- 8.71 The study area is part of a Growth Point Area partnership with Derby, Leicester & Nottingham (The 3 Cities and 3 Counties partnership). It is assumed that this funding is available until 2026 and that Leicester and Leicestershire receives one third of this funding. We have assumed that there is an annual reduction in funding of 10% per annum from 2011 and that it is only available until 2020/21, reflecting the front-loading of infrastructure.
- 8.72 Only capital funding has been accounted for and it should also be noted that this funding would be shared across a number of cost (service) areas, not just transport. Funding should be considered to be in approximately 2008 prices.

Growth Area Fund (GAF) does not appear a source of transport funding at present

- 8.73 Leicestershire and Leicester are not currently defined as Growth Areas on the Department of Communities and Local Government website. Therefore it cannot be considered that there will be any funding coming forward from this source.

We have tabulated the above mainstream funding assumptions

- 8.74 The table below shows the assumptions about our funding sources.
- 8.75 Note that, in line with our wider approach, we have not allocated developer funding to transport (or any other theme). However, it can reasonably be anticipated that some developer funding will be available to fund some of the costs we have identified.

³⁶ Delivering a Sustainable Transport System: Main Report (Nov 2008). DfT

Table 8.4 : Potential Mainstream Funding Sources

	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	TOTAL
LTP central	£40.71	£40.71	£40.71	£122.12
LTP shire	£30.69	£30.69	£30.69	£92.08
RFA	£54.30	£56.71	£60.33	£171.35
GAF	£0.00	£0.00	£0.00	£0.00
GPF	£18.00	£10.63	£0.00	£28.63
HA TPI	£0.00	£0.00	£0.00	£0.00
Total	£143.70	£138.74	£131.73	£414.17

Importantly, this approach does not anticipate possible developer contributions

- 8.76 Importantly, this does not look at how developer contributions might contribute to transport - as we note above, it is not our proper role to decide how to allocate finite developer contributions between service providers (say, between health, transport, and education). We are therefore not making recommendations regarding how much developer contributions should be allocated to transport infrastructure investment.
- 8.77 Monies eventually secured through negotiation for off-site public transport, cycling and walking measures are likely to be programmed according to priorities set in emerging Local Transport Plans, and/ or reflected in Local Plans or agreement with the relevant Local Authorities. It will be essential to ensure that developers will be able to relate the results of their individual contributions to proposed schemes. Anticipated Section 106 funding will therefore need to be related to the specific package of measures for which contributions will be sought. Packages will become more definitive as Plans progress and it becomes clear what level of new development will be accommodated in each strategic sector/ sub-area.

What are the priorities?

- 8.78 Stakeholders have prioritised these transport schemes into the categories “essential”, “desirable” and tentative. We have translated these on our ten point scale to 10 points (essential) 8 points (desirable) and 5 points (tentative).

Issues

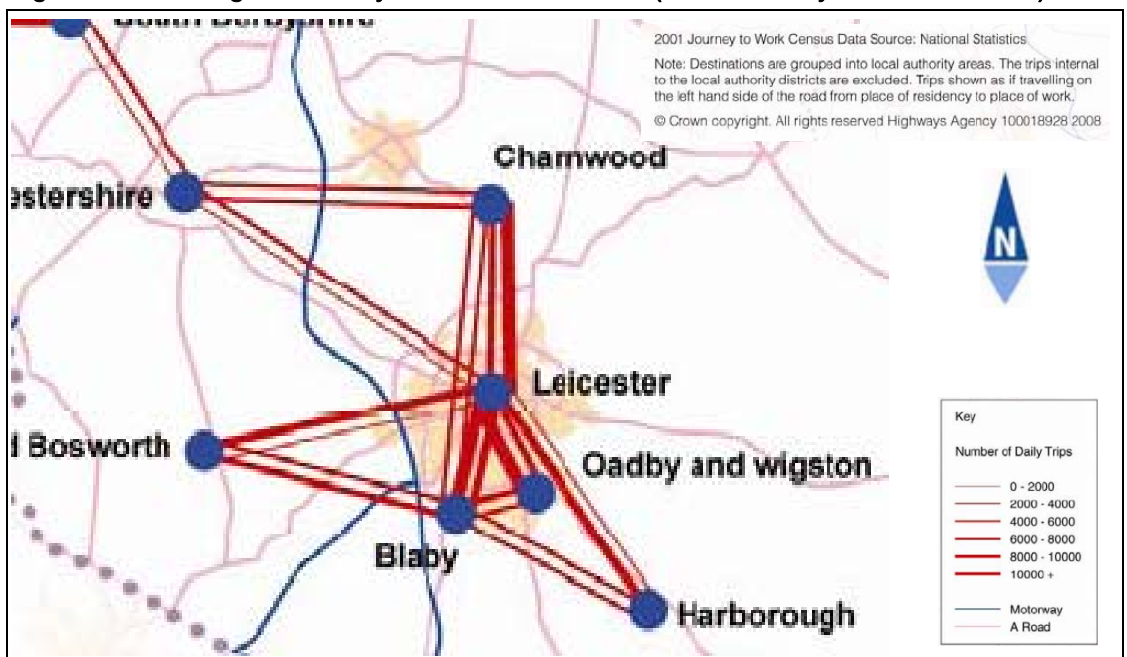
- 8.79 As part of this commission, we have been asked to provide “critical friend” advice on the issues surrounding growth and transport demand. In this section, we pick up these issues.
- 8.80 We have broken our analysis into three parts.
- Issues related to transport planning;
 - Issues split by area and transport corridor; and
 - Issues related to delivery.
- 8.81 We discuss each in turn.

Issues related to transport planning

Wider travel patterns focussed on the City need to be taken into account

- 8.82 Travel to and from Leicester is dominated by certain key strategic flows highlighted by the figure below. These are principally between the city and Blaby and Oadby, and between the city and Loughborough. Flows to Market Harborough, Hinckley and Coalville are lower in extent. Together with within-city movements significant traffic congestion is seen on most radial roads at least at peak times.

Figure 8.1: 50 Largest Journey to Work Movements (2001 Journey to Work Census)



Source: Figure 3.1 - Regional Network Report for East Midlands 2008 Highways Agency

- 8.83 This means that the city has to handle not only travel demands generated within the city, but also those generated by locations outside the city. Inevitably most of these are focused on the city centre, though the impacts are felt throughout the city on the main roads. The impacts are also felt on public transport, on both bus and rail modes.

Cumulative impact and phasing need to be considered carefully. At the moment, cumulative impacts are not properly understood

- 8.84 Until now, the main focus of transport planning and modelling has been on fairly substantial areas of development. Several small developments may individually fall below accepted thresholds for transport improvements.
- 8.85 The cumulative impact of development adds up, which increases the need to ensure that any necessary improvements are phased correctly. A mixture of transport studies in the HMA have tested the strategic transport impacts and needs of assorted Core Strategy options, but not the cumulative impact.
- 8.86 The cumulative impacts of all these individual developments could be enough to generate a significant travel impact on the adjacent transport network. This could justify the need for a developer contribution towards public transport enhancements.

Current transport infrastructure planning work lacks precision in some areas

- 8.87 The transport infrastructure plans compiled to date are generally focussed on local impacts associated with SUEs. In some areas it remains difficult to quantify the precise impact on some areas and exact improvements required at this time; especially where this relates to goals for the required or expected shift towards public transport and the infrastructure needed to it. Targeted communication with key providers will be an important step in understanding the exact impact.

Transport modelling evidence is fragmented and there are geographical gaps in transport modelling undertaken

- 8.88 As planning for SUEs progress further modelling will need to confirm requirements in more detail, especially what public transport infrastructure is required to deliver sustainable objectives.
- 8.89 Fragmented and inconsistent evidence makes for difficulties when making comparisons between schemes, especially when trying to determine priorities and for the purposes of monitoring impacts or determining the success of delivering policy targets in an equitable fashion.

Transport modelling work within Leicester should be developed further

- 8.90 Within the Leicester PUA sites for growth totalling 44,500 new homes have been identified. Many of these sites are infill in nature. Individually, many of these sites will not make a significant demand for new-built transport infrastructure. As most of the basic infrastructure is in place, programmed schemes focus more on network improvements rather than new provision.
- 8.91 Two sites have been identified around Leicester as SUEs to the PUA. An SUE based on 5,000 dwellings and 20ha of employment land is included in Charnwood Borough Council's LDF Core Strategy Further Consultations (Oct 2008) and at Blaby to the southwest. Each of these is outlined to have between 4,000 and 5,000 dwellings. As these are contiguous extensions to the Leicester urban area the proposed infrastructure additions are numerous but individually small in extent. The intention is to "wire in" these areas to the existing network and to provide enhancements where necessary.
- 8.92 Within the city of Leicester significant schemes are planned, (including a new bus station, new park-and-ride sites, tram and "schemes to deal with congestion migration") and local schemes are included in LTP2. It is also apparent that some schemes included in LTP2 will take longer to reach fruition than 2011.
- 8.93 At present these are not fully scoped. The Highway Authority has indicated that the scale of growth of the Leicester PUA will require medium-to-long term strategic schemes to be added to the Central Leicestershire Local Transport Plans out to 2026. A broad list of strategic schemes with estimated costs is published in Appendix 2 of the 6Cs Programme of Development to be added to the Central Leicestershire Local Transport Plans out to 2026.

- 8.94 The 6Cs Congestion management study also recommends the need for extensive further work in terms of scheme development and testing, appraisal and business case development to include substantial further transport model development.³⁷
- 8.95 A number of public transport initiatives have been put forward. Leicester City Council's proposed park-and-ride sites need to come on-stream soon, while direct bus corridors between the city and the proposed SUEs external to the city in Charnwood and Blaby are essential components of their development. A new flagship bus station in Leicester also demonstrates a strong commitment to public transport. However, the prospects for new rail infrastructure are less positive; realistically a programme of station and interchange enhancements is all that is achievable in even the medium term.

SUEs may generate more out-migration for work than expected

- 8.96 LPAs in identifying the location of SUEs and in detailed masterplanning work should carefully consider the balance of existing and proposed land uses including employment types to ensure that an SUE does not lead to unsustainable patterns of movement that could add significant additional traffic onto the road network. It will be important to ensure as far as possible that the mix of residents' skills matches the employment offer.
- 8.97 The strategic modelling work to date has taken into account the different employment characteristics of each SUE location, but as they are taken forward it will be important to ensure that local development framework policies and masterplans seek to ensure balanced provision in practice. The location and availability of suitable local employment is a key factor in determining the shape of the SUEs in terms of encouraging sustainable transport choices for journeys to work and reducing the need to travel, especially by private car.
- 8.98 Reliable public transport services delivering high quality travel opportunities between key centres will be an important consideration, although the prospects for new rail infrastructure appear less positive than for bus at this time; realistically a programme of rail station and interchange enhancements may be all that is achievable in even the medium term.

Securing transport links that are public rather than private-transport based will clearly be a major factor in ensuring that SUEs advance the cause of sustainable travel

- 8.99 The test of the 'networked SUEs' must be that the connecting thread is public transport, and not just cars.
- 8.100 To satisfy sustainable travel planning objectives many of these trips will have to be accommodated on an effective public transport network (not just on the services immediately adjacent to the site). This public transport network already suffers from existing capacity issues and ever increasing traffic congestion will give rise to longer

³⁷ 6Cs Congestion Management Study - Project Report (April 2008) 6Cs Partnership

journey times, delays to services, poor reliability and consequent lack of service attractiveness.

- 8.101 Although the Transport Authorities are making determined efforts to resolve existing shortcomings there is likely to be a need for an enhanced range of strategic public transport infrastructure enhancements to accommodate the combined cumulative impact of the additional trips that will be generated by future new developments.
- 8.102 It is essential that masterplanning of SUEs ensures everybody living in the development has ready access to high quality public transport with competitive journey times to main destinations. Public transport provision needs to be available from the onset of development otherwise people can be expected to develop car based lifestyles that could be difficult to change.

The Highways Agency is aware of and is broadly comfortable with the implications of jobs and housing growth on "its" part of the network

- 8.103 We are aware from published information that there are a number of HA schemes that will impact on the area. The M1 runs through the western part of the County, through Blaby, Charnwood, North West Leicestershire and Hinckley and Bosworth Borough Council boundaries, and very close to the City boundary. It is a key part of transport infrastructure connecting the three cities of Leicester, Derby and Nottingham and periodically suffers from heavy congestion.
- 8.104 The Command Paper 'Roads - Delivering Choice and Reliability'³⁸ published by the DfT in July 2008, announced up to £6 billion for improvements to national strategic roads in England, and set out the national schemes that were being considered. This funding is set to enhance £3 billion previously allocated to strategic regional roads before 2015/ 16 through the Regional Funding Allocation process. The command paper listed schemes planned to start construction by 2010/ 11 and also confirmed that Regions were in the process of reviewing their priorities for the period up to 2018/ 19.
- 8.105 The HA was planning to widen the M1 between junctions 21 and 28, which would heavily impact on journey patterns in Leicestershire; this has now changed following a recent announcement that this section is now to be reconsidered.
- 8.106 On reading 'Britain's Transport Infrastructure - Motorways and Major Trunk Roads' (January 2009)³⁹ by the DfT it is now clear that M1J21a - 23a will not be taken forward at the present time as it is considered to offer relatively low Value For Money (VFM), although M1 J25-J28 widening will continue as published.
- 8.107 Figure 3 of the document shows the schemes in this first tranche of the programme, as well as those already in construction and schemes for future consideration (under DaSTS⁴⁰). This coincides with text that indicates that there is an intention to roll out managed motorways more widely across the motorway network over the next 10 to 15

³⁸ 'Roads - Delivering Choice and Reliability' (July 2008). DfT

³⁹ Britain's Transport Infrastructure Motorways and Major Trunk Roads (Jan 2009). DfT

⁴⁰ Delivering a Sustainable Transport System: Main Report (Nov 2008). DfT

years and that one future location planned for Hard Shoulder Running (HSR) is M1 J24-25 (Long Eaton) plus a look into major junction improvements on the M1 J21-21a (Leicester) and J23a-24 south of Long Eaton.

- 8.108 Concluding on this position the HA has confirmed that the M1 surrounding Leicestershire over the next 10-15 years (to complete the DfT published strategy) in the context of this assessment could anticipate:
- M1 J24-25 (Long Eaton) - ATM
 - M1 J21-21a (Leicester) and J23a-24 (Kegworth - Castle Donington area) - Major Junction improvements only at each junction (and not intervening links).
- 8.109 The section not currently being taken forward (J21a-J23a) may well be included in future Managed Motorways programmes. While not offering VFM now, as demand rises in future years the calculations would be likely to come out more favourably. This may be in the 2021-26 period, although the HA has confirmed that it is too early to be at all definite. For this assessment, 'delivery post-2026 would be a robust approach'⁴¹.
- 8.110 The sections at J21-J21a and J23a-J24a (incl. Kegworth Bypass) cannot be improved using Managed Motorways techniques: traditional highway works are unavoidable on those sections. The HA recommend that this study should consider these sections as being delivered before 2026, along with ATM north of J24/24a.
- 8.111 There are also plans to make the M1/M69 junction free-flow in all directions. In the congested Leicester - Loughborough corridor the HA is also proposing to grade separate the A46/A607 junction near Syston in the period 2016-21.
- 8.112 To confirm our understanding we have consulted directly with the Highways Agency (HA) to determine its latest programme of schemes in the pipeline that will help shape Leicestershire (HA Areas 7/11). The HA has confirmed to us that these are:
- Revisions to the previous M1 Works J21 - 218 discussed above;
 - M1 J19. Recent Public Consultation, latest on HA website (plus URS direct involvement in this).
 - A46 Newark to Widmerpool (where A606 crosses A46).
 - A453 Widening M1 J24.
- 8.113 The HA has told us that with the exception of the A5, most trunk roads in Leicestershire are grade separated and of a high standard road. Where there are capacity problems they are mostly in hand:
- M1 J19 - scheme in pipeline to provide free flow links
 - A46/ A607 Syston, Hobbyhorse junction, North of Leicester - minor scheme delivered around 2005/6 to improve junction, which has removed the need for a Grade Separated Junction for the time being.
- 8.114 The HA do however predict that A42 J13, which is grade separated, will suffer capacity problems in future years due to the level of committed development in the

⁴¹ E-mail response from Highways Agency. 3 March 2009

Ashby area and that safety problems are also a concern along the A5, where there are many small rural accesses. The HA has also pointed out that a separate package of measures was recommended for the area of the A38, A42, A5 and M69 (GOEM initiative), which was identified from the 2005 West to East Midlands Multi Modal Study. The SoS indicated that these schemes should be subject to the RFA1 process, however schemes such as the A42 were effectively deferred, not being programmed for the first 10 years.

- 8.115 The HA has confirmed to us that through its delivery partnership in the draft RSS process it would not necessarily refuse development, but would rather explain the implications. It would still however reserve that right to reject certain developments, particularly if safety were considered to be compromised.
- 8.116 In terms of funding the HA has also confirmed to us that schemes involving M6, M1 and A14 are for DfT to fund directly in recognition of the strategic and historic demand rather than the direct impact of local growth. As a consequence they have not been included in our funding model. Likewise, the rest of the schemes above are RFA, most of which would be beyond developer funding.

Issues split by area and transport corridor

- 8.117 Leicester is impacted both by travel demand originating within the city and by people travelling to and from outside Leicester for a range of journey purposes. For clarity we have therefore examined geographical sections:
- Charnwood corridor (Loughborough, Ashton Green)
 - Thurmaston/ Syston corridor (Charnwood SUE, Melton Mowbray and more local destinations)
 - A6 Harborough corridor (Oadby, Market Harborough)
 - Hinckley and Blaby corridor (M69, Enderby Park and Ride)
 - A50 corridor (Coalville, North West Leicestershire)
 - Area of Leicester inside the Outer Ring Road, but outside the Inner Ring Road
 - Leicester City Centre, within the Inner Ring Road
- 8.118 These areas should not be considered in isolation as they all operate within an overall system. Impacts of travel demand felt in one area will also be experienced in others. These wider impacts need to be quantified on a corridor basis to determine appropriate route strategies, especially to identify where additional public transport infrastructure is likely to be essential to influence mode shift.

Transport infrastructure issues in the Charnwood corridor

- 8.119 The Loughborough SUE has outstanding issues (discussed above) and there is a need for wider area modelling of its potential impacts. This relates critically to the nature of the settlement mix, the resulting travel demand and to what extent public transport can deliver aspirations for modal shift in a congested area. What is clear is the need to determine and quantify the overall movement patterns in the area to establish the level of self-containment that can be reasonably anticipated and subsequently the degree of wider travel demands that will need to be addressed.

- 8.120 Further congestion based modelling work on SUE options will be undertaken by MVA on behalf of the Borough Council by Summer 2009 using a methodology agreed with the County Council. This work will identify packages of transport measures capable of helping mitigate the impact of SUE options around Loughborough and Shepshed. The modelling will apply an iterative approach giving priority to walking, cycling, public transport and smarter choice measures before additional road capacity. This transport work and other social, environmental and economic evidence will be used to determine the location of the SUE option for inclusion in the Core Strategy Submission document.

The multi modal transport corridor between Loughborough and Leicester is strategically significant

- 8.121 Moving the Loughborough SUE aside, what is clear at this stage is that the Charnwood corridor has strategic significance within Leicestershire as a whole as it provides access between Loughborough and Leicester, together with places in-between. The A6 is the key link and the grade-separated junction with the A46 eases traffic flow. Both are strategic roads, but also perform a local function.

- 8.122 There are frequent, good quality daytime bus services for settlements west of the A6 and hourly rail services to Loughborough, Nottingham and Leicester from stations at Barrow upon Soar and Sileby. Part of Sustrans National Route 6 follows the route of the old A6 between Loughborough and Birstall.

The corridor is however already congested. Congestion is likely to remain. M1 improvements might increase travel demand

- 8.123 Apart from anticipated traffic growth there is much pre-existing congestion in the area, primarily caused by journey-to-work movements between Loughborough and Leicester. Some level of congestion will prevail in the future based on a presumption that providing significant extra highway capacity for car journeys in the area will not be defensible on policy grounds. There appears to be significant scope to increase the share of trips by cycling and public transport. The Borough Council is undertaking a feasibility study into the potential for greater use of the Great Central railway corridor between the outer edges of Leicester and Loughborough.

- 8.124 There is however awareness that long-term improvements to the M1 could significantly increase travel demand and journey distances in the area. This heightens the importance of optimising the development of settlement at Ashton Green, such that it will be a major source of the city's labour force, rather than locations further away.

Birstall Park and Ride could be influential, but might have unhelpful consequences

- 8.125 The proposed Birstall Park and Ride could be influential, though it may encourage additional traffic to use the A46. This will also be compounded by heavy flows of traffic to and from junction 22 of the M1. This could be worsened if the capacity of M1 is increased as part of a macro-approach to travel demand.

Ashton Green will be a major extension to the north west of the City, which could make congestion worse unless the travel impacts are mitigated

- 8.126 Ashton Green is targeted for 3,500 dwellings with the aim "to create a new settlement that is sustainable". While it is intended that development will be phased over 15 to 20

years, there is potentially a major impact on travel patterns in the area, and the settlement requires highly sustainable travel credentials. The intention is to achieve this with a higher density of development, a connected street network with clear and direct links particularly for pedestrians and cyclists, a range and mix of uses (shops, community facilities, and employment) and good accessibility to public transport. It is absolutely crucial for transport in the area that Ashton Green is as self-contained as possible.

Birstall Park and Ride is part of a corridor solution, but an optimum location to maximise its potential and use must be decided

- 8.127 Part of the solution to Ashton Green problems may lie with the proposed Birstall Park and Ride site. There is some debate about where this should be located. It could be a significant public transport focal point if in-bound journey benefits can be provided in and around the A6 corridor. A Quality Bus Corridor would provide these benefits, particularly where the A6 reaches the city centre, with the present-day congestion around St Margaret's Way. Great care will have to be taken with where the park and ride site is located. It could encourage flows of traffic from M1 along the A46 and also down the A6 from Loughborough. Poor location could actually lead to an increase in car mileage and local congestion, together with a reduction in longer distance public transport use.

Transport infrastructure issues in the Thurmaston/ Syston corridor

- 8.128 Considerable amounts of congestion are experienced at peak times in this area. Traffic emanates from all directions, though principally from Syston and Thurmaston and areas further east in the county. Traffic problems in the area are exacerbated by the presence of superstores in Thurmaston. One of the key junctions is the A46/A607 Hobbyhorse junction; An improvement scheme in 2005/ 06 significantly improved the capacity of this junction removing the need for grade separation at least in the medium term.

The potential SUE near Hamilton benefits from a range of services nearby that may help sustainable transport objectives

- 8.129 It has been proposed at the draft RSS stage that a Sustainable Urban Extension (SUE) should be implemented in the area. This Charnwood SUE would have around 5,000 dwellings, possibly adjacent to Hamilton in the northeast of the city. This would be a contiguous extension to the Leicester urban area, with much of the traffic flowing to and from Leicester. There is a range of nearby facilities, such as employment, shopping, schools, in Syston, Thurmaston and Hamilton, with opportunities to provide good linkages to these by walking, cycling and public transport.
- 8.130 There are high quality and frequent weekday daytime bus services between East Goscote and Leicester. Syston has rail services to Leicester, Nottingham and Loughborough. Enhancement of these facilities should also attract existing trips, helping to address concerns about the current traffic situation.
- 8.131 The potential for rail based park and ride is being considered to serve an SUE at Thurmaston/ Hamilton.

There are two critical transport requirements to the successful delivery of the Charnwood SUE

- 8.132 Further work is being undertaken to identify a package of transport measures that could significantly reduce the impact of an SUE at Thurmaston/ Hamilton in a sustainable manner. These measures would need to address pressure points on the road network. Two key components are likely to be the need for: a) a link towards Syston to facilitate local trips; and b) a dedicated public transport link directly to the city centre.
- 8.133 A dedicated bus corridor directly into the city could be very effective in meeting the transport needs of the community, provided that sufficient infrastructure is implemented. It will require either further improvements on the A607 route (which is already identified in the Central Leicestershire LTP) or improvements to Catherine Street, giving the most direct route to the city centre. This would require the restricted road layout at the Midland Main Line railway bridge to be improved. If neither of these can be delivered another route would need to be considered, possibly via Victoria Road East Extension. The proposed Quality Bus Corridor on the A607 would provide journey time benefits on Melton Road and Belgrave Road that are pivotal to achieving journey time benefits in the corridor.
- 8.134 Provided that a direct bus corridor can be provided between the city and the proposed SUE, together with the other mitigation measures in place, it is reasonable to assume that the impacts of the SUE would generally be modest. The proposed infrastructure additions are numerous but individually small in extent. The intention is to “wire in” these areas to the existing network and to provide enhancements where necessary. Enhancement of local employment, education and retail facilities is essential.

Issues in the A6 Harborough corridor

The A6 Harborough corridor is another prominent conduit for movement

- 8.135 The A6 is another prominent corridor for travel demand to and from Leicester. There is severe traffic congestion on parts of this road into Leicester. This incorporates movements both locally from Oadby and Wigston into Leicester and to a lesser extent over a longer distance from Market Harborough. Movements tend to be strongly on a north-south axis, due to a largely undeveloped eastern side.

The District Council is keen to improve journeys on the A6 and a shift from Road to Rail could help

- 8.136 Harborough District Council is keen to see improvements in this corridor. With a significant journey-to-work movement into Leicester the A6 is a key focus. Improvements in the rail service could be significant in achieving modal change. Between 2004 and 2007 the number of passengers using Market Harborough station has grown at twice the rate of Leicester station (7.5% per annum against 3.6%), although this may also represent a significant journey-to-work movement towards London, which may be less of a concern for Leicestershire’s planners.

The Rail sector may focus on the longer distance commuting market and satisfying increased demand for local journeys such as a new station at Kibworth may not be a priority

- 8.137 Other developments in the rail market may not be favourable. Network Rail has plans to straighten out the bends at Market Harborough to permit higher speed running. This may not actually increase the number of trains stopping at the station as the benefits will be oriented towards longer distance travellers. Network Rail started work on a new Route Utilisation Strategy for the Midland Main Line in February 2008, which is expected to be finalised in summer 2009. This is likely to outline proposals to accommodate increased passenger and freight traffic, although it may well focus more on strategic priorities for Leicester than on local priorities for Market Harborough. The District Council's aspiration for a new station at Kibworth, again on the Midland Main Line, seems highly unlikely to be included.

While expanded Park and Ride in Oadby will aid local modal shift, it could also attract unwanted commuter traffic from surrounding areas

- 8.138 A further solution proposed to the congestion problems on the A6 is to implement a permanent park and ride site in Oadby. This has been the subject of some modelling work by Oadby & Wigston Borough Council, as part of a Highways and Public Transport Strategy. Currently a Saturday-only service runs from the Racecourse into Leicester. A service tailored towards journeys-to-work needs to be considered very carefully as traffic could funnel in from surrounding areas into Oadby, as could become a strong trip-attractor in itself. The key aspects are to obtain reliable journey times into Leicester and to pick up a local market, to prevent long distance travel to the park and ride site. This may be a difficult balance to achieve.

Issues in the Hinckley and Blaby corridor

- 8.139 This corridor comprises travel demand to and from Blaby largely within the city, together with longer distance movements to and from Hinckley. The dominant movement is between Leicester and Blaby using the A5460, which is a very busy arterial road. The Fosse Park Shopping Centre is also a very significant traffic attractor. The M69 and the M1 are in this corridor, meeting at junction 21, which is very close to Fosse Park. The M69 is used by traffic between Leicester and Hinckley. Proposals by the Highways Agency to make the M69/ M1 a freeflow junction may encourage even more traffic to use the route. This will also relate to the nature of development in Hinckley and Bosworth, which needs to promote self-containment to limit the extent of out-migration to Leicester.

The M69 link road proposal risks making the Hinckley SUE into a Leicester dormitory

- 8.140 In contrast to Coalville the employment prospects for Hinckley SUE appear to be more positive. There is a risk that a new link to the adjacent M69 would entice Hinckley residents to work in Leicester, thus creating a dormitory settlement in the SUE. The completion of the A47 Earl Shilton Bypass has given rise to the attractiveness of a new junction with the M69. This would also be of advantage to HGVs servicing the rock quarries in Blaby District. Such a link is however at a very preliminary stage of consideration and certainly some years from potential implementation.

The emerging detail of the Hinckley Modelling work should inform future revisions of the infrastructure model

- 8.141 Detail from the modelling in Hinckley should be used to inform a subsequent revision to the infrastructure model and should be used to inform decisions on the level of impact that can be anticipated from growth in the area.

Blaby SUE is in an area where there is already some congestion - effective public transport is essential

- 8.142 The west of Leicester in Blaby SUE, between Leicester Forest East and Enderby, is in an area of some congestion already and while close to the urban area, gives rise to concern that neighbouring settlements may be swamped with traffic. It is difficult to see how the widening of the M1 would benefit this area and much would rest on the effective provision and use of public transport modes.

A new Blaby station is unlikely

- 8.143 A proposal for a new Blaby station was included in the East Midlands Franchise Bid and in LTP2, but its location on the Leicester-Birmingham line is extremely problematic. The key determinant of development on the line will be the Route Utilisation Strategy (RUS). This focuses on longer distance movements and the addition of new stations a short distance from a city centre is distinctly unattractive to train operators. The preferred approach of the County Council is to push for station and interchange improvements, rather than for new stations, which makes better operational sense.

The A47 could provide a more effective public transport connection between the City centre and Blaby if congestion along the route can be mitigated

- 8.144 Greater scrutiny of the west of Leicester SUE in Blaby is necessary as the potential public transport links do not connect directly into Leicester City Centre and a range of options will need to be investigated.
- 8.145 Three schemes have been proposed; to improve north-south communications, an enhanced east-west link into the A563 and an increased capacity of the Meynell's Gorse park-and-ride site. This looks less attractive than the Charnwood SUE as the A563 is an orbital road and runs some distance from the city centre. These do not necessarily provide a direct public transport corridor between the city and the proposed SUE, which must be a concern for the effective operation of the SUE. The A47 would provide a more direct connection to the city centre, though is more heavily congested.

Enderby Park and Ride Scheme is likely to generate substantial local trips

- 8.146 The major development in this corridor in the immediate future is the Enderby Park and Ride scheme. This will be located close to Fosse Park and contain around 1,000 parking spaces. This is a very large site, which when full will generate a substantial number of local trips. However, high quality buses will be provided that will use the A563 to access the A47 Quality Bus Corridor; an imaginative solution that avoids congestion on the A5460.

Issues in the A50 corridor

- 8.147 Traffic movements to and from Coalville are not substantial when compared to other corridors. More significant in this corridor are flows from the M1. Public transport solutions will need to focus on improving operation of the A50 west of the A46.

Coalville SUE: The National Forest line is unlikely to go ahead - so will not benefit the Coalville SUE

- 8.148 The Coalville SUE could be quite attractive in refocusing what is primarily a dormitory settlement, if greater employment prospects could be created. It may also be impacted by the reopening of the National Forest Line between Burton-on-Trent and Leicester. This is currently being evaluated by Scott Wilson, but the expectation is that the line will offer a poor rate of return and that 2020 is the earliest date that reopening could occur, if indeed then.
- 8.149 Given that flows from the M1 are the main influence along this corridor and not the impact of Coalville itself the National Forest Line does not stand much chance of being viable; there simply is not the volume of demand to even consider it.

Park and Ride at Glenfield

- 8.150 A Park and Ride site is proposed at Glenfield. This currently operates on Saturdays, but a Monday-Friday service would need to be assessed carefully to ensure that increased traffic does not result in the outer area of Leicester. Most of the congestion on the A50 is west of the A46; this might be a more effective location for park and ride. The area-wide impacts need to be modelled, together with potential Birstall Park and Ride site.

Issues in the Leicester Outer Area

The area between the outer and inner ring road already generates significant travel demands

- 8.151 This outer area, between the Outer Ring Road and the Inner Ring Road, encompasses a large proportion of the residential and employment activity in Leicester. It is an origin and destination in itself, though this is often overlooked in terms of traffic movements to and from the city centre. Emphasising this principle are the key intervention areas that are proposed of Abbey Meadows, Waterside and the New Business Quarter. Together these will accommodate around 7,000 new dwellings and be a major part of the city's expansion.

The area is busy with congested radials that could hamper access to the City

- 8.152 In general this area is busy and contains many congested radials. The traffic impacts of each of the key intervention areas have been assessed in great detail, though their joint impact on traffic has not been assessed. There must be a concern that these will impose a zone of impermeability on the city, clogging up movements that go through the area. While it is comparatively easy to show that each development can be delivered in transport terms, their collective impact is more relevant. A majority of trips will however be oriented towards city centre, adding to congestion on routes that lead there.

- 8.153 It can be anticipated that if these developments go ahead there will be some urgency in implementing the highways and public transport improvements. These are discussed briefly below in the consideration of each area.

Highway improvements at Sanvey Gate and Northgates are key deliverables for Waterside, but the importance of the Link Road and River Bridge must not be overlooked

- 8.154 Waterside is very close to city centre in area still influenced by the remains of the Great Central Railway route. In many ways this is an ideal location to develop, with potential employment in the city centre very close and accessible by walking trips. The riverside location could also be very attractive, especially with Link Road and River Bridge, and Rally Park to the west of the area. A number of highway improvements are crucial in its development, particularly at Sanvey Gate and Northgates. Attention needs to be paid to the delivery of the Link Road and the River Bridge in the overall amenity of the scheme, though in wider terms they should not be considered as strategic links.

Bus and especially cycling and walking links for Abbey Meadows must be a priority

- 8.155 The Abbey Meadows site is further out from the centre. Again detailed plans are in place for highway links, but cycling and walking links across the River Soar and the Grand Union Canal must be afforded top priority. Dedicated bridges will provide significant journey timesavings for users that will compare favourably with journeys made by car and public transport. This is especially important if the city centre is to be the dominant employment location.

Improvements to Swain Street junction and for Granby Street are essential for the New Business Quarter

- 8.156 The New Business Quarter is heavily linked to station enhancement prospects. It also has an important role in adding a south-east focus to the city centre, as well as being a major area for regeneration. Much of the area is covered by car parking at present and the Inner Ring Road is a prominent barrier between the site and the city centre. Solutions that incorporate enhancements to the railway station and to the Inner Ring Road are essential for the successful development of the New Business Quarter. The critical locations in the transformation are recognised as being junction improvements to Swain Street and improvements to Granby Street.

There is scope for more bus routes and services that link key destinations effectively

- 8.157 While most of the transport links within the area as a whole are focused on radial links, the introduction of a public transport link that cuts across this has been very successful. Introduced in May 2006, the Hospital Hopper service now carries over 10,000 people each week. The service links the General, Royal Infirmary and Glenfield hospitals as well as providing links to the city centre, Charles Frears Campus, Beaumont Centre and Hamilton Centre. This shows that demand exists for orbital movements.

- 8.158 Scope for further services should be explored. This might include a service through the northern side of the city. Furthermore, key locations just outside the city centre need to be tied in with city centre locations, like Leicester University, de Montfort

University, Leicester Royal Infirmary, Railway Station and city centre retail locations. Improvements to public transport operations are the key to improved transport in this area as agglomeration of residential locations increase.

Issues in Leicester City Centre

The City Centre is a hub with wider strategic importance

- 8.159 The city centre is the hub of much of the employment and retail activity of not only Leicester, but Leicestershire too. Travel patterns impact across the county and therefore decisions made about transport in the city centre need to be viewed in a wider context. The structure of this analysis has also shown the importance of areas outside the city centre, suggesting that travel patterns must be optimised in each of these areas. If these can be coordinated at the same time maximum benefits will follow. This section therefore focuses on city centre aspects that impact not only on transport specifically, but also on the likely demand for transport.

Transport is a key part of economic vitality

- 8.160 The economic vitality of the city centre is extremely important for a wide variety of reasons. Transporting people in, into and around the city centre is a key part of this. At present around 50% of people entering the centre in the morning peak are using public transport. While it might not be practicable to set a revised target for modal share, it does illustrate that there is some scope for increased public transport use and that benefits will follow.

Highcross is regionally significant but many travel to it by car

- 8.161 A very significant recent development, in regional terms, is the Highcross shopping centre. This will undoubtedly attract a substantial number of people, though the concern is that many will make use of the car parking to access it. Although the centre has made public transport links prominent on its website, the reality on the ground is very different. While the pedestrianisation of High Street has created a very impressive environment, buses no longer have direct access. This may affect the visibility and patronage of bus services.

An updated City Centre Access Study may be beneficial at this time

- 8.162 The Highcross development may also lead to further changes in shifting the centre of gravity of the city centre. This may increase the detrimental impacts on Belvoir Street and Granby Street, and even move retail activity away from Horsefair and surrounding streets. The City Centre Access Study, especially the stakeholder discussions, provided in-depth conclusions on the structure of the city centre. These are valuable, and will be revised in the light of the changes brought by the Highcross development as part of LTP3. This highlights consideration of whether the city centre needs to be studied in a more holistic way, with access requirements playing a full part in the evaluation, alongside employment, retail and other considerations.

Public transport is fundamental to the City's Infrastructure

- 8.163 Public transport is widely acknowledged as a fundamental part of the city centre's infrastructure to help ensure sustainable transportation, both now and for the future.

Bus operations are concentrated on-street at Charles Street and in the bus stations at Haymarket and at St Margarets. At times these can be perceived as unwelcome environments that do not present a positive image of public transport. This is propagated by the congestion caused by the large number of services that layover in the city centre. Relatively few services pass through the city centre from one side to the other.

The need for mass transit solutions has lead the City Council to the consideration of a tram

- 8.164 Work has already been undertaken by the City Council on the need and possibility of delivering a tram on various routes. As with the other transport schemes listed, the cost benefit ratio of these schemes will need to be determined.
- 8.165 The increased demand on main corridors between the City centre and surrounding areas will require highly attractive and potentially innovative improvements to deliver an attractive public transport system. These could include a possible tram system. In addition to more localised infrastructure measures, it will be essential that the public transport system has sufficient high quality capacity and frequency to accommodate future levels of usage to deliver sustainable developments.
- 8.166 Tram is one method to achieve such objectives and the City has provided an initial estimate for £400m and £350m for line 1 (A6 Wigston corridor) and line 2 (A607 Melton Road corridor) respectively.
- 8.167 Line 1 is proposed as a potential scheme along the A6 corridor towards Harborough and Line 2 is proposed as a potential scheme along the A607 corridor towards Syston. Full justification for such innovative measures will involve an assessment of how and where journey time benefits will be delivered in balance with full scheme appraisal, such as value for money comparisons with more conventional methods such as bus.

The role of car parking needs careful consideration

- 8.168 In the context of sustainable development and maximising the benefit of public transport there is a need to consider the role of car parking very carefully as a demand management tool in the centre to ensure that the investment channelled towards effective public transport do not become eroded by relatively cheap and freely available car parking in the city centre that would encourage inappropriate car trips.
- 8.169 However, before expanded public transport links are put in place, there may be a role for car access to new developments in the city centre and associated parking. Clearly there is a difficult balance to strike here. Further research will be needed.
- 8.170 The availability and price of car parking are key elements in managing car use with the potential for a major influence on the choice of means of transport. Car parking can absorb a large amount of development space, which decreases density and therefore can represent an inefficient use of land. Evidence based on the likely effects of different parking levels for each land use should be considered, including consideration of the relative locations of land uses and their consequent accessibility. Changes should however be based on robust evidence to ensure a sound approach that will

address demand management while being sensitive to local needs and differences in accessibility.

- 8.171 One way to increase public transport use would be to reduce the extent of city centre parking, particularly in the north of the city centre. Proposals for the Intervention Area of St Georges North are addressing this issue.

The role of a flagship bus station

- 8.172 The unattractiveness of the current situation and the anticipated growth of bus services have brought forward the idea of a flagship bus station with around 100 stands. While this would demonstrate a commitment to public transport, there are questions on whether this will fulfil an intended role as an attractive and efficient hub to satisfy all city centre trips, as much will depend on its specific location and how it then coordinates and integrates with service provision.
- 8.173 The City Council's New Bus Termini and Routeing Study may provide some of the answers. Services must be reasonably accessible all around the city centre. Routeings must be logical and not impinge on sensitive streets. Bus only streets can bring planning blight. A circular route through the city centre would be advantageous, though the recent development of the Curve and the Cultural Quarter probably rules out the use of Rutland Street. There would then be a series of radials leading off the centre where most of the bus stops would be concentrated. The St Margaret's Bus Station should remain the location for long distance services, as walking distances are likely to be a less critical determinant in potential use than for more local services.
- 8.174 Consideration could also be given to operating a free city bus in and around the city centre, as run in a number of cities in the UK, to connect popular destinations. In Leicester a route could comprise the railway station, Leicester University, Royal Infirmary, De Montfort University, Highcross, St Margaret's bus station and Humberstone Gate. This would be a high frequency service operated with hopper buses that are attractive and easily manoeuvrable in traffic. As it would cross and re-cross the Inner Ring Road it would help to address a number of the severance and access issues cited in the City Centre Access Study.

Developing transport work within Leicester PUA

- 8.175 Significant schemes are planned (new bus station, park-and-ride sites, tram and "schemes to deal with congestion migration") and local schemes are included in LTP2.
- 8.176 Strategic thinking is required on how to achieve substantial increases in the number and modal share of public transport trips into the city. While within the city limits this will be the responsibility of the city council, the impacts and implications will be felt throughout the county. Delivery of growth by 2026 depends on this.
- 8.177 Rail patronage is growing steadily both short and long distance. Route Utilisation Strategies are under development, but the focus will be more on longer distance capacity issues. A significant upgrade of Leicester's station is programmed, covering both access to the station and the operation of the station itself. Elsewhere the prospects for new stations are less positive; realistically a programme of station and interchange enhancements is all that is achievable in even the medium term.

- 8.178 Stronger demand management measures such as road pricing or parking levies have not been included at this stage but such measures could become realistic options within the timeframe covered by the infrastructure assessment, in particular for Leicester. In the event that such management techniques are identified, justified and taken forward from further study it would be useful for indicative costing for such measures to be covered in the Plan.

Specific impacts of development in Melton need to be determined

- 8.179 While there has not been a need so far for detailed modelling in Melton, the specific impacts of development will need to be determined to confirm the level of any contribution required to support the bypass.

Issues related to delivery

Developing and strengthening partnership arrangements will prove beneficial

- 8.180 Chief amongst delivery considerations is the need to work strategically, and in a coordinated manner, with stakeholders. Decisions by service providers and investors should contribute to the spatial strategy, with consistency and reciprocity between different strategies. Engagement throughout is critical. A strong partnership to coordinate and monitor infrastructure implementation will be valuable and there is a vital role for the development management function.
- 8.181 There is already evidence of close working relationships between the various authorities, which should be maintained and encouraged to cement an integrated approach to a joint infrastructure strategy. The formation of a transport infrastructure delivery steering group together with representatives from the infrastructure providers and developers would enhance the focus for maintaining this relationship and provide the vehicle for mutual understanding, setting targets and objectives and managing priorities. As we discuss in Section 30, there is evidence that the Leadership Board will be able to provide the required co-ordination.
- 8.182 Important components of joint working may include:
- Formal agreements with delivery partners (e.g. in the form of 'statements of commitment') should be secured wherever possible. Such statements are potentially an important evidence source in terms of meeting the LDF test of soundness related to delivery.
 - There is also a need to consider carefully the relationships between the LDF and other strategies at the local and regional level, in terms of strategy co-ordination over infrastructure delivery. A firmer understanding of the inter-operability between places to their mutual advantage could offer a considerable benefit to the process, especially understanding the expanded role that is likely to be necessary for inter-urban and intra-urban public transport to support sustainable travel behaviour.
 - It is clear that partnership working and maximising funding opportunities to deliver transport infrastructure provision must be shared and prioritised by a wide range of agencies. There is a place for a more proactive and joint approach to aligning priorities and seeking commitment from providers. This would link well with the

delivery and implementation role of the various Core Strategies. Where the need for infrastructure improvements is identified there needs to be a clear indication of funding and more detail on priorities, phasing and monitoring to deliver improvements in partnership.

Clear implementation and delivery targets must be set and accord with policy

- 8.183 Implementation and delivery targets must be clear and related to policy considerations. Derivation of targets should be properly explained and should be clear in their relationship to the strategy. There should be a clear evidence base for specific numbers and percentages. The question of implementation and monitoring will require far more rigorous thinking and tougher decision making than has been evident in some instances.
- 8.184 Careful masterplanning of SUEs will be critical and should establish the arrangements to ensure that high quality options for walking, cycling and public transport are available from the onset of development, with access and movement layouts that enable all residents ready access by sustainable modes.

Scheme progress and delivery will need to be monitored

- 8.185 The acid test of the process will rest on whether extra transport investment and proposed schemes will actually be delivered.
- 8.186 Since major transport projects can take many years to bring on stream there is a need to monitor infrastructure delivery through a robust and consistent framework. Continual review is crucial to check that the required infrastructure is being implemented to schedule and ensure outcomes match objectives. The mechanisms will need to include an element of flexibility to enable strategies to be modified if needed. The new planning system provides for components of the LDF to be separated, which should allow each part to be reviewed and amended individually, thereby enabling a more rapid and responsive system.
- 8.187 Appropriate mechanisms should be put in place to monitor whether the necessary infrastructural requirements are being delivered, and to re-consider the prioritisation and subsequent delivery programme as necessary. The Annual Monitoring Report (AMR) offers one area for potential focus to tackle some of these issues, as might be some form of 'infrastructure programme' that should be agreed jointly with delivery partners as far as practicable and considered as a 'living document' to be amended as and when required to keep it current.

It will be critical to justify deliverability and phasing of key sites within a monitoring framework

- 8.188 A full transport infrastructure programme will be an essential part of the evidence base to underpin the LDF process. In view of the advice from PPS12 and The Planning White Paper it will be critical to justify deliverability and phasing of key sites and establish a clear monitoring framework.

Evidence of impact will need to be measurable and link with the LTP

- 8.189 Solid measurable evidence is key and care must be taken to differentiate between deficit and needs created by development. There is a need for close integration of the local development framework with the Local Transport Plan.

More detailed transport assessment will be necessary

- 8.190 It is essential to assess the traffic impact of the potential development locations in more detail once the public consultation feedback has steered the draft core strategies. The County and City Councils have recently commissioned a County model to predict future base traffic flows on all strategic and other relevant routes throughout the County and City. This should provide the foundation for testing various options of strategic development locations to predict the cumulative traffic impact of development on the highway network. The model should also be capable of testing various highway infrastructure improvements and other transport interventions to assess the benefits of options with realistic accuracy.

There is a need to maintain a scheme 'holding list'

- 8.191 It will be important for the framework to maintain a 'holding list' where scheme funding is being developed. This should be reviewed each year as part of the Annual Monitoring Review (AMR) and thereby enable projects and schemes to be tracked for both funding and deliverability. Schemes can then be moved in and out as part of the AMR process.
- 8.192 It would be reasonable to work to a time horizon of 15 years, with projects and schemes identified based on 5-year blocks to coincide with the LTP schedule. In view of the current lifespan of the LTP2, which is scheduled until 2011, it would seem pragmatic to consider working to an initial programme for schemes and priorities to underpin and coordinate with editions of the LTP for the periods 2011-2016, 2016-2021 and 2021-2026.

Evidence should be matched with what will be delivered

- 8.193 Evidence about transport schemes should, be matched with what could actually be delivered, so that an overall strategy is developed that is truly deliverable and not merely aspirational.
- 8.194 There is a need to reflect the reality of existing infrastructure constraints and infrastructure plans when shaping realistic options and be able to demonstrate how the chosen strategies, policies and proposals can be delivered within the timescales.

There are no targets set in terms of desired modal shift. Targets would be helpful

- 8.195 In considering the scope and requirements for public transport schemes there are no targets established in terms of the desired modal shift in favour of passenger transport. While there are a number of generic policies within the Local Transport Plan referring to the promotion of sustainable transport, reducing the need to travel and encouraging alternatives to the car, there is no overall sense of a desired congestion target. Recognition of this may be essential if the deployment of public transport measures is

to be equitably spread among Leicester's corridors, and by extension into the wider Leicestershire area.

Assessment of wider travel impacts is necessary linked with a system to measure and review modal shift targets

- 8.196 The economic regeneration and continued success of Leicestershire will require sufficient people to create the critical mass needed to support and feed the economy. The economically active population will. An assessment of where these people live and work and how and by what mode they will travel will be critical as evidence for monitoring and achieving modal shift targets and ensuring that anticipated infrastructure improvements are delivering anticipated benefits.

We should not ignore the cost of 'Smarter Choices'

- 8.197 While the infrastructure list is mainly focussed on Primary transport infrastructure it is recognised that the promotion of sustainable travel objectives will require financial support to promote other techniques and initiatives that should be aimed at influencing people's travel behaviour towards more sustainable options such as encouraging school, workplace and individualised travel planning. These 'Smarter Choices'⁴² should also seek to improve public transport and marketing services such as travel awareness campaigns, setting up websites for car share schemes, supporting car clubs and encouraging teleworking.

The system should be flexible and able to react to change

- 8.198 Flexibility is necessary to consider "what if" scenarios, e.g. if the strategy is heavily reliant on a specific type of infrastructure or a major site. The plan should address the issues that could arise if the chosen option cannot be delivered when required.

Timing will be important

- 8.199 Transport infrastructure is an important element of the spatial planning process as it provides the framework to connect people and places. Timely delivery of appropriate infrastructure to manage anticipated increased demand is essential to the process. In many cases significant investment is needed early on, especially for public transport, both to prepare and plan the location and to create the supporting infrastructure, even though commercial returns will follow for the investor later.

- 8.200 It is therefore necessary to establish in more detail when particular enabling infrastructure is required, what impacts and requirements it will address (for example the predicted shift from car to public transport to minimise congestion) and the mechanisms required to support and fund it.

There is a need to establish priorities

- 8.201 Evidence about schemes needs to be matched with what could actually be delivered so that the strategy is developed that can be deliverable as a series of priorities. In this context there will be a need to consider the role to be played by schemes that address

⁴² For further information on Smarter Choices see: <http://www.dft.gov.uk/pgr/sustainable/smarterchoices/>

'historic deficit' as it is highly likely that the timing of some schemes to address existing issues will be necessary to enable further development to go ahead.

9 FLOOD DEFENCE

Introduction

- 9.1 In this section, we have looked at whether flood risk is a barrier to growth, and if so, whether major flood defence investment was required in order to accommodate growth at the chosen locations. We believe that this review is particularly valuable given the problems that have arisen with this issue elsewhere in the country at a relatively late stage in the planning process.

The Environment Agency's role

- 9.2 The Environment Agency (EA) has responsibility for prioritising and managing flood defence programmes, providing flood forecasting, flood warning systems and providing flood risk maps. The EA is a statutory consultee for planning purposes⁴³, and has the scope to act as a 'showstopper' if there is a major risk of flooding from, or to, any proposed new development.
- 9.3 The Leicester and Leicestershire Housing Market Area is covered by three separate offices of the EA - the Nottingham office (Midlands) covers the bulk of the HMA, the Welland office (Anglian) covers parts of Harborough and the Litchfield office covers parts of the Hinckley area.
- 9.4 The Environment Agency takes a strategic approach nationally to flood risk management by prioritising strategic flood risk management investigations, investment and resources to areas where flood risk can be most effectively reduced. Regional Flood Defence Committees (RFDCs) carry out the Environment Agency's flood defence functions.

PPS 25 and Strategic Flood Risk Assessments

- 9.5 Planning Policy Statement 25 *Development and Flood Risk* (PPS 25) provides national guidance on development and flood risk, emphasising the need to effectively manage flood risk within the planning system, rather than relying on reactive solutions to flooding. This includes a responsibility for Local Planning Authorities to reduce the flood risk to people and property as a result of new development.
- 9.6 PPS 25 identifies the preparation of Strategic Flood Risk Assessments (SFRA) to be used as a planning tool. It is an assessment of flood risk to inform the spatial planning process. All of the local authorities within the HMA have undertaken (or are in the process of completing) a SFRA and will use this to inform the evidence base in determining the spatial direction of growth.

⁴³ Town and Country Planning (General Development Procedure) (Amendment) (No.2) (England) Order 2006

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

The areas of growth proposed in the HMA do not feature in the current strategic investment flood risk priorities of the EA for flood defence measures

- 9.7 For the most part, growth directions appear to be well chosen with reference to their flood risk. Although there are no showstoppers identified, there are however a number of watercourses that affect some of the proposed directions for growth. Measures will need to be put in place to ensure these are safeguarded and enhanced where the opportunity exists.

The EA has provided some spatial guidance in relation to the proposed growth currently envisaged, but more detailed work is required

- 9.8 The general comments are about safeguarding existing watercourses and incorporating Sustainable Urban Drainage (SUD) measures. Appendix 5 provides a detailed response received from the Midlands EA as to the likely watercourses that might be affected, the flood zone risk level and need for SUDs - note this must be treated with caution as the advice has been kindly provided to RTP as a very general level for this assessment.
- 9.9 More detailed master planning and/ or SPDs will need to take account of the range of SUD schemes appropriate to the specific sites and set aside land measures maybe required to account for these flood risk mitigation measures. There is considerable scope to design the SUD schemes to incorporate into the creation of green infrastructure for the area, using a variety of initiatives including reed beds, marsh areas, permeable developments, green routes and grey water harvesting⁴⁴.

Flood risks on individual sites are generally dealt with privately

- 9.10 We have not looked at the flood requirements of individual sites. These costs are borne privately by the developer. As part of any development agreement, a developer has a responsibility to ensure that the new development
- is properly drained, so ensuring that ground water and rainfall does not cause an unacceptable risk of on-site flood problems;
 - is properly defended from external flood risks to an adequate standard; and
 - does not generate an unacceptable risk flooding on adjacent land as a result of changes to the drainage of their land, beyond what might be considered to be reasonable from a natural (undeveloped) area.
- 9.11 These costs are taken care of generically in our spreadsheet model (which makes assumptions of some generic SUDs costs to arrive at a land price, and a consequent possible developer contribution). We do allow for any individual SUDs schemes that

⁴⁴ Making space 4 Water Strategy

may be required for specific sites. However, these are considered as secondary infrastructure which the developer will ordinarily provide as part of the development.

Infrastructure timing assumptions

- 9.12 Our assessment concentrates on infrastructure provided by the public sector. SUDs schemes are dealt with privately. We have therefore not made any timing assumptions in our spreadsheet model.

What are the priorities?

- 9.13 Whilst most flood issues are dealt with privately, there can be wider issues requiring high levels of public investment. This investment is crucial to a site's development potential. We have therefore ranked this as an "essential" infrastructure priority where necessary.

Issues

The EA says that there are no apparent flood showstoppers for planned growth

- 9.14 All three EA offices serving the HMA have confirmed that there are no show stoppers based on the information available at present on the scale and broad direction of growth proposed (though with the caveats that individual proposals will need to be considered and there could be some local objections to specific sites).

There is a need to understand the cumulative impact of surface water drainage. A strategic overview is required

- 9.15 A key concern of the EA - also echoed by comments received from Severn Trent Water - is the cumulative impact of the scale and distribution of development around Leicester City. The Government's new water strategy, 'Future Water,' sets out a vision for a more effective management of surface water to deal with the dual pressures of climate change and housing development.
- 9.16 A number of different agencies have a role in developing a coordinated approach to this issue of surface water drainage. The EA is responsible for flooding from rivers, the LA's look after some of the local drains and some watercourses, and Severn Trent is responsible for the surface water drainage. In view of this, the EA proposes the need to undertake a Surface Water Strategy. Initial modelling work on some of the urban watercourses which run through Leicester to be initiated by the EA could form the start of joint study.
- 9.17 Issues relating to surface water drainage have also been mentioned by stakeholders for the central areas of Harborough, Hinckley and Loughborough. A considered view of the issues to these areas, could inform how best to deal with SUDs measures 'upstream' to help to mitigate wider drainage and flooding issues in the central areas

10 STRATEGIC GREEN INFRASTRUCTURE

Introduction

- 10.1 This section looks at how growth generates needs for strategic green infrastructure.
- 10.2 We look at the 6Cs Green Infrastructure programmes, which includes National Forest provision.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

The demand for strategic green infrastructure

- 10.3 Local greenspace on the doorstep needs to be complemented with larger scale destination sites for varied leisure and recreation experiences.
- 10.4 Growth will bring increased pressure on existing strategic green infrastructure assets and enhancement works will need to be undertaken in order to prepare these assets for greater visitor numbers. This green infrastructure outside the footprint of new development could also have a role to play in bringing together both existing and new communities through linking settlements and country parks, wildlife reserves, urban greenspaces, heritage sites and waterways.

6Cs Green Infrastructure programmes

- 10.5 Work is currently underway by the County Council to assess the current functionality, needs and opportunities for both new and existing Green Infrastructure across Leicestershire as part of a wider study covering the whole of the 6Cs Growth Point (covering the cities of Leicester, Derby, Nottingham, the whole of Leicestershire, south Derbyshire and south Nottinghamshire). The County is at the early stages of this study and therefore (in common with many other service areas) at this stage do not yet have a robust evidence base from which to derive a developer contribution amount that could be included in a statutory planning document and stand up to appeal.
- 10.6 When this work is complete officers envisage that this information will feed in to and inform future county-wide infrastructure planning work and other Developer Contributions/Community Infrastructure Levy preparation work across the Growth Point as a whole.
- 10.7 From these wider regional projects, County personnel have worked to isolated projects within Leicestershire that can be said to represent “infrastructure for growth” - that is to say, the infrastructure required to cope with planned housing growth. They have provided us with the following list of key strategic programmes (which have a number of discrete projects running under them). These are as follows.
 - The Charnwood Forest
 - Strategic River Corridors
 - The Stepping Stones Project
 - The National Forest. We discuss this below.

- 10.8 Project officers have provided us with costs for GI provision. Separate planning guidance exists for the National Forest, but we have used costs provided to us by the County GI Officers as this covers County level GI in its entirety.⁴⁵
- 10.9 An Action Plan is currently in progress, and will identify a long-term timetable for the delivery of projects, the resources and funding required and long term-management options. The Action Plan will identify
- Infrastructure needs & costs
 - Phasing of GI development & deliverability of projects
 - Target dates for implementation
 - Funding sources & long-term management options
 - Responsibilities for delivery
 - Project leaders and partners.

Total costs

- 10.10 Projects have been costed up to 2013/14 by GI officers. RTP has run funding forward to 2015/16 at the spend rate experienced in 2013/14. This has been entered in the spreadsheet model.

Table 10.1: 6Cs GI Leicestershire project costs

Project Name	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Charnwood Forest	140,000	180,000					
Stepping Stones	251,918	324,325	333,776	344,270	354,807	354,807	354,807
Strategic River Corridors	1,523,000	1,073,000	626,000				
The National Forest	785,000	785,000					
TOTAL	2,699,918	2,362,325	959,776	344,270	354,807	354,807	354,807

Source: RTP/ Leicestershire County Council

How can new infrastructure for growth be funded?

NGP funding has been awarded to 2010/11

- 10.11 NGP funding is a time-limited fund award by DDCLG to support housing growth.

⁴⁵ A National Forest Strategy Developers and Planners' Guide has been published. (<http://www.nationalforest.org/document/information/develop.pdf>) It states that around 20% of a development footprint should be provided to National Forest gain. For every 10ha of new housing, then, this policy suggests that 2ha should be given over to Forest. Planners at North West Leicestershire have suggested that these standards have been broadly achieved in recent years. Ideally, National Forest policy seeks to provide forest settings on the development site or adjacent to the site. The objective of policy is to create attractive environmental setting for new development, and contribute to the development of the Forest overall. In some instances, though, Forest cannot provide onsite, so a commuted sum formula is sought. Current policy suggests that £10,000 per ha be provided to the Forest through developer contributions in these instances. However, these sums are in the process of being updated. In seeking to engage with the growth agenda, National Forest staff have met with Local Authorities. The aspiration is to get to eco-town type development standards, which advocate that 40% of the development area is set aside to greenspace. (DDCLG (2008) Draft Planning Policy Statement: Eco-towns - Consultation) The aspiration is to raise the current up the 20% requirement to 30 to 40% for SUEs, and to raise the cost figure to £20k / ha. Within Leicestershire, developer contributions are only sought from those developments within the National Forest area, which is within North West Leicestershire district.

- 10.12 6Cs Green Infrastructure programmes have received a New Growth Point funding allocation of £1.2m for 2008/9 (which will be rolled over into future years), and £1.59m for 2009/10 and an indicative amount for 2010/11 of £1.8m. (The indicative amount is seen as a reliable indication of what funding will be provided). However, this sum covers the wider 6Cs area and cannot be accurately split out to the Leicestershire HMA only. Given cross border issues, there will never be an accurate Leicestershire-only allocation. County staff have therefore (perfectly reasonably) declined to provide us with one. However, for the purposes of our assessment, we have had to make the very rough assumption that 40% of the total NGP GI funding will apply to Leicestershire programmes.
- 10.13 We therefore assume that NGP funding for the Leicestershire area will be as follows: £1,116k in 2009/10 (including the 08/09 allocation); and £720k for 2010/11.
- 10.14 We then assume that funding will not continue thereafter. NGP funding is available for a longer term period (to 2018) but we have not felt able to a) depend on the future distribution of NGP funding to this theme, and b) to the HMA area generally.

6Cs officers are attempting to raise match funding for these projects

- 10.15 A number of different funding bodies have been approached for these growth infrastructure projects. Much of this funding is unconfirmed. We have assumed that match funding comes forward at roughly the level sought (which appears to be around 40% of the total project cost) until the closure of NGP funding.
- 10.16 We therefore assume that match funding for the NGP spend on GI in the Leicestershire area will be as follows: £1,079k in 2009/10, and £944k in 2010/11.
- 10.17 We assume that the 2010/11 level of match funding will continue after the end of NGP funding in 2010/11. This is somewhat optimistic as match funding very often only comes forward when the larger funding streams (in this case, NGP) have been announced.

What are the priorities?

- 10.18 We have set the priority at level seven for all National Forest and Green Infrastructure programmes listed above. We anticipate that these priorities will be revised outside our brief following work with stakeholders.

Infrastructure timing assumptions

- 10.19 We have assumed that the infrastructure will be needed over the time period shown above in the costs table.

What are the issues?

There is no mainstream funding line for green infrastructure

- 10.20 With the exception of DEFRA National Forest funding mentioned below, investment of this sort is normally considered to be within the remit of Local Authorities but there are no dedicated mainstream sources of funding to support any investment. There are

some small and specialised sources of funds for specific and narrowly defined projects, and some lottery funding, but it is difficult to use these as a platform for strategic investment. It is not practical to assume that the Authorities will be able to contribute significantly to capital expenditure beyond what might be expected by way of creating and maintaining funding amenities for existing populations.

There is a funding deficit for strategic GI in Leicestershire

- 10.21 Using the assumptions laid out above, there appears to be a funding deficit for strategic GI in Leicestershire, both now and going forward.
- 10.22 We have assumed that the costs and funding situation in 2015/16 runs to the end date of our assessment in 2026.

Table 10.2: Funding for strategic GI in Leicestershire

Project Name	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Charnwood Forest	140,000	180,000					
Stepping Stones	251,918	324,325	333,776	344,270	354,807	354,807	354,807
Strategic River Corridors	1,523,000	1,073,000	626,000	-	-	-	-
The National Forest	785,000	785,000	-	-	-	-	-
TOTAL	2,699,918	2,362,325	959,776	344,270	354,807	354,807	354,807
NGP funding	1,116,000	720,000	-	-	-	-	-
match funding	1,079,967	944,930	383,910	137,708	141,923	141,923	141,923
TOTAL	2,195,967	1,664,930	383,910	137,708	141,923	141,923	141,923
Funding deficit/ surplus	- 503,951	- 697,395	- 575,866	- 206,562	- 212,884	- 212,884	- 212,884

Source: RTP / Leicestershire County Council

11 PUBLIC SPACE, PARKS, SPORT AND LEISURE

Introduction

- 11.1 Open spaces, public space, parks, sport and recreation all underpin people's quality of life. In this section we examine the needs of growth.

The definitions we are using

- 11.2 In PPG17, open space is defined as “all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity”⁴⁶. This includes parks, green corridors, outdoor sports facilities, allotments, community gardens, cemeteries, civic spaces, including civic and market squares, and other hard surfaced areas designed for pedestrians. Also, this includes amenity greenspace (most commonly, but not exclusively in housing areas) -and informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens.
- 11.3 Sport and recreation is not formally defined for the purposes of PPG17. However, for our purposes in this plan, we have followed PPG17 guidance the definition of this category, including facilities for sport and recreation, including swimming pools, indoor sports halls and leisure centres, and so on.

Our scope

- 11.4 In this section, we have covered parks, playgrounds, playing fields, leisure centres and allotments. We have dealt with strategic Green Infrastructure in a separate chapter.
- 11.5 In this plan, we have not covered private, voluntary and specialist sports provision including for instance indoor and outdoor tennis clubs, stadia, and golf courses. Nor have we covered cemeteries. This is because there is a typically a very limited number of cases when significant investment in cemeteries are needed. We have therefore treated these requirements and costs as de minimis (significant investment in cemeteries is usually due to high land costs).⁴⁷

⁴⁶ Ibid Annex para 1

⁴⁷ We are aware that some local authorities' PPG17 assessments have picked up cemetery requirements. This is entirely proper given their local focus and higher level of detail.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Our method in determining requirements and costs

PPG17-compliant assessments of open space have in many cases been completed by districts

- 11.6 In line with this guidance, a number of districts have performed PPG17 compliant assessments of open space and leisure needs. At the time of writing, those that have not are in the process of undertaking this work, and two are near completion.

Open space standards have been stated in a number of different ways, covering different issues

- 11.7 Many of these local authorities' PPG17 assessments contain guideline standards for developer contributions. In line with the locally specific approach advocated by Government, different districts have taken a different approach to this issue.
- Some of these requirements are in stated in cash terms, whilst others are stated per occupant, others per child, and others by the numbers of housing units constructed. Many add accessibility "walktimes" onto the specifications of need.
 - Different policies' categorisation of open space covers different issues - for example, some split out the category of Park space separately, whilst others' categorisations take account of the fact that park space is covered by other standards, therefore avoid double counting by quoting only the 'articulating space' required to link all the other components of a park together.
- 11.8 There is nothing wrong with these approaches, but these types of problems mean that the different standards used are difficult to compare across the county. Getting a consistent picture of stated green space requirements around the county is therefore a very complex business.

The PPG17 assessments have often incorporated historic deficits. But this assessment is about the infrastructure needs of new growth, and seeks to avoid the inclusion of historic deficits

- 11.9 The issue of historic deficits also needs dealing with explicitly here. The districts' PPG17 assessment can incorporate these historic deficit requirements. PPG17 is the only piece of planning guidance that suggests that developer contributions should be used towards remedying historic deficits, and states that "development of open space, sports or recreational facilities may provide an opportunity for local authorities to remedy deficiencies in provision...planning conditions or obligations may be used to secure part of the development site for the type of open space or sports and recreational facility that is in deficit."⁴⁸
- 11.10 As we have pointed out above, though, this assessment works within the framework established by CIL and S106 guidance. It therefore seeks to identify the infrastructure

⁴⁸ Ibid para 12

needs of housing and jobs growth. It does not seek to identify a historic deficit, or to identify developer contributions to plug this historic deficit.

- 11.11 Because of this fact, we have used a different method to estimate the infrastructure required of growth.

We have taken a different approach. We have reviewed local space standards, and set these against a broader review of standards elsewhere

- 11.12 We have therefore reviewed local requirements in each of the districts, and looked the issues covered by each of the standards. We set these assumptions against a broader review of open space standards. This work looks at a broad range of best practice sources. We have attempted to make these different standards more tractable by converting them to a uniform rate per thousand dwellings. We have used various assumptions to do this.⁴⁹ This work is found in the Appendix 6 entitled “Typical Design Standards”.

- 11.13 Given the pressure that there will be on developer contributions and mainstream funding, we have tended to discount standards which are obviously aspirational in nature (for example, we noted earlier that National Playing Fields Associations Standards were no longer particularly practical, particularly in urban areas - indeed, as the Leicester City Open Space Study notes, the NPFA standards tend to generate an “unfeasibly large and unsustainable level of provision”).⁵⁰

We have applied these requirements to all housing development in all areas, across sites of all sizes

- 11.14 The PPG17 Annex points out that, as a matter of policy, some authorities do not require either on-site provision or a contribution to off-site provision for developments of less than a set number of houses. The basis for this is that the cost of negotiating and administering a planning agreement is higher than the value of the benefit gained for the local community. However, they should bear in mind that (say) 50 developments, each of one house, have the same aggregate impact on local greenspace and sport and recreation provision as one development of 50 houses.

- 11.15 Our use of uniform standards picks up the requirements of all housing development, including that on smaller sites and in the rural areas. This way we ensure that we are not supplying perverse incentives to develop small schemes, or those on greenfield sites.

⁴⁹ We have assumed that Leicester city has 2.28 people per household over the plan period, and Leicestershire excluding the city has 2.24 people. For our purposes, which cover both Leicester and Leicestershire, we have averaged the two numbers and used 2.26. For some calculations we have had to make assumptions about the number of children per household. In these instances, we have used the midpoint 2016 figure of 490 children aged 0-15 years for Leicester city, and 400 in Leicestershire outside the city.

⁵⁰ Leicester City Open Space Study Part 1 (127)

We have costed these proposed open space standards

- 11.16 Having picked reasonable space standards, we have looked at the open space, parks and leisure requirements that these sites might have, and costed them using a set of stated comparators and assumptions.
- 11.17 We have taken the following approach.
- In this assessment we are concentrating on primary infrastructure. We are assuming that small scale open space provision (such as LAPs, and very small scale “pocket” open space on housing developments) are for the most part incorporated in build costs, and so do not need to be separately dealt with.
 - Land costs are generally not included in these calculations. This is because the price of land will vary widely depending on development location. Those developments able to buy agricultural land for use as (say) a playing field or park will typically pay twice agricultural land values (say £20k/ha); those developments in urban areas using built up land will pay very significantly more. This is particularly relevant for space-hungry requirements, such as playing fields and parks. A more detailed approach would need to be taken on a case-by-case basis, but the lack of land costs here should be borne in mind.
 - New employment development is assumed to make no primary infrastructure green space, park, sport and leisure demands.

Important caveats

- 11.18 The approach taken (that of using uniform planning standards to calculate an open space requirement for growth) does not take into account local deficits or surplus in open space. This is a problem, because a surplus would affect infrastructure requirements - for example, if there was an open space surplus in an area, there would be no requirement for more open space provision.⁵¹ However, as a strategic assessment which possibly moves towards a CIL, this is the best method of calculating open space infrastructure requirements, given that it has the great merit of avoiding issues of historic deficit.
- 11.19 It is the case that standards will have to be applied and interpreted in a flexible way to take into account varying local circumstances. In particular, there may be a need to interpret the standards flexibly in relation to areas of high density redevelopment, where the land may simply not be available to satisfy the quantitative components of the standards.
- 11.20 We have stated above that we have tended to avoid obviously aspirational planning standards. However, it should be noted that there is no reason why these standards should not continue to be used as a basis for individual authorities’ developer contribution strategies where those authorities feel that they are needed. Different

⁵¹ PPG17 Annex states at para 9.6: “Not every proposed development will require additional provision. If the amount and quality of provision within the appropriate distance thresholds of the proposed development site will match or exceed the adopted provision standards when the development is complete, there is no need for either additional provision or the enhancement of any existing provision.”

local authorities place a differing emphasis on open space issues, and this entirely proper.

- 11.21 Clearly, there will still be an important role for LPAs to address local issues locally, by variations to the respective CiLs or section 106 policy documents of the Districts. **This work has been undertaken in order to obtain a high level estimate of infrastructure costs and funding for growth. It in no way supersedes the Districts' existing Open Space policies and developer contributions policies.**

Open space, sport and recreation requirements and costs

- 11.22 The standards we have used in calculating the open space, parks, sport and leisure requirements are shown in below in tabular form. More information is found in the Appendix 6 entitled "Typical Design Standards". We have used industry standard indicators to inform our cost estimates, including the Sport England Toolkit.

Table 11.1 Typical parks and open space requirements and costs (including costs per dwelling)

	Strat GI	Local park	LEAP	NEAP	Playing field	Leisure centre	Allotment	Total
Requirements per 1000 dwellings	See separate section	1.35 ha	0.29 ha	0.29 ha	2.3 ha	0.1 centres	0.56 ha	4.79 ha+ leisure centre
Source costs (£)	See separate section	180,000	40,000	80,000	125,000	5,435,000	100,000	
Source quantity	See separate section	per ha	typically 100m2 - 400m2; say 150m2	typically 1000m2	Per ha. (£80,000 per 6400m2/ 0.64 ha)	assumed 4 court sports hall plus 25m 5-lane pool	per ha	
Notes	See separate section	Excludes land, includes fees			Sports England Kitbag. Includes fees and external works. Excludes land. Costs at 2008 Q2	Sports England Kitbag. Includes fees and external works. Costs at 2008 Q2		
Cost per 1000 dwellings (£)		243,000	773,333	232,000	287,500	543,500	56,000	2,135,333
Cost per single dwelling (£)		243	773	232	288	544	56	2,135

Source: RTP and stated sources

How can new infrastructure be funded?

There is no mainstream funding to support parks, open and play space, playing fields and allotment provision for new growth

- 11.23 In talking to districts, it has become clear that in the great majority of cases there is either negligible or nil capital budget set aside for the acquisition of new open space to cope with the demands of growth. (On the basis of a small sample of one local

authority's accounts, there is an identified shortfall in capital spending to deal with the green space already in place, even before new growth is provided for).⁵²

- 11.24 As with strategic green infrastructure, capital investment of this sort is normally considered to be within the remit of Local Authorities but there are no dedicated mainstream sources of funding to support any investment. There are some small and specialised sources of funds for specific and narrowly defined projects but these cannot sensibly be used as a platform for strategic investment. It is not practical to assume that the Authorities will be able to contribute significantly to capital expenditure beyond what might be expected by way of creating and maintaining funding amenities for existing populations.
- 11.25 We have therefore assumed that the capital costs of provision of these facilities is not available from existing mainstream funding.
- 11.26 Where money is available from developer contributions, we anticipate that these funds would be allocated to a central fund for improvements and enhancement to recreation and community infrastructure. Some of this money can then be used towards match funding lottery and other grant aid.
- 11.27 However, it is not possible to be precise about how successful authorities will be in attracting match funding. We have not assumed that match funding will be available.
- We assume that half of the capital costs of leisure centre provision will be met from mainstream funding*
- 11.28 Local authorities can and do allocate capital funding from their budgets for the creation of new indoor sport and leisure space.
- 11.29 There are also non-local authority funds available for these uses, including Sport England's Free Swimming Capital Modernisation Development Programme (SCMP). This Department for Culture, Media and Sport (DCMS) £60m national capital funding for the modernisation and enhancement of publicly accessible swimming facilities. As we said above, though, these funding pots are difficult to use as a platform for strategic investment.
- 11.30 For the purposes of this assessment, we have assumed that half of the funds required for the provision of leisure centre space will be available from local authorities.
- There is a mainstream funding deficit for open space, leisure and sports*
- 11.31 Our spreadsheet model suggests that there will be a funding deficit for open space, leisure and sports provision. We have used the above assumptions to arrive at this estimate.

⁵² Hinckley and Bosworth Borough Council (undated) "Green Space Strategy" at <http://www.hinckley-bosworth.gov.uk/ppimageupload/Image37015.PDF> p4 identifies a capital Green Space Budget 2005 -with a capital funding shortfall of around 20% of the total required. The plan states that "it is anticipated that further Section 106 money will be available by 2008. Where appropriate this money will be used on identified projects reducing HBBC Capital requirements. Budgets will be profiled more accurately annually to take account of Section 106 receipts. It is impossible to predict what external funding streams may exist from 2008 onwards. Officers will identify potential external funding sources as they arise."

Table 11.2 Funding deficit (including strategic green infrastructure)

	Cost	Mainstream Funding	BALANCE
Strat GI	-£12.2m	£6.7m	-£5.5m
Allotment	-£3.3m	£0.0m	-£3.3m
Cemeteries	£0.0m	£0.0m	£0.0m
LEAP	-£45.1m	£0.0m	-£45.1m
NEAP	-£13.5m	£0.0m	-£13.5m
Local park	-£14.2m	£0.0m	-£14.2m
Playing field	-£16.8m	£0.0m	-£16.8m
Leisure centre	-£31.7m	£15.9m	-£15.9m
Total	-£136.8m	£22.6m	-£114.2m

Source: RTP

What are the priorities?

- 11.32 We have rated all infrastructure in this category as being “desirable”, with 7 points being awarded on our 10 point scale. We anticipate that these priorities will need subsequent review in individual cases.

Infrastructure timing assumptions

- 11.33 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development

Issues

- 11.34 We have not identified any separate delivery issues other than those mentioned above

12 EARLY YEARS, PRIMARY AND SECONDARY EDUCATION

Introduction

- 12.1 This section shows how housing growth affects the requirements, costs and funding of Early Years, Primary and Secondary education in the Leicester and Leicestershire HMA area. These services are delivered within their respective areas by Leicestershire County Council and Leicester City Council. This section seeks to simplify what is a very complicated subject, based on inputs provided by the service providers.

Education is now part of a wider approach to children's services

- 12.2 It is important to consider education as part of a wider Children's Service offer. The Every Child Matters White Paper and the Children Act 2004 focused on providing a joined up approach to Children's services. There are a large number of changes affecting the delivery of children's education service delivery, including greater parental choice, the move to transfer post 16 education funding from Learning and Skills Councils to local authorities in March 2010, the creation of Children's Centres, Sure Start programmes, Extended School provision, the creation of Academies, Voluntary Aided Schools, and delivery and roll out of programmes such as Building Schools for the Future to help rebuild or refurbish existing schools.

'Strategies for Change' will have a major impact on the future provision of education infrastructure

- 12.3 There is a process in place aimed at taking a longer term, joined-up look at primary, secondary and in some instances FE provision, based on forecast population growth, needs of the community and business in order to provide the best service to the community. This is being channelled through the preparation of *Strategies for Change*. This will involve the merging of various funding programmes to create a holistic delivery programme for a modernised school infrastructure.
- 12.4 The City and County education authorities are at different stages in the process of preparing and publishing their Primary and Secondary Strategies for Change. It is important to note that due to sensitivities relating to the children and schools that will be directly affected by these strategies that the authorities cannot share sensitive information with us until they have been through the appropriate consultations and approvals by members, central Government and wider stakeholders. Thus, we provide a simplified outline of the available information that has been made available to us by each authority.
- 12.5 The information used in this infrastructure assessment is likely to be subject to considerable alteration over the next few years as the investment and provision in education is expected to undergo major changes. Therefore it will be essential to keep this information under constant review and updated accordingly.

What are the infrastructure requirements resulting from housing and jobs growth?

Infrastructure requirements are guided by demographic change and shifting demand

- 12.6 The City has experienced growth in population. This growth is expected to continue for the short and medium term.
- 12.7 The County is expected to experience a relative decline in the number of young people even though housing numbers are expected to grow. However, some of the County schools serving the Leicester PUA area are oversubscribed, and attract City residents from over the border into the County. The County also attracts pupils from some other areas, e.g there is a flow into the County of pupils from Swadlincote in Derbyshire to schools in North West Leicestershire.
- 12.8 In the case of the proposed County SUEs, the general assumption agreed with the Districts is that each of the larger SUEs will require primary and secondary schools in order to be self contained and sustainable.⁵³ Outside of the SUEs, the cumulative effect of a number of smaller developments could also result in the need for new schools where there is not sufficient capacity at existing schools to meet this growth. However, for the purpose of this exercise, it is assumed that this growth will be managed by extensions to existing provision where possible, particularly for secondary Schools, which are larger and provide for a wider geographical area.

Overall, there is a current surplus in capacity at the moment, but this will change

- 12.9 The current surplus places at the City are less than 10% of total capacity. Demographics are predicted to absorb this surplus.
- 12.10 The County have undertaken some detailed analysis to inform the emerging Local Development Frameworks of each district and have shared some of this information with us for this assessment. The tables in Appendix 7 show the estimated surplus places by district authority for primary and secondary education.
- 12.11 At a District wide level, taking account of planned housing growth (based on consented planning permissions) Harborough and Oadby and Wigston are currently experiencing a deficit of secondary school places as at July 2008. All the other authorities are experiencing a surplus of under 10%, apart from Melton where there is 21% surplus capacity. It should be noted, that the Melton school structure is currently scheduled for major reorganisation under a Building Schools for the Future Programme; this will take account of future growth and net capacities here should be reduced.
- 12.12 More refined analysis will be required at a local level, to take account of where potential surplus capacity can be used to serve new development (if at all).

Translating growth into requirement for schools infrastructure

⁵³ The exceptions to this is Loughborough - see requirement table for details.

12.13 The starting point in translating school education infrastructure requirements is to understand some of the assumptions used by the County and City in estimating future requirements. Some of these are incorporated in the assumptions table 12-1 below. It is important to note that the detailed service infrastructure planning is much more complicated than this and needs to take account of many other considerations. This will be picked up at the detailed delivery stage. Both authorities have undertaken substantial levels of population change and future forecasting to inform their Primary and Secondary *Strategies for Change*.

Table 12.1 Assumptions for Estimating Requirements, Costs and Funding

Assumptions (2008)	Leicester City	Leicestershire County
School Age	The Primary age for the City is 3+ to 11 years. The Secondary provision at the City is for age 11 to 16 years.	The Primary age for the County is 4+ to 11 years. It currently operates a split secondary provision. High Schools caters for 10 - 13years or 11 - 13 years and Upper Schools cater for ages 14 to 16 years. However, through the BSF programme the County will review the provision in each area across the County, which may result in change.
Primary Yields per dwelling	100 houses (2 bed or more) yields 28.1 primary pupils . 100 flats (2 bed) yields 6.2 pupils per 100 dwellings for primary school. Nothing assumed for 1 bed units.	100 houses (2 bed or more) yields 24 primary pupils . 100 flats (2 bed) yields 4.3 pupils per 100 dwellings for primary school. Nothing assumed for 1 bed units.
Secondary yields per dwelling	100 houses (2 bed or more) yields 20.6 secondary pupils . 100 flats (2 bed) yields 3.7 pupils per 100 dwellings for secondary school. Nothing assumed for 1 bed units.	100 houses (2 bed or more) yields 20 secondary pupils . 100 flats (2 bed) yields 3.2 pupils per 100 dwellings for secondary school. Nothing assumed for 1 bed units.
House to flat percentages	70% houses and 30% flats	80% houses and 20% flats
Primary School size and build cost estimates ⁵⁴	1 form entry = 210 pupils at a build cost of £3m 2 form entry = 420 pupils at build cost of £6m. 3 form entry = 630 pupils at build cost of £9m	Ideal 2 form entry size of 420 primary pupils and minimum of 210 primary pupils Approx £6.1m at 2008 prices for 420 places - costs include design to BREEAM very good or excellent standard, abnormals and external works.
Secondary school size and build cost	Five year groups - 11yr - 16yrs, 30 pupils per year. 900 places is a 6 form entry.	Minimum 600 places (4fe), Ideal size is 900 places (6fe) pupils to 1200 places (8fe).

⁵⁴ Cost of two form and three form entry based on construction costs of recent schools at Queensmead, Braunstone and Taylor primary schools in Leicester City.

estimates	1200 places is an 8 form entry at a build cost of £18m-£20m.	Approx £19M for 720 places - costs include design to BREEAM (very good or excellent standard), abnormals and external works
Cost of Land	Cost of land not included and may have to put on central area site.	Cost of land not included - general assumption is that this will be provided by developer
Cost and funding of creating low carbon schools	Build costs do not take account of this. Seek Carbon Trust funding or similar where possible.	Build costs do not take account of this. LCC recently secured grant funding for low carbon design for Melton, but all new schools in the County would be expected to meet BREAM very good standards or better .
Funding	BSF, Basic Needs Funding, other merged funding, developer contributions and gap funding to be met by City Council	Reliant on developer contributions. BSF programme not confirmed.

Source: RTP, Leicester City Council, Leicestershire County Council

- 12.14 We show how these assumptions translate into schools infrastructure requirements in Table 12.2 (City) and Table 12.3 (County).

Special Needs School requirements

- 12.15 There will be a need to provide a county wide special needs unit to cater for demand arising from the proposed growth. Around 3% of the school population require specialist provision. The majority of pupils with additional needs are included within mainstream provision. In the County a network of area special schools is being developed - this is being paid for through mainstream funding, DCSF grants and the BSF programme. These area special schools support units in mainstream schools for pupils with particular identified needs. As the population grows through the development of SUEs it may be necessary to increase the number of such units, for which developer contributions may be required
- 12.16 Leicester City Council's policy is to try to include special needs provision within mainstream provision. There is a Special Schools Programme as part of the BSF funding and some capacity has already been built into plans for new provision to accommodate the growth in special needs population.

Nursery and Early Years requirements

- 12.17 In Leicestershire and Leicester City, nursery provision (such as playgroups, day nurseries and childminders) is generally provided by the private sector and so is not included in this infrastructure assessment. Early Years provision (at 3+ for the City, and 4+ for the County) is built into new primary school provision and included in the requirements for primary schools. Both the City and County have a number of targeted Sure Start Programmes aimed at the most deprived areas to provide a range of education and health provision to pre - school children in specific areas and often

linked to Children's Centres. However these are for existing residents and have not been included in the infrastructure assessment.

- 12.18 We suggest that consideration should be given in terms of land provision to be set aside as part of the master planning stage of the SUEs for nursery provision within the 'community hub' multi-use centre. However, like retail and dental facilities, this private sector provision is only likely to be delivered when the provider is certain that there will be sufficient demand for the service.

What are the infrastructure delivery costs?

- 12.19 Department for Children Schools and Families (DCSF) set out in Building Bulletin 98 for secondary schools and Building Bulletin 99 for primary schools the minimum requirements for new school buildings in terms of space for pupils and staff and required facilities. A broad indication of costs required to accommodate new growth at current prices is included in Table 12.2 (City) and Table 12.3 (County). Actual costs will depend on the nature of the site, design, provision of community facilities and building cost inflation over the next years.

Funding for the education infrastructure

Schools Capital Allocations Funding

- 12.20 The bulk of schools capital funding is allocated by formula to education authorities by central Government in line with the national spending review. Thus the published information for this study relates to the period from 2008 to 2011. Appendix 8 provides a summary of the Schools Capital Allocations for Leicestershire County and Appendix 9 provide a summary of the Schools Capital Allocations for Leicester City for 2008 - 2011.⁵⁵ This funding is provided to the two authorities in the form of a grant or as supported borrowing.
- 12.21 The main sources of capital funding for the purpose of this study are made up of the Modernisation Funding, Basic Needs Funding, Building Schools for the Future Funding. We summarise each of these in the following paragraphs.

Building Schools for the Future / Secondary School Funding

- 12.22 Building Schools for the Future (BSF) is aimed at providing a new approach to capital investment. It is bringing together significant investment (circa £45bn nationally) in buildings and in Information and Communications Technology (ICT) over the coming years to support educational reform.
- 12.23 The Building Schools for the Future Programme (BSFP) is calculated by reference to forecast school rolls on an area by area basis, only taking into account any new development for which full planning permission has been granted. There is no firm commitment to fund the BSF programme beyond the duration of the current spending

⁵⁵ Source - www.teachernet.gov.uk

review (2011), although the current government has indicated that it is committed to continue the programme to 2020.

- 12.24 BSF funding only covers a proportion of the overall costs of new additional provision.

Leicester City BSF Programme

- 12.25 Leicester City Council has already secured £236m BSF funding for the rebuilding and refurbishing of secondary schools to be delivered during 2006 to 2012. The first stage of this has now been completed and £62m of funding has been spent on four secondary schools.

- 12.26 The City Council is currently finalising its submission to Central Government for the second stage of the BSF Programme due to be submitted at the end of February 2009. The City is seeking additional resources to fund the additional growth in pupils forecast for the City. This Secondary Strategy for Change/ BSF Programme should be in the public domain imminently.

- 12.27 This funding is being used to reassess the most suitable location of new schools to 'tie up' with planned growth emerging through the LDF process. For instance, the relocation and redevelopment of Babington College to the proposed new Ashton Green SUE⁵⁶, will service both existing and planned new growth for the area, similarly provision of a secondary school within a central location is proposed as part of the BSF programme, to serve the planned redevelopment of the Strategic Regeneration Areas in order to accommodate the new central area housing growth.

- 12.28 We have been provided details of the Leicester City BSF funding and this has been included in the Spreadsheet model to fund a substantial element of the secondary education infrastructure requirements. Where there is a shortfall in any BSF funding from Central government to meet the planned growth, the shortfall will need to be made up by the local authority and developer contributions.

Leicestershire BSF Programme

- 12.29 Leicestershire County Council has submitted an expression of interest for early inclusion in the BSF programme. DCSF are due to announce in February 2009 which authorities have been successful. The County intends to review provision on an area by area basis, starting with Loughborough and Quorn, moving to Hinckley and then to North West Leicestershire. However, this is yet to be confirmed by DCSF.

- 12.30 BSF funding could substantially alter the current education funding gap for the County.

Primary Strategy for Change / Primary School Funding

- 12.31 Leicester City Council's Primary Strategy for change was one of fifteen in the country to be declared as 'Excellent' and signed off for approval by Central Government. This provides a vision and investment strategy for the next fifteen years for primary capital programme for Leicester City.⁵⁷

⁵⁶ This will depend on the development market and some changes maybe required to this plan.

⁵⁷ Funding based in this strategy is agreed to 2011, rest to 2023 is indicative.

- 12.32 The Primary Strategy for Change in Leicester (Appendix 10 for indicative funding) is now publically available and lists the indicative funding proposals to achieve the intended delivery which will accommodate new forecast growth and improvements / extensions to existing provision. This takes account of the funding information included in the Schools Capital Allocations for 2008 - 2011 and projects forward to 2022 - 2023, taking account of expected changes in funding, and pooling together a variety of central, local and developer contribution funding.⁵⁸ The section within this funding for new growth is made up of a combination of Basic Needs Capital Funding and Developer Contribution.
- 12.33 The County Council has yet to secure approval for its Primary Strategy for Change, once this is in place, the funding analysis should change and will need to be updated in the infrastructure model.

Basic Needs Funding

- 12.34 Basic Needs Funding (BNF) is a capital allocation for building investment based on forecast population growth using a national formula (adjusted for area differentials). Appendix 8 shows that for the period of 2008 - 2011, there is a BNF allocation of £11,273,042 for Leicestershire and Appendix 9 shows that for the period of 2008 - 2011, there is a BNF allocation of £12,681,520 for Leicester. The City Council has taken account of the BNF in its longer term new schools investment plan (incorporated in Appendix 9).
- 12.35 BNF funding is currently used flexibly by the County to account for growth in pupils in particular areas of the County due to demographic changes arising from the existing housing stock.

Modernisation Funding

- 12.36 This capital funding is available to support building programmes for new or refurbishment of existing provision. The current 2008 - 2011 Capital Allocation includes £6,613,731 for Leicester and £19,660,054 for Leicestershire in this category (see Appendix 8 and 9).
- 12.37 The City Council has used the current allocation of approximately £2m per annum from the Modernisation Funding, and future forecast this funding as a direct and important element of the overall funding contribution toward their Primary Strategy for Change.
- 12.38 The County note that Modernisation Funding should be set against a multi-million backlog of improvements to schools to improve condition and suitability (for instance a backlog of over £54 million in County Primary schools).

Developer contributions

- 12.39 Delivery historically has relied on developer contributions to fund new schools and provide the land for this development. Developer contributions are likely to continue to

⁵⁸ Annex 9 provides the Indicative Funding Proposals contained in the Leicester City Primary Strategy for Change June 2008

remain a source of funding but will be competing in a climate for limited resources to fund other social and community provision.

- 12.40 In the case of funding information provided by the County Council, the spreadsheet model currently assumes that there will be no other mainstream funding available to cope with growth. This means that there is a funding gap present which the County hopes will be filled by developer contributions. The situation for the County could change once their submission for BSF is confirmed.
- 12.41 The City Council, has already secured a substantial element of BSF, thus reducing their reliance on developer contributions and creating greater 'predictability' to the infrastructure delivery and refurbishment process.

What are the priorities?

- 12.42 We have rated all primary and secondary education service needs as 10 on our sliding scale suggesting this is an essential requirement. Though the phasing and delivery could vary depending on surplus capacity in the area and build out rates to make it operationally viable.

Issues

A changing situation will affect the infrastructure model

- 12.43 The funding information could change as announcements on mainstream sources such as Building Schools for the Future and Strategies for Change are made. The spreadsheet model will need to be regularly reviewed to reflect such changes.

Cross border issues

- 12.44 Many parents in Leicester City choose to send their children to County schools, which can have significant impact for educational arrangements and movement / transportation. One such example is the popularity of Beauchamp College in Oadby which is close to the City border.
- 12.45 Similarly a detailed analysis of local situations will be necessary to assess existing capacities at the time new development is proposed and this could again affect costs and funding.

The shape and type of education provision is going through major changes

- 12.46 The shape of future provision and age ranges is likely to be substantially different to the system that has operated to date. There is an increasing move to merge secondary and post 16 provision in some of the new schools and have through schools from Age 11 to 19yrs. Indeed some stakeholders have sought for large SUEs to have 0 - 19yrs provision. Thus the spreadsheet model will need to be regularly reviewed to reflect this change

Table 12.2 Education Growth Requirements, Cost and Funding for Leicester City

Local authority	Growth location	Growth requirements ⁵⁹	Cost	Funding	Notes
Leicester	Ashton Green SUE 3,500	One new primary of 420 places, expansion of existing primary schools and One new secondary School for 1200 pupils.	£18m for secondary £6m for primary	BSF to pay for secondary school. primary school - seeking developer contributions and other sources for gap funding.	BSF funding programme includes the relocation and redevelopment of Babington Secondary School to Ashton Green, which will cater for existing and planned growth. This is scheduled for completion and opening by 2014. However, depending on the medium term market conditions in the property market, the proposal to relocate Babington may have to reconsider. If this is the case, Babington may stay where it is and another secondary school will need to be provided for Ashton Green at a later stage.
City	Waterside and Rest of City 6,800	Primary provision will initially be met by existing schools. Two school likely over longer term. Looking to secure a new secondary school for 1200 places for 2014 to server wider central area.	£18m for secondary £12m for two primary schools -	BSF to pay for secondary school. Expectation is developer contribution will fund primary school requirements..	Looking at present to acquire a site for a secondary school in a central location. This is currently scheduled for 2014 opening. As the central sites develop in the medium to longer term , two or three additional new primary space may be required depending on type and scale of development
City	Abbey Meadows 3000	Likely to require 2 primary school. secondary school provision to be met from expansion of existing and central area school	£12m for two primary schools of 420 pupils. £18 m Secondary School for 1,200 pupils	BSF to fund central area secondary school. Primary cost to be met by developer contributions	
City	St Georges	Expansion of existing provision and	£6m for one	Developer contributions to	This development could be served either by the Central area schools

⁵⁹ All land requirements for providing education infrastructure are assumed to be met by developer for this study except for the central area secondary school. The City requirements have been provided by the City Council based on current knowledge of planning to inform the Primary and Secondary Strategies for Change.

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Local authority	Growth location	Growth requirements ⁵⁹	Cost	Funding	Notes
	1,700	one new primary school. Secondary to be met by Central provision.	primary school	fund primary school.	or an expansion of the St Matthews facility which is planned with some surplus capacity; but enough to cater for all the likely requirement from this development..
City	Hamilton 700	Expansion of existing primary school. Replacement of existing secondary school planned as part of the BSF.	£18 m for secondary school	Developer contributions to fund primary extension. BSF to fund secondary provision	

Table 12.3 Education Growth Requirements, Costs and Funding for Leicestershire County

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
Charnwood	Loughborough SUE	3500	1 x 420 & 1x 315 place primary schools. Secondary requirement will be met by expansion of existing nearby provision.	£10,900,000	Developer contribution for build cost and land.	
				£11,200,000		
Charnwood	East of Thurmaston, North of Hamilton SUE	5000	2 x 420 place and one 210 place primary schools. One Secondary school for 720 pupils. We may also require a contribution to fund expansion of Post 16 facilities at nearby schools for Post 16.	£15,700,000	Developer contribution for build cost and land.	An alternative might be to extend existing school provision in surrounding schools it is possible given land constraints.
				£22,400,000		
Charnwood	Other Charnwood	1500	Spread over a number areas in Charnwood. Analysis suggests gains of around 27 primary and 24 secondary pupils across 11 areas but unfortunately there is not enough detail to be more specific.	£3,600,000.00	Developer contribution for build cost.	Total suggested pupil gains are 301 primary and 264 secondary pupils. However these areas are spread over 11 different locations in Charnwood suggesting average gains in each area of 27 primary and 24 secondary pupils. This implies extending existing school capacity rather than building new schools.
				£4,800,000		
Melton	Melton Town Centre	2000	401 primary pupil gains and 352 secondary pupil gains	£6,100,000	Developer contribution for build	Some gains have already allowed for in the current Melton secondary review although there is a possibility of some

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
				£6,400,000	cost and land.	additional capacity being needed. For primary schools the gains suggest 1x 420 place school may be needed.
Melton	Bottesford	100	20 primary pupil gains and 18 secondary pupil gains	£200,000/ £300,000.	Developer contribution for build cost.	Some gains have already allowed for in Melton secondary review although there is a possibility of some additional capacity being needed. For primary schools the gains suggest extensions to existing primary schools.
Melton	Melton Villages	610	122 primary pupil gains and 107 secondary pupil gains but spread over a number of areas	£1,500,000/ £2,000,000	Developer contribution for build cost.	Some gains have already allowed for in Melton secondary review although there is a possibility of some additional capacity being needed. For primary schools the gains suggest extensions to existing primary schools.
Melton	Asfordby	100	20 primary pupil gains and 18 secondary pupil gains	£200,000/ £300,000	Developer contribution for build cost	Some gains have already allowed for in Melton secondary review although there is a possibility of some additional capacity being needed. For primary schools the gains suggest extensions to existing primary schools.
Oadby and Wigston	Oadby	548	Approximate gains of 110 primary places and 96 secondary places. This suggests possible extensions to existing schools.	£1,300,000	Developer contribution for build cost	
				£1,700,000		
Harborough	Market Harborough	2800	562 primary gain suggested and 493 secondary gains. Suggests 1 x 420 place primary and extensions to existing primary to accommodate remaining pupils. At secondary level figures suggest possible extensions to	£7,800,000	Developer contribution for build cost and land.	
				£9,000,000		

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
			new schools rather than new school.			
Harborough	Broughton Astley	600	Suggests 120 primary places and 106 secondary. Suggests extensions to existing schools rather than new schools.	£1,500,000	Developer contribution for build cost and land.	
				£1,900,000		
Harborough	Leicester Principal Urban Area (PUA)	500	Suggests 100 primary places and 88 secondary. Suggests extensions to existing schools rather than new schools	£1,200,000	Developer contribution for build cost.	
				£1,600,000		
Harborough	Remaining rural areas	1300	Spread over a number areas in Harborough. Analysis suggests gains of around 264 primary and 229 secondary pupils across a number of areas but unfortunately there is not enough detail to be more specific. Figures suggest small extensions to a no of primary an secondary schools may be needed.	£3,200,000/ £4,200,000	Developer contribution for build cost.	

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
Harborough	Lutterworth	700	Suggests 140 primary places and 123 secondary. Suggests small primary and extensions to existing secondary schools.	£2,500,000	Developer contribution for build cost and land.	
				£2,200,000		
Blaby	SUE	5000	2 x 420 place and 1 x 210 place primary schools to meet estimated primary gains of 1003 pupils. One Secondary school for 720 pupils for pupils aged 11-16.	£15,700,000	Developer contribution for build cost and land.	Note although LCC are suggesting a 720 place secondary school this is on the margins of viability. LCC have included this because they have been lobbied by the Districts for each SUE to have their own schools. An alternative might be to extend existing school provision in surrounding schools it is possible given land constraints.
				£22,400,000		
Blaby	East Blaby	200	40 primary gains and 35 secondary. Suggest extensions to existing schools.	£500,000	Developer contribution for build cost.	
				£600,000		
Blaby	Countesthorpe	150	30 primary gains and 26 secondary gains. Suggests extensions to existing schools.	£400,000/ £500,000	Developer contribution for build cost.	
Blaby	South Whetstone	250	50 primary gains and 44 secondary gains. Suggests extensions to existing schools	£600,000 / £800,000	Developer contribution for build cost.	

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District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
Blaby	Littlethorpe	300	60 primary gains and 53 secondary gains. Suggests extensions to existing schools	£700,000/ £1,000,000	Developer contribution for build cost.	
Blaby	Stoney Stanton	100	20 primary gains and 18 secondary gains. Suggests extensions to existing schools	£200,000 / £300,000.00	Developer contribution for build cost.	
Blaby	Elmesthorpe	150	30 primary gains and 26 secondary gains. Suggests extensions to existing schools	£400,000/ £500,000	Developer contribution for build cost.	
Hinckley and Bosworth	Hinckley town centre and Burbage	1415	1 x 210 place primary school with an extension to existing primary provision to accommodate the remaining 74 primary gains. Extensions to secondary schools sufficient for 249 more places.	£4,400,000	Developer contribution for build cost and land.	
				£4,500,000		
Hinckley and Bosworth	Barwell and Earl Shilton SUE	4500	2 x 420 place primary schools plus extensions to existing primary provision to accommodate remaining 63 pupils. 792 secondary gains suggests and 800 place including 6th form.	£13,000,000 £20,400,000	Developer contribution for build cost and land.	Note although LCC are suggesting a 792 place secondary school this is on the margins of viability. LCC have included this because we have been lobbied by the Districts for each SUE to have their own schools. An alternative might be to extend existing school provision in surrounding schools it is possible given land constraints.

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District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
Hinckley and Bosworth	Market Bosworth	100	20 additional primary and 18 secondary. Possible extensions to local school.	£200,000./ £300,000	Developer contribution for build cost.	
Hinckley and Bosworth	Newbold Verdon	110	22 additional primary and 19 secondary. Possible extensions to local school.	£200,000/ £300,000	Developer contribution for build cost.	
Hinckley and Bosworth	Groby	110	22 additional primary and 19 secondary. Possible extensions to local school.	£200,000/ £300,000	Developer contribution for build cost.	
Hinckley and Bosworth	Desford	110	22 additional primary and 19 secondary. Possible extensions to local school.	£200,000/ £300,000	Developer contribution for build cost.	
Hinckley and Bosworth	Rural Remainder	510	Estimated 102 primary gains and 90 secondary gains but likely to be spread over multiple schools suggesting small extensions to existing schools	£1,200,000/ £1,600,000	Developer contribution for build cost.	
NW Leics	Coalville SUE	4500	2 x 420 place primary schools plus extensions to existing primary provision to accommodate	£13,000,000	Developer contribution for build cost and land.	Note although LCC are suggesting a 792 place secondary school this is on the margins of viability. LCC have included this because we have been lobbied by the Districts for each

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
			remaining 63 pupils. 792 secondary gains suggests and 800 place including 6th form.	£20,400,000		SUE to have their own schools. An alternative might be to extend existing school provision in surrounding schools it is possible given land constraints.
NW Leics	Coalville	2650	1 x 420 place primary school plus extensions to nearby primary schools for remaining primary pupil gains of 112 pupils. Extensions to nearby secondary schools sufficient to accommodate 466 secondary pupils aged 11-18.	£6,500,000	Developer contribution for build cost and land.	
				£8,500,000		
NW Leics	West Coalville	1050	211 primary gains and 185 secondary gains suggests 1 210 place primary school and extensions to existing secondary provision.	£3,500,000	Developer contribution for build cost and land.	
				£3,400,000		
NW Leics	Asbhy De La Zouch	500	100 primary gains and 88 secondary gains suggesting extensions to existing local schools rather than new schools.	£1,200,000	Developer contribution for build cost.	
				£1,600,000		

District	Growth location	No of Properties	Growth requirements	Cost (Primary First)	Funding	Notes
NW Leics	Castle Donington	500	100 primary gains and 88 secondary gains suggesting extensions to existing local schools rather than new schools.	£1,200,000	Developer contribution for build cost.	
				£1,600,000		
NW Leics	Remaining Rural Areas	500	100 primary gains and 88 secondary gains but likely to be spread over a wide area suggesting possible small extensions to existing schools.	£1,200,000	Developer contribution for build cost.	

13 POST 16 EDUCATION AND FURTHER EDUCATION

Introduction

- 13.1 Provision of post-16 education is largely delivered by Further Education (FE) colleges and by LEAs via schools' 6th forms and 6th form centres.
- 13.2 The Government's current priority is to increase participation rates in education or training for 16-18 year olds, and particularly to reduce the number of young people who are NEET (Not in Employment, Education or Training). Apprenticeships 16-18 are priority for future growth in participation. The current participation rate is 78% and the Government's target is to raise this to 100% of 17 year-olds from 2013 and 100% for 18 year-olds from 2015. In partnership with the LEAs, the Learning and Skills Council (LSC) is funding an extensive programme of capital works to schools and colleges in the HMA to accommodate this.
- 13.3 Demographic projections show a decline in this age group nationally and in the HMA over the period 2011-2026. It is expected that the increase in demand will arise from higher participation rates outweighing the decline in the cohort.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

There are no significant infrastructure requirements arising from housing growth

- 13.4 The driver for new infrastructure in this theme is not housing and jobs growth. Instead, the driver (against a background of falling numbers in the key 16-18 age group) is the Government's target for increased participation
- 13.5 We therefore conclude that there are no significant infrastructure requirements arising from the growth proposals for the HMA.

How can new infrastructure for growth be funded?

Because there are no significant infrastructure requirements arising from housing growth, the question of funding does not arise for this assessment

- 13.6 The LSC has two established capital funding streams providing for growth in post-16 education provision:
- 16-18 Capital Funding provides for growth in numbers in school 6th forms (provision for existing pupils is met by the LEA)
 - FE Capital Funding supports FE College and FE 6th Form College capital build projects.
- 13.7 These are sufficient to provide for the current capital build programme.
- 13.8 A third capital fund has recently been introduced for private providers delivering Work Based Learning provision:

- The Regional Skills Capital development Fund.

13.9 LSC have announced a review of all Post 16 Capital funding stream. The findings are to be announced in March 2009.

13.10 We have assumed nil funding, in line with our assumptions on requirements.

What are the priorities?

13.11 We have scored this as “desirable” (8 points).

Infrastructure timing assumptions

13.12 Given our findings above, the question of infrastructure timing does not arise.

Issues

13.13 There may be a requirement for 16-18 Capital Funding to fund increased 6th form provision at schools facing increased demand from new housing in the SUEs. For example, the County considers that it may also require a contribution to fund expansion of 6th form facilities at nearby schools for an additional 140 6th form pupils.

13.14 The management of Post 16 provision is currently being reorganised in response to the Government’s proposed changes in the leaving age in 2013 and 2015. Given that there are still a number of areas of uncertainty around this it should be borne in mind that these conclusions may change in future as it becomes clearer how Post 16 Provision is to be planned and managed.

14 CULTURAL AND COMMUNITY FACILITIES

Introduction

- 14.1 In this section we consider the infrastructure requirements of growth for the categories of cultural facilities and community centres. We deal with each of these categories in turn.

Defining cultural facilities

- 14.2 Cultural facilities consists of a wide range of facilities and services including museums, art galleries, creative space, art and sculpture, theatres / performing arts space, heritage exploration, etc. The list is wide ranging, depending on local assets and community aspirations. Such facilities can have a special role in helping with 'Place Shaping' and increasingly in creating and developing the creative business sector economy.

Defining community facilities

- 14.3 It is clear from our consultation with all HMA local authority representatives involved in preparing the Core Strategies for LDFs that the definition of community infrastructure is very wide. It includes a wide range of facilities including shops, post office, schools, meeting places, open space and green corridors, burial grounds, libraries, art galleries, museums, doctor's and dentist's surgeries, places of worship, community centres, youth provision, heritage and arts facilities. The Use Class Order for non residential institutions (D1) includes such uses as libraries, schools, health centres, places of worship and so on.
- 14.4 Our definition is considerably narrower. Here, we define "community facilities" as community centres.
- 14.5 We have dealt with many of the facilities listed above (such as schools, youth provision, and doctors' surgeries) separately in this report. Other facilities such as shops, pubs, dentists, places of worship and post offices, are outside our remit given that they are privately provided.⁶⁰ These are a matter of spatial planning in terms of identifying policies and broad allocations in planning documents.

Cultural facilities

⁶⁰ In some parts of Leicester and Leicestershire there is a requirement emerging through the LDF consultation process for the provision of places of worship. Standards of provision do exist for future requirements (e.g. land provision for places of worship from the Aldershot Urban Extension Supplementary Planning Guidance, which suggests an amount of 0.1 hectares required for 400 new dwellings). However, it is very difficult to work out the actual requirements, given the number of different faiths involved in different areas, and the fact that surplus provision will already exist in some areas. Based on our stakeholder consultations, it was clear that it would be very difficult for a local authority to be seen to be planning for facilities for some faiths in a new SUE, and whereas some groups are willing to share facilities as part of a joint use facility, others are not. If free land was required as part of the development process then it is possible that faith groups would compete for it. Given that the funding of this facility will be met privately (Government is barred from providing funding), we do not include cost and funding for places of worship in the spreadsheet model Infrastructure Model

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Cultural facility requirements vary considerably

14.6 The infrastructure requirements for cultural facilities vary considerably depending on the type of facility and location. There is not a simple standard requirement. Based on our interviews and desk reviews, some of the local authorities are hoping to create multi use art facilities as part of market town master plans, others are looking to create cultural facilities as part of creating a sense of place for the area. The following are a list of some of the emerging cultural projects:

- A multi use arts facility in Loughborough town centre;
- A Creative Enterprise Centre in Hinckley town centre;
- A performing space as part of a multi use library facility in Melton; and
- A museum and exhibition facility at Bouskell Park in Blaby District.
- There are also hopes to build on the current Snibston Museum offer in Coalville, and develop a 'Mining Lives' project linked to growth and regeneration of the area.
- Leicester City is in the process of exploring the development of the Cathedral Quarter for various possible cultural facilities, having recently invested in the development of a major performance centre at the Curve in the Cultural Quarter.

In many cases costs are not yet clear. We have assumed nil costs for now. This should be updated when new information is available

14.7 Most of the cultural facilities listed above are at too early a stage to have any costs included in this assessment, apart from the Hinckley Creative Enterprise Centre⁶¹ and the Mining Lives project linked to Snibston in Coalville.⁶² As costs for cultural projects vary considerably depending on the type of facilities, it is not possible to estimate a cost at this stage.

14.8 In the absence of information, we think it safest to assume nil cost for now. This information can be refined in the spreadsheet model at a later stage, as and when this information is available⁶³.

How can new infrastructure for growth be funded?

Funding for cultural facilities is dependent on grant sources

14.9 Capital funding for cultural facilities tends to be predominantly from grant sources such as East Midlands Tourism, emda, Leicester Shire Economic Partnership, Heritage Lottery, Arts Council, Charities, and mainstream local authority funding.

14.10 There has been little evidence of developer contributions supporting major cultural facilities in the past. However, local authorities have secured some funding for percent

⁶¹ Cost estimated at £6.4m and funding of £6.4m committed from the HBBC capital programme and external funding sources.

⁶² Cost estimated at £5.5m and funding sought from emda, Heritage Lottery and the County Council.

⁶³ The known information relating to the Creative workspace and Mining Lives has been incorporated in the spreadsheet model.

for art schemes. An example of this is the Hallam Fields site in Charnwood. Charnwood Borough Council secured a contribution of £45K, based on negotiations which used 1% cost of the project as a starting point for the negotiations (but secured an amount that was less than 1%). This funding was then used to lever in additional funding from the Arts Council and Arts for Business. The main use of the funding was to undertake a range of community consultations that will form the basis for more permanent art installations on the site to create a sense of place and community cohesion⁶⁴.

We have assumed nil funding. This should be updated when new information is available

- 14.11 As the funding can vary considerably depending on the type of provision, and cost too is unknown at this stage, we have not included any estimation in the funding model. This information can be refined in the spreadsheet model at a later stage, as and when this information is available.

What are the priorities for cultural facilities?

- 14.12 We have rated all generic cultural facilities as 5. This equates to “desirable / tentative” on our sliding scale.

Community Centres

- 14.13 A community centre is a meeting place used by members of a community for social, cultural, or recreational activities.

- 14.14 In our consultations with stakeholders, there was a general consensus on the need to provide community centres / neighbourhood centres as part of the infrastructure requirements. Consultees stated that community centres or village halls are particularly important in rural communities that are experiencing a decline in rural services such as closure of schools, post office, village shops, churches etc. Communities as small as a thousand residents in rural areas have secured the development of community centres, e.g. Billsdon, however, this is based on having a strong community present that is then willing and able to take on the running of the centre.⁶⁵

Stakeholders are nervous of ongoing maintenance and other revenue costs arising from community centre provision

- 14.15 Feedback from stakeholders raised concerns about identifying agencies / communities willing to take on the management and funding. Indeed, Leicester City Council is currently reviewing its neighbourhood centres with a view to reduce the maintenance liability.

⁶⁴ Steve Lewis Roberts - Charnwood Borough Council

⁶⁵ Leicestershire and Rutland Rural Community Council interview feedback

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

- 14.16 The requirement for community centres tends to depend on local needs, often based on surveys of communities residing in an area, particularly in rural areas. We have used our own information taken from experience elsewhere and substantiated this with information from the Leicestershire and Rutland Rural Community Council and Sport England standards to ensure these recommendations are appropriate. Requirements can vary from 0.2sq m to 1 sq m per housing unit. For this assessment, we have adopted a requirement of 0.4sqm per household unit as a guide.
- 14.17 Typical build costs range from between £1,200sq m to £1,800 sq m. Again based on our ready reckoner, we propose a cost figure of £1,500 per m². Thus a centre for a community of 3000 dwelling units, would result in a requirement of approximately 1200 m² and would be approximately £1.8m (or alternatively this equates to a contribution of approximately £600 per dwelling).
- 14.18 There was considerable support from stakeholders towards the development of joint multi purpose centres that provide for a range of social, health, learning, and sports facilities for the sustainable urban extensions. The actual configuration, cost and management of these will vary considerably in each area.

How can new infrastructure for growth be funded?

Funding for community centres has historically come from grant funding

- 14.19 Most community centres developments are dependent on external funding in the form of grants or developer contributions to support the capital cost of providing the infrastructure and for major extensions / repairs.
- 14.20 Grants used include Lottery, Charities, Neighbourhood Renewal Programmes, local authority grants administered via the Rural Community Councils and Landfill Grants. The County Council's mainstream funding for community centres has fallen from £150,000 to £42,000 for 2008/09 (administered via the Rural Community Council). This is not likely to increase in the foreseeable future. Lottery funding too has been reduced as funding is being diverted to pay for the Olympics.

Most authorities interviewed do not currently seek developer contributions for community centres

- 14.21 Authorities' negotiations generally do not go further than that for education, libraries, open space and play areas. Harborough District council has secured developer contributions based on a 'standard charge' on new developments to fund 'community infrastructure', the actual infrastructure required is then negotiated with the local community.
- 14.22 Thus we assume County wide funding from mainstream sources of £42,000 for the current period, and nothing for new community centres from Leicester City Council. Other sources of capital funding are unknown as they are mainly based on grants.

What are the priorities?

- 14.23 We have rated all generic community facilities as 6. This equates to “desirable / tentative” on our sliding scale. This must be treated with caution, as in some easily accessible areas there maybe a range of community facilities for residents to access fairly easily, but in some remote rural areas, the importance of having a community centre can be very important due to the lack of / difficult to access other community facilities.

Infrastructure timing assumptions

- 14.24 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development

Issues

- 14.25 There are no obvious delivery issues other than the issue of ongoing maintenance and other revenue costs arising from community centre provision mentioned above.

15 LIBRARIES

Introduction

- 15.1 This section deals with requirements for libraries arising from housing growth.
- 15.2 Modern use of libraries is much broader than traditional reference and lending libraries for books. Many are now used as community centres with free access to the internet and provision of meeting space. Many of the recently developed facilities function as “community hub” multi-use centres. The breadth of use now means they are hubs of community activity.

What are the infrastructure requirements resulting from housing growth? What are the costs?

- 15.3 The provision of a public library service is a statutory duty under the Public Libraries and Museums Act 1964 to provide a service to everyone who lives, works or studies in an area. The definition of what this requirement should translate to in terms of service delivery is to provide a ‘comprehensive and effective service’ - exactly what this means in practice is vague, though there are service level agreement targets based on satisfaction surveys and useage.
- 15.4 Library provision for the City is provided by Leicester City Council, whilst the rest of the County is serviced by Leicestershire County Council.

We have used national guideline standards to assess requirements

- 15.5 For this assessment, we have used a national standard requirement based on published information by the Museums and Library Archives (MLA) - ‘A Standard Charge Approach 2008.’⁶⁶ The MLA figures have been assessed to ensure they bear a good fit to the local requirements by the City and County service providers. The requirement formula is shown in the box below:

A space standard requirement of 30 square metres per 1,000 population as a benchmark for local authorities. This space standard will be used for new infrastructure provision (as opposed to expansion of existing provision or a mobile outreach service).

- 15.6 Table 15.1 onwards below show the library infrastructure requirements based on the above standards and information provided by the local service providers.
- 15.7 The requirements section is based on the current best guess estimate of whether a new building will be required or whether it will involve either an extension of existing service or mobile outreach.
- 15.8 The detailed requirements are not yet known, however, we have used MLA standards and discussions with service providers to guide this input. The eventual configurations

⁶⁷ www.mla.gov.uk/website/publications

of library services may be very different to those used as a basis in the MLA guidance. The MLA guidance is therefore only used as a cost proxy.

Detailed design and costing inputs will be required at a later stage

- 15.9 The detailed design, components, and form of the final library provision will be developed as part of the detailed design and master planning of sustainable urban extensions, and also as part of the a City wide property review that is currently taking place in the case of City provision. The master planning stage will need to consider the possibility of creating joint service centres, and their phasing and delivery implications. Location factors in getting the most of library usage and through put will be important considerations for the master planning stage. Experience has shown that libraries that are a part of other joint service centres or close to major retail outlets (e.g. at Hamilton) can secure better use.
- 15.10 Library requirements will vary depending on location, size and existing provision elsewhere. Our consultee at the city noted that ‘a key consideration in meeting the requirement for growth, based on experience, is to avoid small bits of provision scattered in locations with relatively few facilities. Indeed, the City library has had to close down some of this type of provision due to running cost and low usage’.⁶⁷
- 15.11 It is likely that over time, the type of delivery of library service could change considerably with much greater use of outreach and electronic services, and joint shared multi use centres. Our assessment takes account of the best estimates at this point in time and the spreadsheet model will need to be adjusted as information is refined.

We have used national guidance to estimate costs

- 15.12 The library service providers have worked with us to provide indicative estimates for infrastructure costs based on the current broad options for growth. Details relating to exact distances from housing, existing provision, type of housing and population etc will need to be taken account of at the detailed planning stage for determining exact costs.
- 15.13 Where a local cost estimate is not available, we have agreed with service providers to use the MLA standard cost for the East Midlands. This is shown in the box below.

A construction and initial fit out cost - MLA Guidance

These can vary by site and area; taking the RICS (Royal Institution of Chartered surveyors) Building Cost Information Service data, this can be from £2,807 per square metre in the East Midlands area to £3,465 per square metre in Greater London. A recommended current benchmark figure here is £3,000 per square metre.

New Build Standard based on benchmark information from MLA

⁶⁷ City Library Service

A calculation using the benchmark figure above gives a cost of £90,000 (30sqm x £3,000) per 1,000 people, or **£90 per person** in new housing. This figure would then need to be related to the estimated occupancy of new dwellings in proposed housing schemes.

So for an SUE of say 3000 dwellings in the County, (based on a population assumption of 2.24 persons per household for the County, and 2.28 persons per household in the City), the total population will be 6,720. Thus the standard estimate cost for a new library building will be £90 x 6,720= £604,800

Note that these figures do **not include any land purchase costs** and we discuss below an approach to deal with this.

Extension of Existing Library Service

It is likely that extending the service offer of an existing library, refurbishing an existing library or providing a mobile outreach service will be at a lower cost than a totally new development. For this reason, we have agreed with service providers to an estimation of 50% of the cost of new provision.

Assumptions on accounting for land costs

- 15.14 The above calculation does not take account of land cost for new provision. Having discussed the pros and cons of including estimations for a generic land cost in the model, it was decided to leave this out on the assumption that most entirely new facilities would be provided on land provided free by developers as part of the larger developments. This assumption would need to be reviewed for policy making purposes.
- 15.15 This requirement to include the land will need to be picked up at the detailed master planning stage. It will be important for future SPD policy and masterplans to take account of the need for this as part of the overall design and delivery of the development.

We have presented requirements and costs in tabular form.

- 15.16 Our findings are presented in Table 15.1 and Table 15.2

How can new infrastructure be funded?

There is no funding available for library provision to support new growth in the city. County funding is not secure

- 15.17 We are informed that there is currently no capital funding available for the City Library service to meet the requirements of new growth. Past funding from the People's Network has been exhausted; there is current funding from the Lottery to fund a library at New Parks. There are opportunities to explore joint service provision with the PCT as has been done with the LIFT centres mentioned earlier.
- 15.18 In the past the County Council has secured £8m from various means besides developer contributions, since 2003 - 2009 to fund capital library projects. Much of this has been possible by the sale of County Council land; however this cannot be continued indefinitely and in any event until land values recover from their current downturn.

Our funding assumptions

- 15.19 Our projection suggests that full land value recovery could take ten years. For this reason, we have agreed an approach to funding based on the assumption that, after five years, the sums available for reinvestment into the County library service will return to half of the levels achieved during the five years up to y/e 31st March 2008 and continue at that level for a further five years (i.e. £4m from 2014 - 2019 onwards).

What are the priorities?

- 15.20 We have rated all library service requirements as 7. This equates to “highly desirable” on our sliding scale. The key reason for this is that in addition to providing the statutory library service, most new libraries now provide a hub of other community activities and so we consider are a key requirement from a community infrastructure provision perspective.

Table 15.1 Growth Requirements - Libraries Facilities (city)

Local authority	Growth location	Growth requirements	Cost	Notes
Leicester	Ashton Green SUE 3,500	Increase provision at the nearby Beaumont Leys Centre library.	£359,1000 Extension of existing provision.	The broader aspiration for Ashton Green is to provide a comprehensive range of services within the centre. There is a dilemma here, as Beaumont Leys already has a library, and it would make greater sense to expand and service this than provide a new stand alone facility. This could be supported with stops by the Children's Bookbus (mobile library). However, if a community hub multi-use service centre was to be provided at Ashton Green, then a small provision for a library could be made within this (Cost assumption based on total population of 7980 X £45 per person = £359,100)
Leicester	Waterside And Rest of City 6,800	Improvement of City Centre library package	£697,680 Contribution towards £30m cost of refurbishment through there is capacity at present.	The central location of these development areas near the City Centre, means that they will be catered for by the existing Central library. However, the current City library is outdated and in need of modernisation. There is a desire to turn the existing two Central library buildings into one and making it more accessible with community rooms and facilities for informal learning and innovative and developmental library work. There is a proposal to look at developing a library as part of the 'Central Youth Hub' bid for the current Haymarket Centre. There have been discussions relating to the possible relocation of the Central library. Given our discussion with education, PCT and youth services and the requirement to provide central provision, it makes considerable sense to plan for a central joint centre provision that supports the growing central area population. (Cost based on 15,504 population x£45 = £697,680)
Leicester	Abbey Meadows (3,200)	Expansion of existing provision	£328,320 (expansion at Rushey Mead)	The existing provision at Belgrave or Rushey Mead should be expanded to cater for the needs of this population. If a joint service centre is provided on site, then some small library facility could be included as part of this. (Cost based on 7296 population x £45 = £328,320)
Leicester	St Georges (1,700)	Expansion of existing provision	£174,420 (expansion at St Matthews)	This development could be served either by the Central area library or an expansion of the existing St Matthews facility into an adjoining shop unit. Much will depend on the detail design and delivery. (cost based on 3876 population x £45 = £174,420)
Leicester	Hamilton (700)	Expansion of existing provision	£71,820 (expansion of existing Hamilton)	Hamilton has a new well located library adjacent to Tesco. Additional revenue to extend this provision with more space and longer opening hours would be preferred. There is community land for such an extension. (cost based on 1596 population x £45 = £71,820)

Table 15.2 Growth Requirements - Libraries Facilities -County

Local authority	Growth location	Growth requirements	Cost	Notes
Charnwood	Loughborough SUE (3,500)	New provision	£705,600	This would need to be a new facility preferably incorporated into retail, community or educational development on the site
Charnwood	East of Thurmaston, North of Hamilton SUE (5000)	New Provision	£1,008,000	This would need to be a new provision as the existing library would be inadequate for the additional population. Ideally it would be incorporated with other retail, community or educational development , which would reduce the overall cost
Charnwood	Other Charnwood (1500)	Expansion of existing provision	£151,200	There would need to be enhancement of exiting library facilities at Anstey, Quorn, Rothley, Barrow and Sileby
Melton	Melton Town Centre (2000)	Expansion of existing provision	£201,600	Potential redevelopment of the library either on its existing site at Brooksby Melton College or incorporated into the new Borough Council offices Scheduled for completion by 2011
Melton	Other remaining (810)	Expansion of existing provision	£81,648	Dependant on the location of the developments there may be a need for an additional mobile library or a new service delivery mechanism to be developed
Oadby and Wigston	Oadby (548)	No additional capital requirements	Zero	Creation of new library in a refurbished supermarket at The Parade in Oadby, includes a community meeting room and possibly a Customer Service point. Completed in 2008 at a cost of £880K funded via Leics. County Council capital programme
Harborough	Market Harborough (2,800)	New building	£564,480	Market Harborough library is of an inadequate size for the existing population of the town and with additional population will need to be replaced
Harborough	Broughton Astley (600)	Expansion of existing provision	Zero	The current library could cater for the additional population
Harborough	Leicester PUA	New Provision	£100,800	There would be a need for a new library to cater for the increased population,

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	(500)			
Harborough	Remaining rural areas(1,300)	Expansion of existing provision	£131,040	Dependant on the siting of the developments there may be a need for an additional mobile library or a new service delivery mechanism to be developed
Harborough	Lutterworth (700)	Expansion of existing provision	£141,120	A larger replacement library in a more central location is needed Ideally it would be incorporated with other retail, community or educational development, the overall cost to meet all provision - current and future is estimated at £1.83m.
Blaby	SUE (5000)	New Provision	£1,800,000	A replacement library at Leicester Forest East would need to be part of this provision
Blaby	Other (1150)	Expansion of existing provision	£115,920	Dependant on the siting of the new developments there would need to be enhancements to the library facilities at Countesthorpe, Stoney Stanton and Sapcote
Hinckley and Bosworth	Hinckley town centre and Burbage (1415)	Expansion of existing provision	£ 142,632	The existing library in the centre of Hinckley could be expected to cater for the additional population with some enhancement to its facilities. Development at Burbage may trigger the need for a replacement library
Hinckley and Bosworth	Barwell and Earl Shilton SUE (4,500)	Multi- agency centre being developed.	£1.2 of the multi-agency centre. £907,200 (for Earl Shilton)	Creation of multi-agency centre in the centre of Barwell for completion by 2010. Sale of the Cedars in Barwell raised £1.2m capital which is to be re-invested in Barwell library. Planning Permission secured for the George Ward Centre in the centre of Barwell adjacent to school. Earl Shilton would need a new, larger library. The existing library cannot be extended on its current site
Hinckley and Bosworth	Other remaining (940)	Expansion of existing provision	£94,752	Dependant on the siting of the developments there may be a need for an additional mobile library or a new service delivery mechanism to be developed
NW Leics	Coalville SUE (4,500)	New Provision	£600,000	Existing town centre library - A new library could be built as part of retail or community development in this area
NW Leics	Coalville (2650)	New provision	£ 534,240	A new library could be built as part of retail or community development in this area

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NW Leics	Coalville (1050)	Expansion of existing provision	£105,840	
NW Leics	Asbhy De La Zouch (500)	Expansion of existing provision	£50,400	
NW Leics	Castle Donington (500)	Expansion of existing provision	£50,400	
NW Leics	Other (500)	Expansion of existing provision	£50,400	

Infrastructure timing assumptions

- 15.21 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development.

Issues

There is scope for efficiency savings from "community hub" multi-user buildings

- 15.22 We have discussed the scope for efficiency savings and service delivery improvements in our delivery chapter of this report. These general conclusions apply here. However, in specific terms, there are a number of examples where library provision has been incorporated in multi-user buildings. Examples include the Brite Centre in Braunstone, which cost around £3m and provides five services and the Southfields Centre (as part of LIFT scheme).
- 15.23 The cost and type of service in Joint Service Centres can vary considerably as can the management and delivery of the service.

Further consideration will need to be given to developing the community and library provision at Ashton Green and for the Central Strategic Regeneration Area

- 15.24 There needs to be more work carried out in the areas mentioned above. The costs, overall provision, funding and delivery is likely to be very different from the current information included in this model. A similar issue is likely to be faced with some of the SUEs in the County too.

There is an issue of service delivery and phasing

- 15.25 In the short to medium term it is hard to provide a full stand alone service. This will need to be phased in when there is the critical mass of development, however, forward thinking and planning will be needed to determine the final location and land provision to enable this provision to take place in the longer term.
- 15.26 Similarly there are issues concerning funding, often the funding to provide short and medium term provision will use up the initial budget for creating a proper new or extension provision.

16 YOUTH CENTRES

Introduction

- 16.1 This section looks at the provision of youth centres. Services for young people are delivered through a variety of organisations (including the Youth Service, and the community and voluntary sector) and based in a range of facilities, of which purpose-built youth facilities are only one - but the one requiring significant public sector capital expenditure.
- 16.2 There is no national standard setting out a fixed ratio of level of physical youth provision to population or numbers of dwellings, but both Leicester and Leicestershire Youth Services consider that SUEs will usually need new purpose-built provision. The requirements are outlined below.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Leicester will require two new youth centres

- 16.3 The growth proposals throw up two areas where new provision will be required: Ashton Green and Abbey Meadows. There is already a high level of need and lack of existing provision in the north of Beaumont Leys (which is immediately to the south of the Ashton Green area). The area scores badly on indicators of youth need such as teenage pregnancy and numbers of young people who are NEET. Given the volume of new dwellings proposed for the Ashton Green area, it will require a purpose-built facility. This should be co-located at the proposed shared service facility for the area.
- 16.4 There is little provision at present in the Abbey Meadows area which will also require a purpose-built facility on the basis of the numbers proposed.
- 16.5 The scale of growth proposed at Waterside is also large, but there is an existing youth club nearby, and the area will be covered by the proposed new city centre facility (see below).
- 16.6 The current city administration's manifesto included a pledge to provide a large new multi-purpose city centre for children and young people - now being described as the 'Leicester Youth Hub'. This is currently the subject of a £5 million bid to the Big Lottery Fund for 'myplace' funding to convert the former Haymarket Theatre. If the bid is approved - a decision is expected at the end of February - this will open in 2011. The Youth Service anticipates that it will cover the needs arising from growth proposed for the city centre and adjoining areas. Youth Service provision in the inner city areas is complemented by the services of a range of third party organisations.
- 16.7 Growth proposals at Hamilton will be covered by existing facilities, one of which, at Netherhall, is being improved. The growth proposals do not generate any further requirements.

Leicestershire will require about five new youth centres, or 'wings'

- 16.8 Leicestershire envisage that each SUE and community will require a youth centre - and that in some cases more than one will be required. They expect that these will be provided as part of multi-use community facilities in each SUE, which should include a youth 'wing'. As an initial estimate, the County suggest that one 'wing' will be required for each 1,200 place secondary school, although not located on the school site. We have interpreted this as a tentative requirement for five 'wings'.

The centres will cost about £0.5 million each

- 16.9 A youth facility needs to have an area of at least 250 square metres in order to provide an adequate range of services, and this will cost approximately £500,000.⁶⁸ The table below shows our initial list of centres and totals costs.

Table 16.1 Youth centres - assumption requirements and costs

Youth Centre Location	Area	Cost
Ashton Green	City	£0.5 million
Abbey Meadows	City	£0.5 million
Barwell and Earl Shilton SUE	County	£0.5 million
Blaby SUE	County	£0.5 million
Loughborough SUE	County	£0.5 million
East Thurmaston, North of Hamilton SUE	County	£0.5 million
Coalville	County	£0.5 million
Market Harborough	County	£0.5 million
Total		£4.0 million

How can new infrastructure for growth be funded?

We assume that there is no funding available for youth centres from mainstream sources

- 16.10 There are three funding sources for youth facilities at present:
- Myplace, which only has a budget of £190 million across England over the next two years. It is described as a 10-year programme, but no further funding rounds have been identified as yet.
 - Local authority capital budgets. In Leicester youth facilities are funded from the Community Services budget. This has no provision for new youth facilities beyond the proposed city centre hub, and is under pressure from other services. The hub will require £1.5 million capital to supplement 'myplace' funding. Any further provision will be the subject of bids against the CS budget.
 - In Leicestershire youth facilities are funded through the CYPS capital budget and grant funding received from DCSF or Myplace. Funding from the mainstream CYPS budget is not sufficient to cover refurbishment and modernisation of existing centres, so would not be available to fund new centres.

⁶⁸ This estimate received from Leicester City Council.

- 16.11 Given the above, we have assumed that there is no funding from mainstream sources to cope with growth.

Youth facilities can also be funded through developer contributions

- 16.12 Youth facilities are potentially part of the package of community facilities to support new housing development which could form part of a Planning Obligations SPD or a CIL.

What are the priorities?

- 16.13 Youth facilities are part of the 'suite' of community facilities needed by a new community, and help in-coming young people by providing activities and opportunities to meet. We therefore score them 7 on our sliding scale.

Leicester Priorities

- 16.14 The priorities for provision to meet the proposed housing growth in Leicester are new facilities at Ashton Green and Abbey Meadows. This assumes that the funding bid for the proposed city centre youth hub is successful.

Leicestershire Priorities

- 16.15 Leicestershire priorities will follow the development of the SUEs, at this stage, particularly in view of the current economic climate which will determine when and in what order the SUEs in the County will be developed.

Infrastructure timing assumptions

- 16.16 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development.

Issues

- 16.17 Youth facilities are not showstoppers, although in an SUE provision as early as possible is desirable to help in-coming young people settle in.
- 16.18 Because there are no fixed standards for youth provision per dwelling, it is easier to fund them through developer contributions via a CIL or other tariff arrangement, as it may be difficult to make the case that they are needed in Section 106 negotiations on individual developments.

17 ADULTS' SOCIAL CARE

Introduction

17.1 Adult social care covers the following issues.

- Adult Care Services (20-64 years)
 - People with Physical and Sensory Disabilities (18-64)
 - People with Learning Disabilities 18-64
- Older Peoples Services (65+ years)

17.2 Increasingly, the lines between adults' social care and other services are being intentionally blurred in order to provide a more coherent service to the individual. The Government's White Paper "Our Health, Our Care, Our Say" promotes multi-agency, integrated community facilities such as Health and Social Care Centres, Community Centres, and extended schools.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

17.3 Infrastructure requirements arise as a result of population (housing) growth. No appreciable demands arise from jobs growth.

Societal changes, rather than housing growth, mean that demands for adult social care are rising

17.4 As we pointed out above in paragraph 6.7, the very broad demographic story in the HMA appears to be one of a younger population in Leicester city (which demands more childrens' provision), and an ageing population in the districts (which demands more older peoples' social care). This means that new housing in central Leicester may be taken up by a younger cohort with different needs to the residents of new housing in the districts, which may be reflected in different infrastructure requirements.

17.5 Existing work states that any residential development is likely to have an impact on the County's Adult Social Care provision. Some developments may have a more acute impact. Developments likely to house a high concentration of older people, people with learning disabilities or people with physical disabilities will have a greater demand on services.

17.6 Adult social care (particularly services for the over 65 age groups) is likely to be driven by changes to the demographic profile of the area in general rather than housing growth in particular.

17.7 In line with the rest of the country, the HMA's population is ageing, placing growing demands on social care services.

There are significant strategic changes to service delivery in adult social care in order to cope with some of these demands

- 17.8 The County states that in Leicestershire, as elsewhere, there is a move to a more bespoke, personalised, level of support for older people, adults with disabilities and/or mental ill health and carers.⁶⁹ New ways are now being developed to support older and disabled people to live independently within their communities, so although Adult and Social Care Services will continue to provide some services directly and commission services (such as day care, home care, community meals, short breaks and residential care) increasingly they will enable support through direct payments for service users and carers and individual budgets will also become available.

Strategic changes mean that infrastructure requirements for adult social care are falling. The emphasis is on keeping cared-for adults in the social "mainstream"

- 17.9 One of the implications of this change in approach is that the new build programme directly provided by adult social care at the County and City is likely to reduce, with increased working in partnership with the private and voluntary sectors. Strong emphasis needs to be placed on providing housing options which allow people to stay where they are and avoid social isolation. This emphasises the need for mixed tenure and flexible housing, building in sustainability and diversity at the outset in all new communities and in other major developments.
- 17.10 The County Council does not anticipate a significant level of new capital infrastructure being required as a result of the proposed growth in dwelling numbers. Ensuring that existing and new buildings are accessible will be a key element of future service provision. Growth in the numbers of elderly people will lead to a demand for more services, but these will largely be met by services commissioned from the private sector. The role of Social Services will be largely the assessment of third-party providers; commissioning services - residential or day-care - from them; and monitoring to ensure that provision meets standards.

What are the costs to cope with new development?

- 17.11 There will be no significant capital costs as a result of the new development. The increase in the numbers of elderly people will drive the needs for greater service provision, but, as described above, this will largely be met by third-party provision. To the extent that this is commissioned by Social Services departments the demand for revenue spending will increase.

How can new infrastructure for growth be funded?

Mainstream funding will adjust to reflect population changes

- 17.12 It is assumed that the additional revenue funding required to meet the increased requirements associated with housing growth will be built into the government funding

⁶⁹ County submission to the initial (unpublished) work undertaken towards a county infrastructure plan.

formula once the additional population increase is taken into account. The capital requirements will need to be supported with revenue funding to pay for the care/support costs of the placements.

Policy suggests that some additional funding is levied from growth

- 17.13 The current 'Statement of Requirements for Developer Contributions in Leicestershire' (updated Dec 07) sets out S106 monies towards community facilities for adults which may include day and/or residential services and towards multi-agency, integrated community facilities such as health and social care centres, extended schools etc.
- 17.14 However, because our assessment finds that there are no specific infrastructure requirements and costs arising directly from new growth, we have assumed that no funding is required either.

What are the priorities?

- 17.15 As there is no significant infrastructure programme associated with new housing adult social care does not score as a priority on our scale.

Infrastructure timing assumptions

- 17.16 Because there are no assumed requirements or costs, the question does not arise.

Issues

- 17.17 Adult social care will not be a showstopper to development of any of the proposed growth areas.

18 CHILDREN'S SOCIAL CARE

Introduction

- 18.1 Since April 2006, education and social care services for children have been brought together under a director of children's services in each local authority. Children's social services have a general duty to safeguard and promote the welfare of children, with specific responsibilities to support:
- Children at risk
 - Disabled children
 - Looked after children
- 18.2 As part of their general duty towards children, local authorities are also responsible for delivering a nation-wide network of Children's Centres, service hubs where children under five years old and their families can receive seamless integrated services and information. Under the Ten Year Strategy for Childcare, every community will be served by a Children's Centre by 2010, with a target of one centre per 800 children under five.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Children's social care (children's homes and day centres) has no infrastructure requirements and costs arising from growth

- 18.3 Children's social services have told us that they do not see a direct relationship between new population and additional demand for their services leading to an additional requirement for 'infrastructure' in the sense of premises such as children's homes and day centres. 'Demand' is correlated better with levels of deprivation rather than housing growth as such.
- 18.4 As a result of this they do not envisage a significant requirement for capital expenditure on buildings as a result of the new housing proposed in the HMA.
- 18.5 There may be a requirement for social services to give more thought to the increase in requirements resulting from a growth in population. Following the Climbe and subsequent cases we understand that there has been an increased demand for places in children's homes. Whilst this shift is a policy change, rather than one relating to increased population, it means that there may be a greater emphasis on the provision of children's homes in future. A rising population in the area will exacerbate that demand. Since this is a specialist area we do not feel able to project the precise nature of social services' longer term requirements.

Children's Centres - requirements and costs

- 18.6 Children's Centres provide "joined-up" provision to children and their parents. They are expected to be local and accessible to parents, so each Children's Centres centre is only expected to deliver to a relatively small geographic area. Requirements vary in the City and County as follows:

- Children’s Centre requirements in the city: the pattern of actual and projected provision in Leicester is such that most of the proposed growth areas appear to be covered by existing provision. The exception is Ashton Green, where the scale of growth proposed is such that a new centre will be required. The centre would presumably be co-located with the shared service facility proposed for the area.
 - Children’s Centre requirements in Leicestershire. Leicestershire’s preliminary estimate is that a centre will be required in each major SUE, where these are expected to have more than 800 children under 5; children’s centre provision for other housing growth is likely to be met from existing provision. The County Council envisage that these would form part of multi-use community facilities, possibly as part of primary school premises.
- 18.7 Costs of Children’s Centre provision has, until now, been determined by available funding. DCSF currently provide capital funding of £300,000 per new Childrens’ Centre to meet their target of covering every community by 2010. This usually limits the scale of provision to refurbished buildings and existing community facilities rather than new ones. There is no funding beyond then to cover any additional demand from the proposed new dwellings in the HMA.
- 18.8 Clearly, though, major new developments will find it difficult to rely on existing community facilities. Although many are sited on the fringes of existing towns in order to take advantage of existing infrastructure, the very fact that they are entirely new developments does tend to suggest that there will be some significant capital requirements for new Children’s Centres arising from growth. Leicester consider that a new children’s centre will be required at Ashton Green (other growth areas in the City will be covered by existing or programmed provision). The County Council consider that all the major SUEs will require a centre. We have assumed that that this comprises all those with 2,500 dwellings or more. Clearly, this assumption would need proper examination at planning stage.
- 18.9 We have also assumed that the average cost of a new centre will be £1m which is a conservative estimate derived from the examples we have found. The table below sets out the list.

Table 18.1 Growth Areas in the HMA Requiring New Children’s Centres (high level estimate)

Ashton Green
Blaby (SUE Option C)
East of Thurmaston (Charnwood)
Loughborough SUE
Market Harborough
Barwell SUE (Hinckley)
Stephenson’s Way (NW Leics)
South Coalville SUE

Source: RTP

How can new infrastructure for growth be funded?

The capital requirements of Children's Social Care are small

- 18.10 The capital requirements of Children's Social Care Services are predicted to be small. They do not appear to relate directly to the proposed housing growth. For these reasons we have not considered them further in this assessment.

There is currently no specific funding stream for Children's Centres post 2010. We assume the current spending rate continues. We identify a funding gap

- 18.11 As we have pointed out, the DCSF currently provide capital funding of £300,000 per new Children's Centre to meet their target of covering every community by 2010. How the Children's Centres programme will be affected by future funding programmes and any change of national government is not yet clear.
- 18.12 It is not known whether there will be further DCSF capital funding for children's centres after the current round which ends in March 2011. If there is none the alternatives will be the local authorities' own capital resources (which will be limited by other calls on it) or developer contributions.
- 18.13 For the sake of our assessment, we have assumed that the current funding stream carries on the current rate in order for the Government to continue to ensure that there is universal access to children's centres. If funding were to continue at a rate of £300,000 per centre, £2.4 million of the total cost of £8 million would be covered, leaving £5.6 million to be found from local authorities' own capital and/or developer contributions.

What are the priorities?

- 18.14 The current round of funding for children's centres will provide a centre in each community. As the growth proposals for the HMA do not contain stand-alone new communities there will be some coverage of proposed SUEs from existing and proposed centres. New children's centres are therefore not an immediate priority, and are desirable rather than essential. Additional children's centres can be developed as add-ons to primary schools or part of multi-use community centres in SUEs as funding becomes available and demand builds up with new housing delivery. We therefore score them 7 on our sliding scale.

Infrastructure timing assumptions

- 18.15 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development

Issues

Phasing of provision

- 18.16 Because it is not essential to provide children's centres in the initial stages of development, they can be provided during the later phases of development. They do not constitute showstoppers to development.

CIL is better adapted as a funding source than Section 106

- 18.17 Because the need for children's centres is defined on a broader basis than facilities such as schools funding from developer contributions would be more easily achieved on the basis of a CIL or other tariff arrangement rather than Section 106 contributions from individual developments, where it would be difficult to identify a specific need.

There may be opportunities for a multi-use community hub building

- 18.18 As we explain in our delivery chapter, there may be cost efficiencies available from locating a Children's Centre in a multi-use building. These opportunities should be actively explored.

19 POLICE

Introduction

- 19.1 This section looks at how proposed growth affects the requirements, costs and funding of policing in the HMA. It should be noted that it has not been agreed with the Police and so this work (in line with the rest of this document) represents our independent approach.
- 19.2 Policing in the HMA is by Leicestershire Constabulary, which covers Leicester, Leicestershire and Rutland. The Constabulary is overseen by Leicestershire Police Authority. The Police Authority is also part of the East Midlands Police Authorities Joint Committee (along with four other police authorities that cover the East Midlands).
- 19.3 The constabulary operates three Basic Command Units (BCUs). Within each are Local Police Units (LPUs) corresponding with district or borough boundaries. Most Police functions come under local policing (neighbourhood policing), operational support, major crime, specialist operations, performance and strategic issues, and human resources. There are currently 22 police stations, of which 21 fall within the HMA area. Eleven of those in the HMA areas are in the Leicester Principal Urban Area (PUA).

What are the infrastructure demands resulting from housing and jobs growth? What are the costs?

- 19.4 Our approach to this section differs from the approach that we have tended to adopt elsewhere in this report. In other sections, we have worked from first principles by showing service providers the growth maps attached as Appendix 3 and 4. We have then asked what infrastructure requirements service providers have, given this growth and what service providers know about existing spare capacity, capacity shortages, future demographic change, service configuration, strategic context, and so on.
- 19.5 Here, we have instead used a different approach. The police have preferred to supply us with their existing contributions policy which uses a formula to work out requirements. We explain below.

There is an existing statement of how new development generates requirements for policing

- 19.6 The Leicestershire Police Authority's Policing Contributions policy (October 2007) sets out how new development places additional demands on police resources to ensure communities remain safe. In general, new development may place additional travelling demands on officers, either because the neighbourhood suffers an increased number of calls from the public, or because the neighbourhood has so increased in size. A national performance indicator based on timeliness of arrival governs police emergency calls.
- 19.7 The number of households, the number of residents within those households, and the type of incidents associated with those households, will all affect the efficiency of operational policing by the Constabulary.

- 19.8 In particular, the County's adopted statement of requirements for developer contributions in Leicestershire states that the Constabulary requires sites for police stations, building costs of new police stations and contribution towards additional office/other building provision at existing police stations or other community buildings from new development.
- 19.9 However, we understand the Constabulary has submitted revised requirements which have not yet been adopted by the County. These revised requirements are based on a formula that has been developed nationally by the Association of Chief Police Officers and the Association of Police Authorities. This requires inputting a large amount of policing data which produces two figures at the end: one is a cost per person and the other is a cost per dwelling.
- 19.10 Table 19.1 below from the Leicestershire Police Authority and Constabulary Policing Contributions from Development Schemes outlines the police capital calculation of a Section 106 claim for development of new households across the Leicestershire Police area. The Force calculates its capital requirement to be £606 per new household.

Table 19.1 Calculation of Section 106 claim for development of new households

POLICE CAPITAL COSTS based on projection of

**1,000
NEW HOUSEHOLDS**

1. COST OF GENERAL OFFICE ACCOMMODATION (non-specialist)

Item		Data
1	Number of Households in Leicestershire Police Area	382,100
2	Divide by total Leicestershire Police Officers / Police Staff	3,647
3	No of Households per Staff Member is (1) ÷ (2) =	104.77
4	Number of New Households forecast	1,000
5	New Staff Members required, therefore, is (4) ÷ (3) =	9.54
6	Total existing non-specialist accommodation, M ²	53,606
7	Non-specialist accommodation per member of staff, M ² is (6) ÷ (2) =	14.7
8	New non-specialist accommodation needed, therefore, is (5) x (7) =	140.24
9	Current cost of non-specialist accommodation, per M ² is	3,500
0	Cost of non-specialist office accommodation for new households is (8) x (9) =	£490,840

2. COST OF CUSTODY FACILITIES (specialist)

1	Number of Households in Leicestershire Police Area	382,100
12	Total Custody Facilities in Leicestershire Police Area, M ²	4,788
13	No of Households per M ² Custody Facility (11) ÷ (12)	79.8
14	Number of New Households forecast	1,000
15	Total new Custody Facilities needed, therefore, is (14) ÷ (13) M ²	12.53
16	Cost of Custody Facilities per M ²	4,500
17	Cost of Custody Facilities for new households is (15) x (16) =	£56,385

3. MISCELLANEOUS CAPITAL COSTS PER POLICE OFFICER

18	One-off start up costs per Police Officer	£8,199.74
19	Ratio Police Officers to Police Staff	0.62
20	Number of Police Officers (see 5 above)	5.91
21	Total - No addition for VAT	£48,460

4. MISCELLANEOUS CAPITAL COSTS PER POLICE SUPPORT STAFF MEMBER

22	One-off start-up costs per Police Staff Member	£2,973
23	Ratio of Police Staff to Police Officers	0.38
24	Number of Police Staff (see 5 above)	3.62
25	Total - No addition for VAT	£10,762

Total Section 106 claim for development of new households (10+17+21+25)		£606,447
TOTAL SECTION 106 CLAIM PER NEW HOUSEHOLD - excl VAT		£606

Source: Leicestershire Police Authority and Constabulary Policing Contributions from Development Schemes

- 19.11 However, it is important to point out that where possible, we have attempted to avoid adopting this approach in this study. Using nationally created formulas does not pick up local requirements or infrastructure surpluses, and so may not accurately reflect local circumstances. Some of the demographic assumptions in the model may also be questionable. As we understand it from work elsewhere, the national model used by police assumes that all new housing in all areas generates net population growth. This assumption can be problematical. Additionally, item 4 in the cost build up shown above apparently relates to revenue costs in relation to staff. Circular O5/05 only refers to revenue costs in the context of maintenance.
- 19.12 We have therefore adopted a different approach, which we explain below. This is an interim measure, because a new formula for calculating an appropriate amount for police expenses in response to growth is currently being formulated by the Association of Chief Police Officers (ACPO). This will update the approach shown above. We have been advised that this is based upon a calculation of the cost per household, adjusted to reflect the fact that not all new households generate an increase in population overall. If this is the case, and with the additional proviso that the scope of revenue and other costs does not exceed those envisaged in this study, then in our opinion this will be an appropriate basis for calculation. We propose that our costs and funding calculations are updated once the ACPO model is finalised. In the meantime, in response to the specific question posed by this brief we have used the method explained below, but caution that - in line with the other cost calculations provided in this report - it cannot be used as a basis for planning negotiations.

Police Property Requirements

- 19.13 Like most service providers, the Constabulary's main requirements (particularly in terms of capital requirement) is property provision. The typical hierarchy of this is set out in the Police Authority's LDF guidance (June 2008) as follows:
- Neighbourhood police office
 - LPU Station (small town)
 - BCU HQ Station
 - Force HQ
 - Support (eg training, storage)
 - Specialist (eg Roads Policing)
 - Independent public Access/Enquiry Point (e.g., part of a library)
 - Multi-service joint provision building - e.g., one-stop-shop
- 19.14 The requirements for different types of development is summarised in the table below.

Table 19.2 Typical police property requirements for different types of development Sustainable Urban Extensions (SUEs)

Type	Typical Growth requirements	Notes
Large Scale Development Sites	New station facility	Required to address local neighbourhood policing needs and also to meet the associated support facilities arising from the growth In terms of local policing needs the Police are supportive of the principle of co-location with other appropriate public service or voluntary sector providers in a community building. In some locations it may be appropriate to have a one-stop-shop type of presence.
Town Centre Development	One-stop shop	Any increased density and amount of development, expansion of retail and leisure facilities and issues, such as promoting the 24 hour economy, will impact on police resources. A more visible and accessible presence for the police in town centres, together with other measures such as enhanced CCTV, may be required. The office space needed may take the form of part of a major retail scheme or public service offices, or a “one stop shop” facility shared with other public or voluntary sector service providers. Designing out crime is a critical issue in town centres and must also be addressed in policy for these allocations.
Smaller Urban Development	Cumulative growth may require new facility, or expansion of existing facilities	The expansion of existing communities through incremental growth will impact on Police resources, potentially significantly changing their character and community safety resource requirements..
Employment Development	Cumulative growth may require new facility, or expansion of existing facilities	Such allocations place additional demands on resources.

Source: RTP adapted from Police Authority’s LDF Guidance

- 19.15 We understand the Constabulary has developed four different blueprints for police stations for SUEs. However, we have not been provided with this information, or had confirmed whether each SUE requires a station.

Other infrastructure requirements

19.16 All the emergency services also have to invest significant amounts of money in their vehicle fleet whereas the support requested from developers often simply takes the form of funding for buildings (as described above). Telecommunications masts are also often required on new developments in order for the police communications to work in these areas

We assume large, strategic developments require a new station

19.17 We have assumed in the table below that the SUE and Strategic Development sites require a new police station based on the size and location of development (inc. proximity to other development sites).

19.18 There may be additional requirements due to the cumulative effects of growth on police services. However, as we have not been provided with details of these, and our assumption below that these will be funded by the police, we have excluded them at this stage although we recommend this is discussed in more detail with the police.

Assumed size and cost of new stations

19.19 We have assumed a building of 250 sq m. The Valuation Office 2005 Practice Note recommends a cost of £1,175 per sq m GIA for the main accommodation in police stations. We have therefore assumed a total cost of £1,500 per sq m (to include fees and external works), with an additional allowance of £100,000 for police vehicles.

Table 19.3 Police Growth requirements - Leicester City

Local authority	Growth location	Assumed Growth requirements	Estimated Cost (including vehicle allowance)
City	Ashton Green	New facility assumed and vehicles	£475,000
City	Abbey Meadows / Waterside / St Georges	New facility assumed and vehicles	£475,000

Source: RTP estimate using Valuation Office 2005 Practice Note

Table 19.4 Police Growth requirements - Leicestershire County

Local authority	Growth location	Assumed Growth requirements	Estimated Cost (including vehicle allowance)
Charnwood	Loughborough SUE	New facility assumed and vehicles	£475,000
Charnwood	East of Thurmaston, North of Hamilton SUE	New facility assumed and vehicles	£475,000
Blaby	Blaby SUE	New facility assumed and vehicles	£475,000
Harborough	Market Harborough incl. SUE (all)	New facility assumed and vehicles	£475,000
Hinckley and Bosworth	Barwell & Earl Shilton SUEs	New facility assumed and vehicles	£475,000
NW Leics	Coalville sites	New facility assumed and vehicles	£475,000

Source: RTP estimate using Valuation Office 2005 Practice Note

How can new infrastructure for growth be funded?

- 19.20 The question here is to what extent the police can realistically expect their funding sources to respond to the increased policing requirements resulting from housing growth in the area. This is important, because any shortfall may represent the “funding gap” which might be in part plugged by developer contributions or additional central Government funding.
- 19.21 It should be noted here that we are explicitly avoiding the question of the extent to which the additional population in new housing in existing settlements actual represents an increase in the population or simply movement within it.
- Capital requirements are funded from revenue budgets by saving, borrowing or renting*
- 19.22 Like many other service providers, there are two different budgets; the revenue budget which meets all pay and running costs together with the costs of paying off loans, and the capital budget with meets the cost of land, buildings and equipment with an expected life of more than twelve months.
- 19.23 Police services are constrained in their capital spending. The operational capital requirement of the police force is meant to be met through their mainstream revenue

budget with the facilities required paid for by saving, borrowing or leasing either directly or indirectly through a PFI deal.

Police have a PFI budget, but it is uneconomic to use on small projects

- 19.24 The police service also has a PFI budget. However, the actual capital cost of responding to the growth agenda is often fairly limited in any specific area and that PFI as a mechanism is uneconomical to use on smaller projects. It follows that where consideration is being given to using PFI to upgrade the police estate, there is no reason why the cost of responding to population growth should not be included within it. But where there is no such plan it would simply be uneconomical to assume that PFI was a mechanism.

Central Government funding levels have a big effect on Council Tax

- 19.25 This total budget is fixed each year and then apportioned between police authorities based on a complex formula. Local authorities can increase funding by raising the Council Tax for Standard Spending (CTSS) or using reserves. Small changes in government support for policing - or spending need - can translate into very large increases (or falls) in council tax. Again, this means that police capital spend is highly constrained.

Funding can be expected to respond to population growth to some extent over the long term. But it is unrealistic to expect that all new policing requirements will be covered

- 19.26 Although police service funding is split between central and local government, it is effectively population based (with a number of other factors being taken into account). These factors suggest that we could expect the current funding regimes to respond adequately to the requirements of growth. If we were to accept this as an argument, we would use the approach taken to PCT funding, where we suggested assuming that mainstream budgets would cover new capital requirements with the exception of the funding "time lag" they experience whilst funding formulas adjust to take account of new population.
- 19.27 On the other hand, factors we have explored above (ie, the difficulty of using PFI, the practical limits to police capital spending due to the constraints on local authority capital expenditure, and the difficulties of properly applying a capital budget), might militate against this assumption. The key problem is that the normal level of capital spending by police force is so much smaller than those of, say, the Primary Care Trusts that they simply do not have the flexibility of the latter when it comes to budgeting for the cost of new buildings.

We assume that new stations on SUE sites are not funded from mainstream sources

- 19.28 There is no perfect answer here. But because of the factors we've discussed above, it is sensible to assume that the most of the capital requirements incurred by growth will not be covered by existing mainstream central and local funding.

- 19.29 Our general approach is therefore to expressly compensate the police services for the cost of providing both new buildings and new vehicles which are solely required for the purpose of servicing the needs of growth since these will almost certainly strain police resources more than incremental growth in existing towns.
- 19.30 For this assessment, we have therefore assumed that the cost of the new police stations on the SUE and strategic sites identified above will not be funded from mainstream sources. Funding for these requirements will therefore have to be found from either developer contributions or some other central Government funding support for growth. It should be noted that this central Government funding does not currently exist for the Leicester or Leicestershire area.
- 19.31 However, we assume that any additional smaller requirements related to the cumulative effects of growth will be funded by the police.
- 19.32 Clearly, the precise share of developer contributions received by police from individual developments will need to be subject to the competing demands of other service providers and should be negotiated on a case by case basis.

What are the priorities?

- 19.33 We have ranked police facilities as a “seven” on our ten point priority list (where ten is essential and one is speculative).
- 19.34 We anticipate that these priorities may be changed in discussions which follow our work.

Infrastructure timing assumptions

- 19.35 The Police Authority states it is critical that new or enhanced Police facilities are provided early on as local police need to be able to build relationships with expanded or new communities from the outset, and to react to the need for Police services, demand for which will typically commence as soon as growth starts. However, we have not been provided with detail of this in relation to specific infrastructure requirements, we have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rated infrastructure costs in line with the assumed phasing of development.

Issues

- 19.36 We are not aware of any other issues in relation to the infrastructure required by the police, other than that outlined above. We recommend further discussions are held with the police to clarify the above.

20 FIRE

Introduction

- 20.1 This section looks at how proposed growth affects the requirements, costs and funding of fire services in the HMA.
- 20.2 There are 46 fire and rescue services in England. County councils provide 15 fire brigades and the rest are separate statutory bodies known as combined or metropolitan fire services. London has the only 'regional' fire brigade. Each service is accountable to a fire authority of locally elected councillors.
- 20.3 The study area is covered by the Leicester, Leicestershire and Rutland Combined Fire Authority (LLRCFA). LLRCFA is a separate statutory "pre-cepting" body, which means the fire brigade imposes a direct Council tax precept. It comprises 17 elected Members as follows:-
- Leicester City Council - 5 Members
 - Leicestershire County Council - 11 Members
 - Rutland County Council - 1 Member
- 20.4 Services are delivered by the Leicester Fire and Rescue Service (LFRS). The services provided to the communities are delivered through four LFRS Directorates which are Corporate Resources, Community Safety, Organisational Development and Finance and Corporate Risk Management.

What are the infrastructure demands resulting from housing and jobs growth? What are the costs?

LFRS states that resources are stretched. However, there appear to be pockets of over-provision

- 20.5 We understand from conversations with LFRS officers that the LLRCFA is the lowest spending CFA in the country (at about £32 per head population per annum). Consequently, the LFRS states that resources are stretched, and given the rural nature of much of the CFA area and an aspiration for an equal attendance standard to all fires and non fire emergencies, numerous pockets of underprovision exist.
- 20.6 Conversely, there is arguably a relative over-provision of fire stations/services in the north of the HMA area in Moira and Shepshed. There is also an increasingly apparent under provision further out to the north on the outskirts of the HMA in the Castle Donington area.

The Northern Review

- 20.7 LLRCFA commissioned a separate study into the north of the authority's area, the Northern Review. The Northern Review was conducted to examine, in some depth, the inherent risk and current station deployment within the area of North Leicestershire and Rutland, and determine where service improvements may be possible. The

Northern Review also forms part of the Combined Fire Authority Integrated Risk Management Plan and the 2007 - 2010 Action Plan, which are discussed in more detail below.

20.8 The Northern Review concluded a need to identify and take forward a number of station and vehicle deployment options for further study. This will quantify overlap with adjacent stations and the levels of residual risk if any overlaps are removed, and to quantify where strategic (distributive) cover can be improved, at the same time reducing local risk. The following scenarios were identified:

- Removal of Shepshed station
- Removal of Moira station
- Make Melton Wholetime (WT)
- Make Melton Day Crewed (DC)
- Make Melton WT & DC
- Make Oakham DC & Retained
- Make Oakham DC 2 pump
- Make Oakham Retained 2 pump
- Make Oakham WT 1 pump
- Birstall WT 1 pump (Syston removed)
- Birstall DC 1 pump (Syston removed)
- Birstall Ret 1 pump (Syston removed)
- Birstall WT 1 pump - Loughborough Retained removed
- Birstall DC 1 pump - Loughborough Retained removed

Computer modelling exists that can assess fire station provision against growth plans but this has not yet been carried out

20.9 Fire Authorities were been provided with the fire service emergency cover (FSEC) toolkit in 2004 by Communities and Local Government (DCLG) as part of the Integrated Risk Management Plan (IRMP) requirement announced in 2003. This software allows a risk based assessment of different scenarios (including new population growth). LLRCFA commissioned an assessment of the FSEC Toolkit in November 2007 by Mott MacDonald. This means that the FSEC tool is now calibrated and configured to allow for modelling to commence generating outputs.

20.10 Although this toolkit can be used to assess in detail the implications of growth, and test these against fire station provision (e.g. expansion of current stations, new stations and closures), we understand this has not been completed and is not possible within the timescales of this assessment given the ongoing commitment to examine current IRMP challenges. We recommend this information is updated in the infrastructure funding model when it is available.

A new fire station/HQ and regional control centres are planned at Birstall and Castle Donington respectively

20.11 The key infrastructure item planned by LLRCFA is the provision of a new fire station and headquarters in Birstall, located to the north of the city between the proposed

developments at Ashton Green and East of Thurmaston SUEs. This is set out in the Authority's Action Plan for 2008-11. We understand land has been secured for this facility, partly through developer contributions and partly by acquisition.

- 20.12 We understand this facility will reduce the number of 'life' incidents not attended within ten minutes and lend significant advantage to strategic emergency cover (given the geography and road network of the CFA area). The target date for completion of this is June 2010. A complete refurbishment of the existing Central Fire and Rescue Station in the city centre is also identified in the Action Plan, with completion targeted by April 2010.
- 20.13 Finally, a new Regional Control Centre for the East Midlands FRS's at Castle Donington, one of nine across the UK has been built and should be operational in 2010. This is a geographical based mobilising system that will send out the best placed/equipped resources, regardless of which authority covers the incident.
- 20.14 However, none of these facilities are required purely to accommodate the additional demands created by the proposed growth in the HMA area. The Central Fire and Rescue Station is an estates issue, whereas the Birstall facility is predominantly required to improve the service to existing residents/communities, although it will improve capacity to assist with future growth.

Castle Donington may require a new fire station in addition to the Regional Control Centre

- 20.15 One area that has for some time been at the 'tipping point' for a dedicated 'local' FRS resource is in Castle Donington. However, new growth in the area will mean that new fire service provision will be required. The area currently has fairly good access from Loughborough, along with support from adjoining FRSs (although we understand this may be reduced in the medium term).
- 20.16 Recent improved understanding through 2009 - 2012 IRMP shows Castle Donington to present the most significant risk in the North of the County for road traffic collisions (RTCs) with significant background non domestic risk. LLRCFA currently believes that any significant housing and/or commercial growth could stretch existing resources to the point where a new FRS station is needed.
- 20.17 We have therefore assumed a new facility at Castle Donington will be required in the medium term, although we have not been provided with a specification for this.

What are the costs to cope with new development?

- 20.18 The cost of the new Birstall facility and refurbished City Centre station have been estimated at £10.6 million and £4.5 million⁷⁰ respectively. This provision would have been built anyway, but has been configured with a view to coping with expected

⁷⁰ Leicester, Leicestershire & Rutland Combined Fire Authority Action Plan 2008-2011(Appendix A to Our Plan 2008-2011)

housing growth in the area. Some costs of the new development can therefore be attributed to growth. We have made the rough assumption that 25% of the cost of the new Birstall facility is attributable to growth, which equates to £2.65 million.

- 20.19 We have assumed a cost for a new fire station in Castle Donington of approximately £5 million, based on the cost of the other facilities. This cost will need to be refined through further discussions with LLRFCA. We have assumed that 100% of these costs are attributable to growth.

How can new infrastructure for growth be funded?

- 20.20 LLRFCA receives both central government grant (approximately £18 million pa) and council tax (approximately £15 million pa). The grant funding is increasingly 'reduced' against inflation meaning that any shortfall must come from council tax. The ability to raise council tax is fettered and subject to the capping regime - "must be substantially below 5%". There is access to PFI funds for larger schemes - usually those involving major service reconfiguration. Given the nature and scale of LLRFCA's infrastructure requirements, this is unlikely to be used.
- 20.21 Unlike infrastructure such as schools, few new developments are large enough to warrant a new fire station or even an extension to an existing one, and are therefore not delivered by the development process.

The new Birstall facility can be funded through existing mainstream funds, but Castle Donington fire station will need additional funding to be found

- 20.22 We understand the new Birstall facility is likely to be funded by a combination of supported capital funding, prudential borrowing and capital receipts from the sale of existing assets. We have therefore assumed that LLRFCA will be able to fund this itself.
- 20.23 However, as the LFRS capital program currently already includes the Birstal and Central development/refurbishment, this will limit for a number of years the ability of LLRFCA to borrow further to fund a new station at Castle Donington. It is therefore likely that the FRS will seek capital assistance (either through developer contributions or government grants to cope with growth areas) to fund this. It is important to note that there currently are no grants of this type, although the service may be eligible for Growth Area Fund (GAF). This would need separate investigation.

What are the priorities?

- 20.24 We have ranked fire and rescue facilities as a "seven" on our ten point priority list (where ten is essential and one is speculative).
- 20.25 We anticipate that these priorities may be changed in discussions which follow our work.

Infrastructure timing assumptions

- 20.26 Our timing assumptions for the Birstall facility are based on the completion dates stated by LLFCFA which are set out above. However, should this be significantly delayed, or major development is brought forward earlier, we would recommend this is reviewed with LLRCFA. With regard to the potential requirement for a new station at Castle Donington station, we have assumed this will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd the costs in line with the assumed phasing of development.

Issues

- 20.27 It should be noted that LLRCFA wishes to input on fire safety in new developments.

21 AMBULANCE

Introduction

- 21.1 This section looks at how proposed growth affects the requirements, costs and funding of ambulance services in the HMA.
- 21.2 The East Midlands Ambulance Service (EMAS) provides emergency and unscheduled care and patient transport services in the Leicestershire HMA. EMAS was formed in July 2006, as a result of the national reconfiguration of ambulance services, and is made up of the former EMAS (covering Derbyshire, Leicestershire, Nottinghamshire and Rutland), Lincolnshire and the Northamptonshire component of Two Shires Ambulance Trusts. EMAS employs over 3,000 staff at more than 70 locations - including three control centres at Nottingham, Lincoln and Northampton and manage an overall annual budget in excess of £130 million.⁷¹ It runs a fleet of 895 vehicles including Accident and Emergency (A&E) ambulances, Rapid Response Paramedic cars, Patient Transport Service (PTS) ambulances and Community First Responder (CFR) vehicles. Along with two air ambulances, an increasing network of CFR vehicles help support emergency cover in the more rural areas it serves. It also has a number of specialist vehicles for dealing with chemical, radioactive, nuclear and biological incidents.

PCTs commission services from EMAS

- 21.3 EMAS has service level agreements with the PCTs. The Accident and Emergency Service Level Agreement (SLA) for 2008/09 was signed on the 29 February 2008, with Derbyshire County PCT acting as the Coordinating Commissioner on behalf of the other 8 PCTS in the East Midlands Strategic Health Authority, and North Lincolnshire PCT and North East Lincolnshire PCT who also fall within the geographic territory the Trust serves.
- 21.4 Key features of the SLA are as follows:
- One year SLA - 1 April 2008 to 31 March 2009.
 - Recurrent value £115,201,468.
 - Inflation uplift applied at 2.3% in line with 2008/09 NHS Operating Framework
 - Investment to meet new service standards with effect April 2008 £6,995,001.

Strategic Direction of the Ambulance Service

- 21.5 The future issues and direction of EMAS (beyond 2010) is set out in its "Our Strategic Direction" document. It notes that over recent years, there has been a shift from traditional command-and-control cultures of the former trusts, to localised, empowered management teams working within the heart of their communities.

⁷¹ EMAS documentation

What are the infrastructure demands resulting from housing and jobs growth? What are the costs?

- 21.6 We understand EMAS does not have any set formula for capital infrastructure requirements by population growth.
- 21.7 However, it has stated the service is almost at capacity in terms of spatial requirements. EMAS has recommended the following approach to infrastructure growth requirements:
- Use its current staffing of 359 for the current population to project the increase in staff by population.
 - After an additional ten staff it would potentially require a further station to accommodate up-to 40 staff before requiring an additional station and so on.
 - Each station requires ICT and accommodation for vehicles etc.
 - Also for every 10 members of staff it would require capital for a vehicle and equipment.
- 21.8 We have interpreted this information as follows:

Table 21.1 Population growth and the new requirements for the ambulance service

	2006e	2011p	2016p	2021p	2026p	TOTAL
Leicester	116,520	118,217	122,311	126,251	130,117	130,117
Leicestershire CC	260,854	275,322	290,909	305,627	318,564	318,564
Leicester + Leicestershire Population	377,374	393,539	413,220	431,878	448,681	-
Population Increase		16,165	19,681	18,658	16,803	71,307
Extra Staff Required (@ 1 per 1,051 pop)		15	19	18	16	68

Source: EMAS, RTP

- 21.9 EMAS has reported that the location of these additional stations resulting from growth would need to be between the overall growth areas, although it has not provided any further information in this respect. It has also not provided any information on whether specific SUEs require stations.

What are the costs to cope with new development?

- 21.10 We understand from EMAS one of the stations (Syston), which accommodated approximately 80 staff and 30 vehicles, was valued at £3.5 million. However, we are assuming only 40 staff in a station, with fewer vehicles. Our own research found that the Scottish Assessors 2005 replacement cost estimation for ambulance stations indicates a cost of £900 per sq m for “standard” stations and £1,150 per sq m for “good” stations (including Control Centres).
- 21.11 We have assumed a station cost of £2 million. We understand the cost of new vehicles is £135,000 per vehicle. The assumed infrastructure costs are summarised below.

Table 21.2 Population growth and the new costs for the ambulance service

	2006e	2011p	2016p	2021p	2026p	TOTAL
Cumulative Extra Staff Required		15	34	52	68	
Assumed new stations (1 after 10 staff, then @ 1 per 40 new staff)		1	0	1	0	2
New vehicles (@ 1 per 10 new staff)		2	2	2	2	8
Cost - New stations (@ £2m per station)		£ 2,000,000	£ -	£ 2,000,000	£ -	4,000,000
Cost - New vehicles (@ £0.135m per vehicle)		£ 270,000	£ 270,000	£ 270,000	£ 270,000	1,080,000
Total Cost		£ 2,270,000	£ 270,000	£ 2,270,000	£ 270,000	5,080,000

Source: EMAS, RTP

How can new infrastructure for growth be funded?

- 21.12 EMAS is funded largely by the PCTs, with some additional charitable donations. This funding is tied to the service level agreements, and is driven more by demand than housing numbers. For more information on the funding of PCTs, please refer to the health section.
- 21.13 Because EMAS is largely funded by the PCT, we have adopted the same approach for funding as the PCTs, based on the assumption 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.

What are the priorities?

- 21.14 We have ranked ambulance facilities as a “seven” on our ten point priority list (where ten is essential and one is speculative).
- 21.15 We anticipate that these priorities may be changed in discussions which follow our work.

Infrastructure timing assumptions

- 21.16 As set out above, we have assumed the first station is required by 2011, and the second by 2021, based on the assumed phasing of development. The costs for these in the spreadsheet model are assumed to be in 2010/11 and the period 2016/17 - 2020/21.

Issues

- 21.17 Finally, we are not aware there are any ‘showstoppers’ in relation to the ambulance service and the anticipated quantum and location of new growth.

22 PRIMARY HEALTH CARE

Introduction

- 22.1 Primary health care services in the Leicester and Leicestershire HMA are delivered by the NHS Leicestershire County and Rutland NHS Primary Care Trust and NHS Leicester City (the City's Primary Care Trust).
- 22.2 This plan needs to try to separate out a number of complex and overlapping issues. Strategic documents from the County PCT state that the provision of premises is determined by
- Changes in demand - population changes and growth, and expanded patient choice and public expectations
 - Changes in services - new models of care, and new clinical pathways. There is currently a strong focus from the Government to improve the quality of GPs surgeries. (For example, the provision of GPs surgeries from converted private housing stock is no longer seen as adequate).
 - Statutory requirements - including the DDA, and Health and Safety⁷²
- 22.3 Clearly, all of these dimensions are important, but it is that portion of the first which concerns population change which fundamentally concerns this report. In particular, it is important to clearly distinguish between the current reconfiguration of health service delivery (in larger, more fit-for-purpose health centres) and the expansion in demand which results from new housing development.
- 22.4 However, it is the case that the health services can use all of the above drivers to help them reconfigure the way that services are delivered in order to respond to changing population sizes, distributions and profiles. For example, the PCTs' mainstream funding has been recently used to improve the quality of GP surgeries (converted houses being used as surgeries are no longer seen as adequate), and this process of modernisation that would happen anyway can be intelligently applied to the changing circumstances of growth. Examples of good practice include the use by both PCTs of the DoH Equitable Access Programme used to provide money for new facilities. Importantly, future growth requirements over a five year period were reviewed before spending decisions were made. In Leicester city, the PCT has funded three new GP practices through the use of Equitable Access funding and a new health centre from the PCT's own investment plans. Leicestershire County and Rutland also has a new GP facility planned under the same initiative.
- 22.5 Indeed, premises managers from both PCTs can point to examples of where additional capacity has been built into capital plans in anticipation of future population growth. In

⁷² Final Draft V1 NHS Leicestershire County and Rutland Draft Primary Care Strategy
<http://www.lcrpct.nhs.uk/site/Internet/PCTStructure/BoardMeetings/2008/0/Public%20Papers%20PDF.pdf> (30)

both cases, too, NHS managers have close links with planners at the County and City in order to anticipate and plan for future growth.

Our remit

22.6 The following areas are outside our study.

- Acute health care. We do not cover acute (generally hospital) care in this report. Our reasoning here is that PCTs, who operate as the purchasers and thus the funders of hospital services, have funding which adjusts for capitation. Note that there are a number of important nuances here, though - there are a number of other factors involved in the funding formula, such as clinical activity rates and deprivation and that funding arrangements works on retrospective data. The County PCT states in the past Leicestershire has had the lowest capitation share in the country. However, as we explained above this means very broadly that as population rises, then acute trusts' income from PCTs should also rise. Population change is therefore roughly taken care of in this way. In London, though, use has been made of the HUDU model, which does include a) revenue funding and b) the cost of providing acute care which should be purchased through the capitation adjusted funding provided through PCTs.
- Pharmacies and Optometrists. PCTs do not financially support the initial provision or ongoing costs of pharmaceutical and optometric premises. This is a private sector function. However, the PCT does have a role in advising on the optimal location of pharmacy and optometric services to ensure access and patient choice is determined by the national regulations. There is also an inspection role. The new contract for optometrists will allow NHS LCR to influence where services are located. Similarly, this can also be achieved with the commissioning and tendering of dental services underpinned by the dental strategy and dental needs assessment will feed this strategy. This will need to be taken into account when masterplanning.
- Dental Premises. PCTs issue a contract to dentists but there are no ongoing capital or revenue issues. Dentists are contracted to provide an agreed level of units of dental activity. For this they receive an income. All running costs are charged against this income. (However, PCTs can financially support the business rates for dental practices, the level of which is linked to the practices percentage of NHS work. NHS LCR has also supported the development of some dental practice premises through the Modernisation Funding).

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

PCTs undertake detailed demographic work, and make planning assumptions about a growing population

22.7 Baseline activity and finances have been projected forward in five year model using population and health needs factors identified from Office of National Statistics (ONS) data and the local 2008 Joint Strategic Needs Analysis (JSNA). For example,

assumptions of population growth have underpinned the NHS Leicester City strategy, at around 1% pa until 2012/13.⁷³

How a growing population translates into demand for primary health services

- 22.8 A rough rule of thumb used by PCTs across the country is that there should be 1 GP for every 1,800 people. However, it is the case that GPs do run with both significantly more, and significantly fewer, people on their lists than this. In practice, there is a good degree of flexibility in list lengths and not, as might be imagined, any statutory maximum list size. It is therefore often difficult to identify a “slice” of new provision specifically targeted at new growth.
- 22.9 The size of an average GP’s list means that, even if existing GPs were working at the maximum sustainable rate, 800 new homes would need to be built before a new GP would be required. As a result, both City and County PCTs point out that there is very often no requirement to provide a new GP surgery for each new development. However patients should have a choice to register with a local practices and therefore PCT’s need to ensure there is sufficient capacity. Where there is a small growth in population this may mean extending an existing practice rather than building a new practice premises.
- 22.10 The solution sometimes proposed, that of opening branch surgeries to treat a smaller, more local population, is not always optimal. Branch surgeries often find it difficult to offer the wide range of services demanded due to their size.
- 22.11 Conversely
- Larger surgeries can be more economically efficient, with shared ancillary and support facilities.
 - Larger surgeries can often offer wider range of co-located primary services which provides a wider choice and access for patients. The national drivers for change are to provide a wider range of services in a primary care setting.
 - Surgeries with a number of GPs are often able to provide additional capacity and can (at times) absorb some new housing growth. This can be a combination of physical extension of premises, or more intensive use of existing premises.
- 22.12 As GP practices accept patients from within an agreed practice boundary, the location of the proposed developments will impact on some practices more than others, particularly in more rural areas where the demand for services from the increased population may fall on only one or two practices covering that area.

⁷³ NHS Leicester City *One Healthy Leicester* (192)

There is a need to make best use of existing capacity

- 22.13 Overall, though, PCTs believe that there is a need to make use of existing capacity in order to use resources efficiently. Recent work has been undertaken to assess current capacity of GP services at both County and City PCTs.
- The Leicestershire County and Rutland PCT recently undertook an exercise to rate every GP's existing capacity in the face of experienced population increases. This has now placed every facility in order of need of development for the provision of core primary care services. It is therefore likely that those premises in the red or deep amber category will experience greater difficulties in absorbing large scale population increases but, depending on other factors, may also see future primary care premises development in that area. The opportunity to reflect the needs of any proposed increases in population would be part of the planning process for new primary care developments. This process alone will not determine the PCTs premises development plan as there are a number of key strategic documents which are to emerge soon and will influence the PCT's premises development plan.
 - Leicester City PCT has (in 2008) undertaken a premises survey of all GP practices. This has provided a detailed understanding of all the premises used in the city for primary medical care services and will be used to improve overall quality and functionality of premises. Also, in 2008 NHS Leicester City conducted a needs assessment based on a range of criteria including housing growth to determine the optimal locations of the new Equitable Access programme GP practices. This will be repeated again in 2009 in preparation for the procurement of the 3rd practice under the programme.

Capital needs resulting from new growth

We have laid out the findings of our interviews with PCTs in Table 22.1 and Table 22.2 below.

- 22.14 In the third column of the tables (listed "growth requirements"), we have summarised whether significant new capital spend is required to cope with growth plans. Note that it cannot be assumed that a developer should pay for this; mainstream funding and developer contributions might contribute either singly or together. As we have stated clearly above, this work is not intended to form the basis of any kind of developer contributions policy.
- 22.15 We have labelled requirements in the "needs" column as follows.
- "New facility required": In instances when the requirements of new growth are clear (for example in Ashton Green, where a new 3-4 GP practice would be required).
 - "Extension of / incorporation within planned upgrade": in instances where the capital spend required to cope with new growth is less clear (where, for example, a new facility is being planned or informally considered anyway, that can either have sufficient flexibility built into the design to cope with growth, or can be redesigned to cope with growth).

- “Small scale capital works - de minimis”: in instances where there are likely to be smaller scale capital works are required (such as small extensions to existing facilities).
- “No significant capital requirements identified at the moment”: in instances where there is existing capacity within the system. Clearly, this situation is under review, and new requirements may present themselves in future.

22.16 Table 22.1 and 22.2 below also give an indication of costs required to accommodate new growth. We have used cost indicators supplied to us by the County PCT in this. These costings are very high level and are only intended to provide a very rough indication of the scale of investment required.

22.17 There are also likely to be a number of smaller scale extensions and building works (such as interior remodelling, partitions and so on) which we have not allowed for in a strategic study of this nature.

Table 22.1 Growth requirements - Leicester City PCT

Local authority	Growth location	Growth requirements	Cost	Notes
City	Ashton Green	New facility required	£958,000	If fully built out, Ashton Green will need a new practice with approximately 4 GPs. A new population of 6000 is viable practice size, so Ashton Green will warrant new capital spend. PCT will keep Ashton Green under review in order to pick up any phasing issues, and so be able to respond. Ashton Green was not accounted for in the Equitable Access Programme (EAP) assessment because the PCT was advised by the council that realistically it would not come forward over next 5 year period.
City	Waterside	New facility required	£820,000	Practices around Waterside don't have the capacity to expand. However, the area didn't come out as area of need when EAP assessment done over 5 year timeframe because it was assumed Waterside would be built out later than the 5 year period. Precise requirements depend on what the final numbers will be and over what time.
City	Abbey Meadows	No significant capital requirements identified at the moment		Growth is unlikely to be a problem. There is a new health centre, with additional space planned in for population growth.
City	St Georges	No significant capital requirements identified at the moment		Growth is unlikely to be a problem. There is a new practice in city centre which can take the additional demands.
City	Hamilton	Smaller scale capital works required - de minimis		Growth would only represent additional requirements for 1 GP - and existing practices can find space. This may require an extension.

Table 22.2 Growth requirements - Leicestershire County and Rutland PCT

Local authority	Growth location	Growth requirements	Cost	Notes
Charnwood	Loughborough SUE	Extension of/ incorporation within planned upgrade	£470,000	<p>One practice in the North West area of Loughborough has recently realised additional capacity through a premises extension but the other Loughborough practices have not seen any significant development of their facilities within the last five years and have identified capacity issues. The practices accept patients from across Loughborough and therefore the demands resulting from proposed population growth could be met by several practices but it would still exacerbate the current situation. A new Primary Care Centre is being proposed by 3 practices in the centre of Loughborough although no approval has been given as yet by the PCT.</p> <p>For calculating the costs of new growth, RTP has assumed that half of the planned growth at the SUE will need new build provision.</p> <p>Funding is not yet identified for new development.</p>
Charnwood	East of Thurmaston, North of Hamilton SUE	Extension of/ incorporation within planned upgrade	£336,000	<p>There are two brand new facilities in the area at Thurmston and Syston. These can cope with growth. But there are capacity issues in other local GP practices which may also be affected by displacement from growth. SUE could be seen as an opportunity to build in capacity and solve these existing problems together. For calculating the costs of new growth, RTP has assumed that one quarter of the planned growth at the SUE will need new build provision.</p>
Charnwood	Charnwood villages	Not yet known		<p>Loughborough and Sileby practices serve the Barrow area, although only one practice is located within Barrow itself and only the Barrow practice covers the area of Wymeswold. The PCT is currently working with the practice on a S106 funded development of the existing health centre in Barrow but it is unlikely that the funding available will allow the expansion required to meet the needs of the</p>

				proposed population increases in this area. The PCT states that facilities in the village areas will be considered in the light of the Primary Care Strategy based on a number of factors around access and choice.
Melton		No significant capital requirements identified at the moment		Premises assessment indicates that Melton premises would be a low priority for investment to meet core primary care service demands. Asfordby and Long Clawson also have capacity.
Oadby and Wigston		No significant capital requirements identified at the moment		Significant number of OW practices premises in need of development and identifying capacity issues. 4 practices in Wigston, 1 in South Wigston and 1 in Oadby have identified potential developments, with other practices also identifying capacity issues. Local GPs are independent contractors and so they have to raise the capital. There is also new capacity coming on stream given that O&W is chosen location of 8 to 8 centre. The new centres can also have a registered list of 4000 population. This 8 to 8 centre will allow the PCT to build in some capacity to cope with planned growth. Currently there is a bidding and selection process under way.
Harborough	Market Harborough	New facility required	£752,000	There are two facilities in Market Harborough, a new purpose built facility in 2005 has brought increased capacity to one of the facilities but the other has identified issues with capacity. Further growth in Market Harborough would exacerbate these issues. The PCT owns the Community hospitals and a review of these facilities is determining a future development programme. There is a possibility of relocating the GP practice as part of this development and additional capacity could be secured as part of this. We have assumed that a new 3-4 GP surgery would be required to cope with growth.
Harborough	Broughton Astley	Smaller scale capital works	Unknown, de minimis	Population figures indicate that an additional 1 - 2 GPs may be required due to

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		required - de minimis		recent population expansion. The additional 600 dwelling growth at Broughton Astley would mean that new facilities configurations would be required. Indications are that a reconfiguration of the existing building would help to absorb increases. Also have a branch surgery nearby which could assist with this. Costs are likely to be incurred but are treated as de minimis in a study of this strategic nature.
Harborough	Lutterworth	No significant capital requirements identified at the moment		A new surgery has been built in the last 18 months. A low priority for further expansion to provide core primary care services.
Blaby	SUE	New facility required	£1,344,000	Needs capacity. Will need new facilities to cope with SUE growth.
Hinckley and Bosworth	Hinckley	Extension of/ incorporation within planned upgrade	£380,000	Needs capacity - but potential to move into a community hospital. Will need to build in additional capacity to manage population growth.
Hinckley and Bosworth	Barwell SUE	Extension of/ incorporation within planned upgrade	£336,000	Will need more capacity. But plans are already underway to expand, so should be covered. To calculate the additional costs brought by growth, RTP has assumed that provision will be required to cope with the equivalent of half the population at the SUE.
Hinckley and Bosworth	Earl Shilton SUE	No significant additional capital requirements		Only one practice is located in the Earl Shilton area itself. Additional capacity has recently been achieved through development of the Earl Shilton premises although the population increases proposed would impact on current capacity.
NW Leics	Castle Donington	Smaller scale capital works required - de minimis	Unknown, de minimis	Additional capacity is in the process of development now to meet current and some future needs but substantial growth will impact on capacity even when development is complete. Costs are likely to be incurred but are treated as de minimis in a study of this

				strategic nature.
NW Leics	Coalville sites	New facility required	£2,204,000	County PCT work shows that 4 practices out of 5 Coalville practices are showing red or deep amber on capacity - meaning that no surplus exists. Significant growth is planned in the area, with around 8000 homes in Coalville = 16,000 more pop in Coalville - in theory 10 new GPs. A new facility will be required. PCT managers note, though, that factors such as patient relocation to new developments still within existing GP practice boundaries, loyalty to previous GPs, and net growth being lower than gross growth mean that accurate population growth is not known. (This is a general point applicable to all areas)
NW Leics	Ashby De La Zouch	Potential new facility being proposed which will require investment	£135,000	Has existing shortage of provision. Any growth may represent the "tipping point" for new facility requirements. However, growth at Ashby is modest (500 dwellings), resulting in a new population of 1,100 (gross) and so taking approximately 60% of a full time GP. However, this facility is most in need of development. It is highly unlikely to meet current premises issues and any further increase in population by small scale extensions. We have estimated costs at £135,000. This will approximately pay for capital provision for the required portion of GP time. We would ordinarily treat this as de minimis, but note that there will be significant additional costs incurred by the PCT because the infrastructure requirements of growth take the provision past the "tipping point" at which a new surgery may be necessary.

How can new infrastructure be funded?

Some mainstream capital funding is available

- 22.18 Funding for health services is provided to PCTs on a capitation basis. The Trusts are expected to manage their requirements within this. They have a degree of flexibility in this respect including use of their own capital, realisation of surplus assets and through various flavours of the PFI.
- 22.19 The DoH states that part of the Comprehensive Spending Review settlement was a capital funding increase of 10 per cent in 2008/09, which will support continued growth in capital investment programmes. Nationally in 2008/09, £400 million is being made available to fund PCT local capital schemes, with an additional £250 million to fund national initiatives, such as the community hospitals programme.⁷⁴
- 22.20 NHS Local Improvement Finance Trust (LIFT) is also available within the City PCT boundary although new forms of LIFT are now available countrywide. LIFT is a Public/Private Partnership (PPP) financing vehicle for improving and developing frontline primary and community care facilities. Its explicit objective is to allow PCTs to invest in new premises in new locations, not merely reproduce existing types of service.
- 22.21 There is also increasing private sector involvement in the creation and funding of new health centres which are then leased to GP practices with the rent met from the PCT's revenue funding within the PCTs budgetary restraints. (e.g development companies such as Primary Health Properties and Carecapital together with a number of specialist investment funds).

Mainstream funding should pay for new capital requirements - but there are problems. And unlike other areas, neither Leicester city nor Leicestershire appear to receive explicit additional recognition of population growth in its funding

- 22.22 In theory, this funding should provide PCTs with the necessary funds to pay for the new facilities needed. In practice it is not straightforward. Firstly, facilities will need to be built in advance of the full realisation of the population increase, and secondly there will be a subsequent time lag before Health Service revenue funding catches up with the population growth. Changes to the funding allocation mechanism should go some way to address this but will probably not eradicate it. Neither is it entirely clear that capitation funding responds fully to the needs of the growth. This was tacitly recognised by Government with a specific budget for additional strategic capital investment in the Growth Areas but we understand that this only amounted to £20 million during the period 2005-6. The result is that NHS budgets in areas experiencing growth are invariably under pressure.

⁷⁴ DoH (2007) The Operating Framework for the NHS in England 2008/09 (chapter 4)

22.23 Department of Health finance publications show that there is an upwards adjustment to financial settlements in areas labelled ODPM Growth Areas (in areas including Milton Keynes South Midlands, Thames Gateway, and Ashford).⁷⁵ It appears that no additional funding for growth was available within Leicestershire over 2007/8 (the date of the most recent published DoH data we have found).

PCTs do receive payments for premises, but do not receive specific budget for premises development

22.24 PCTs get funding for GP premises from the Department of Health. This funding is ringfenced, and is paid to GPs.

22.25 However, PCTs do not receive a specific budget for new premises *developments* as such. Both PCTs state that funding for expansion to the current provision would be at the expense of other competing priorities and ultimately may not be possible.

22.26 The revenue consequences are the important thing for the PCTs. Capital costs are embedded in the revenue costs attached to new development. Therefore other sources of funding for new facilities have to be explored. As part of this it is the PCTs policy to seek S106 contributions towards healthcare for housing developments.

PCTs have provision in place for small scale premises improvement and extension

22.27 It is the case in the City (and, we anticipate, the County) that it is possible to fund small scale improvements and expansion to extend the range of services they provide.⁷⁶ PCTs argue that a) the first call on this investment would be to improve the current estate rather than adding additional capacity, and b) this is subject to funding being available, and subject to budgetary constraints.

The approach to capital funding for growth will need to be different in individual cases

22.28 Work by the County states that, with the exception of PCT-owned health centres, primary care premises are owned or rented by independent contractors (ie, the GPs) providing primary care.

22.29 In the case of GP practices only, the PCT pays rent (recurrent revenue) to the GPs for the use of existing premises and, where funding permits, the PCT can provide capital and/or recurrent revenue funding for new and expanded premises for new developments.⁷⁷

22.30 As we discussed above, in some instances, a form of private finance arrangement exists, where independent contractor GPs enter into agreements with third part

⁷⁵ See NHS Revenue Resource Allocations and Limits: Exposition Book. DoH Expository 2006-07 and 2007-08 Primary Care Trust initial revenue resource limits. Growth areas adjustments are shown in Table 3.5.

http://www.dh.gov.uk/en/Managingyourorganisation/Financeandplanning/Allocations/DH_4104471

⁷⁶ NHS Leicester City *One Healthy Leicester* (164)

⁷⁷ Leicestershire and Rutland PCT Eco-towns response (6)

developer companies that specialise in Primary Care developments which are then leased back to the GPs.

- 22.31 The NHS Leicester City *One Healthy Leicester* Strategy and Commissioning document points out that growth and modernisation will need to be funded differently to reflect the variety of contractual relationships primary care providers have with the PCT. It points out that “some GP practices operate as tenants, renting their accommodation in either a PCT owned health centre, one of the recent LIFT buildings or from a private landlord. In these instances, responsibility for maintaining and improving the premises will depend on the nature of the leasehold agreement. However, most other GP practices are owner occupiers of the premises from which they provide services. For these independent contractors, responsibility for ensuring they operate from premises that meet statutory requirements and are fit for purpose clearly rests with them.”⁷⁸

Leicester City PCT is working on ways to improve its ability to invest - including freed up resources, income from extended services, and a developer contribution strategy

- 22.32 Investment previously has been from the traditional routes of GP premises funding - notional rent, borrowing costs (cost rent) and improvement grants, which would underwrite the capital investment made by the GP practice or a third party developer. The limited and discretionary nature of this funding means that investment in premises developments is not always possible and therefore alternative ways of funding projects need to be sought.
- 22.33 Work by the City PCT states that freed up resources or income from additional/extended services will need to be considered towards supporting the revenue consequences of new proposals where core and extended primary care is to be provided. Full details of this and the processes in taking forward premises developments in line with the Premises Directions will be the subject of a separate NHS LCR policy, together with the process for securing and utilising s106 funding.⁷⁹

Leicestershire County and Rutland PCT has a developer contributions strategy in place

- 22.34 The County PCT has a S106 contribution policy available, which contains a calculation to give an indicative sum of capital requirements arising from housing developments.
- 22.35 The PCT states that it is now increasingly being asked to demonstrate how this money is being used, and to explain the precise relationship of the developer contribution to the housing development in question. The PCT is using its Joint Assessment, and the GP capacity index, to do that.

⁷⁸ NHS Leicester City (2008) One Healthy Leicester - NHS Leicester City Commissioning and Investment Strategy 2008-13 (164)

⁷⁹ Leicestershire strategy (31)

Our assumptions about how growth infrastructure is funded

- 22.36 Our brief requires us to make some estimates of the extent to which funding is going to be available to cope with the demands of growth on the health service.
- 22.37 As we've stated above, we are not allocating developer contributions between service providers in this study. However, we can make a suggestion about how developer contribution towards health might be calculated. Making this assumption also leads us to an accompanying assumption of how much other funding will be required to cope with growth. This "other funding" will be made up of a complex and location-specific blend of mainstream, private and PFI funding.
- 22.38 Our major concern is to overcome the "time lag" in funding that we explained above. We have assumed that the PCT will not build the facilities themselves - they will pay rental costs, to a separate entity, such as Primary Health Properties or LIFT, for the use of a new facility.
- Developer contributions: Our suggestion - which has not been agreed with the PCTs - is that PCTs should receive the annualised equivalent of the capital costs of the required facilities for (say) three years. We have assumed this equates to 7.5%p.a. of the capital costs e.g. if the capital cost of a new health centre costs £1m, the cost of renting, running etc this facility would be £75k p.a. To cover this cost for three years to allow the funding formula to catch up with growth would require a developer contribution of £225k.
 - Mainstream/other funding: to continue with the above example of a £1m health centre, mainstream and other funding would be required to pay for the balance of the rental costs not obtained from developers. In this example, this would be around £775,000.
- 22.39 This would have to be apportioned between the number of new dwellings involved.
- 22.40 It should be noted that this approach has not been agreed with the PCTs. Further work will be required.
- 22.41 We think that this approach is preferable to that used in London, where use has been made of the HUDU model. The HUDU model includes revenue funding and the cost of providing acute care which should be purchased through the capitation funding provided through PCTs. It seems to be driven by a wish to extract maximum gain for the health service from developers irrespective of the spirit of the planning guidance and the consequences.

What are the priorities?

- 22.42 We have rated all health service needs as 9. This equates to "highly desirable" on our sliding scale.

Infrastructure timing assumptions

- 22.43 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development

Issues

Cross border issues are present, but manageable

- 22.44 There are some cross border issues for the City and County. However, our advice from the City PCT is that these issues are likely to be manageable. There are existing mechanisms within PCT finances to deal with the necessary recharging procedure, and in practice, patient flows go both ways, so tending to balance out. The major near-border developments are the Blaby SUE options, and the Charnwood East of Thurmaston, North of Hamilton SUE. In the case of Blaby, though, there are unlikely to be significant cross border issues due to motorway severance. The Charnwood East of Thurmaston, North of Hamilton SUE may generate cross border issues if people in that area register with a city practice, but these are likely to be manageable.

There is scope for significant efficiency savings from multi-user buildings

- 22.45 Significant cost efficiencies are potentially available through the PCT. We are aware of discussions beginning between education and health service in the co-location of health and school facilities in Ashton Green. A community-hub style shared service facility (including a library, GP, outpatients, intermediate care unit, community centre, and social work base for city council) is also being discussed for the Eyres Monsell area of the city. This type of co-operation needs to be actively encouraged by the leadership board.

A CiL-type standard charge might be useful to allow PCTs maximum flexibility for rational planning of health services and to maximise total developer contribution

- 22.46 As stated above, the County PCT states that it is now increasingly being asked to demonstrate how the money it receives in developer contribution is being used, and to explain the precise relationship of the projects funded by the developer contribution to the housing development in question. We expect that this newly critical approach from developers reflects reduced margins in the development market.
- 22.47 Unfortunately, this change in approach from developers means that PCTs might have less flexibility to use available funding to best effect in future. This kind of approach (which, admittedly, is within the spirit of Circular 05/05) can encourage the development of health centres in places that are sub-optimal from the point of view of the delivery of health services: obviously, health service need cannot be relied on to co-incide with development sites.
- 22.48 Under emerging CiL guidance, there will be no requirement to demonstrate "necessity to planning". In areas where the overall population will rise at a rate commensurate with the increase in population from new development (this would require some

demographic analysis) the CIL approach might also provide a basis for charges covering all new development rather than simply major developments. This would be the preferable outcome: it would mean that PCTs had maximum flexibility in service provision, but would also maximise the total funds available to the health service, as value from all development would be captured.

23 GAS

Introduction

- 23.1 This section looks at how proposed growth affects the requirements, costs and funding of gas infrastructure.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

There are two gas pipeline systems: national high pressure networks and local low pressure networks

- 23.2 The national high pressure gas transmission system is owned and operated by National Grid. This supplies gas to lower-pressure local distribution networks, which have several owners. In Leicester and Leicestershire the local distribution network is also operated by National Grid (National Grid Distribution). National Grid does not supply gas, but charges gas suppliers for the use of the network.

The national network does not need strengthening as a result of growth

- 23.3 National Grid consider that the national high pressure distribution system will be able to meet the level of growth proposed for the HMA without any strengthening.

Local networks may need strengthening as a result of growth, but costs are met privately by developers. Connection costs are currently unknown

- 23.4 National Grid Distribution cannot assess the precise scale of local network strengthening and new mains required and their costs at the moment. More information and background work is required.

- 23.5 However, we are advised by British Gas that with the decline in industrial demand there is spare capacity in the networks in Leicestershire.

- 23.6 Any work needed to supply new development will be at the local distribution level. National Grid informs us that 'reinforcements and developments of our local distribution network generally are as a result of overall demand growth in a region rather than site specific developments. A competitive market operates for the connection of new developments'.

- 23.7 Provision of on-site gas distribution is the responsibility of the developer, as part of construction. Local site connections to wider networks may be dealt with by independent gas transporters (IGTs) who will absorb some costs in anticipation of future revenues.

Connection costs are dealt with generically in our model

- 23.8 We have not separately broken out costs of gas provision in our assessment. This is because the developer component of connection costs is taken account of in the land prices developers are prepared to pay for a site. Gas connection costs are included generically as part of our viability calculations.

How can new infrastructure for growth be funded?

Gas connection costs will be privately funded

- 23.9 As we have suggested above, the National Grid will expect developers to pay for new mains to connect developments back to a suitable gas supply and any strengthening of that supply. As stated, National Grid has stated that “there is a competitive market for the connection of new developments”. For example, some of these costs may be met by independent gas transporters (IGTs) who will undertake the work and offset the cost against future revenues.

What are the priorities?

- 23.10 A gas supply is currently regarded as essential utility provision for new development. Where network strengthening and new mains are required to serve a development it is therefore essential that these are in place before the development is occupied. The LPAs must therefore liaise closely with National Grid Distribution over the proposed phasing of development.
- 23.11 However, because we have shown above that these costs are generally picked up by the private sector, they do not represent a priority for public sector investment. Prioritisation is therefore marked “not applicable” in spreadsheet model.

Infrastructure timing assumptions

- 23.12 Our assessment concentrates on infrastructure provided by the public sector. Gas connections are dealt with privately by the developer. We have therefore not made any timing assumptions in our spreadsheet model.

Issues

- 23.13 On the information available at this stage, gas supply will be provided by private sector investment and is unlikely to pose any showstoppers, provided that gas suppliers and distributors are kept aware of development phasing.

24 ELECTRICITY

Introduction

- 24.1 This section deals with electricity infrastructure provision to cope with growth in the HMA.
- 24.2 There is a national and local component to electricity supply in the HMA. National Grid operates the national electricity transmission network across Great Britain and owns and maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. In the HMA, the local distribution company is E.ON Central Networks (Central Networks).

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

National Grid have no issues with growth

- 24.3 National Grid advises that the growth proposed for the HMA will not have a significant effect on their infrastructure. Existing capacity appears to be sufficient to deal with projected demand.

Central Networks have identified extensive reinforcements which will be required to their networks to supply development at the main growth areas. Costs are not known

- 24.4 Central Networks have carried out an initial high level assessment of the reinforcements that will be required to serve development of the main SUEs and growth areas. Their 132kV and 33kV network will need to be reinforced and additional circuits installed. Several Bulk supply point substations and Primary substations will need to be constructed or reinforced. The 11kV network will need to be extensively reinforced and extended and a number of new 11kV/415V distribution substations installed depending upon which development sites are used. For this part of the assessment employment areas have been ignored as the type of business locating to the area will affect the type of solution required.
- 24.5 Central Networks findings in relation to the main growth areas and SUEs are set out in the tables below.

Table 24.1 Leicester City electricity infrastructure requirements

Site name	Additional requirements / further comments
Ashton Green	Extension and reinforcement of the 11kV network. Installation of approximately 11 distribution 11kV/415V substations
Abbey Meadows	Extension and reinforcement of the 11kV network. Installation of approximately 10 distribution 11kV/415V substation
Waterside	Extension and reinforcement of the 11kV network. Installation of approximately 9 distribution 11kV/415V substations
St Georges	Extension of the 11kV network. Installation of approximately 6 distribution 11kV/415V substations

Source: Central Networks

Table 24.2 Leicestershire electricity infrastructure requirements

Site name	Additional requirements / further comments
SUE Option C	Extension and reinforcement of the 11kV network. Installation of approximately 15 distribution 11kV/415V substations
East of Thurmaston etc	Extension and reinforcement of the 11kV network. Installation of approximately 15 distribution 11kV/415V substation
Waterside	Extension and reinforcement of the 11kV network. Installation of approximately 11 distribution 11kV/415V substations
Market Harborough	Extension and reinforcement of the 11kV network. Installation of approximately 9 distribution 11kV/415V substations
Barwell SUE	Extension and reinforcement of the 11kV network. Installation of approximately 8 distribution 11kV/415V substations
Earl Shilton SUE	Extension and reinforcement of the 11kV network. Installation of approximately 6 distribution 11kV/415V substations
Melton Mowbray SUE	Extension of the 11kV network. Installation of approximately 3 distribution 11kV/415V substations
Stephensons Way	Extension and reinforcement of the 11kV network. Installation of approximately 8 distribution 11kV/415V substations
South Coalville SUE	Extension and reinforcement of the 11kV network. Installation of approximately 14 distribution 11kV/415V substations

Source: Central Networks

- 24.6 The costs of these reinforcements can only be determined by detailed work when more information on the location and scale of development is available.

How can new infrastructure for growth be funded?

Some funding will be borne by Central Networks

- 24.7 Some of the costs of these reinforcements may be borne by Central Networks. This funding will be raised privately.

Most of this reinforcement will be paid for by the developers

- 24.8 Most reinforcement will be paid for by site developers. There are two main elements of reinforcements for which developers may be required to pay:

- The full cost of providing the local infrastructure to serve the development. This comprises the 11,000 volt (11kV) network and the transformers stepping this down to 415 volts for local supply.
- A proportion of any higher voltage (132kV and 33KV) reinforcement 'up-stream' that is required to supply the development. The proportion is based on the extent to which the reinforcement is required by the development and the extent to which it is required for general strengthening of the network. Reinforcement may not be necessary if there is adequate capacity in the network, provided the network has not been reinforced in the last five years. If this is the case a proportion of the costs will be charged to the developer retrospectively.

What are the priorities?

- 24.9 We have shown above that these infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked "not applicable" in the spreadsheet model.

Infrastructure timing assumptions

- 24.10 Our assessment concentrates on infrastructure provided by the public sector. Electricity connections are dealt with privately by the developer. We have therefore not made any timing assumptions in our spreadsheet model.

Issues

- 24.11 The issues we see here are as follows:
- The need for liaison and forward planning. The construction of Bulk Supply Point and Primary substations involves long term planning, the purchasing of long lead time equipment and the purchasing of sites for the substations. It has been assumed that all wayleaves and legal requirements for the substation sites and cabling works will be forthcoming. Any delay in this process could significantly affect construction works and cause delays.
 - The need for an equitable spreading of costs across site developers. In providing supply reinforcements to SUEs, there is a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage). It will be important to ensure that the costs are equitably borne by all the developers. An example of dealing with the former problem is a forward funding arrangement, as discussed elsewhere in the report, with the cost recovered through a charge per dwelling.
- 24.12 Subject to close working between the LPAs, Developers and Central Networks there appear to be no showstoppers with regard to electricity supply.

25 WATER

Introduction

- 25.1 This section looks at how proposed growth affects the requirements, costs and funding of water infrastructure.

What are the infrastructure requirements resulting from housing and jobs growth?

Severn Trent's plans incorporate planned growth

- 25.2 Water companies have a statutory duty to supply water to domestic housing on request.
- 25.3 Severn Trent plc supplies water to the whole of the Leicester and Leicestershire HMA. STW is currently consulting on its draft Water Resources Management Plan 2009 which sets out its proposed 25 year strategy for maintaining the balance between supply and demand for water across its region. The plan runs to 2035 and has been drawn up to take account of the growth proposed in the draft RSS and resulting from Growth Point status.
- 25.4 At strategic level Severn Trent considers that its proposals will provide sufficient water to meet demand until 2035 with no more than three hosepipe bans per 100 years. On the resources side these will include measures to maximise uptake where there is headroom. On the supply side their proposals are a mixture of leakage reductions, demand management (such as extension of metering), and increased efficiency. The company is also increasing the availability of water by transferring it from surplus to deficit areas. The major project in the 2010-2015 period is the Derwent Valley Aqueduct Duplication, bringing water south to Leicester.

The plans look at overall demand for water, and so are not site-specific

- 25.5 Strategic proposals are intended to cover the overall demand for water, and it is therefore not possible to identify the water demand implications of specific housing developments. The strategic water project that is most closely related to growth in the HMA is the partial duplication of the Derwent Valley Aqueduct which will bring water to Leicester.

There are likely to be some local reinforcements to cope with growth, but these are not yet understood

- 25.6 STW advise that there will be requirements for local trunk main reinforcements to meet the needs of some of the growth proposals, but that these will require modelling to determine the requirements and their costs in any detail. This will not be possible until more detailed information is available on the location and scale of growth. A preliminary review suggests that there are no 'show-stoppers' as regards water supply.

Individual site connection costs are picked up by developers through the development process

- 25.7 Developers have the power under the Water Act to requisition connection of their on-site water mains to the water company's mains supply. The cost of this can vary considerably depending on the distance to be covered and whether the mains supply needs strengthening through the provision of, for example, larger mains pipes. The water companies charge these costs to the developers, with an offset to take account of future revenue from the new development.
- 25.8 We have not dealt with these individual site connection costs separately. They will vary on a case-by-case basis. However, these costs are picked up in our spreadsheet model, and are incorporated into our calculations of developer contributions.

How can new infrastructure for growth be funded?

Strategic projects are paid for through water company borrowing plans. Some funding for certain strategic projects will come from developers

- 25.9 Strategic projects will be funded by STW through borrowing to increase in its regulated asset base approved by OFWAT for each five-year Asset Management Period (AMP). For example, the Derwent Valley Aqueduct Duplication is scheduled for implementation in AMP5 (2010-2015), subject to approval by OFWAT.
- 25.10 Where off-site works have been identified to service specific development sites, developers will be expected to make a contribution to an amount determined at the detail design stage under the usual requisitioning/adoption process. This contribution will take into account Severn Trent's income from the new development.

Funding for individual site connections comes from developers

- 25.11 As we point out above in our remarks on costs, funding for individual site water connections is picked up by developers. Allowance for these costs is made in the viability section of our spreadsheet model.

What are the priorities?

- 25.12 All the proposals in the Draft Water Resources Management Plan are essential to meet the overall demand for water. The trunk main reinforcements are essential to ensure water supply to the growth areas that will require them.
- 25.13 However, we have shown above that these infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked "not applicable" in spreadsheet model.

Infrastructure timing assumptions

- 25.14 Our assessment concentrates on infrastructure provided by the public sector. Water connections are dealt with privately by the developer. We have therefore not made any timing assumptions in our spreadsheet model.

Issues

25.15 The issues we see here are as follows.

- The need for liaison and forward planning. Severn Trent stress the importance of adequate notice to ensure that supply reinforcement can be designed and undertaken in time to allow development to proceed as phased. At this stage it is not possible to determine whether there are problems with the phasing of local trunk main reinforcements which will affect the phasing of development. If there are no such problems, the phasing of these reinforcements will depend on the phasing of the development that they serve. To ensure that this is the case as far as possible, Severn Trent wish to see regular liaison with LPAs and major developers.
- The need for an equitable spreading of costs across site developers. In providing supply reinforcements to SUEs, there is a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage). It will be important to ensure that the costs are equitably borne by all the developers. An example of dealing with the former problem is a forward funding arrangement, as discussed elsewhere in the report, with the cost recovered through a charge per dwelling.

25.16 Otherwise, there appear to be no water supply showstoppers which will prevent or seriously delay the development proposed for the HMA.

26 SEWAGE AND DRAINAGE

Introduction

- 26.1 In this section we deal with how growth generates drainage infrastructure requirements. There are two major aspects to drainage:
- Sewage - its collection, treatment and discharge
 - Drainage - comprising of surface water drainage.
- 26.2 Severn Trent plc are responsible for sewage treatment across the HMA area with the exception of a small area of Melton District and the south-eastern part of Harborough District comprising nearly half the District's area, for which Anglian Water is responsible (see map at Appendix 11). This includes the proposed SUE at Market Harborough. We describe below the infrastructure requirements, and how they are funded, with separate sections on Anglian Water and Severn Trent.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Sewage

Water companies are legally obliged to deal with sewage

- 26.3 The collection, treatment and discharge of foul water from residential areas is usually undertaken by the water company, which has a responsibility to provide capacity for growth. The obligation applies only to domestic development but it is likely that additional capacity for employment purposes can be provided.
- 26.4 New sewers and connections to existing systems can be requisitioned from the water company under Sections 98 and 106 of the Water Industry Act 1991. It is usual for developers to provide sewage connections on development sites at their cost under the sewers for adoption process and any off site sewage connections are provided by agreement under the requisitioning process. The capital cost of these is met by the developer, with an offset to take account of future income. The choice of pipeline routes, design and treatment location is entirely with the water company.

Severn Trent Infrastructure does not require new sewage works to deal with growth in its areas

- 26.5 Severn Trent considers that at this stage it will not require any new sewage works as a direct consequence of future growth: enhancement and expansion of existing ones should be sufficient to deal with growth in the HMA.
- 26.6 Severn Trent plc has made provision for growth in Leicester and Leicestershire (except for the areas served by Anglian Water) in the AMP5 (2010-2015) investment programme. Severn Trent's final proposals are due to be with OFWAT in March 2009, with final determination of the programme due in December 2009. When the company has a clearer understanding of the phasing of proposed development it will be able to determine any requirement for investment in the AMPs post 2015.

- 26.7 Wanlip STW serves Leicester and has considerable spare capacity. Investment in STWs is more likely to be required to deal with the higher percentage levels of growth proposed in SUEs outside Leicester such as Coalville and Loughborough. In areas such as these a Water Cycle Study should be carried out to provide a comprehensive assessment of water abstraction, supply, drainage and flood risk.
- Anglian Water see significant constraints in the Market Harborough area. No significant growth is possible unless a temporary "package plant" is installed. Without the "package plant" no housing growth will be possible until at 2017 at the earliest*
- 26.8 Anglian Water advise that the only impact on their services of the proposed growth will be at Market Harborough. Market Harborough STW is at capacity and no significant level of growth beyond current permissions in the area will be possible until the works has received major upgrades. The scale of these upgrades, and therefore their cost, will depend on the EA's requirements regarding the quality and volume of discharges .
- 26.9 There are no proposals for enhancements to Market Harborough STW in AMP 5 (2010-2015), so the earliest these could take place is 2017, on the basis of work commencing at the beginning of AMP 6 (2015-2020).
- 26.10 This is potentially a delaying factor on development at Market Harborough before 2017, but it may be possible (subject to EA agreement) to install a temporary 'package plant' to process increased discharges until permanent upgrades are completed. The cost of this would be met by the developer.
- 26.11 The Market Harborough STW is located north of the town, so the costs of connecting sewers will be considerably less if development takes place to the north rather than in other directions.

Surface Water Drainage

- 26.12 The key issue to the effective drainage of new development is the sustainable management of storm water.
- Surface water now needs to be managed in line with the Government's new water strategy*
- 26.13 The Government's Water Strategy, entitled *Future Water*, sets out a vision for more effective management of surface water to deal with the dual pressures of climate change and housing development. Surface water needs to be managed more sustainably, by allowing for the increased capture and reuse of water, slow absorption through the ground, and more above-ground storage. Water companies do not expect surface water from new development to be conveyed to the foul or combined sewerage system.
- Greater emphasis needs to be paid to the consequences of extreme rainfall*
- 26.14 When surface water is managed through a conventional piped system or through use of sustainable drainage systems (SuDS) designs can only have a finite capacity and cannot take the flow generated by extreme rainfall. In the past, even outside the flood plain, some properties have been built in natural drainage paths. This leaves them extremely vulnerable to flooding, and not just from sewers. The latest version of

"Sewers for Adoption", the developers guide to providing sewers on new developments, states that developments should safely accommodate floods which exceed the design capacity of the sewers.

- 26.15 The Ciria document C635 "Designing for exceedance in urban drainage good practice" shows how developments can be designed so that flood water can pass safely along roads or through open spaces.
- 26.16 Water companies also strongly support avoidance of development in the flood plain and other areas prone to fluvial flooding; rivers and watercourses will sometimes inundate the sewers or restrict their outlets so there is a real possibility of flooding from sewers as well as from the river or stream in these locations (PPS25 gives guidance on this).

How can new infrastructure for growth be funded?

Sewage

On-site secondary sewage infrastructure costs are picked up by developers

- 26.17 Under the process of adopting sewers, the developer provides the on-site sewerage for water companies to adopt on completion under Section 104 of the Water Industry Act 1991. We treat the cost of this as a normal development cost. Off site sewers are then provided by the water company where necessary and the costs determined on a site by site basis. The capital cost to developers is usually off-set by an allowance for future income.

Sewage treatment works (STWs) are primary infrastructure. They are paid for by water companies through their investment cycle in anticipation of future revenue

- 26.18 The industry's planning process for capital expenditure works on a five year cycle. Water companies agree their five-year capital programmes, or Asset Management Programmes (AMPs) - and thereby the amounts they can charge customers for capital works - with OFWAT. These are fixed, not rolling programmes: the next AMP, for the period 2010-2015 is currently being finalised, for example. This has implications for infrastructure planning which we discuss below.
- 26.19 The water company must satisfy all regulations in relation to the discharges and facilities for treatment. In order to ensure that new developments do not exceed the available treatment and discharge capacities, the water company can reasonably request that phasing restrictions be applied to new developments whilst they undertake infrastructure reinforcement/expansion works. The Local Planning Authority may (if it so chooses) incorporate these phasing restrictions into any Planning Approvals.
- 26.20 Expansion of Sewage Treatment Works (STWs) requires EA approval. They have two main areas of concern:
- The quality of the effluent in relation to the capacity of the receiving watercourse. For example, the Agency may require enhanced treatment to ensure that the levels of ammonia in the watercourse remain at acceptable levels.
 - Increased risk of flooding from higher levels of discharge.

- 26.21 The water companies carry out necessary enhancements to STWs at their own cost in anticipation of future revenue. They will only invest in additional capacity when they are confident that growth will materialise. Capital investment will need to be agreed with OFWAT for inclusion in the next five-year AMP. Provided reasonable notice - four to five years - is given the water companies do not envisage problems in providing additional capacity in the HMA.

Surface water drainage

SuDS will be constructed and paid for by developers as part of the on-site infrastructure

- 26.22 Developers in the SUEs will be expected to provide SuDS to ensure that run-off from developments is no greater than in their undeveloped state. SuDS will usually be adopted by the local authority with the developers providing a commuted sum for maintenance. If a local authority is unwilling to adopt a SuDS, Anglian Water will do so provided that it is constructed to their standards.

What are the priorities?

- 26.23 These are statutory requirements. However, we have shown above that these infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked “not applicable” in spreadsheet model.

Infrastructure timing assumptions

- 26.24 Our assessment concentrates on infrastructure provided by the public sector. Sewage and drainage infrastructure is dealt with privately by the developer. We have therefore not made any timing assumptions in our spreadsheet model.

Issues

- 26.25 We see the issues relating to sewage and drainage as follows:

Early engagement is important

- 26.26 The lead times imposed by the five-yearly AMP cycle on improvements to STWs need to be reflected in early engagement between the water companies, developers and LPAs. As shown above, it will not be possible to start work on an STW enhancement to serve new development before about 2017, as it will need to be programmed into AMP6, which runs from 2015-2020.
- 26.27 As described above, Severn Trent state that their proposed AMP5 investment programme has made provision for growth in the HMA. It will be necessary to review this when OFWAT determines their AMP programme in December 2009 to ensure that the programme has been agreed.

Infrastructure must precede development

- 26.28 Where the discharges from proposed developments require enhancements to STWs and the networks serving them, it is essential that these are carried out and completed before the developments are occupied. Close liaison between LPAs and the water companies is essential to ensure that the latter are aware of proposed development programmes.

Equitable cost sharing

- 26.29 Cost of sewerage network enhancements in an SUE needs to be borne by all the development in the area, rather than falling on those at the beginning or the end, applies also to water supply (see above).

Market Harborough sewage

- 26.30 As described above, Market Harborough STW is a potential delay factor on development starting there before 2017, unless a temporary 'package plant' can be installed before that date.

Water Cycle Studies

- 26.31 The water companies stress the importance of carrying out water cycle studies in growth areas in order to provide a comprehensive assessment of the water cycle from abstraction to discharge in order to confirm that water supply, drainage and flood risk will not be a constraint on the levels of growth proposed. Water cycle studies are initiated by local authorities or the EA.

27 TELECOMMUNICATIONS

Introduction

- 27.1 This section looks at how proposed growth affects the requirements, costs and funding of telecoms infrastructure.

What are the infrastructure requirements resulting from housing and jobs growth? What are the costs?

Telecoms provision is dealt with privately

- 27.2 We review this subject briefly because landline and broadband provision is dealt with between developers and providers. There are no infrastructure requirements on the public sector for providing either fixed-line or mobile telecom services. BT has an obligation to provide a landline to every household in the UK, and developers will want to facilitate this otherwise their developments will be unsellable. The market is functioning well in this regard and there is no need for public involvement.
- 27.3 Mobile phone provision is also a matter for private sector provision. The main requirement is for sites for masts. This is dealt with through the development system.
- 27.4 Broadband access is also almost universally available through the market, so this places no infrastructure demands on the public sector either. Business users can purchase additional bandwidth to speed up their internet access if they wish to. Those requiring speeds higher than ADSL (up to 8 mbps) can obtain increased bandwidth through the market.

Because investment is private, we have not costed it

- 27.5 As the infrastructure provision is private investment, we have not felt it necessary to identify the costs.

How can new infrastructure for growth be funded?

Funding will be private. We have not quantified it

- 27.6 In the case of both fixed-line and mobile, telecoms, new infrastructure will be funded from the capital programmes of BT and also cable companies, where the latter operate.
- 27.7 The Digital Britain review mentions a universal access to 2mbps broadband by 2012, but is unclear on exactly how this will be funded (although it appears to be an extension of BT's Public Service Obligation on phone provision across the broadband industry). By the summer, the review will decide whether the government needs to invest in next-generation broadband - a superfast network which would further revolutionise communications, and, so the theory runs, stimulate the economy.⁸⁰

⁸⁰ http://www.culture.gov.uk/what_we_do/broadcasting/5631.aspx

What are the priorities?

- 27.8 Telecom services should be rolled out as the new housing and commercial development is built so the issue of priorities does not arise.
- 27.9 If issues of prioritisation arise with regard to high-speed internet access, BT and other providers should be encouraged to give priority to employment areas, although they will probably wish to do so on commercial grounds in any event.
- 27.10 We have shown above that these infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked “not applicable” in spreadsheet model.

Infrastructure timing assumptions

- 27.11 Our assessment concentrates on infrastructure provided by the public sector. Telecoms connections are dealt with privately by the developer. We have therefore not made any timing assumptions in our spreadsheet model.

Issues

- 27.12 We do not consider that the provision of telecoms infrastructure gives rise to any significant issues. It will not be a showstopper.

28 WASTE

Introduction

28.1 This section looks at how proposed growth affects the requirements, costs and funding of waste management.

Responsibilities are split

28.2 County and Unitary authorities are responsible for the treatment and disposal of municipal waste. Unitary and second-tier authorities are responsible for the collection of household waste.

There are targets for waste reduction

28.3 In order to meet the requirements of the EU Landfill Directive, the Government has set the following targets for recycling and composting of household waste: at least 40% by 2010, 45% by 2015 and 50% by 2020. There are also specific targets for reducing the amount of biodegradable municipal waste going to landfill to:

- 75% of 1995 levels by 2010
- 50% of 1995 levels by 2013
- 35% of 1995 levels by 2020

28.4 This requirement is in the context of the quantity of waste growing within Leicestershire at 1.2% per annum (2007/8), although forecast to drop to 0.7% per annum by 2038/9.

28.5 Failure to meet these targets has a significant potential impact in penalties on Leicester City and Leicestershire County Council (up to £150 per tonne in non target years and in target years there could be further penalties if the UK fails to meet its national target - suggestions are that EU penalties will be split equally between all failing Authorities).

28.6 The County Council and the Leicestershire Waste Partnership (the County and Districts) have made a commitment to achieving 58% Recycling and Composting rate by 2017 and to reduce the amount of residual waste going to landfill via utilising more sustainable options. The County Council has recently received government approval to a PFI project⁸¹ to enable it to treat the residual waste after recycling so as to meet the targets for reducing waste going to landfill.

Waste management has been sub-contracted in the City

28.7 Leicester City Council has a 25-year waste management contract, running to 2028, with Biffa Leicester, who are responsible for collection, recycling and recovery of household waste, and disposal of the remainder. Waste is processed through a combination of mechanical and biological processes (MBT). Metals are recovered for reuse, light materials are converted into 'FLOC', a fuel used in cement works, and biodegradable waste is composted to make a soil conditioner and produce methane for

⁸¹ <http://www.defra.gov.uk/news/2008/081002b.htm>

electricity generation. With changing technology, a gasification plant may be developed over the study period. There is currently 25% spare capacity in the MBT system.

- 28.8 As can be seen, in most areas the cost of reconfiguring the waste services to respond to targets for recycling and reductions in landfill swamp the impact of housing growth. Also, major PFI schemes for large recycling facilities are increasingly common. It would therefore be exceptional for a Council to require a contribution towards such facilities and where they do a strict apportionment of cost is needed.

What are the infrastructure demands resulting from housing and jobs growth? What are the costs?

Waste collection costs will arise from new housing in both the City and County

- 28.9 There will be costs associated with new households. They will require the following:
- Collection vehicles, at approximately one per 4,000 dwellings (there are variations around this depending on spare capacity, and whether the new rounds are urban or rural)
 - Waste receptacles: wheelie bins, boxes
 - Bottle and paper banks
- 28.10 We have 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 range to £50 -100 per dwelling.

Waste Treatment and Disposal arise from new housing in both the City and County

- 28.11 New households potentially give rise to the following requirements:
- Civic Amenity Sites or Recycling and Household Waste Sites (RHWS). These may need to be extended, redeveloped or relocated to accommodate the increased waste throughput. The costs of extending an existing site may be very small if the extension is modest, but a new site may cost up to £2.5 million, although this would include land costs (we have assumed a maximum cost of £2 million without land costs).
 - Waste Transfer Stations. Depending on the location of new development, it may be more economical to transfer waste from collection vehicles for onward transport to treatment/disposal facilities. The cost of a waste transfer station is of the order of £1.5 million.
 - Waste Treatment Facilities. These typically have a lifespan of at least 25 years and need to be designed to accommodate housing and waste growth over this period. It is generally not feasible to extend or upgrade waste treatment facilities and the capital costs for providing one large enough to deal with growth over its life must be borne at the beginning of the project. Costs depend on scale and technology adopted.

Responses to growth in Leicestershire County

Leicestershire is intending to redevelop four Recycling and Household Waste Sites

- 28.12 Leicestershire is intending to redevelop four Recycling and Household Waste Sites RHWSs. In no order of preference, these are:
- Kibworth
 - Lount
 - Melton
 - Sileby
- 28.13 Depending on the scale and location of housing growth others may be considered, but further work is required to determine where.
- 28.14 Costs will depend on the extent of the redevelopment decided upon. However, a major driver of the redevelopment is to improve recycling rates rather than the requirements arising from growth.

A Waste Transfer Station may be developed next to Loughborough RHWS

- 28.15 The County suggests that such a facility may be developed. This is dependant on several factors in addition to growth in the number of households. We note that this is still requiring further discussion and consultation, so we have not included any costs in this report.

The type of waste treatment facility to be developed through the PFI project is still under consideration

- 28.16 Whatever technology is adopted, as the facility will have a life of about 25 years it will need to deal with residual waste arising from growth in the County areas of the HMA into the 2030s. To a considerable extent it will be dealing with waste arising from existing dwellings, or dwellings constructed post-2026.

Responses to growth in Leicester City

The waste contract provides for 2.5% tonnage growth per year, so any additional collection rounds and associated equipment required will be provided for under this

- 28.17 If growth exceeds 2.5% per year, there will be a requirement for additional payments by the City Council, on the PFI contract, but this will be a revenue cost.

There is sufficient Waste Treatment capacity to deal with proposed growth

- 28.18 Because there is 25% spare capacity in Biffa Leicester's recycling and composting plants, it is not anticipated that new infrastructure to deal with this will be required as a result of the proposed housing growth. If it is decided to develop a gasification plant this will be to improve on the operation of the current system as a whole and not to deal specifically with new housing.
- 28.19 The City's waste management service considers that a third civic amenities site is desirable but this is an existing requirement rather than one triggered by growth proposals.

28.20 Because of the nature of the City’s PFI contract we do not consider that there will be additional capital costs for infrastructure falling on the City Council over the plan period.

Costs of responding to growth

Collection and equipment costs

28.21 While the increased on-going costs of collection and replacement of equipment will be covered by increased capitation reflecting the increased population there will be upfront costs for equipment for the additional collections. SPDs examined in other areas tend to set a cost of between £50 and £100 per dwelling. We have assumed a mid-point cost of £75 per unit in the County. These services are currently provided by the individual local authorities (as opposed to the County Council). As explained above, any such costs in the City will be absorbed in the PFI payments.

Costs of expanded Recycling and Household Waste Sites

28.22 Leicestershire County Council has calculated the costs of capacity increases at RHWSs in order to maintain recycling levels as demand grows. The contributions vary depending on requirements. Maximum levels are around £93 in 2008/9. Total costs will be determined by the requirements of specific growth areas.

28.23 We have taken this maximum cost and have assumed an average cost of £50 per unit in the County to cover the expansion of Recycling and Household Waste Sites. These services are currently provided by the County Council.

Total waste costs assumed for responding to growth

28.24 The total costs for waste (collection and provision of RHWS) on the above basis are as follows:

Table 28.1 Total assumed waste costs relating to housing growth in the HMA

	£
Collection (£75/dwelling)	3,184,650
RHWS (£50/dwelling)	2,123,300
Total	5,307,950

Source: RTP

Total waste costs assumed by local authority

28.25 Using the above assumptions, the total costs of responding to growth in each of the Local Authority areas is as shown in the table below. Two points are worth noting.

- these cover both the districts’ costs for collection and the County Council’s costs for RHWSs).

- As we stated above, because of the nature of the City's PFI contract we do not consider that there will be additional capital costs for infrastructure falling on the City Council over the plan period.

Table 28.2 Total assumed waste costs relating to housing growth local authority area

	Total
Blaby	-£0.8m
Charnwood	-£1.3m
Harborough	-£0.7m
Hinckley and Bosworth	-£0.9m
Melton	-£0.4m
North West Leicestershire	-£1.2m
Oadby & Wigston	-£0.1m
Leicester City	£0.0m
Total	-£5.3m

How can new infrastructure for growth be funded?

PFI Credits are available for major contracts and major waste treatment infrastructure

- 28.26 Leicester City's contract with Biffa Leicester is an example of the former; the award of nearly £87m in PFI credits to develop new long term waste management facilities to the County an example of the latter. This will cover nearly half the anticipated cost, the rest being met by payments by the County to the contractor over the life of the project.

For recycling and recovery infrastructure Waste Infrastructure Capital Grant is available from DEFRA, but these are targeted at service quality rather than responding to growth

- 28.27 The levels of capital grant available over the three years 2008/9-2010/11 are:

- Leicester City: £1.3m
- Leicestershire County: £2.7m

- 28.28 However, it is important to understand that this funding is targeted at improving provision on the current waste stream rather than at new development. This is available for funding facilities such as improvements to RHWs and Waste Transfer Stations, but the scale of provision means that their scope is limited. We assume that it will mainly be spent on measures to improve recycling rates.

Local authority funding and developer contributions have also been used in the past

- 28.29 Developer contributions are used to contribute towards the costs of new/improved RHWs and the upfront costs of collection from new dwellings. For vehicles, depot facilities, collection receptacles (bins etc) and any local 'bring' recycling centres, funding sources are:

- Local authority capital expenditure

- Developer contributions, where the additional provision can be clearly linked to new development. The County is considering seeking contributions for waste transfer stations as well as RHWSs, but we do not yet have information on the costs of this.

We assume that local authority capital resources will be limited to meeting recycling and landfill reduction targets

- 28.30 As explained above, collection and RHWS costs arising from growth in the City will be covered by revenue payments on the current PFI contract. The costs of a major waste treatment facility in the County will be covered by a proposed PFI contract.
- 28.31 However, we assume that costs of collection for the new households and the housing growth element of expansion/new provision of RHWSs in the County will not be funded by mainstream funding sources.
- 28.32 Therefore the costs we identify in Table 28.2 do not have an identified funding source.

What are the priorities?

- 28.33 While waste recycling and recovery provision is essential, new provision is driven by the need to meet recycling targets rather than new housing. However, given the financial incentives on waste management authorities to maintain recycling rates it is important that capacity at RHWSs is increased to take account of increased arisings.
- 28.34 Infrastructure for collection is also essential, and provision to meet the increased requirements of new housing will have to be phased in as soon as it is occupied.

Infrastructure timing assumptions

- 28.35 We have assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata'd infrastructure costs in line with the assumed phasing of development

Issues

- 28.36 There are no phasing issues regarding recycling and recovery infrastructure, as it is not directly related to new housing development.
- 28.37 Collection infrastructure will need to be linked to new housing and phasing will therefore be that of the housing.
- 28.38 There are no 'showstoppers' in waste management and collection.

29 FINDINGS

Introduction

- 29.1 This section derives from our spreadsheet model, which captures information on the requirements for infrastructure to cope with growth, the resulting costs, and mainstream and developer contribution funding.
- 29.2 Here, we pull together the findings of the spreadsheet model, and pick up some of the most important linkages between development phasing and infrastructure delivery.
- 29.3 We begin by very briefly explaining how our spreadsheet model works.

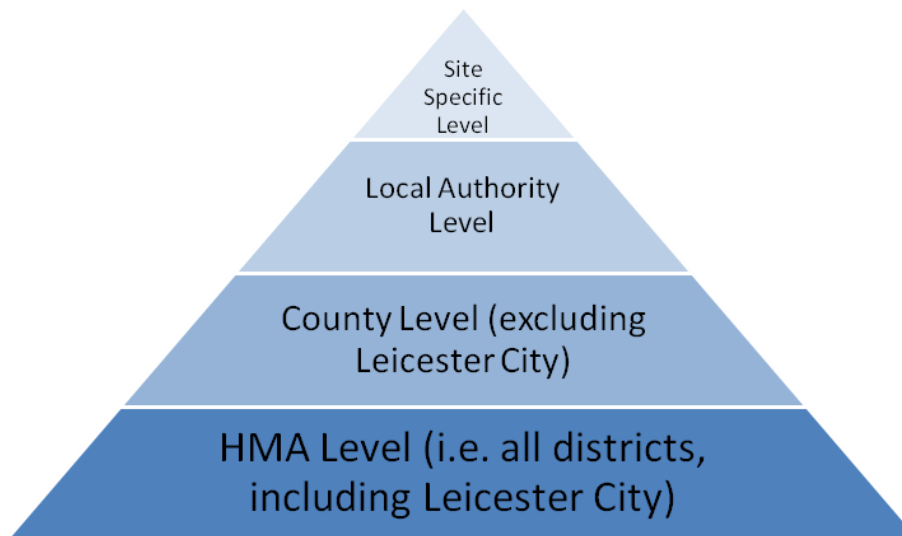
How our spreadsheet model works

- 29.4 As set out in the introduction, Roger Tym & Partners has developed an infrastructure cost and funding spreadsheet model for this study. It brings together the key infrastructure information, which includes:
- Infrastructure items required to accommodate new growth
 - Estimated costs of these infrastructure items
 - Estimated mainstream public sector funding available to pay for this infrastructure
 - Estimated indicative developer contributions funding available to contribute to the costs of this infrastructure
 - The anticipated timing of the infrastructure requirements, costs and funding
- 29.5 The spreadsheet model has been provided under separate cover. As we have recommended it will require periodic updating, we have set out some key information on the spreadsheet model's structure and calculation that should be understood before the findings section is read.

How we allocate infrastructure requirements and costs to different spatial levels

- 29.6 The spreadsheet model has a number of spatial levels to which infrastructure requirements and costs can be allocated. These are shown below.

Figure 29.1 Spatial scales in the infrastructure model



Source: RTP

- 29.7 We have allocated infrastructure requirements and costs at a site-specific level where possible (based on the information we have been provided with). However, some requirements and costs apply to a wider area than a specific site (or sites). For example, new strategic road infrastructure might have an impact far beyond a specific site. Where we have not been provided with information on which sites infrastructure requirements and costs apply to, we have assumed that costs are spread broadly. These assumptions can be changed in the spreadsheet model.

Interpreting infrastructure requirements and costs at different spatial levels

- 29.8 It is important that infrastructure requirements and costs shown by the spreadsheet model for specific sites or individual local authorities are not necessarily the *only* costs that will need to be borne at these levels. For example, transport costs that apply across the whole HMA will not be reflected in the costs shown by the model for particular sites and districts.

Mainstream funding is allocated at the HMA level within the spreadsheet model

- 29.9 Although some infrastructure *costs* are allocated at the site specific, district and county levels, mainstream *funding* for each infrastructure category (e.g. transport, education etc) is only allocated at HMA level. This is for the following reasons.⁸²
- If service providers are going to make best use of their own resources, they will require the flexibility to juggle funding streams between areas.
 - Funding streams alter frequently, making commitment difficult and detail redundant.

⁸² We explain more detail on this issue in section 6.

- 29.10 As a result, in the spreadsheet model we provide, there is no direct read-across from specific infrastructure requirements (such as a school, or a GP surgery) to a particular funding stream at any level.
- 29.11 This means it is not sensible for the spreadsheet model to attempt to establish the estimated funding gap for different spatial levels. Although the estimated indicative developer contributions are calculated at a site specific level within the model, we outlined in Section 4 that the overall contributions analysis is only at a high level, and should not be used to calculate developer contributions from specific sites.

We have made assumptions on the lead delivery partner in the spreadsheet model

- 29.12 Each infrastructure requirement identified in the spreadsheet model has been assigned an assumed lead partner for delivery. Where we have been provided with information on more than one delivery partner, we have assumed a single “lead” partner where possible.

Headline findings

- 29.13 We begin by presenting the overarching conclusions of our study.

There is a £1.3bn infrastructure funding gap in the HMA to 2026

- 29.14 Our work suggests that there is a £1.3b funding gap to 2026, across the Housing Market Area (HMA). The headline figures on costs, mainstream funding and developer contributions are as follows.

Overall Infrastructure costs of	-£2,016m
Mainstream funding of	+£ 522m
Developer contribution funding of	<u>+£ 150m</u>
Leaves a funding gap of	-£1,344m

- 29.15 The headline finding above summarises the component strands of costs, mainstream funding, and developer contribution funding. In the sections below, we unpack these different component parts to analyse the infrastructure information in the spreadsheet model that produces this funding gap, and to provide information at different spatial levels. This helps us to draw important conclusions, and drives recommendations on how delivering the necessary infrastructure to accommodate growth in the HMA can be achieved.
- 29.16 We start by looking at costs. We then look at mainstream and developer contribution estimates, and then pull these threads back together.

Analysing estimated infrastructure costs

Very large investment in infrastructure is required across the HMA in order to cope with housing growth

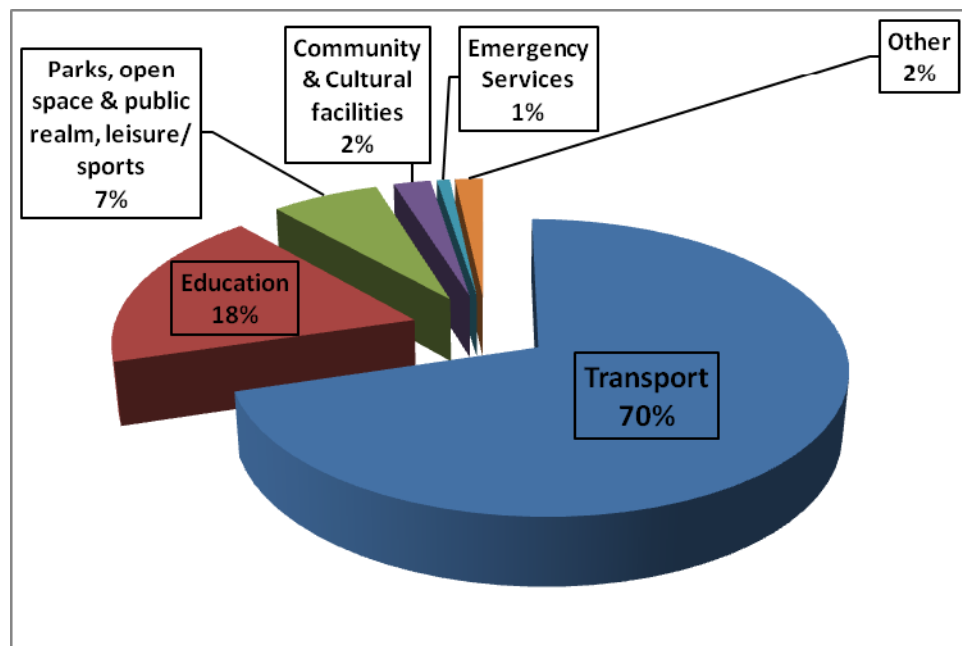
- 29.17 As set out above, the spreadsheet model shows a total estimated infrastructure cost of approximately £2 billion to cope with anticipated housing growth in the HMA to 2026.

Estimated infrastructure costs by infrastructure category

Transport dominates infrastructure costs

29.18 Figure 29.2 and Table 29.1 below show estimated infrastructure costs by category. Transport dominates estimated infrastructure costs across the HMA (approximately 70% of total costs), with education representing the second highest cost (approximately 17% of total costs). The third highest cost is parks and open space (including strategic Green Infrastructure). This is consistent with other studies we have undertaken.

Figure 29.2 Estimated Infrastructure costs by Infrastructure Category (%)



Source: RTP

29.19 The following table provides the cash figures that underpin the percentage sums provided in the figure above. Clearly, efforts to address this funding gap should most sensibly concentrate on these three main areas. Other themes - including emergency services, childrens social care, and so on - are not significant when seen in this context, and over this time period. For example, over the 17 year plan period to 2026, the infrastructure requirements for the police work out at £220,000 per annum.

Table 29.1 Estimated Infrastructure costs by infrastructure category

Infrastructure Category	Total Estimated Cost
Transport	-£1412.9m
Education	-£368.6m
Post 16 education and FE	£0.0m
Parks, open space & public realm, leisure/ sports	-£136.8m
Community & Cultural facilities	-£46.9m
Libraries	-£10.2m
Health	-£7.7m
Adult Social Care	£0.0m
Childrens' Social Care & Centres	-£8.0m
Youth Centres	-£4.0m
Police	-£3.8m
Leicestershire Fire and Rescue Service	-£7.7m
Ambulance Service	-£5.1m
Waste	-£5.3m
Electricity	£0.0m
Gas	£0.0m
Sewage & Drainage	£0.0m
Water	£0.0m
Telecoms	£0.0m
Flood	£0.0m
Total	-£2017.0m

Source: RTP. Note the parks and open space figure includes strategic green infrastructure.

A small number of big projects account for a large proportion of the infrastructure costs

29.20 There are a small number of very big ticket infrastructure projects that have been identified as required to cope with growth. The top ten highest cost infrastructure items are shown below. The top three projects account for £817m - or 40% of the costs.

Table 29.2 “Big ticket” projects - the top ten costs

	Infrastructure Item	Description	Area	Infrastructure Category	Total
1	TRAM LINE (Line 1)	Tram	Leicester City	Transport	-£400.0m
2	TRAM LINE (Line 2)	Tram	Leicester City	Transport	-£350.0m
3	NEW BUS STATION	Bus	Rest of Leicester City Centre	Transport	-£67.0m
4	CONGESTION (Quality Bus Corridors, junction improvements, ATC etc. to 2026)		Rest of Leicester City	Transport	-£60.0m
5	QTY CENTRE IMPROVEMENTS	Walk/Cycle	Rest of Leicester City Centre	Transport	-£55.0m
6	Environmental improvements in south west Leicestershire including possible Luttworth and Sharnford by-passes.	Road	Leicestershire County	Transport	-£30.0m
7	IMPROVED CROSSINGS OF INNER RING ROAD	Walk/Cycle	Rest of Leicester City Centre	Transport	-£30.0m
8	Melton Mowbray Bypass (See MEL01)	Road	Leicestershire County	Transport	-£29.0m
9	Glenfield Park and Ride and quality bus corridor	Bus & Road	Leicestershire HMA (non-site specific)	Transport	-£24.0m
10	New Secondary School	2x 400 place and one 210 place primary schools. One Secondary school for 720 pupils. We may also require a contribution to fund expansion of Post 16 facilities at nearby schools for Post 16.	East of Thurmaston, North of Hamilton SUE*	Education	-£22.4m
Total					-£1067.4m

* Blobby SUE Option C new secondary school also £22.4m

Source: RTP

29.21 As we have said above, large projects such as this will need to demonstrate clear value for money in project appraisals if they are to go ahead. As we argue in the subsequent Delivery section, these findings suggest that it will be important to undertake a clear prioritisation process, both within and across thematic areas.

Understanding infrastructure costs by geographies

29.22 We can use the spreadsheet model to investigate how infrastructure costs are incurred geographically. However, two caveats need to be borne in mind here.

- Firstly, the objective here is not to apportion costs to particular organisations (such as a particular district council) but instead to understand how the infrastructure costs arising from housing and jobs growth could be allocated across particular geographical areas. That means, for example, that the County and HMA area have costs allocated to them. Growth in individual district areas would need to pick up a share of these costs. It also means that the costs of infrastructure within a spatial area here might not match those ascribed to

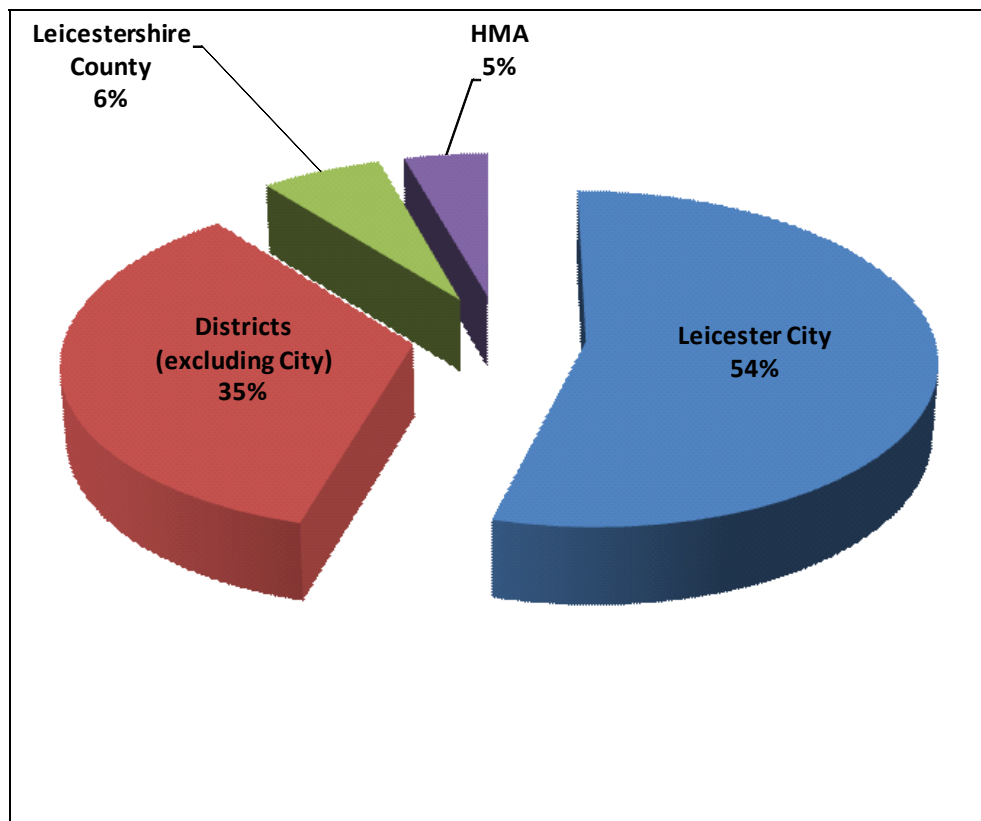
administrative organisations responsible for that area. For example in Charnwood, the costs of infrastructure for the area costs high, but costs for Charnwood Borough Council as lead partner are relatively low - mainly because the Borough Council has no administrative responsibilities for delivering transport and education.

- Secondly, as we have discussed in the transport section, it should be noted that the costs of some major transport items cannot be attributed entirely to new growth. In the absence of detailed transport assessment we cannot be sure what proportion of costs should be properly attached to new growth. Given that transport costs make up 70% of total infrastructure costs, this is an important requirement for further study, and would certainly need to be picked up if a Community Infrastructure Levy (CIL) charge was to be set up covering transport.

Over half the infrastructure costs are attributed to the Leicester City area

29.23 Figure 29.3 below shows the estimated infrastructure costs allocated within the spreadsheet model by different areas.

Figure 29.3 Infrastructure costs by area (percent)



Source: RTP

29.24 In cash terms, the costs by area are as follows.

Table 29.3 Infrastructure costs by area

Area	Total Cost
Leicester City	-£1193.0m
Charnwood	-£160.9m
Leicestershire County	-£138.4m
North West Leicestershire	-£135.7m
Blaby	-£112.1m
HMA	-£96.4m
Hinckley and Bosworth	-£87.5m
Harborough	-£61.1m
Melton	-£25.8m
Oadby & Wigston	-£6.0m
Total	-£2017.0m

Source: RTP

- 29.25 The spreadsheet model shows over half the infrastructure costs attributed to the Leicester City area. The reason for this is that there are some large projects in Leicester City, such as the tram lines which are estimated to cost £750m. It could be argued that some of these major transport costs attributed in the model to Leicester City could be attributed across the HMA as they benefit the overall transport network required to accommodate growth.

A significant proportion of costs have been attributed to strategic sites

- 29.26 The strategic sites account for 44,515 out of the 58,366 dwellings we have been asked to consider as growth in this study. The specific costs attributed to these strategic sites in the spreadsheet model are set out in Table 29.4 below.
- 29.27 Although it is by no means sufficient in itself, this information does provide the necessary starting point to begin the process of understanding which of the strategic development sites are likely to be most expensive to bring forward. This type of prioritisation process is likely to be necessary in order to focus strategy across the HMA. However, further work and refinement will be required before this data could be used to make these sorts of prioritisation decisions. Caveats are attached, as follows.
- Table 29.4 shows that there are still significant costs allocated in the spreadsheet model to the strategic sites. Transport costs are an important driver of these findings. For example, the Barkby/ Barkby Thorpe bypass and link to A563 in Leicester, estimated to cost £17.4m, has been entirely allocated in the spreadsheet model to the East of Thurmaston SUE. This would need to be confirmed by transport assessment work.
 - Again, it should be noted that these are not the only infrastructure costs that are potentially required to deliver the strategic sites. A proportion of costs for infrastructure requirements allocated within the model at district, county and HMA levels may also need to be calculated for these sites to get a fully detailed picture of the costs of bringing forward individual sites in the HMA.

Table 29.4 Infrastructure costs by strategic site

Strategic Site	Estimated No. of Dwellings	Estimated Cost
East of Thurmaston, North of Hamilton SUE	5,000	-£89.4m
Waterside	3,000	-£66.4m
Loughborough SUE	3,500	-£58.7m
Blaby SUE Option C	5,000	-£57.5m
South-East Coalville SUE	4,500	-£48.3m
Ashton Green SUE	3,500	-£36.9m
Barwell SUE	2,500	-£31.6m
Abbey Meadows	3,200	-£29.8m
Earl Shilton SUE	2,000	-£28.5m
Market Harborough incl. SUE (all)	2,800	-£28.1m
Stephensons Way Sites	2,650	-£24.5m
Hamilton Extension SUE	700	-£20.0m
Melton SUE Option	1,000	-£15.6m
Hinckley & Burbage	1,415	-£13.5m
South-West Coalville	1,050	-£11.4m
St Georges	1,700	-£10.9m
New Business Quarter (B1 Office)	0	-£8.7m
Melton Central	1,000	-£3.4m
Blaby SES Option D	0	£0.0m
Hinckley Town Centre + Bus/Railway Station	0	£0.0m
Sunningdale Rd	0	£0.0m
Melton West SES	0	£0.0m
Loughborough Science Park Extension	0	£0.0m
Castle Donington East SES	0	£0.0m
Total	44,515	-£583.0m

Source: RTP

Costs by delivery partners

29.28 The table below shows infrastructure cost responsibilities by the assumed lead delivery partner. Leicester City Council and Leicestershire County Council are unsurprisingly the partners with the greatest responsibility (in costs terms) of delivering infrastructure relating to housing and employment growth in the HMA as the statutory bodies for transport and education in the HMA.

Table 29.5 Infrastructure costs by lead delivery partner

Assumed Lead Partner	Estimated Infrastructure Cost
Leicester City	-£1185.4m
Leicestershire County Council	-£705.4m
North West Leicestershire	-£40.0m
Developer	-£17.1m
Highways Agency	-£16.4m
Hinckley and Bosworth	-£11.0m
Leicestershire & Rutland Combined Fire Authority	-£7.7m
Leicestershire County and Rutland NHS Primary Care Trust	-£6.0m
Charnwood	-£6.8m
East Midlands Ambulance Service	-£5.1m
Blaby	-£4.2m
Harborough	-£4.0m
Leicestershire Constabulary	-£3.8m
Melton	-£1.9m
Leicester City Primary Care Trust	-£1.8m
Oadby & Wigston	-£0.7m
Network Rail*	£0.0m
Total	-£2017.0m

* Costs of Elmsthorpe rail station tbc

Source: RTP. Note that some costs are ascribed to developers. This reflects the fact that some infrastructure items would be delivered by direct by developers. We were provided this information by local authorities.

Estimated timing of infrastructure costs

- 29.29 Table 29.6 below shows the estimated timing of infrastructure costs in the HMA. The two largest cost categories, transport and education, are assumed to require the majority of expenditure to provide infrastructure required to accommodate the growth in the HMA (based on the PoD housing delivery phasing) in 2011/12-2020/21.
- 29.30 It should be noted, though, that the analysis presented here will be quickly rendered out of date. The housing numbers in the NGP Programme of Delivery are to be revised early in 2009. This will affect infrastructure requirements stated in the spreadsheet model. The spreadsheet model should be updated with the new phasing when it is available.

Table 29.6 Estimated timing of infrastructure costs (i.e. cashflow) by category

Infrastructure Category	2009/10-	2010/11-	2011/12 -2015/16	2016/17 -2020/21	2021/22 - 2025/26	Total Estimated Cost
Transport	£55.9m	£45.0m	£527.5m	£749.9m	£34.3m	£1412.9m
Education	£11.4m	£9.6m	£163.3m	£167.1m	£16.8m	£368.6m
Post 16 education and FE	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m
Parks, open space & public realm, leisure/sports	£10.0m	£9.7m	£40.7m	£39.0m	£37.3m	£136.8m
Community & Cultural facilities	£2.9m	£2.9m	£13.8m	£13.9m	£13.4m	£46.9m
Libraries	£0.3m	£0.3m	£2.5m	£3.6m	£3.6m	£10.2m
Health	£0.2m	£0.2m	£2.0m	£2.6m	£2.6m	£7.7m
Adult Social Care	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m
Childrens' Social Care & Centres	£0.1m	£0.2m	£1.8m	£3.0m	£3.0m	£8.0m
Youth Centres	£0.1m	£0.1m	£1.0m	£1.4m	£1.3m	£4.0m
Police	£0.0m	£0.1m	£0.9m	£1.4m	£1.4m	£3.8m
Leicestershire Fire and Rescue Service	£1.5m	£1.7m	£1.8m	£1.3m	£1.3m	£7.7m
Ambulance Service	£0.0m	£2.3m	£0.3m	£2.3m	£0.3m	£5.1m
Waste	£0.3m	£0.3m	£1.4m	£1.7m	£1.7m	£5.3m
Total	£82.7m	£72.2m	£756.9m	£987.2m	£117.1m	£2017.0m

Source: RTP

Analysing estimated mainstream public funding

29.31 We have assessed the potential availability of mainstream public funding to pay for the infrastructure requirements resulting from the assumed growth in the HMA. We have interviewed service providers, consulted strategic documents, and undertaken our own research to get an answer here.

29.32 Estimated mainstream funding has been entered into the spreadsheet model for each infrastructure category at an HMA (as opposed to site specific or district) level. This is for the reasons noted at the outset of this section. It should also be noted that where the spreadsheet model shows no mainstream public funding, this is in relation to the requirements identified to cope with growth; it does not necessarily mean that no mainstream public funding is estimated to be available for the particular infrastructure category.

A low percentage of infrastructure costs are estimated to be covered by mainstream public funding. However, in absolute terms the funding gap for some themes is relatively modest

29.33 Table 29.7 below shows:

- the estimated mainstream funding from the spreadsheet model by infrastructure category (in comparison to estimated infrastructure costs);
- the public sector funding gap (i.e. estimated infrastructure costs less estimated mainstream public funding); and
- the percentage of estimated infrastructure costs covered by estimated mainstream public funding.

29.34 This indicates that mainstream public funding will make a limited contribution to meet estimated growth infrastructure requirements in the HMA. Roughly one quarter of identified infrastructure costs are covered by mainstream funding.

Table 29.7 Estimated mainstream public funding against costs, showing funding gap excluding developer contributions

	Total Cost	Estimated Mainstream Funding	Funding Gap (excluding developer contributions)	% Costs Covered by Mainstream Funding
Transport	-£1412.9m	£414.2m	-£998.7m	29%
Education	-£368.6m	£54.0m	-£314.6m	15%
Parks, open space & public realm, leisure/ sports	-£136.8m	£22.6m	-£114.2m	16%
Community & Cultural facilities	-£46.9m	£11.9m	-£35.0m	25%
Libraries	-£10.2m	£5.2m	-£5.0m	51%
Childrens' Social Care & Centres	-£8.0m	£2.4m	-£5.6m	30%
Health	-£7.7m	£6.0m	-£1.7m	78%
Leicestershire Fire and Rescue Service	-£7.7m	£2.7m	-£5.0m	35%
Waste	-£5.3m	£0.0m	-£5.3m	0%
Ambulance Service	-£5.1m	£3.9m	-£1.1m	78%
Youth Centres	-£4.0m	£0.0m	-£4.0m	0%
Police	-£3.8m	£0.0m	-£3.8m	0%
Post 16 education and FE	£0.0m	£0.0m	£0.0m	-
Adult Social Care	£0.0m	£0.0m	£0.0m	-
Sewage & Drainage	£0.0m	£0.0m	£0.0m	-
Water	£0.0m	£0.0m	£0.0m	-
Telecoms	£0.0m	£0.0m	£0.0m	-
Gas	£0.0m	£0.0m	£0.0m	-
Electricity	£0.0m	£0.0m	£0.0m	-
Flood	£0.0m	£0.0m	£0.0m	-
Total	-£2017.0m	£522.8m	-£1494.2m	26%

Source: RTP

29.35 However, in absolute terms the funding gap for some themes is relatively modest. Libraries, childrens' social care, health and so on have relatively modest mainstream funding gaps. Each have gaps of less than £5m.

There is no mainstream funding identified in the model for County Council education requirements. Some service providers are relying on developer contributions

29.36 Some categories that require significant investment - notably education - are currently showing large mainstream funding gaps in the spreadsheet model. This is in part because no mainstream funding has been identified by the County Council at this stage to cope with the infrastructure requirements of growth. Instead, developer contributions are being relied on to fund these infrastructure requirements.

29.37 However, the credit crunch means that developer contributions are likely to be significantly reduced. This means that all service providers (not just education) will need to try to pull together innovative funding packages - perhaps involving "bending" mainstream funding into growth areas, and an increased use of public private partnership funding - if infrastructure is to be delivered. We explain more in our Delivery section.

Analysing estimated developer contributions to infrastructure

29.38 Section 4 sets out our approach and assumptions to estimating potential developer contributions. Developer contributions can be used to "plug" some of the funding

gap we have uncovered. Developer contributions are likely to play an important role in funding infrastructure requirements resulting from residential growth in the HMA.

- 29.39 In this section, we outline the findings from our spreadsheet model on how much developer contributions could be available from jobs and housing growth in the HMA.

Developer contributions are estimated in our spreadsheet model based on agreed assumptions

- 29.40 Our spreadsheet model has made an assessment of the level of developer contributions available to contribute to infrastructure provision. We have explained our approach in section 4. This section also contains important caveats that need to be understood.
- 29.41 As set out in section 4, we classified sites by type, likely development density and also value in order to calculate an overall level of estimated developer contributions (based on the agreed assumptions) in the HMA in the study period.
- 29.42 Based on these assumptions (which are summarised in Table 4.5), our calculations suggest that only the Low Density/High Value and Medium Density/High Value development categories produce surplus worth that could be secured as developer contribution.
- 29.43 The developer contribution assumptions used in the spreadsheet model are summarised again below.

Table 29.8 Estimated surplus worth available for developer contributions in spreadsheet model

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	£0
Low Density/Medium Value	£0
Low Density/High Value	£876
Med Density/Low Value	£0
Med Density/Medium Value	£0
Med Density/High Value	£18,556
Brownfield Development Category	
Medium Density	£0
High Density	£0
Mixed Use	£0

Source: RTP

These assumptions mean the overall estimated level of developer contributions in the spreadsheet model is relatively low

- 29.44 On this basis, the spreadsheet model shows a total estimated indicative developer contribution level in the HMA of approximately £150m. The breakdown of this for the different development categories is shown in Table 29.9 below. It should be noted that only half the above level of contributions are assumed in the spreadsheet model prior to 2013. It should also be noted that in the Medium Density/Low Value and Medium Density/Medium Value categories, a small level of indicative contribution is calculated in the spreadsheet model as some sites in these categories have a relatively small quantum of retail floorspace assumed.

Table 29.9 Estimated indicative developer contribution by development category

Development Category		Estimated Indicative Developer Contribution	No. of Sites	Estimated No of Residential Dwellings
Brownfield	Med Den Resi	£0.0m	3	6,115
	High Den Resi	£0.0m	4	5,000
	Med Den Mixed	£0.7m	3	4,500
	Employment	£0.0m	1	0
	Retail	£4.5m	2	0
Greenfield	Med Den/Low Val	£0.7m	6	13,013
	Med Den/Med Val	£4.0m	15	21,440
	Med Den/High Val	£128.8m	17	8,298
Retail (not assigned greenfield or brownfield)		£11.3m	6	0
Total		£150.0m	57	58,366

Source: RTP

- 29.45 The level of developer contribution funding estimated by the spreadsheet model is therefore relatively modest. A total contribution level of £150m equates to an average of only approximately £2,500 per unit across all sites in the HMA.

There is the potential to achieve higher contributions on some sites with lower abnormal costs

- 29.46 Our analysis has required higher affordable housing and sustainability requirement assumptions than were previously secured. This has had a negative impact on the level of developer contribution that have been estimated in comparison to previous developer contribution levels achieved.

- 29.47 As set out in section 4, our assumption of £500,000 per ha costs on greenfield sites reflects a relatively conservative generic allowance to cover a number of potential “abnormal” development works as it is not possible to assess these on a site by site basis in the HMA.

- 29.48 In reality, some sites could be relatively straight forward to develop and therefore incur lower abnormal costs than we have assumed. In such cases, greenfield sites in development categories that we have assumed no developer contributions in our spreadsheet model may be able to provide contributions (assuming all other variables remain the same).

Estimated developer contributions by local authority

- 29.49 The spreadsheet model can be used to estimate developer contributions at a local authority level. But care needs to be taken, as we explain below.

The developer contribution analysis is not intended to work at a site specific level, and should be treated carefully at local authority level

29.50 The purpose of our analysis of developer contributions is to understand what level of such funding could potentially be available from growth in the HMA to pay for related infrastructure requirements. As we have explained in detail in section 4, we have not sought to estimate potential developer contribution levels on a site by site basis. Nor should too much reliance be placed on the level of developer contributions arising at a local authority level, particularly where developer contributions calculated arise from a small number of sites.

There are large differences in developer contributions between local authorities in the spreadsheet model

29.51 Table 29.10 below shows large variations between authorities. For example, Leicester City has the highest assumed residential growth, but the lowest estimated indicative developer contribution funding. By contrast, Harborough has relatively modest growth, but high levels of developer contribution.

29.52 There are good reasons for this apparent mismatch. In the case of Leicester, the large development sites are assumed to be in the medium density/medium value category (e.g. Ashton Green), or in brownfield categories (e.g. Waterside) which show no developer contribution in the spreadsheet model. However, Harborough contains the Market Harborough SUE which is assumed to be in the medium density/high value category and delivered when it is assumed “peak” residential sales values return, and therefore produces a developer contribution in the spreadsheet model of £85 million.

Table 29.10 Estimated indicative developer contribution funding by authority

Local Authority	Assumed No. of Residential Dwellings	Estimated Indicative Developer Contribution Funding
Blaby	6,150	£13.3m
Charnwood	10,000	£2.3m
Harborough	5,900	£88.9m
Hinckley and Bosworth	6,855	£13.3m
Leicester City	15,900	£0.7m
Melton	2,810	£13.0m
North West Leicestershire	9,700	£11.6m
Oadby & Wigston	1,051	£6.8m
Total	58,366	£150.0m

Source: RTP

Pulling together a picture of the overall funding gap

Back to the headline findings: there is a funding gap of £1,343m

29.53 Here we return to the “headline findings” shown above at the beginning of this section. To 2026, we showed infrastructure costs of £2,016m; mainstream funding of £522m; and developer contributions of £150m. This left a funding gap of £1,343m.

Seeing the funding gap on a per annum basis makes the gap appear more tractable

29.54 Whilst there is a very large funding gap, it should be borne in mind that this plan runs until 2026. Per annum, that equates to a funding gap of £79m.

If we concentrate on top priority items, the funding gap narrows but still exists

29.55 Different infrastructure requirements will have different levels of importance in the HMA. Table 29.11 below shows which assumed priority category shows the largest funding gap (in terms of mainstream public funding available). The infrastructure in the highest priority categories has the largest costs and the largest identified mainstream funding gaps.

Table 29.11 Infrastructure costs and identified mainstream funding by priority categories (excludes developer contributions)

Assumed Priority	Infrastructure Category	Estimated Cost	Mainstream Funding	Funding Gap
10	Transport	-£778.2m	£414.2m	-£364.0m
	Education	-£368.6m	£54.0m	-£314.6m
	Waste	-£3.2m	£0.0m	-£3.2m
	Flood	£0.0m	£0.0m	£0.0m
10 Total		-£1167.4m	£468.2m	-£699.2m
9	Health	-£7.7m	£6.0m	-£1.7m
9 Total		-£7.7m	£6.0m	-£1.7m
8	Transport	-£441.6m		-£441.6m
	Post 16 education and FE	£0.0m	£0.0m	£0.0m
8 Total		-£441.6m	£0.0m	-£441.6m
7	Parks, open space & public realm, leisure/ sports	-£136.8m	£22.6m	-£114.2m
	Libraries	-£10.2m	£5.2m	-£5.0m
	Police	-£3.8m	£0.0m	-£3.8m
	Leicestershire Fire and Rescue Service	-£7.7m	£2.7m	-£5.0m
	Ambulance Service	-£5.1m	£3.9m	-£1.1m
	Waste	-£2.1m	£0.0m	-£2.1m
	Childrens' Social Care & Centres	-£8.0m	£2.4m	-£5.6m
	Youth Centres	-£4.0m	£0.0m	-£4.0m
7 Total		-£177.7m	£36.8m	-£140.9m
6	Community & Cultural facilities	-£35.0m	£0.0m	-£35.0m
6 Total		-£35.0m	£0.0m	-£35.0m
5	Transport	-£193.1m		-£193.1m
	Community & Cultural facilities	-£11.9m	£11.9m	£0.0m
5 Total		-£205.0m	£11.9m	-£193.2m
Total		-£2017.0m	£522.8m	-£1494.2m

Source: RTP

Reprioritising or cost-engineering some big schemes could be part of the solution

29.56 It would be possible (in theory) to “spend” the full developer contributions pot of £150m on top priority infrastructure items. However, on the basis of the assumptions used in this study, there would still be a problem delivering even

statutory infrastructure requirements: priority 10 infrastructure has a mainstream funding gap of £699m, which dwarfs available developer contributions of £150m.

- 29.57 In reality, it cannot be assumed that all the developer contributions can, or indeed should, be used to fund top priority items as these requirements may not relate to all development sites in the HMA. Even so, it should be borne in mind that our estimates suggest that there is only around £150m developer contributions to 2026 to fund infrastructure if the assumptions on affordable housing etc set out in Table 4.5 are adopted.
- 29.58 As shown in the table above, there are some large transport infrastructure items, in particular the tram lines. £400m of the priority 10 transport scheme is tram line 1. Assuming that LTP funding stayed the same, finding an alternative to this expenditure, or altering some of the other items, would mean the other top priority items could in theory be funded through mainstream and developer contribution funding.

The impact on potential developer contribution funding of changes to key variables

- 29.59 We have mentioned in section 4 that potential developer contributions can be increased by changes to abnormal costs (such as decontamination, drainage and third party acquisitions), land costs and affordable housing requirement assumptions.
- 29.60 In section 4 we explored the impact of a) reducing land cost assumptions from £500k/ha to £300k/ha and b) reducing affordable housing requirements. Both sets of sensitivity tests had roughly similar effects. We have provided the results of each test in Table 29.12 below by different development categories (and have rounded the numbers for simplicity).
- 29.61 If these sensitivity tests were combined, then clearly they would result in a potential further increase in developer contribution.

Table 29.12 General level of surplus worth available for developer contribution funding from sensitivity outputs

Greenfield Development Category	Indicative Surplus Available for Developer Contributions (per unit)
Low Density/Low Value	£0
Low Density/Medium Value	£0
Low Density/High Value	£15,000
Med Density/Low Value	£0
Med Density/Medium Value	£10,000
Med Density/High Value	£30,000
Brownfield Development Category	
Medium Density	£0
High Density	£0
Mixed Use	£0

Source: RTP

29.62 We have then taken the developer contributions values shown in Table 29.12 above and translated them to the HMA level below (Table 29.13). Using these changed assumptions, the table shows that the overall developer contribution funding produced by the spreadsheet model substantially increases from approximately £150m to approximately £420m across the HMA to 2026.

Table 29.13 Estimated indicative developer contribution by development category from sensitivity testing outputs

Development Category		Estimated Indicative Developer Contribution	No. of Sites	Estimated No of Residential Dwellings
Brownfield	Med Den Resi	£0.0m	3	6,115
	High Den Resi	£0.0m	4	5,000
	Med Den Mixed	£0.7m	3	4,500
	Employment	£0.0m	1	0
	Retail	£4.5m	2	0
Greenfield	Med Den/Low Val	£0.7m	6	13,013
	Med Den/Med Val	£197.9m	15	21,440
	Med Den/High Val	£207.8m	17	8,298
Retail (not assigned greenfield or brownfield)	£11.3m	6	0	
Total		£422.8m	57	58,366

Source: RTP

29.63 Table 29.14 takes these developer contribution levels in Table 29.13 (generated by altered assumptions) and translates them to an estimated developer contribution take at local authority level. For example, both Charnwood and Leicester City now show much higher developer contribution levels than in Table 29.10, as the large SUE sites assumed as medium density/medium value now show a contribution of £10,000 per unit.

Table 29.14 Estimated indicative developer contribution funding by authority from sensitivity testing outputs

Local Authority	Assumed No. of Residential Dwellings	Estimated Indicative Developer Contribution Funding
Blaby	6,150	£70.3m
Charnwood	10,000	£82.6m
Harborough	5,900	£147.9m
Hinckley and Bosworth	6,855	£19.7m
Leicester City	15,900	£35.6m
Melton	2,810	£29.5m
North West Leicestershire	9,700	£25.0m
Oadby & Wigston	1,051	£12.2m
Total	58,366	£422.8m

Source: RTP

Cashflow “pinch points”

There are potential infrastructure funding timing issues that need to be addressed

- 29.64 We used the model to look at particular cost and funding “pinch points” - for example, the times where up-front infrastructure requirements and costs ran ahead of funding.
- 29.65 Table 29.15 below shows the gap in estimated mainstream public funding available for each category, with developer contributions available over that period shown at the bottom (as these have not been allocated to individual infrastructure categories in this study).
- 29.66 The two largest cost categories, transport and education, are assumed to require the majority of expenditure to provide infrastructure needed to accommodate the growth in the HMA (based on the PoD housing delivery phasing) in 2011/12-2020/21. This entails that there could be a particular cashflow “pinchpoint” in these time periods, depending on the timing and amount of funding available (mainstream and developer contribution).

The funding gap in the first years of the spreadsheet model is lower

- 29.67 Although lower developer contributions are assumed in the first years of the spreadsheet model due to current market conditions, as there are less of the costs associated with the major infrastructure requirements in these years, the overall funding gap is therefore lower.
- 29.68 This suggests there is time to address the potential cashflow and funding gaps issues identified by the spreadsheet model.

This analysis has been rendered somewhat academic by circumstances

- 29.69 Firstly, the levels of funding gap are so great in each time period shown after 2011 that looking at particular “pinch points” is not particularly significant. Secondly, as we said above, housing development phasing is due to be revised in a refresh of the NGP Programme of Development.

Table 29.15 Cashflow of Estimated Infrastructure Funding Gap (gap in mainstream funding by category, and overall funding gap i.e. including developer contributions)

Infrastructure Category	2009/10-	2010/11-	2011/12 -2015/16	2016/17 -2020/21	2021/22 - 2025/26	Gap in Mainstream Funding
Transport	£55.9m	£45.0m	£383.8m	£611.1m	£97.4m	£998.4m
Education	£8.3m	£6.5m	£146.7m	£151.2m	£1.7m	£314.3m
Parks, open space & public realm, leisure/sports	£6.8m	£7.1m	£34.9m	£33.4m	£31.9m	£114.1m
Community & Cultural facilities	£2.0m	£2.0m	£10.8m	£10.3m	£9.8m	£35.0m
Libraries	£0.3m	£0.3m	£0.9m	£0.6m	£3.0m	£5.0m
Health	£0.2m	£0.1m	£0.2m	£0.9m	£1.0m	£1.7m
Childrens' Social Care & Centres	£0.4m	£0.3m	£1.3m	£2.5m	£2.5m	£5.6m
Youth Centres	£0.1m	£0.1m	£1.0m	£1.4m	£1.3m	£4.0m
Police	£0.0m	£0.1m	£0.9m	£1.4m	£1.4m	£3.8m
Leicestershire Fire and Rescue Service	£0.2m	£0.3m	£1.8m	£1.3m	£1.3m	£5.0m
Ambulance Service	£0.0m	£0.5m	£0.1m	£0.5m	£0.1m	£1.1m
Waste	£0.3m	£0.3m	£1.4m	£1.7m	£1.7m	£5.3m
Indicative Developer Contribution	£8.9m	£7.1m	£49.1m	£42.5m	£42.3m	n/a
Total	£64.4m	£54.7m	£534.5m	£773.9m	£84.1m	£1343.4m

Source: RTP

Funding gaps within each local authority area (excluding mainstream funding)

- 29.70 One of objectives of this report was to provide local authorities with a view on the infrastructure required to cope with housing growth in their areas.
- 29.71 We have provided a detailed table of all infrastructure requirements at a site-by-site level. This is necessarily very complex, and so we have provided it under separate cover as Appendix 12. This also shows which sites are within the PUA and which are Strategic Regeneration Area sites.
- 29.72 Table 29.16 below shows the estimated infrastructure costs, and the estimated level of developer contributions, within each administrative area. Mainstream funding has not been included in this table as it has not been attributed to the district (i.e. local authority) level.
- 29.73 It is important here to recall the point made in paragraph 29.22 above. The objective here is not to apportion costs to particular organisations (such as a particular district council) but instead to understand how the infrastructure costs arising from housing and jobs growth could be allocated across particular geographical areas.
- 29.74 Infrastructure costs which spill across administrative borders to more than one local authority in the spreadsheet model (i.e. at County and HMA level) are shown at the bottom of the table. These costs will need to be borne by the local authorities as these broader costs will be necessary to deliver growth in their respective areas.

Table 29.16 Infrastructure Funding Gap (excluding mainstream funding) by geographical area

Local Authority	Estimated Costs	Estimated Developer Contribution Funding	Funding Gap (excluding mainstream funding)
Leicester City	-£1193.0m	£0.7m	-£1192.3m
Charnwood	-£160.9m	£2.3m	-£158.7m
North West Leicestershire	-£135.7m	£11.6m	-£124.0m
Hinckley and Bosworth	-£87.5m	£13.3m	-£74.2m
Blaby	-£112.1m	£13.3m	-£98.8m
Melton	-£25.8m	£13.0m	-£12.8m
Oadby & Wigston	-£6.0m	£6.8m	£0.8m
Harborough	-£61.1m	£88.9m	£27.8m
Leicestershire County	-£138.4m	n/a	-£138.4m
HMA	-£96.4m	n/a	-£96.4m

Source: RTP

The Leicester City area shows the largest funding gap (excluding mainstream funding)

- 29.75 The Leicester City area shows a much greater funding gap (excluding mainstream funding) due to a) the number of large transport projects identified in this study in this area, and b) the low level of developer contributions generated by housing development in the area. However these benefit, and are arguably required, to deliver the overall housing and employment growth assumed in the HMA.
- 29.76 We recommend this assumption is reviewed by the HMA local authorities following this study, and the spreadsheet model refined accordingly.

Next steps

- 29.77 As we have explained in detail in preceding chapters, our findings are determined by the assumptions we have used in constructing our spreadsheet model. We have developed these assumptions alongside our stakeholders.
- 29.78 What our model suggests, though, is that some of these assumptions will need to be closely re-examined if housing growth is to have the necessary supporting infrastructure.

29.79 We look at how that process might get under way in the following section on delivery.

30 DELIVERY ISSUES AND RECOMMENDATIONS

Introduction

- 30.1 This section builds on the findings of our work discussed in the section above by discussing wider delivery issues. It then makes recommendations for local authorities and partners to consider.
- 30.2 We have shown in the findings section above that
- There is a very significant mainstream infrastructure funding gap.
 - Developer contributions are perhaps lower than anticipated and are insufficient to plug the funding gap identified.
 - A small number of large projects account for a significant proportion of the funding gap.
 - There are likely problems with cashflow “pinch-points” which will need to be overcome.
- 30.3 This section looks at how these problems can begin to be overcome. These problems are complex and overlapping, and will not be solved with any one course of action. Here, we therefore suggest that a number of adjustments might be required to management structures, strategy and policy within the Leicester and Leicestershire Housing Market Area. We deal with each of these in turn below.
- 30.4 We start by contextualising our work. The credit crunch provides the inescapable backdrop for delivery of infrastructure in Leicester and Leicestershire to 2026. We suggest that it will have a significant impact on the delivery of planning targets over the medium term. This affects the requirements for infrastructure. More significantly, even where housing developments do take place, the credit crunch will have a longer-term effect on the ability of the development process to fund the desired infrastructure.
- 30.5 We then deal with how partners might approach a move towards a Community Infrastructure Levy.

The challenges

Private housing development has slowed dramatically

- 30.6 The private new-build housing development process is currently effectively at a halt. Clearly, this will have a considerable impact on the development industry’s ability to hit housing targets. The critical factor for the delivery of housing targets will be the length of time that the market remains depressed.

Even if the housing market recovers quickly, land values will be negatively affected for a much longer period. Often, this reduces the ability of the development process to fund infrastructure

- 30.7 Development land acquired before the credit crunch did so in a climate of rising house prices. Land values also rose to reflect an assumption this trend would

continue in the future, or at least were relatively high on the basis that house prices would maintain those levels. As developers were actively buying land, land was transacted at these high prices.

- 30.8 Land values have now fallen to reflect the new economic and development conditions. The problem for developers who acquired land at a higher (fixed) price than current land values (i.e. no account is taken of any future falls in house prices), is that it is currently unprofitable to undertake development on those sites (or they may even make a loss); the land cost was fixed at pre-credit crunch levels, but the value they currently expect to generate from development on the site in the short-medium term has fallen significantly.

We expect these effects to last some time

- 30.9 DDCLG and Valuation Office Agency (VOA) evidence from the 1990s shows that the percentage fall in housing land values greatly exceeded the percentage fall in house prices.⁸³ Land values did not recover to their previous levels for around a decade. Even if house prices return to previous pre-credit crunch levels, assuming other variables remain relatively constant (e.g. build costs), development will largely take place first on sites already acquired by developers. Developers generally won't be seeking to acquire new land until these "land banks" have been used.

Where this is the case, a developer will look to improve other variables to try and make a profit from this land

- 30.10 The developer may be willing to accept a lower profit level to at least make some form of return on the land but there is a limit to this as there are inherent risks in development that need to be reflected. The developer may look to change the type, mix or density of development. This may improve overall development values but as there is lower demand across all sectors this still may not achieve an acceptable level of return. Costs are highly unlikely to fall in line with house prices so the only remaining variable that could make a significant difference is developer contribution requirements.
- 30.11 Developers are already seeking to negotiate (or renegotiate) S106 agreements at much reduced contribution levels (including affordable housing requirements) in order to undertake development. Where development land in an area has not been acquired, reasonable developer contribution levels can still in theory be secured to fund infrastructure where the landowner is willing to sell at a lower land value than it would have received before the credit crunch, and (arguably more importantly) what it might receive in the future. The landowner's calculations here will depend on his or her views on the likely future direction of land values.

⁸³ The steeper fall is because land values are the result of subtracting the anticipated costs of development from the anticipated receipts. So therefore if, say, the price of land absorbs roughly one quarter of receipts from house sales, and if those receipts fall while costs stay the same, the value of land might be expected to fall four times as fast as house prices. In reality it doesn't quite play out that way and at certain stages the value of land 'undershoots' what might be expected on the basis of house prices in the same way as it can 'overshoot' at other points in the cycle.

- 30.12 Understanding the ownership and acquisition prices/structures (e.g. option agreement structure) is critical to understanding how much development land can contribute to funding infrastructure.

Land values may fall, but even substantial falls are unlikely to have a great impact on developer contributions

- 30.13 An important question in the longer term is whether landowners will accept lower prices when selling their land. We have proposed a baseline value of £500,000 a hectare. This is around 20 times higher than agricultural values. If and when it becomes clear that land values have sunk and will stay low for some time, we might rationally expect that many landowners will be prepared to sell for less. But it is difficult to be certain that this “rational” response will take place, and in any event even if a landowner will accept (say) £300,000 per ha this will only reduce the cost per house by around £5,000 per unit. This will not create a great deal of surplus for spending on infrastructure delivery.

The challenge is to get housing, economic restructuring and infrastructure growth moving - to deliver important social and economic benefits

- 30.14 There are two fundamental reasons why stakeholders would want to see the housing development industry back up and running.
- Housing delivery has important economic and social benefits. These have been rehearsed in detail elsewhere.⁸⁴ New housing has wider area regeneration and economic restructuring effects.
 - The construction industry is a big employer: the construction industry employed around 20,000 people in Leicestershire in 2007.⁸⁵
- 30.15 At the moment, there is a risk that that, instead of increased public sector expenditure off-setting flagging private sector investment, the cancellation or postponement of private sector schemes such as housing will weaken the rationale for the construction of associated infrastructure including schools or health centres. This could create a downward spiral.

Strategic responses

- 30.16 Strategy is the overall process of deciding where we want to get to and how we are going to get there. Here we suggest a number of ways in which stakeholders might respond to the economic context and the findings of our report by adapting their strategies.

⁸⁴ See, for example, the Barker Report, which discusses the specifically social benefits of housing growth alongside the economic rationale for an expansion in housing supply.

⁸⁵ NOMIS shows that 16,200 people were employed in construction in Leicestershire in 2007. This excludes self employed people. An economy-wide basis, an additional 15% can be added to these figures. However, construction is known to have a significantly higher rate of self employment.

Recommendation: review strategy to respond to the credit crunch

- 30.17 Particularly in cases where land is already bought or optioned, the credit crunch represents a profound shift in the ability of the private sector to deliver housing outcomes previously expected. Strategy needs to take this new reality on board.
- 30.18 Particularly in Leicester city, strategy is to a significant extent predicated on
- demand for flatted developments in inner-urban areas; and
 - development values being sufficient to i) remediate brownfield land and ii) buy out existing use values for industrial premises, relocate those industries to tailor-made sites, and put down residential development in its place.
- 30.19 We believe these assumptions need to be reviewed.
- 30.20 Firstly, the market has over-shot on the provision of certain types of development markets - such as high rise, city centre blocks. It is very difficult to see these markets returning to this level of activity under future circumstances and strategy should reflect this fact. Although Leicester appears to have escaped the worst of these effects, there are a number of planning permissions in place for these flatted developments that are unlikely to be taken up.
- 30.21 Secondly, part of the central Leicester strategy relies on the relocation of some industrial uses to other sites. We have doubts about the short term viability of replacing functional industrial property with new residential development. Viability is particularly problematic where land values reflect a need to provide affordable housing, contribute to social and physical infrastructure costs and deal with remediation and demolition issues. If any further investment is required to relocate industrial uses, then we think it likely that this could involve EMDA or other public sector funding.
- 30.22 There needs to be some radical thinking on viability issues if Leicester and Leicestershire are to get their more difficult sites away. We have shown in section 4 that some of the main determinants of the financial viability of the scheme are land values and house prices. The higher the house prices and the lower the land values are, the more financially viable the scheme becomes.

Recommendation: prioritise strategy and policy objectives

- 30.23 As we have shown above, the costs of the infrastructure we have identified far exceed the funding available. Inevitably, then, this may require some uncomfortable prioritisation decisions to be made, and attempts made to reduce costs wherever possible in order to maximise the value-for-money of investment.
- 30.24 There are real strategic and policy choices to be made between aspirations. For example, there is a real tension between the policy demands - of affordable housing, Code for Sustainable Homes standards, and the provision of infrastructure. In section 4 and again in section 29, we have explored the implications of changing some of these assumptions, and found increases in developer contributions if changes to land values or affordable housing requirements were made. The spreadsheet model provided is a powerful tool for

looking at the financial implications of such policy changes, and could be used to put together a package of policy options for stakeholders to choose from.

- 30.25 In this assessment, we have set out the beginnings of an infrastructure prioritisation mechanism. This is a blunt tool. Ideally, prioritisation should not solely involve the extent to which whatever is proposed is regarded as critical, but also what is needed at any particular point in time. As we suggested above, our work here is meant to start an ongoing process of debate.

Recommendation: focus strategy on fewer sites

- 30.26 Leicester City may wish to consider a more targeted approach to the delivery of the Strategic Regeneration Area (SRA). We question whether the City should be tackling all SRA sites at the same time, or whether it should adopt a more focused approach on a smaller number of sites. With the City, a key task for the EDC to address very early on is whether it appropriate to introduce a new area - St John's - until the other SRA sites have progressed. A reconsideration of sites and re-phasing may be considered preferable.

Recommendation: emphasise with partners the role of mainstream funding, and challenge service providers to look for innovative funding packages

- 30.27 It is becoming increasingly apparent that the "pre-crunch" approach of giving away development rights with a planning contributions price ticket attached will not work any more. We do not expect it to revive any time soon.
- 30.28 Our findings show that developer contributions are in no way sufficient to perform the hoped-for role of picking up the necessary infrastructure costs. Developer contributions need to be seen by service providers as the funder of last resort; in many instances, the reverse is now true.
- 30.29 We suggest that the biggest single contribution that the public sector can make to improving the viability of development and the social, economic and environmental sustainability of the finished product is to ensure that maximum use is made of mainstream funding sources. Innovative funding packages (involving bending mainstream funding into growth areas, public/private partnerships, and revenue raising schemes) will all be very important if infrastructure is to be funded.

Policy responses

- 30.30 Policy provides the means of delivering strategy. We deal with it here.

Recommendation: sharpen New Growth Point funding policy

- 30.31 New Growth Point (NGP) funding is allocated to the 6Cs Programme Board. Allocations between Housing Market Areas are then made by the Programme Board.
- 30.32 The objective of New Growth Point (NGP) funding is to provide funding support to local authorities who wish to pursue large scale and sustainable growth, including new housing, through a partnership with Government.

30.33 The NGP Programme of Development (PoD) states that NGP funding will be targeted at “interventions to unlock those sites so that they become viable for private sector partners to build houses much sooner than would have happened without intervention.”⁸⁶ Partners need to be certain that this is exactly how the spending is being deployed.

30.34 In the current market, this represents a major challenge. Even major public sector intervention and pump priming can be swallowed up by the adverse market movements of recent times.

Focusing NGP funding on projects with the maximum economic benefit

30.35 Work by Prof Michael Parkinson for the ODPM (now DCLG) suggests that the real emphasis for regeneration policy should be on productivity and competitiveness⁸⁷. The conclusion we draw is that NGP funding needs to be targeted at projects which have the clearest relationship to the future economic prosperity of the HMA.

30.36 This does not mean that money should be spent on employment sites alone, because housing sites may have equally important economic effects when demography and broader economic externalities are taken into account.

30.37 However, it does suggest that with the Leicester and Leicestershire HMA there needs to be a clear and compelling “theory of change” about how the spending will have economically beneficial effects which go beyond the immediate effects of the project itself.

Aim for fewer, bigger, interventions with NGP funding

30.38 The PoD states that attempts have been made to avoid putting all its “eggs in one basket”. We can see this logic, and understand the pressures to ensure that the allocation of funds across the districts within the HMA is equitable. (We have attached the NGP programme for 2009-11 as submitted as Appendix 13).

30.39 Again, though, work by Prof Michael Parkinson for the ODPM suggests that the scale of intervention is important. As the report says, “Government should do fewer but bigger things better in future. Less means more”.⁸⁸ Small sums allocated to small projects, for example, are unlikely to represent strategic, “game changing” opportunities. We think that fewer, bigger interventions are necessary given some of the profound problems faced by a number of strategically important growth sites. There should be a series of focused criteria for assessing how this funding is targeted.

⁸⁶ NGP PoD 1 Oct 2008 submission, 8

⁸⁷ p149 ODPM (2006) State of the English Cities Volume 2

⁸⁸ p149 ODPM (2006) State of the English Cities Volume 2

Recommendation: develop policies to stimulate the development process

- 30.40 Central Government is trying to ensure that the effects of the economic slowdown are mitigated by bringing forward infrastructure spending.⁸⁹ Other councils are attempting to stimulate the development process to address housing need and bring wider economic benefits. Leicester and Leicestershire authorities also have a potentially important part to play here, and the Leadership Board could be the vehicle that brings these authorities together.
- 30.41 Glasgow City Council, for example, has put together a package of work intended to ameliorate the impact of the credit crunch. Upfront payments demanded of companies that develop on green space will no longer be collected until the economy has improved in an effort to stimulate development in Glasgow. The Council also recently announced a programme to build temporary parks on stalled development sites⁹⁰ and has set up an Economic Advisory Board to tackle the credit crunch.⁹¹ Initiatives include
- More flexibility in the Council's land disposal policy to make it easier for projects to get off the ground.
 - More flexibility in the way the Council allocates grants for social housing.
 - Extension of a Business Investment Fund which offers low-cost loans to small and medium-sized businesses.

Consider using public funds to buy land or provide up-front infrastructure - including NGP, HCA, Council funding, and EMDA funding

- 30.42 Developers are highly cashflow sensitive. This is a particular problem on sites, such as some SRA sites, where there are significant up-front works required including decontamination. In these instances, developer partners will be discouraged by a requirement to undertake major remediation in advance of housing sales.
- 30.43 The public sector has a possible role in funding and/or financing this work. There are a number of possible approaches here.
- HCA funding and financing. Here, we are not advising that stakeholders start looking for HCA grant funding in the traditional manner. Instead, there are financial processes which may be more attractive to developers, and which operate at less overall cost. HCA may wish to fund up front infrastructure development in return to rights for land in the future. This would be particularly attractive to developers because, from a developers' point of view, it subsidises

⁸⁹ Alastair Darling quoted The Observer 19 Oct 2008 "Much of what Keynes wrote still makes sense. You will see us switching our spending priorities to areas that make a difference - housing and energy are classic examples... Nothing in the pre-budget report has been decided but the key thing is going to be innovation - bringing forward spending."

⁹⁰ Regen.net, 18 November 2008, Glasgow tells developers: build now, pay later

⁹¹ See reference at:
<http://www.clyde waterfront.com/citycouncilannounceshelpthroughcreditcrunch.aspx?NavPageId=44>

their costs of capital: in effect, their capital is being substituted by the HCA's capital funding, which is available to the HCA at Treasury base rate. The developer crystallises a land sale and the process provides the developer with a route to profit by effectively swapping the promise of a future £5m for a £5m receipt now. In the current climate, developers are likely to be keen on such a deal. HCA chairman Robert Napier is reported to be interested in such approaches.⁹²

- NGP funding is unusually flexible. We would suggest that this flexibility is currently being somewhat under-used. For example, with NGP, it is possible to buy sites. This possibility could be considered in more detail, and could present a very real opportunity.
- Councils may wish to purchase land on the expectation that subsequent land sales could be used to refund the purchase price. New borrowing powers are now available to local authorities after the government allowed them greater freedom in managing their finances. Interest rates on the loans are reasonable because local authorities have good credit ratings, with councils able to borrow either from the Public Works Loan Board or directly from the market if they can get a better rate. New borrowing would be most likely to be based on an underlying asset which possessed an income stream. The income stream within the project could be future land sales, if the money raised was used to buy or remediate land.

30.44 As John Carleton, the incoming head of private finance at the HCA, has stated, local authorities now need to put their own cash into regeneration projects to keep them afloat until the housing market recovers. Falling land values and the current economic climate, in his view, mean there is no longer any viability in regeneration models that rely on cross subsidy from selling houses. "The only kind of market that will be made in the next few years will be public private partnerships".⁹³

Local Authorities and/or HCA may wish to consider Compulsory Purchase Orders for some sites

30.45 Local authorities and HCA should in the first instance attempt to acquire land by negotiation where it is possible on reasonable terms. A compulsory purchase notice (CPO) is usually a measure of last resort. However, if landowners are unwilling to sell at a realistic prices, the prospect of a CPO is often the only basis upon which reasonable terms can be achieved. In some instances it may be necessary to make a statement of decisive action on CPO early in a project. Selective use of CPO powers may be required in order to demonstrate that public sector agencies intended to acquire the land, and that holding out for very high hope values would be fruitless.

30.46 If necessary, Local Authorities or HCA would need to exercise their powers of compulsory purchase under S126 or other enabling legislation of the 1990 Planning

⁹² Soc Invest Newsletter Friday 7th November 2008

⁹³ Soc Invest Newsletter Friday 7th November 2008

Act (as amended by 2004 Planning and Compulsory Purchase Act) to assemble the comprehensive development opportunity. A CPO should only be made where there is a compelling case in the public interest. Circular 06/04 states that, in reaching a decision about whether to confirm an order made under section 226(1)(a) of the 1990 Act (as amended), the Secretary of State will, amongst other things, consider:

- whether the purpose for which the land is being acquired fits with the adopted planning framework for the area, or where no such up-to-date framework exists, with the Core Strategy and any relevant AAPs which are under preparation with full consultation with the community;
- the extent to which the proposed purpose will contribute to the achievement of the promotion or improvement of the economic, social or environmental well-being of the area;
- the potential financial viability of the scheme for which the land is being acquired. A general indication of funding intentions and commitments by third parties will generally be sufficient to satisfy the Secretary of State that there is a reasonable prospect that the project will proceed. However, the greater the uncertainty of this, the more compelling the case for Compulsory Purchase will need to be under the other grounds. Timing is also important - the existence of a time limit to the funding may be sufficient for the Local Authority to justify proceeding with the order before the details of the replacement scheme or the statutory planning position are finalised;
- whether the purpose for which the authority is proposing to acquire the property could be achieved by other means. This requires the consideration of any alternative schemes put forward by the owners of the land and alternative approaches to achieving similar objectives for the order land; and
- the proportionality of the Order.

30.47 A detailed study of the likelihood of the project to pass these tests is beyond this report. However - and without prejudice to further study - we believe that use of CPO in pursuit of a coherent project strategy could pass the necessary tests in some instances.

Work as closely as possible with Blueprint, the HCA and EMDA. Close links with HCA will be particularly critical in implementation

30.48 At the moment, NGP funding appears to be spent on discrete projects. We understand that partners are looking to develop a more co-ordinated approach in future. We think that co-ordination is likely to be very important in ensuring the strategic effectiveness of spend. At all times, there will need to be very high levels of cross-working with other agencies such as Blueprint, the HCA and EMDA to ensure that each funding stream and work programme is mutually re-inforcing wherever appropriate.

30.49 As we note above, the role of the HCA will be particularly important with regard to the financing possibilities it brings to developers.

30.50 It will be important to understand the HCA's new strategic approach. The HCA through its 'single conversation' is looking to invest on an area basis to support

increasing housing choice and affordability across all tenures. The 'single conversation' will look to see there is a coherent community strategy and implementation plans for an area that deals with local social and economic problems and issues and makes best use of brownfield land and current housing stock across all tenures, alongside any planned greenfield growth. The plans will need to include the employment and leisure offer for an area, the 'place making' and community involvement strategy and demonstrate how housing choice and affordability will be improved. The plan will need to show how empty homes will be brought back into use, how local partnerships are engaging with private landlords, how local authority and Registered Social Landlord (RSL) stock will be improved/renewed and initiatives to support owner occupiers to improve their properties. It will need to deal with low demand, where appropriate, and identify how regeneration and growth in a given area allows a move towards more balanced housing markets.

Maximise the value of the Economic Development Company (EDC) by investigating the role of LABVs and JESSICA funding

- 30.51 The new Economic Development Company (EDC) for Leicester and Leicestershire is expected to be operational by mid-2009. Local authority owned and private-sector led, it will have an urban development and infrastructure delivery arm, which will be available to all the Sustainable Urban Extensions (SUEs) as a centre of excellence and delivery vehicle. The EDC is contracted to deliver in the City, Coalville, Hinckley and Loughborough.
- 30.52 We are aware that a great deal of work has gone into the creation of the EDC. We defer to this work, and so will therefore not cover this issue in detail. Very broadly, though, it is clear that the EDC creates a number of new policy opportunities. Note that the EDC makes a Local Asset Backed Vehicles (LABV) possible⁹⁴, because it is constituted as a City Economic Development Company).
- Joint European Support for Sustainable Investment in City Areas (JESSICA) is not new funding, but does work in a different way to existing funding streams. Here we present findings from a summary paper prepared by Price Waterhouse Coopers.⁹⁵ For the first time, it allows EU grant funding receipts to acquire a stake in an Urban Development Fund (UDF) investment vehicle. JESSICA allows that creation of an Urban Development Fund that can take a stake in a number of vehicles.⁹⁶ It should be noted that housing is not eligible expenditure, but in practice could be included as part of a mixed use scheme,

⁹⁴ Local Asset Backed Vehicles are funds combining locally-owned public sector assets and equity from institutional investors, established to finance the delivery of major regeneration outcomes.

⁹⁵ PWC *An Introductory guide to JESSICA*. Note that this only applies to Leicester City: the City only is eligible for European Regional Development Fund and European Social Fund funding, making the City area eligible for JESSICA.

⁹⁶ An Urban Development Fund (UDF) is defined as a fund investing in public-private partnerships and other projects included in an integrated plan for sustainable urban development. It is likely that UDFs in the UK will be established at either a regional or local/city level in response to integrated urban development plans, project pipelines and investor interests.

provided sufficient additional investment is attracted from other sources to finance these ineligible components.

- Local Authority Asset Backed Vehicles (LAABV) - an initiative driven by DCLG and English Partnerships. JESSICA could provide an important source of liquidity with which to enhance the value of public assets or acquire additional strategic assets.
- Projects of a specific theme linked to the EU's Lisbon Agenda. These include economic and environmental themes such as those within the project
- Infrastructure Funds - finance targeted at infrastructure or other enabling investment, which is generally recognised as a major barrier to delivery of regeneration in the UK.
- Growth Points - a project could potentially be eligible if the link on environmental aspects of the project can be made to the Lisbon Agenda.

Investigate Regional Infrastructure Fund

- 30.53 Consultancy work for EMDA/ East Midlands Regional Assembly has identified possible future funding opportunities for a Regional Infrastructure Fund.⁹⁷ The purpose of a Regional Infrastructure Fund (RIF) is to facilitate the timely provision of regionally or sub-regionally significant infrastructure that supports the planned growth and development through priorities to be determined by new regional or sub regional governance arrangements.
- 30.54 RIFs are a relatively new concept, but could be formed from a range of different funding sources, for example by pooling section 106 contribution, and it could potentially be established as a sub-fund within the Regional Funding Allocation (RFA). A RIF is likely to comprise only a small proportion of the resources needed to deliver the infrastructure required. The East of England RIF is looking at securitising an increase in the Supplementary Business Rate in order to release a cash sum. However, this is likely to be highly unpopular with the business community, and seems to be politically difficult.
- 30.55 The work states that “The potential for RIF will become clearer once draft proposals within the Planning Bill to secure infrastructure contributions through the development of a Community Infrastructure Levy are confirmed by the Government.”⁹⁸

Recommendation: review the detailed findings of our work on transport

- 30.56 The critical friend review that URS has carried out as part of this commission provides useful detail on the outstanding transport strategy issues and possible ways forward.
- 30.57 The details are too numerous for them all to be reiterated here. We say more in section 8 in the “issues” sections. But perhaps one of the most important amongst

⁹⁷ Arup for EMDA/ EMRA Regional Funding Advice

⁹⁸ Ibid (12)

these recommendations is the need to establish HMA-wide transport infrastructure investment priorities that are aligned with scheme delivery and timing. To explain: when housing is delivered, local authorities must be able to respond by having transport infrastructure either in place or aligned to accommodate growth. This is particularly complicated in the case of transport by the fact that transport a) generates high levels of cross-border issues, b) is capital intensive and therefore requires long-term planning through the LTP and c) is frequently at the mercy of shorter-term commercial decisions about development viability.

- 30.58 These characteristics of transport investment are particularly problematic in the current economic conditions. If, for example, the credit crunch means that particular strategic sites might not come forward, it will be important to recognise this and refocus resources on those sites or areas with the higher potential for delivery elsewhere in the HMA. The Transport Strategy and Performance Group (which sits under the Leadership Board in the new sub-regional governance arrangements) might be the best place to pick up this role, which would require someone monitoring delivery, and setting timescales and priorities for when transport infrastructure delivery is necessary.
- 30.59 Part of the prioritisation process could include taking a high level cost-benefit appraisal (perhaps broadly using NATA/STAG principles and summary tables⁹⁹) across the schemes in the HMA - so there would be a very general understanding of which alternative transport schemes would likely to bring forward the greatest economic benefit.

Management responses

- 30.60 Here we suggest a number of ways in which stakeholders might respond to the economic context and the findings of our report by adapting their management approach.

Recommendation: Focus the Leadership Board around delivery

- 30.61 It is clear that a great deal of thought has gone into Housing Market Area-wide governance arrangements for the delivery of economic and planning outcomes.
- 30.62 It is proposed that economic development leadership activity be headed by a Leadership Board to oversee strategy, prioritisation and performance. This would operate across Leicester and Leicestershire. This will be the strategy holding body where priorities for economic development and regeneration, transport, housing and environmental priorities will be determined. It will delegate delivery roles to the EDC and other agencies within an integrated delivery plan.^{100 101}

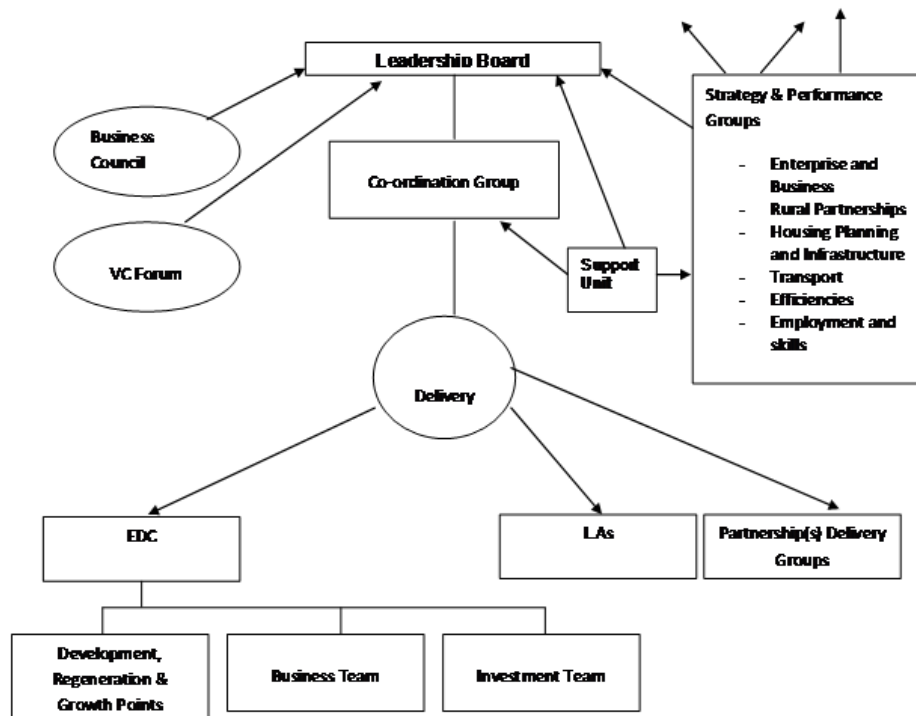
⁹⁹ NATA is New Approach to Transport Assessment; STAG is Scottish Transport Advisory Guidance. Both set out the broad principles for the assessment of transport costs and benefits.

¹⁰⁰ More detail see Draft Leicester and Leicestershire Multi-Area Agreement 2009-2020

¹⁰¹ This new Board is a result of a) the Government's Sub-national Review of Economic Development and Regeneration, which proposes a greater role for upper tier local authorities in leading economic improvement; and b) the fact that Leicester and Leicestershire function as a single economic area

- 30.63 In reviewing the forthcoming arrangements, we have one suggestion to make. We believe that there is likely to be a requirement for pro-active project management across a number of agencies and funding streams. We would suggest making the Support Unit responsible for delivery, with named individuals made clearly responsible for project management and delivery implementation.
- 30.64 This would take us from the position suggested in the 1 Oct 2008 Programme of Delivery in Figure 30.1 to that shown in Figure 30.2. As can be seen from the latter diagram, we have suggested that the support unit be given specific project management responsibility

Figure 30.1 Leadership Board proposed management structure

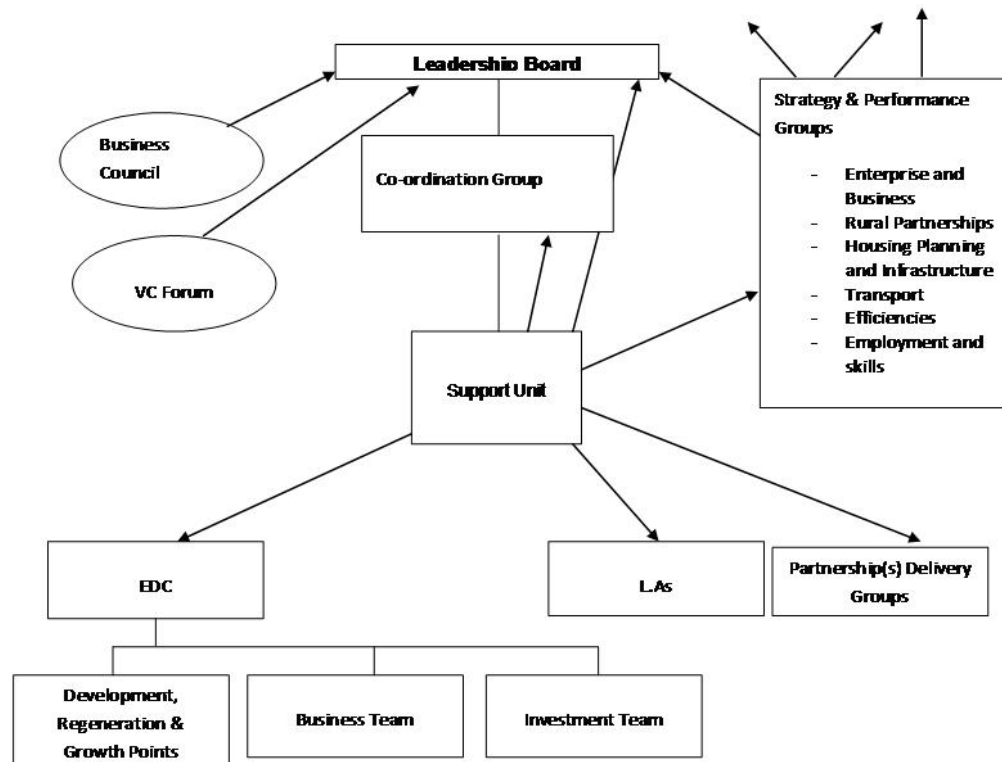


Source: Leicestershire County Council "Sub-regional Leadership Arrangements" November 2008

- 30.65 Such a change would see the structure diagram amended as follows.

and so is the appropriate geography for carrying out economic leadership functions. For more detail see "Sub Regional Arrangements for Economic Development" Leicester City Council Cabinet Report
[http://www.cabinet.leicester.gov.uk/Published/C00000427/M00002454/AI00021322/\\$Subregional arrangementsforeconomicdev.doc.pdf](http://www.cabinet.leicester.gov.uk/Published/C00000427/M00002454/AI00021322/$Subregional%20arrangementsforeconomicdev.doc.pdf)

Figure 30.2 Leadership Board proposed management structure - amended to show support unit project management responsibility



Source: RTP

Recommendation: create a cultural shift within management

30.66 We suggest that one of the most important challenges facing management - either within the Leadership Board, the Leadership Board delivery team, or the EDC - is the creation of a new culture of delivery. Very simply, we would suggest that it will be important to stop thinking in land use planning, grant funding and policy terms. Instead, a more task focused approach needs to be adopted, such as that at the Olympic Development Agency (ODA) - or even the now defunct London Docklands Development Corporation (LDDC). The ODA's starting point is a very clear business planning approach, with a full analysis of what tasks lie on the critical path, which tasks need public sector intervention to unlock progress, the order in which those public sector interventions need to be made, and the value arising from those interventions. The skillset of officers reflects those requirements. NGP and other funding then needs to be refocused around funding small but important elements on the critical path that will open up development in future.

Recommendation: consider more detailed infrastructure planning at district level

30.67 This strategic level study has attempted to pull together the big picture on infrastructure planning. As well as identifying requirements, costs and funding at HMA level, it has set out the principles and rules of the infrastructure assessment process, identified major issues within each theme, and identified potential "showstoppers".

30.68 There is now room for a second, more detailed sweep through the issues at a local level. We suggest that this work should focus on delivery. Such work would identify - in much finer grain than this study - the infrastructure issues for each district area. This should perhaps at the level of each strategic site. The work would identify site-specific barriers to progress, and attempt to find ways of resolving them. It may also deliver project planning timelines, and detailed actions.

30.69 It is precisely this sort of detailed, practical work that will form the raw material required for the cultural shift from planning to delivery that we discuss above. This work would also further bolster planning authorities' evidence base.

Recommendation: make delivery “modular” by creating off the shelf projects

30.70 Delivery-oriented management will need to be tactically savvy. The medium term outlook for public funding is opaque. Over the next few years, there might be more public money but it might not be in regeneration: it might, for example, be in education or in health. What is likely is that public funding priorities move over time. In these circumstances, there are great advantages in having a “stock” of projects on the shelf - so that changes in public finance can be responded to quickly.

Recommendation: Use the Leadership Board and this infrastructure assessment to catalyse relationships between planning authorities, public service providers and other agencies

Use this Growth Infrastructure Assessment to get cross-agency and cross-authority co-ordination, and sustain it through the Leadership Board

30.71 We believe that this Growth infrastructure assessment may be helpful in getting greater service provider ‘buy in’ to channel investment decisions on infrastructure along the same range of priorities. This is not the usual - rather hackneyed - call for closer partnership working, but instead is a point with real bite: for example, if Ashton Green does not start to deliver shortly, then the Education Authority will have to channel their £16m investment from BSF in a new secondary school at a less than optimal location for longer term sustainable development objectives.

30.72 This point similarly applies to other service providers, but the education issues are perhaps more important than others. Quality of schooling is one of the major drivers of housing location choice. DCSF BSF needs to be closely integrated with regeneration and place shaping. In the US, Chicago's chief education officer has stated that schooling strategy is an integral part of city development, saying "Where we develop good schools, people want to live. Education drives housing drives retail drives leisure drives environment."¹⁰² Or, as the ex-Minister for Communities and Local Government has put it, “get schools right and the rest will follow”.¹⁰³

¹⁰²David Miliband quoted The Guardian, Wednesday September 8, 2004

¹⁰³ibid

30.73 The call made above for integrated working also applies to the local and county authorities. Cross-authority working will be required in order to maximise the benefits of undertaking this work.

Use Leadership board and LSP linkages to deliver multi-user buildings

30.74 There appears to be some potential for both quality enhancements and cost efficiencies in the provision of multi-user “community hub” buildings. Research suggests that some of the possible benefits include¹⁰⁴

- Joined up service delivery to deliver more customer focused services
- Economies of scale through co-location and integration, and introducing cost savings in capital and revenue streams
- Making the most efficient use of land across the public sector estate

30.75 The findings of this research would need to be confirmed - for example, we understand that the cost efficiencies generated as a result of co-location can be relatively limited - but consultation with Leicester and Leicestershire service providers has tended to support these research findings, particularly with regard to service quality improvements. For example, Leicester Libraries stated that small library facilities with relatively few facilities scattered on estates do not work, and some like these have already been closed in the City. Instead, the Libraries service suggests that community rooms and informal learning opportunities could be provided as part of new joint service provision. Leicester Libraries has suggested that the provision of library services might be best dealt with as a part of the citywide corporate property review.

30.76 Projects of this type are being taken forward in Leicester and Leicestershire. Significant cost efficiencies are potentially available through the PCT. We are aware of discussions beginning between education and health service in the co-location of health and school facilities in Ashton Green. A shared service facility (including a library, GP, outpatients, intermediate care unit, community centre, and a social work base for City Council employees) is also being discussed for the Eyres Monsell area of the City.

30.77 Clearly, this type of co-operation is already under way. Continued efforts, either through the Leadership Board, MAA process or other mechanisms, needs to be taken in order to overcome the barriers to this kind of inter-agency co-operation that have been identified (including financial constraints, working culture, policy alignment and geographical coverage).¹⁰⁵

¹⁰⁴NHS London (2006) *The Case for Social Infrastructure Planning*
http://www.healthyrbandevelopment.nhs.uk/documents/int_social_infrastructure/The_Case_For_Social_Infrastructure_02_06_06.pdf

¹⁰⁵ *ibid*

Recommendation: Consider using Multi-Area Agreements to plan and manage infrastructure delivery

- 30.78 A draft Multi-Area Agreement (MAA) covering economic development measures has been agreed between Leicestershire County Council, the City Council and the central Government. The high level outcomes that the MAA will deliver from April 2009 to 2020 are:
- Increased employment
 - Higher skill levels
 - Business growth
- 30.79 The MAA aims to create a cross-border governance structure that can prioritise economic development investment, make decisions about where and how funding is allocated and create efficiency savings within the delivery process.
- 30.80 We would suggest that there are strong arguments to see the MAA extended to cover infrastructure delivery. In many respects, these would
- Crystallise discussion on some of the cross border issues (such as transport) that we have identified as part of this assessment and complement and reinforce the significant improvements in cross border governance that Leicestershire has already seen.
 - Complement the MAA targets covering the economic theme.
- 30.81 Equally, though, there are reasoned concerns that this creates a “democratic deficit”, whereby some of the planning responsibilities properly exercised under elected representatives at a local authority level may be displaced. Any MAA development process would need to be subject to careful consensus-building.
- 30.82 If partners were to choose to go ahead with incorporating planning and infrastructure development within the MAA, then this would have the merit of reinforcing a planning evidence base. PPS12 guidance states that it is important that service providers agree who is responsible for delivery. In most cases, this will be straightforward. However, these responsibilities might not be clear in some instances, (such as flood defences) and precise roles of individual agencies might be unclear in others (such as transport infrastructure).
- 30.83 Consequently, a Planning Inspector would need to see that a structure is in place to deal with an issue (e.g. agreement between City, County and Highways Agency on road schemes) and being programmed at a high level into an infrastructure plan/funding model, possibly with inclusion in an MAA, may be a useful part of this.

Recommendation: improve contingency planning

- 30.84 Any strategic body needs to have thought through, and be able to cope with, the implications of rapidly changing circumstances.
- 30.85 PPS12 makes it plain that a Local Development Framework Core Strategy should make proper provision for uncertainty and not place reliance on critical elements of

infrastructure whose funding is unknown.¹⁰⁶ This commonsense approach is now reflected in planning requirements. PPS12 says that "A strategy is unlikely to be effective if it cannot deal with changing circumstances....Plans should be able to show how they will handle contingencies: it may not always be possible to have maximum certainty about the deliverability of the strategy. In these cases the core strategy should show what alternative strategies have been prepared to handle this uncertainty and what would trigger their use."¹⁰⁷

- 30.86 The spreadsheet model provided with this Growth infrastructure assessment can help with this effort. The spreadsheet can be altered to explore different land values, affordable housing ratios etc, so different scenarios can be explored. This and other work should be used to "stress test" different planning scenarios, with worked out strategic planning responses on each. The new governance structures mentioned above will provide an ideal arena through which these discussions can be managed.
- 30.87 As a way of beginning to think about this issue, the Leadership Board may wish to review the NHS East Midlands 'potential futures' scenario planning tool, which uses agreed scenarios to
- Test in-depth and refine the strategic intentions set out in strategy.
 - Stress-test plans.
 - More clearly identify and understand key strategic imperatives.
 - Engage key stakeholders in strategic plans.
 - Identify any capability requirements not already identified.
 - Identify contingency plans.
- 30.88 These techniques are also used in the private sector. Work by McKinsey may be useful as a starting point.¹⁰⁸

Recommendation: use best practice from elsewhere

- 30.89 Elements of best practice from elsewhere could be adopted within the Leicester and Leicestershire HMA. Below we pick up the relevant elements of best practice elsewhere, but would caution that neither of the vehicles below are perfect.

The Ashford Special Purpose Vehicle (SPV)

Working with the private sector to deliver growth

- 30.90 DCLG, Ashford Borough Council and other public sector partners adopted a private/public partnership approach to delivering the growth in Ashford a number of years ago.
- 30.91 Ashford's Future Partnership is a public/private partnership which set up Ashford's Future as a company in 2008 as a Special Purpose Vehicle to oversee the delivery

¹⁰⁶ See PPS12 paragraph 4.10

¹⁰⁷ See PPS12 paragraph 4.46

¹⁰⁸ See, for example, The McKinsey Quarterly December 2008 *Leading through Uncertainty*
http://www.mckinseyquarterly.com/Leading_through_uncertainty_2263

of growth in the area on behalf of the Partnership. The company's board includes representatives from the private sector. Land Securities, a leading UK developer that is particularly active in Kent, leading the development of Ebbsfleet Valley (adjacent to the recently opened Ebbsfleet Eurostar station) is represented.

30.92 An agreement was reached between the Council and developers Taylor Woodrow to forward fund a new junction (Junction 10a) on the M20, which unlocked development at a number of key development sites in addition to its own. This agreement requires the Council to pay Taylor Woodrow with future S106 money secured from qualifying development.

Pooling funding (EP, SEEDA, DCLG and tariff contributions) in a legal vehicle

30.93 A potentially even bigger step is proposed with the creation of a new company by the Ashford's Future Partnership Board (AFPB).¹⁰⁹ The new company will be a "Special Purpose Vehicle" made up of 50:50 private/public representation, with a Chair drawn from the private sector members. The Chair will have a casting vote.

30.94 A Partnership Agreement will be in place which will commit funding partners (Ashford Borough Council, KCC, EP and SEEDA) to support the delivery of the Partnership's Programme for Development. This is intended to ensure adequate resources are made available to support Ashford's growth agenda. It is also designed to confirm the relationship between the AFPB and the SPV in terms of delivery responsibilities and funding.

30.95 Further funding for specific project delivery is likely to be directed into the SPV via grant funding from EP and SEEDA. The revenue costs of the SPV will initially be met through Growth Area Funding but in the longer term it is likely to be able to generate income from assets and other activities.

Management arrangements to agree how the funding is spent on infrastructure

30.96 There is significant private input to agree infrastructure priorities. The SPV Board will have responsibility for:

- Implementing those projects that are identified as being the responsibility of the SPV in the Programme for Development approved by the Ashford's Future Partnership Board.
- Agreeing the Programme for Development for the partnership, setting out the projects to be delivered by both the SPV and the wider partnership. The AFPB will also sign-off the business plan for the SPV and the SPV will be responsible for the delivery of specific projects for which it is accountable.
- Allocating growth area funds, tariff and other funding as appropriate to partners and the SPV to support project delivery.

¹⁰⁹ <http://www.ashfordgrowthdelivery.co.uk/content.asp?page=2>

A Special Purpose Vehicle with a specific utilities remit: the East Kent Spatial Development Company

- 30.97 The difficulties of providing infrastructure provision for growth have come to the fore since the introduction of the Sustainable Communities Plan. There are two main types of difficulty: funding and timing. Utilities infrastructure has exhibited both difficulties.
- 30.98 Regulatory bodies' investment programme approvals have not so far given much priority to the needs of regeneration and growth areas as against those of existing customers. Utilities have therefore not found it easy to invest in capacity speculatively in advance of demand. This is a particular problem in regeneration areas, where demand is not certain, and take-up of sites on a new development can be slow, at least initially.

Overcoming the funding and timing issues related to infrastructure provision

- 30.99 The East Kent Spatial Development Company was set up with funding of £11m contributed by SEEDA, Kent County Council, Thanet District Council and Dover District Council to initially to deal with a specific problem in Thanet, where land allocated for development could not come forward because of the absence of utilities, and where utilities were reluctant to invest because of doubts about the level of demand.
- 30.100 The Company's first project was to pay EdF Energy to construct a new sub-station and distribution network to serve central Thanet, the costs to be paid back by developers as they took up the utilities. The funding is a revolving one, with repayments available to fund further provision. The Company is currently building the Canterbury Innovation Centre at the University of Kent to provide 25,000 square feet of incubation start-up business space, so its remit has widened somewhat since it was set up.
- 30.101 In the current state of the development market there is scope for wider application of the principle to ease developer's initial cashflow burden.

Recommendation: keep this assessment up to date

- 30.102 We suggest that the assumptions used in this infrastructure assessment will need to be revisited and updated relatively frequently, particularly at times of rapid housing market change. We suggest a full three year formal review, but would tend to think that a rolling process of revision might be preferable. The spreadsheet model has the facility to allow this to happen relatively straightforwardly.

The way forward to a Community Infrastructure Levy

- 30.103 The Government explicitly requires progress be made towards Community Infrastructure Levy (CIL). PPS12 makes it clear that the Core Strategy should

advance their infrastructure planning to “serve as a basis for establishing policies for charging CIL on developments in their areas”.¹¹⁰

Recommendation: we suggest a “wait and see” approach to CIL

- 30.104 The recent Planning Bill, which received Royal Assent in November 2008, contained provisions for the introduction of the Community Infrastructure Levy (CIL). Despite this and two previous policy documents on how CIL could work, its precise provisions are still currently unclear.
- 30.105 Even after primary legislation is published, we expect that there will be a great number of practical issues to iron out. It is our guess that the benefits of being first with a CIL would be outweighed by the advantages that might be gained for Leicester and Leicestershire by a “wait and see” policy. It might be better to allow other areas to flush out the issues first. Quite apart from these technical matters, there are other good reasons to wait. CIL was conceived in a strong development market, whereas conditions now are fundamentally different and values are not expected to return to previous levels in the short term. There is consequently a greater risk in introducing a new contributions policy into a fragile, uncertain market. As we have suggested above, we think that there are significant strategic changes needed if we are to see the level of housing delivery take place, and management time would be best spent focusing on these issues, rather than setting up a CIL.
- 30.106 We think this the best policy because of the likely complexity of setting up a CIL (or CILs). The difficulties can broadly be categorised into setting, implementing, spending and administering a CIL, and some of these issues are set out below.

Difficulties in setting a CIL tariff

- 30.107 Under current guidance, CIL charges will be based on simple formulae which relate the size of the charge to the size and character of the development paying it. Such a simple formulae is likely to be in the form of a standard charge per unit for different development categories (e.g. per dwelling for residential development or per sqm for employment development). It is envisaged that CIL will also be applied to almost all development.
- 30.108 Setting a CIL is therefore easiest where infrastructure needs are evenly spread in relation to the size, location and type of development, there is a relatively homogenous development market (i.e. viability in each development category is broadly the same across the area) and development can afford the necessary proportion of such costs (i.e. taking into account public sector funding).
- 30.109 In reality though, each local authority will have difficult decisions to make in each of these areas. For example in terms of viability, a CIL set too high will render some less viable sites uneconomic - and these are often going to be the inner-city sites which generate the greatest wider social and economic benefits from their regeneration. A CIL set too low will mean that the more viable sites effectively get a

¹¹⁰ DCLG (2008) PPS12 Paragraphs 4.11 and 4.12

free ride. Such a policy would be ineffective in capturing the broader social and economic gains from the granting of planning permission. There are also inter-related issues of priority - affordable housing and sustainability requirements need to be considered.

30.110 There are some potential solutions the Government is currently considering, such as different CIL rates to reflect key differences in an area (eg greenfield and brownfield, or urban and rural, development).

30.111 A local authority will therefore need to consider:

- Which development categories to apply a CIL to (eg does CIL only apply to residential development, or commercial development as well?),
- Which infrastructure categories are included in the charge (does CIL only relate to, say, transport, or are other issues included?) and
- The variance in viability between developments in the area (is CIL set low, so as not to discourage development on regeneration sites, or high, in order to capture value from high value sites? Are there to be any site exemptions, and if so on what grounds?)

Difficulties in implementing CIL

30.112 The Government's January 2008 policy statement set out that the process of setting charges should ideally be embedded in the development plan process. It is envisaged the CIL charges will be set out in a "charging schedule", and that this will be a legal document created through the CIL regulations but will also be part of a local authorities' LDF.

30.113 The formal legal status of the charging schedule and at what stage of an LDF process it can be adopted by a local authority is still unclear. The Government is currently minded to propose that the charging schedule will not formally be part of the development plan. However, it will be tested in a similar way to development plan documents to ensure robustness and provide a full opportunity for stakeholders to test it. Given the much slower than anticipated adoption of development plan documents by local authorities, the government is currently considering whether, and on what basis, a CIL could be implemented before a core strategy (with an associated infrastructure assessment) is adopted.

Difficulties in spending CIL

30.114 The plan and decision making process for spending CIL funds will require a mechanism that provides a rational basis for choosing between the competing claims of service providers and geographical areas. There are likely to be political and "buy in" issues associated with this that will need to be overcome before a CIL can be introduced effectively. Whilst these problems are not materially different from those experienced in setting a standard charge regime used at present by the county council, there may be more visibility and profile in allocating CIL.

30.115 CIL will have to be used to deliver the required infrastructure arising from new development, we assume based on a robust and publicly examined infrastructure assessment. This assessment will need to allocate anticipated CIL funds between

different service providers and geographical areas. This will require a much closer relationship between service providers and the charging local authority to agree the plan, responsibilities for delivery, and also a decision making mechanism for spending the CIL funds. It is not clear how closely spending CIL funds needs to relate to the infrastructure assessment that forms the evidence for it and, or, the core strategy.

Difficulties in administering CIL

30.116 Implementing a CIL will require charging authorities to introduce new administration and management systems. There is the

- collection and charging of CIL from development;
- the spending and distribution of CIL funds with service providers; and
- producing, updating and monitoring CIL information (both internally and to external service providers).

30.117 There are a number of issues and risks on the above basis that would need resolving before a CIL could be effectively introduced. We therefore think that a full CIL across the Leicestershire HMA area should probably not be pursued for another 3-5 years. A review will be needed in the future to see if a CIL is worth pursuing.

Recommendation: it would be worth making some preparatory steps towards a CIL

30.118 We would not suggest that the Management Board simply ignore the CIL issue over the medium term. Some preparatory steps towards a CIL would be of great benefit if a decision was made to start a CIL, and would still be useful even if a CIL was never fully developed.

30.119 One potentially major advantage of CIL (or, for that matter, a tariff) would be that, if set at the right level(s), a greater quantum of contributions could be secured from development, mainly because there would be fewer exceptional circumstances that would make for non-payment. This could be critical to funding the infrastructure identified in this report. The certainty of developer contributions from a CIL also allows the potential of forward-funding key infrastructure that would otherwise not be fundable until major development schemes either provide it directly or through the financial contributions it provides.

30.120 Firstly, the Management Board may wish to investigate whether a CIL could, in principle, help achieve its aims better than currently implementable developer contribution policies (under Circular 05/05) on this basis. Secondly, if this is the case, it may wish to undertake some preparatory work to find solutions to some of the challenges outlined above, and develop the evidence base required to implement a CIL.

30.121 Even if stakeholders do choose to rule a CIL out at this moment, there are still potential improvements to infrastructure service planning, delivery and developer contributions policies that could be made. These may also indirectly help prepare the Management Board for a CIL in the future, with potentially new planning approaches or policies that reflect some elements of a CIL. This could include:

- Improvement of service planning/delivery. The infrastructure assessment and funding model could be used as a base and catalyst for improving service provider liaison and agreement of priorities for s106 investment. Although districts would still retain all ultimate control over use of 106 monies, and the infrastructure assessment would not necessarily have planning or legal status (other than as part of the evidence base for LDFs), better solutions such as joint service provision facilities (e.g. joint emergency services) could be facilitated and funded through joint service provider forums/management boards.
- Concentration on, and resolution of, particular infrastructure category issues - certain infrastructure categories have been highlighted in this report as a particular infrastructure issue. CILs can cover a number of infrastructure categories. However, the CIL approach seems particularly relevant to certain categories of infrastructure (such as transport), and it may be better to concentrate on these, at least in the short term. For example, the impact of new development in Kent Thameside (part of the Thames Gateway) on the strategic road network was deemed to be unacceptable by the Highways Agency when planning applications were being prepared. Dartford and Gravesham Borough Councils are therefore developing a strategic transport tariff to supplement funding agreed with DFT, DCLG and the developers Land Securities to pay for a plan of key transport infrastructure works.
- Moves towards policy alignment. Developer contributions policies, and prioritisation of infrastructure, differ between the local authorities in the Leicestershire HMA area. Opportunities for authorities to work more closely together on planning and developer contributions policy would not only help tackle some of the shared growth issues in the HMA area, but also form a stronger base through policy alignment for implementing a CIL in the future.