

Leicester City Council
LEICESTER CITY EXTRACT:
LEICESTER & LEICESTERSHIRE GROWTH
INFRASTRUCTURE ASSESSMENT



LEICESTER CITY COUNCIL
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Final Report
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APPENDICES

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1 INTRODUCTION

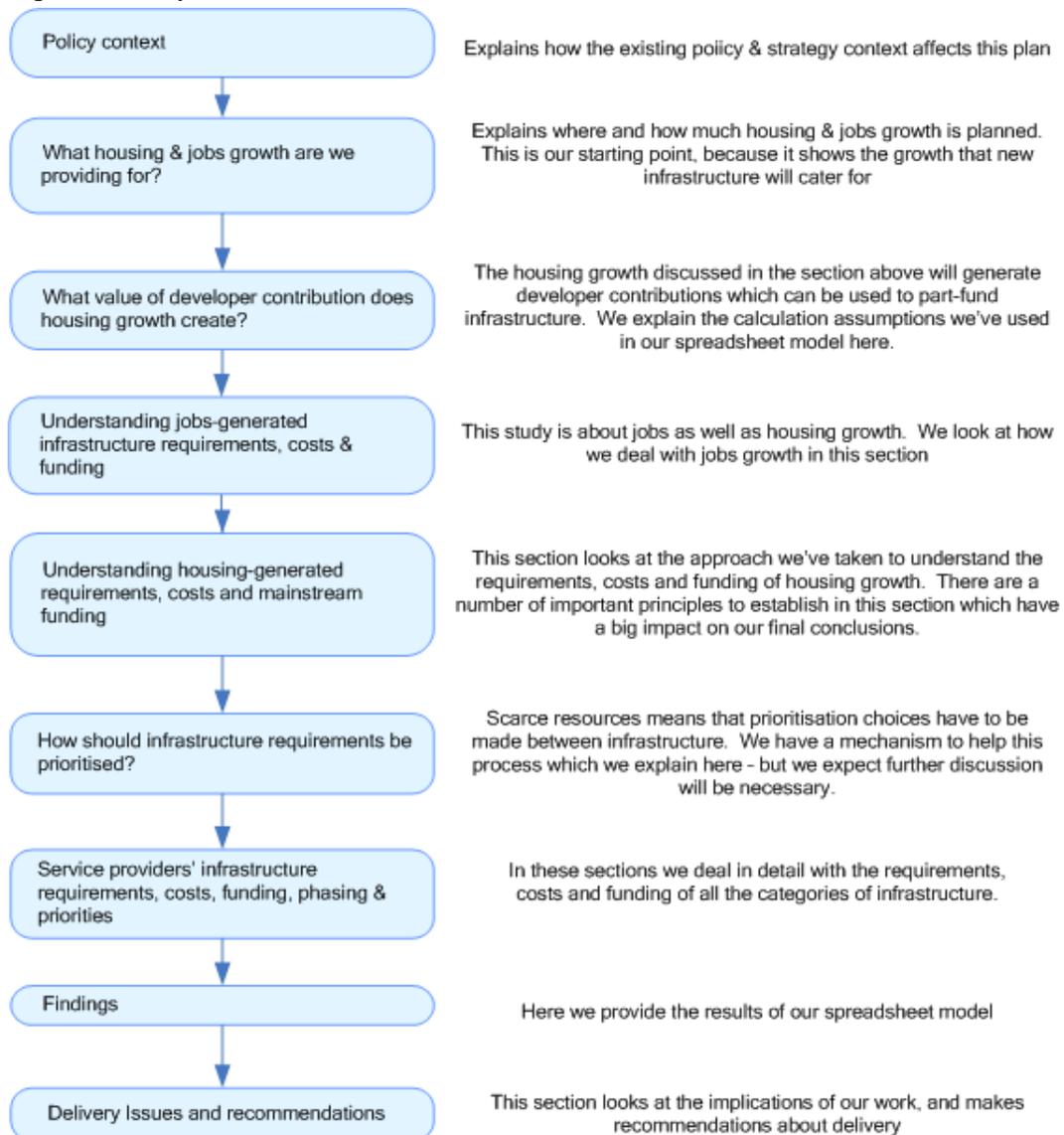
The scope and emphasis of this extract report

- 1.1 Roger Tym & Partners, with specialist transport input from URS, completed a growth infrastructure assessment (GIA) for the Leicester and Leicestershire Housing Market Area (HMA) in March 2009.
- 1.2 This Leicester City Extract Report uses the March 2009 work, and extracts information from this study for Leicester City Council only. This report has been undertaken by Roger Tym & Partners.
- 1.3 We have:
 - focused on the information specific to Leicester City, and where relevant edited out references to Leicestershire districts;
 - summarised or entirely removed some of the more general information, delivery recommendations and detailed methodology;
 - made small inserts of explanatory text where necessary for clarification only;
 - retained the general contextual information regarding each infrastructure category;
 - retained relevant discussions of cross-border issues, where those issues have impacts on the Leicester city area.
- 1.4 Also important is what we have not done. It should be noted that we have not undertaken additional research or analysis for this report. Edits, summaries and explanatory inserts of text aside, this extract report retains the text of the original report. This extract report therefore does not deviate to any significant degree from the original in tone, analysis or content.
- 1.5 There is also one area where additional analysis has been necessary in order to create a Leicester-specific document. In the case of some categories of mainstream funding, in particular transport funding, additional assumptions were needed to be made to apply the original GIA information to Leicester City.
- 1.6 This report has the same chapters as the original GIA report to allow easy read across between the two.

Structure of the original GIA and this report

1.7 The diagram below shows how we structured the original GIA report. As stated above, we have used the same structure in this report to allow easy read across.

Figure 1.1 Report structure



1.8 The approach we took information gathering, and the contacts we talked to, is explained in Appendix 1 of the original GIA and a list of written sources used was contained in Appendix 2. We have not included these in this report.

The scope and emphasis of the original GIA assessment

The types of infrastructure we looked at

Defining infrastructure

- 1.9 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
- 1.10 Our brief for the original GIA defined infrastructure to include the following categories that enable a development to go ahead.² These are as follows.

Figure 1.2 Infrastructure categories in the original GIA

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

The original assessment provided a strategic overview

- 1.11 Our objective for the original GIA was 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 was 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.
- 1.12 Rather, it began to give an indication of the strategic pieces of infrastructure that will be required to support growth within the Leicester and Leicestershire HMA 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.

¹ Concise Oxford English Dictionary

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

A series of important caveats were attached to the original GIA work

1.13 A number of important points must be borne in mind when using this, and the original, GIA 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 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 in relation to developer contributions 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, as opposed to individual developments or local authorities. 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.

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)

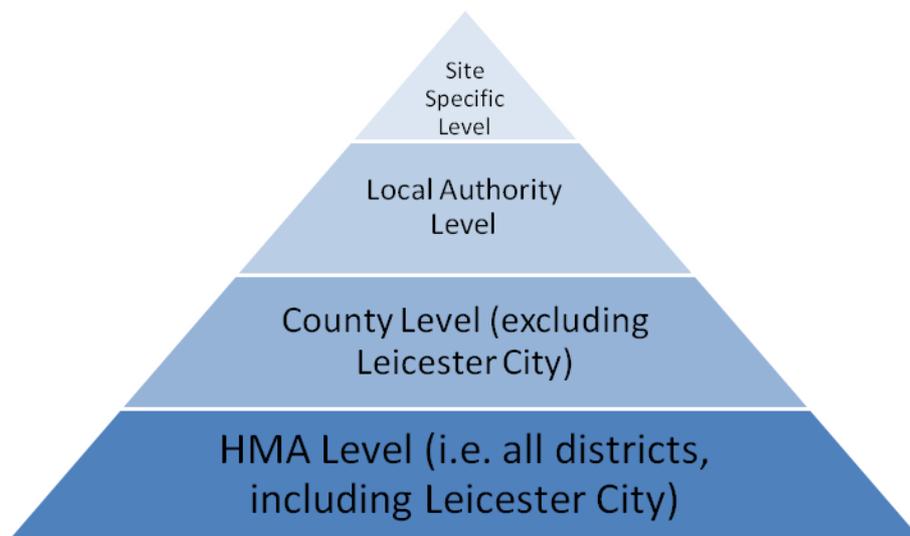
Adaption of the original GIA spreadsheet model has been required

- 1.14 Although we have not undertaken any new research, we have adapted the original GIA spreadsheet model for the purposes of this study. The key change is to the treatment of mainstream funding, which is discussed in more detail below.
- 1.15 The spreadsheet model (or “funding” model) was an integral part of the original study. It brought together all the key information on infrastructure requirements, estimated cost, funding and priorities in the overall HMA. Further information on the model is set out in Section 29 of the original GIA report.

Mainstream funding disaggregated from HMA level

- 1.16 Although some infrastructure *costs* are allocated at the site specific, district and county levels in the original spreadsheet model, mainstream *funding* for each infrastructure category (e.g. transport, education etc) was only allocated at HMA level in the model. A summary of the spatial levels used in the infrastructure spreadsheet model is set out below:

Figure 1.3 Spatial scales in the infrastructure spreadsheet model



Source: RTP

- 1.17 Where mainstream funding applied to specific sites, such as education funding, we have disaggregated this information in the spreadsheet model for Leicester City. In the case of transport funding, we have pro-rated part of the funding (RFA and GPF - see section 8) based on housing numbers, and used the estimated LTP funding for Leicester City.
- 1.18 Consequently, some of the estimated mainstream funding figures for Leicester City sites or the district are different to that set out in the original GIA.

We have not apportioned HMA wide infrastructure costs to Leicester City

- 1.19 There were infrastructure costs in the original GIA which were assumed to spill across administrative borders to more than one local authority in the spreadsheet model, and were therefore assumed to be at County and HMA level (see Figure 1.3). A good example

of these types of costs are to be found in Table 8.1, which shows cross-border transport investments.

- 1.20 We have not apportioned the costs of these cross-border projects to Leicester City, or any other HMA authority. Such a process would need separate discussion. However, these costs should not be ignored, and so we have retained this information in our Summary analysis in section 29, specifically in Table 29.3.

2 POLICY CONTEXT

Introduction

- 2.1 The original GIA report set out the policy context for the study, including the draft Regional Spatial Strategy (RSS) at that time, and its implications for the Leicester and Leicestershire HMA. Please refer to the corresponding section in the original GIA for this information.

3 WHAT HOUSING AND JOBS GROWTH ARE WE PROVIDING FOR?

Introduction

- 3.1 The original GIA report explained the sources of our data on jobs and housing growth. This was important, as the assessment must start from an agreed and consistent set of assumptions about housing and jobs growth.
- 3.2 We attempted to maintain a focus on the big issues that count, and ensured that we avoided the type of detail which can quickly render an assessment of this type unusable.

Summary of growth assumptions used in the original GIA

- 3.3 We have summarised below the assumed housing and jobs growth used in the original GIA. We mapped this growth in the GIA, which we have attached at Appendix 1 and 2. These maps, and Table 3.1 below, are only indicative for the purposes of the GIA. For more detailed information on this, including these important caveats, please refer to the original GIA report.

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

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

- 3.4 We 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 for the original GIA. We have set out the growth within the PUA only in this report. It should be noted some adjustments were necessary to accommodate the longer timescales and revised growth details. Further details of these adjustments are set out in 3.18 of the original GIA.

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 (Chamwood)			0	0	0	0	100	200	350	350	350
Blaby	166	266	130	120	103	57	37	39	37	35	20
Chamwood	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

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

- 3.5 Our assumed phasing for the PUA only, based on the PoD, used in the original GIA is set out below.

Table 3.3 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 (Chamwood)	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%

Source: RTP based on NGP Pod (Oct 2008)

Jobs growth assumptions

Appendix 1 and 2 also show the assumed employment sites. These include the strategic employment growth planned for the SUEs and the New Business Quarter in Leicester, and 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). For further information on these, please refer to 3.22 of the original GIA.

4 CHAPTERS 4 - 7 (SEE APPENDIX 9)

- 4.1 The original GIA report had the following chapters, which are now contained in Appendix 9 to make this report concise:

Chapter 4 - What value of developer contributions does housing growth create? How should developer contributions be allocated?

- 4.2 This section set out the methodology used in the GIA for estimating potential levels of developer contribution funding, and the results of the analysis. The analysis included sensitivity testing of key variables.

Chapter 5 - Understanding jobs-generated infrastructure requirements, costs and funding

- 4.3 This section set out our approach to jobs-generated infrastructure requirements, costs and funding. In particular, we split employment development into the two categories of a) non-retail employment, and b) retail employment.

Chapter 6 - Understanding housing-generated infrastructure requirements, costs and mainstream funding

- 4.4 This section set out our approach to housing-generated infrastructure requirements, costs and mainstream funding.

Chapter 7 - How should new infrastructure requirements be prioritised?

- 4.5 We undertook a prioritisation of infrastructure requirements in the original GIA - this section set out the assumptions used in this process.

8 TRANSPORT

Introduction

- 8.1 Our original GIA assessment looked 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 In this section we have extracted the salient points from this analysis for Leicester City. It should be noted for information on the policy context, and other areas in the HMA, please refer to the original GIA report.

Growth and transport assessments already undertaken

- 8.3 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.⁴ A proportion of this would be met through implementing a series of SUEs (Sustainable Urban Extensions).
- 8.4 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

- 8.5 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.
- 8.6 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.⁵

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

- 8.7 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

⁴ EIP Panel Report Table 2 - Allocations 2001-2006 by HMA November 2007 quoted NGP Programme of Development refreshed 1 Oct 2008 p22

⁵ New Growth Point Programme of Development 1 October revision, p7

a series of documents. A recent EMRA publication highlights there are key implications for transport in the Leicester and Leicestershire HMA⁶:

- 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

- 8.8 Our review of work stemming from the 6Cs Congestion management study⁷ 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.
- 8.9 The study, which uses PTOLEMY⁸, 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 significant intervention and that car use was the prime issue to be addressed rather than car ownership.
- 8.10 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,

⁶ East Midlands RSS Partial Review: A Statement of Conditions & Issues. (October 2008) EMRA

⁷ 6Cs Congestion Management Study - Project Report (April 2008) 6Cs Partnership

⁸ 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>

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

- 8.11 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.⁹

Priorities for coping with congestion

- 8.12 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

- 8.13 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, 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

⁹ New Growth Point Programme of Development 1 October revision, p18

Hinckley and Coalville, provided that the required packages of supporting highways and transportation measures identified by the County are affordable.

- 8.14 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.

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

- 8.15 In the original GIA we set out information on our assumptions regarding issues such as historic deficit and primary vs secondary infrastructure requirements.
- 8.16 In this report, we have summarised the requirements for Leicester City. We have also included the HMA wide requirements, which are likely to affect the city.

Table 8.1 Leicester City and HMA wide identified transport requirements and estimated cost

Area	Description	Infrastructure Item	Total
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
HMA	Bus & Road	Glenfield Park and Ride and quality bus corridor (See CITY11 & BLO9).	-£24.0m
	Bus & Road	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

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

8.17 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

8.18 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 8.2.

Table 8.2 Potential “showstoppers” in Leicester City

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.
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.

Housing Development	Key infrastructure	Issues
	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

8.19 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

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

8.21 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

8.22 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 DaSTS¹⁰ (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

8.23 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

8.24 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

¹⁰ Delivering a Sustainable Transport System: Main Report (Nov 2008). DfT

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.

- 8.25 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

- 8.26 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 tabulated the above mainstream funding assumptions for the HMA

- 8.27 The table below shows the assumptions about our funding sources.

- 8.28 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.

Table 8.3 : Potential Mainstream Funding Sources (millions) - HMA wide

	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

We have used this to estimate mainstream funding for Leicester City

- 8.29 To estimate the proportion of this overall estimated funding for the HMA that might be available for Leicester City, we have pro-rated the estimated RFA and GPF funding based on housing numbers, in addition to the estimated LTP funding for Leicester City (LTP central). This comes to approximately £177m out of the estimated £414m for the HMA, as set out below:

Table 8.4: Potential Mainstream Funding Sources (millions) - Leicester City

	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	TOTAL
Leicester City Estimated Funding	£60.40	£59.05	£57.14	£176.60

Importantly, this approach does not anticipate possible developer contributions

- 8.30 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.

- 8.31 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?

- 8.32 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).

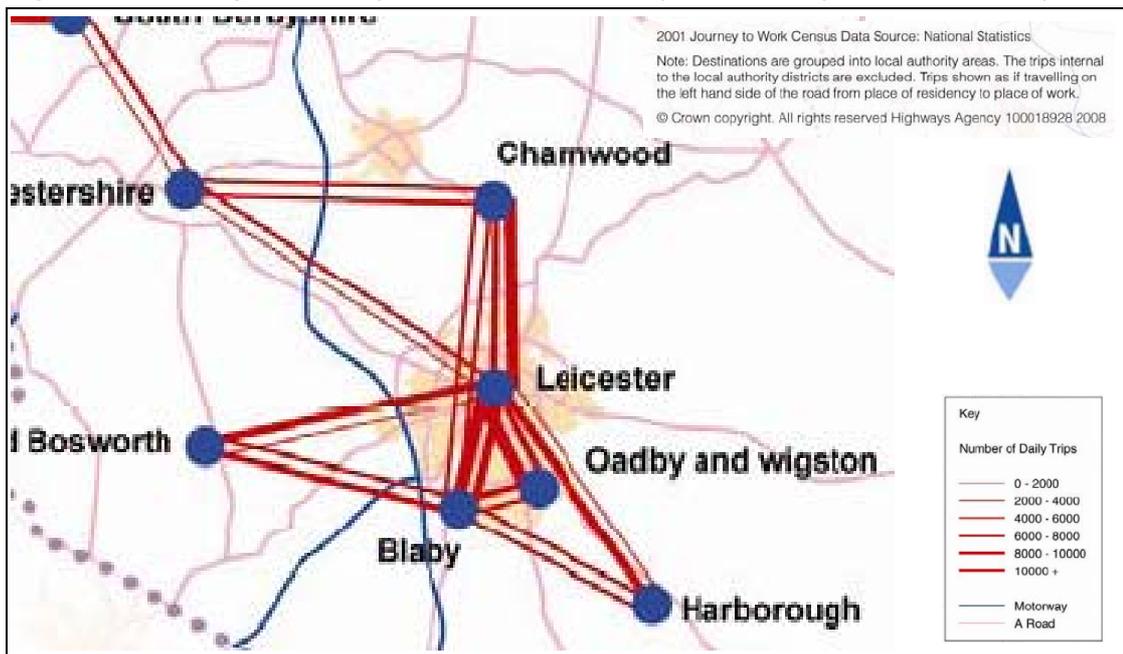
Issues

- 8.33 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.
- 8.34 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.
- 8.35 We discuss each in turn.

Issues related to transport planning

- 8.36 We have extracted the issues from the original GIA that relate to Leicester City.
- Wider travel patterns focussed on the City need to be taken into account*
- 8.37 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

8.38 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

8.39 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.

8.40 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.

8.41 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

8.42 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

- 8.43 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.
- 8.44 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

- 8.45 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.
- 8.46 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.
- 8.47 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.
- 8.48 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.
- 8.49 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.¹¹
- 8.50 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

¹¹ 6Cs Congestion Management Study - Project Report (April 2008) 6Cs Partnership

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

- 8.51 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.
- 8.52 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.
- 8.53 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

- 8.54 The test of the 'networked SUEs' must be that the connecting thread is public transport, and not just cars.
- 8.55 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 journey times, delays to services, poor reliability and consequent lack of service attractiveness.
- 8.56 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.
- 8.57 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

- 8.58 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.
- 8.59 The Command Paper 'Roads - Delivering Choice and Reliability'¹² 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.
- 8.60 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.
- 8.61 On reading 'Britain's Transport Infrastructure - Motorways and Major Trunk Roads' (January 2009)¹³ 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.
- 8.62 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 DaSTS¹⁴). 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 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.
- 8.63 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

¹² 'Roads - Delivering Choice and Reliability' (July 2008). DfT

¹³ Britain's Transport Infrastructure Motorways and Major Trunk Roads (Jan 2009). DfT

¹⁴ Delivering a Sustainable Transport System: Main Report (Nov 2008). DfT

- M1 J21-21a (Leicester) and J23a-24 (Kegworth - Castle Donington area) - Major Junction improvements only at each junction (and not intervening links).
- 8.64 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'¹⁵.
- 8.65 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.
- 8.66 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.
- 8.67 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.
- 8.68 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.
- 8.69 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 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.

¹⁵ E-mail response from Highways Agency. 3 March 2009

- 8.70 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.
- 8.71 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

- 8.72 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)
 - Area of Leicester inside the Outer Ring Road, but outside the Inner Ring Road
 - Leicester City Centre, within the Inner Ring Road
- 8.73 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

- 8.74 The Loughborough SUE has outstanding issues and there is a need for wider area modelling of its potential impacts; these are discussed in more detail in the original GIA. The multi modal transport corridor between Loughborough and Leicester is strategically significant
- 8.75 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.
- 8.76 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

- 8.77 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.

- 8.78 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

- 8.79 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

- 8.80 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

- 8.81 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.

Issues in the Leicester Outer Area

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

- 8.82 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

8.83 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.

8.84 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

8.85 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

8.86 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

8.87 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

- 8.88 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.
- 8.89 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

- 8.90 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

- 8.91 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

- 8.92 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

- 8.93 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

- 8.94 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

- 8.95 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.
- 8.96 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.
- 8.97 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.
- 8.98 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

- 8.99 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.

- 8.100 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.
- 8.101 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.
- 8.102 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

- 8.103 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.
- 8.104 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.
- 8.105 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

- 8.106 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.
- 8.107 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.
- 8.108 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.
- 8.109 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.

Issues related to delivery

- 8.110 The original GIA set out a number of general delivery issues which have not been included in this report - please refer to the original GIA for this information.

9 FLOOD DEFENCE

Introduction

- 9.1 In this section of the original GIA, we 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 was particularly valuable given the problems that have arisen with this issue elsewhere in the country at a relatively late stage in the planning process.

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

No primary infrastructure requirements assumed in Leicester City

- 9.2 The areas of growth proposed in the HMA do not feature in the strategic investment flood risk areas of the EA for flood defence measures when the original GIA was prepared. The EA says that there are no apparent flood showstoppers for planned growth. 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. A strategic review was therefore recommended.
- 9.3 We assumed that flood risks on individual sites are generally dealt with privately, and we therefore assumed no infrastructure costs on any of the Leicester City sites.

Infrastructure timing assumptions

- 9.4 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?

- 9.5 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.

10 STRATEGIC GREEN INFRASTRUCTURE

Introduction

- 10.1 This section looks at how growth generates needs for strategic green infrastructure. We looked at the 6Cs Green Infrastructure programmes for the original GI, which included National Forest provision.

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

Strategic green infrastructure requirements were dealt with on an HMA wide basis

- 10.2 From wider regional projects, County personnel worked to isolate 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.
- 10.3 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.¹⁶
- 10.4 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

¹⁶ 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.

- Target dates for implementation
- Funding sources & long-term management options
- Responsibilities for delivery
- Project leaders and partners.

Total costs for HMA pro-rated for Leicester City

10.5 Projects were costed up to 2013/14 by GI officers. RTP has run funding forward to 2015/16 at the spend rate experienced in 2013/14.

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

10.6 We have pro-rated these costs to Leicester City based on housing numbers.

How can new infrastructure for growth be funded?

NGP funding has been awarded to 2010/11

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

10.8 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.

10.9 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.

10.10 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

10.11 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.

- 10.12 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. We have pro-rated this funding to Leicester City based on housing numbers.
- 10.13 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?

- 10.14 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

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

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”¹⁷. 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 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).¹⁸

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

Important caveats

- 11.6 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

¹⁷ Ibid Annex para 1

¹⁸ 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.

for more open space provision.¹⁹ 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.

- 11.7 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.
- 11.8 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 local authorities place a differing emphasis on open space issues, and this entirely proper.
- 11.9 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

- 11.10 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" in the original GIA report. We have used industry standard indicators to inform our cost estimates, including the Sport England Toolkit.

¹⁹ 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."

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 100m ² - 400m ² ; say 150m ²	typically 1000m ²	Per ha. (£80,000 per 6400m ² / 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

- 11.11 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).²⁰
- 11.12 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

²⁰ 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."

might be expected by way of creating and maintaining funding amenities for existing populations.

- 11.13 We have therefore assumed that the capital costs of provision of these facilities is not available from existing mainstream funding.
- 11.14 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.
- 11.15 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*
- 11.16 Local authorities can and do allocate capital funding from their budgets for the creation of new indoor sport and leisure space.
- 11.17 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.
- 11.18 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.

What are the priorities?

- 11.19 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

- 11.20 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

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

12 EARLY YEARS, PRIMARY AND SECONDARY EDUCATION

Introduction

- 12.1 In our original GIA, we sought 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.

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

- 12.7 The current surplus places at the City are less than 10% of total capacity. Demographics are predicted to absorb this surplus. 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

- 12.8 The starting point in translating school education infrastructure requirements is to understand some of the assumptions used by 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. Leicester City has 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)	Information
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.
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.
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.
House to flat percentages	70% houses and 30% flats
Primary School size	1 form entry = 210 pupils at a build cost of £3m 2 form entry = 420 pupils at build cost of £6m.

and build cost estimates ²¹	3 form entry = 630 pupils at build cost of £9m
Secondary school size and build cost estimates	Five year groups - 11yr - 16yrs, 30 pupils per year. 900 places is a 6 form entry. 1200 places is an 8 form entry at a build cost of £18m-£20m.
Cost of Land	Cost of land not included and may have to put on central area site.
Cost and funding of creating low carbon schools	Build costs do not take account of this. Seek Carbon Trust funding or similar where possible.
Funding	BSF, Basic Needs Funding, other merged funding, developer contributions and gap funding to be met by City Council

Source: RTP, Leicester City Council

12.9 We show how these assumptions translate into schools infrastructure requirements in Table 12.2 (City).

Special Needs School requirements

12.10 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

12.11 In 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 (3 years old +) is built into new primary school provision and included in the requirements for primary schools. The City has 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.

12.12 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.

²¹ 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.

What are the infrastructure delivery costs?

- 12.13 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). 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

- 12.14 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 4 provides a summary of the Schools Capital Allocations for Leicester City for 2008 - 2011.²² This funding is provided in the form of a grant or as supported borrowing.
- 12.15 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

- 12.16 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.
- 12.17 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 review (2011), although the current government has indicated that it is committed to continue the programme to 2020.
- 12.18 BSF funding only covers a proportion of the overall costs of new additional provision.

Leicester City BSF Programme

- 12.19 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.

²² Source - www.teachernet.gov.uk

- 12.20 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.
- 12.21 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 SUE²³, 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.
- 12.22 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.

Primary Strategy for Change / Primary School Funding

- 12.23 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.²⁴
- 12.24 The Primary Strategy for Change in Leicester (Appendix 5 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.²⁵ The section within this funding for new growth is made up of a combination of Basic Needs Capital Funding and Developer Contribution.

Basic Needs Funding

- 12.25 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 4 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 4).

²³ This will depend on the development market and some changes maybe required to this plan.

²⁴ Funding based in this strategy is agreed to 2011, rest to 2023 is indicative.

²⁵ Annex 9 provides the Indicative Funding Proposals contained in the Leicester City Primary Strategy for Change June 2008

Modernisation Funding

- 12.26 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 in this category (see Appendix 4).
- 12.27 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.

Developer contributions

- 12.28 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 remain a source of funding but will be competing in a climate for limited resources to fund other social and community provision.
- 12.29 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?

- 12.30 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

- 12.31 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

- 12.32 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.
- 12.33 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

- 12.34 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 ²⁶	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	

²⁶ 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.

Leicester City Council
 Leicester City Extract: Leicester & Leicestershire Growth Infrastructure Study

Local authority	Growth location	Growth requirements ²⁶	Cost	Funding	Notes
City	St Georges 1,700	Expansion of existing provision and one new primary school. Secondary to be met by Central provision.	£6m for one primary school	Developer contributions to fund primary school.	This development could be served either by the Central area schools 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	

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.
- 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.²⁷ These are a matter of spatial planning in terms of identifying policies and broad allocations in planning documents.

²⁷ 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

Cultural facilities

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. We understand 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 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 available²⁸.

How can new infrastructure for growth be funded?

Funding for cultural facilities is dependent on grant sources

- 14.8 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.
- 14.9 There has been little evidence of developer contributions supporting major cultural facilities in the past. However, local authorities have secured some funding for percent 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 cohesion²⁹.

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

- 14.10 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.

²⁸ The known information relating to the Creative workspace and Mining Lives has been incorporated in the spreadsheet model.

²⁹ Steve Lewis Roberts - Charnwood Borough Council

What are the priorities for cultural facilities?

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

Community Centres

- 14.12 A community centre is a meeting place used by members of a community for social, cultural, or recreational activities.
- 14.13 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.³⁰

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

- 14.14 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.

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

- 14.15 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.
- 14.16 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).
- 14.17 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

³⁰ Leicestershire and Rutland Rural Community Council interview feedback

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

14.18 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.

14.19 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.

Leicester Coty does not currently seek developer contributions for community centres

14.20 Authorities' negotiations generally do not go further than that for education, libraries, open space and play areas. We have assumed 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?

14.21 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

14.22 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

14.23 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.

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.’³¹ 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 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.

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

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'.³²
- 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

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

³² City Library Service

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.

How can new infrastructure be funded?

There is no funding available for library provision to support new growth in the city.

- 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.

What are the priorities?

- 15.18 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 (Leicester City only)

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)

Infrastructure timing assumptions

- 15.19 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

- 15.20 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).

- 15.21 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

- 15.22 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

- 15.23 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.
- 15.24 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.

The centres will cost about £0.5 million each

16.8 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 £500,000.³³ 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
Total		£1.0 million

How can new infrastructure for growth be funded?

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

- 16.9 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.
- 16.10 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

16.11 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?

16.12 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

16.13 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.

³³ This estimate received from Leicester City Council.

Infrastructure timing assumptions

- 16.14 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

- 16.15 Youth facilities are not showstoppers, although in an SUE provision as early as possible is desirable to help in-coming young people settle in.
- 16.16 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 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.

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

17.5 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.³⁴ 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.

³⁴ County submission to the initial (unpublished) work undertaken towards a county infrastructure plan.

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

- 17.6 One of the implications of this change in approach is that the new build programme directly provided by adult social care at the 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.

What are the costs to cope with new development?

- 17.7 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

- 17.8 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 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.

What are the priorities?

- 17.9 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

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

Issues

- 17.11 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 are as follows:

- 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.
- 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 Children's 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 City.
- 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). 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.

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. We have assumed funding continuing at a rate of

£300,000 per centre, leaving £700,000 to be found from the City's 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 City. 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 City 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 1 and 2. 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 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

- 19.9 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.
- 19.10 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

- 19.11 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
- 19.12 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

- 19.13 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

- 19.14 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

- 19.15 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).
- 19.16 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

- 19.17 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

How can new infrastructure for growth be funded?

- 19.18 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.
- 19.19 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

- 19.20 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 which meets the cost of land, buildings and equipment with an expected life of more than twelve months.
- 19.21 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

- 19.22 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

- 19.23 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

- 19.24 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.
- 19.25 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

- 19.26 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.
- 19.27 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.
- 19.28 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 area.
- 19.29 However, we assume that any additional smaller requirements related to the cumulative effects of growth will be funded by the police.
- 19.30 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?

- 19.31 We have ranked police facilities as a "seven" on our ten point priority list (where ten is essential and one is speculative).
- 19.32 We anticipate that these priorities may be changed in discussions which follow our work.

Infrastructure timing assumptions

- 19.33 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

- 19.34 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 Leicester City.
- 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.

What are the costs to cope with new development?

- 20.15 The cost of the new Birstall facility and refurbished City Centre station have been estimated at £10.6 million and £4.5 million³⁵ respectively. This provision would have been built anyway, but has been configured with a view to coping with expected 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.

How can new infrastructure for growth be funded?

- 20.16 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.
- 20.17 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.

³⁵ Leicester, Leicestershire & Rutland Combined Fire Authority Action Plan 2008-2011(Appendix A to Our Plan 2008-2011)

The new Birstall facility can be funded through existing mainstream funds

- 20.18 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 LLRCFA will be able to fund this itself.

What are the priorities?

- 20.19 We have ranked fire and rescue facilities as a “seven” on our ten point priority list (where ten is essential and one is speculative).
- 20.20 We anticipate that these priorities may be changed in discussions which follow our work.

Infrastructure timing assumptions

- 20.21 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.

Issues

- 20.22 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.³⁶ 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.

³⁶ 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 Population	116,520	118,217	122,311	126,251	130,117	130,117
Population Increase		1,697	4,094	3,940	3,866	13,597
Extra Staff Required (@1 per 1,051 pop)		2	4	4	4	13

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		2	6	9	13	
Assumed new stations (1 after 10 staff, then @ 1 per 40 new staff)		0	0	0	1	2
New vehicles (@ 1 per 10 new staff)		0	0	0	1	1
Cost - New stations (@ £2m per station)		£ -	£ -	£ -	£ 2,000,000	2,000,000
Cost - New vehicles (@ £0.135m per vehicle)		£ -	£ -	£ -	£ 135,000	135,000
Total Cost		£ -	£ -	£ -	£ 2,135,000	2,135,000

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 are delivered by 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 Safety³⁷
- 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 both cases, too, NHS managers have close links with planners at the County and City in order to anticipate and plan for future growth.

³⁷ 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)

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 2012/13.³⁸

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.

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 the City PCT.

³⁸ NHS Leicester City *One Healthy Leicester* (192)

- 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.

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.³⁹
- 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.

³⁹ 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).⁴⁰ 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 that it is possible to fund small scale improvements and expansion to extend the range of services they provide.⁴¹ 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.⁴²

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 developer

⁴⁰ 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

⁴¹ NHS Leicester City *One Healthy Leicester* (164)

⁴² Leicestershire and Rutland PCT Eco-towns response (6)

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.”⁴³

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.⁴⁴

Our assumptions about how growth infrastructure is funded

- 22.34 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.
- 22.35 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.
- 22.36 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

⁴³ NHS Leicester City (2008) *One Healthy Leicester - NHS Leicester City Commissioning and Investment Strategy 2008-13* (164)

⁴⁴ Leicestershire strategy (31)

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.

22.37 This would have to be apportioned between the number of new dwellings involved.

22.38 It should be noted that this approach has not been agreed with the PCTs. Further work will be required.

22.39 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?

22.40 We have rated all health service needs as 9. This equates to “highly desirable” on our sliding scale.

Infrastructure timing assumptions

22.41 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

22.42 There are some cross border issues for the City. 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

- 22.43 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

- 22.44 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.
- 22.45 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.
- 22.46 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 City.
- 24.2 There is a national and local component to electricity supply in the City. 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 City 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

- 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/adoptions 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 City.

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 in the City area. 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 City.
- 26.6 Severn Trent plc has made provision for growth in the City 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.

Surface Water Drainage

- 26.8 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

- 26.9 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

- 26.10 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.
- 26.11 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.
- 26.12 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

- 26.13 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

- 26.14 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.
- 26.15 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.
- 26.16 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.
- 26.17 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

- 26.18 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?

- 26.19 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

- 26.20 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

- 26.21 We see the issues relating to sewage and drainage as follows:

Early engagement is important

- 26.22 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.

- 26.23 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

- 26.24 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

- 26.25 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).

Water Cycle Studies

- 26.26 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.⁴⁵

⁴⁵ 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 (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 project⁴⁶ 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 electricity

⁴⁶ <http://www.defra.gov.uk/news/2008/081002b.htm>

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 the City

- 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 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

- 28.12 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

- 28.13 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.
- 28.14 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.
- 28.15 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

- 28.16 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. As explained above, any such costs in the City will be absorbed in the PFI payments.

How can new infrastructure for growth be funded?

PFI Credits are available for major contracts and major waste treatment infrastructure

- 28.17 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

- 28.18 The levels of capital grant available over the three years 2008/9-2010/11 are:
- Leicester City: £1.3m
- 28.19 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 RHWSs 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

28.20 Developer contributions are used to contribute towards the costs of new/improved RHWSs 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.

28.21 As explained above, collection and RHWS costs arising from growth in the City will be covered by revenue payments on the current PFI contract.

What are the priorities?

28.22 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.

28.23 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

28.24 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

28.25 There are no phasing issues regarding recycling and recovery infrastructure, as it is not directly related to new housing development.

28.26 Collection infrastructure will need to be linked to new housing and phasing will therefore be that of the housing.

28.27 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 An explanation of how the spreadsheet model works is provided in the original GIA report.

Headline findings

- 29.4 We begin by presenting the overarching conclusions of our study.

There is a £959m infrastructure funding gap in Leicester City to 2026

- 29.5 Our work suggests that there is a £959m funding gap to 2026 in Leicester City. The headline figures on costs, mainstream funding and developer contributions are as follows.

Overall Infrastructure costs of	-£1,193m
Mainstream funding of	+£ 233m
Developer contribution funding of	<u>+£ 7m</u>
Leaves a funding gap of	-£ 959m

- 29.6 As set out later on in this section, we would recommend caution with the developer contribution estimate. As was made clear in the original GIA, much depends on the specifics of individual sites, and the assumptions used. The original GIA was a strategic City and County-wide study, and methodology used was consistent with that purpose. We have not undertaken any further analysis on developer contributions for Leicester City sites for the purposes of this report.

We have not apportioned to Leicester any of the County or HMA costs from the original GIA

- 29.7 It should be noted these figures do not include any apportionment of the infrastructure costs identified at the County or HMA level in the original GIA; part of these costs may need to be borne by the City, although as we explain later in this section there are conversely costs that were assumed to be in the City (such as the tram lines) that may be necessary for growth in the wider HMA.

Analysis of components of the funding gap

- 29.8 In the sections below, we unpack these different component parts to analyse the infrastructure information in the spreadsheet model that produces this funding gap.
- 29.9 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 in Leicester City in order to cope with housing growth

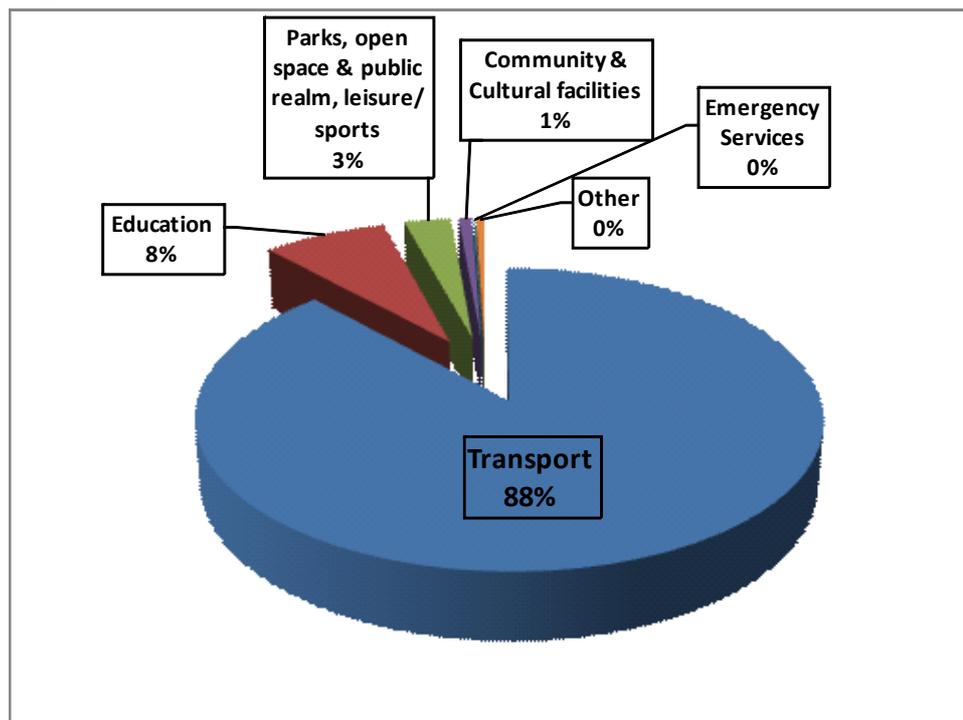
- 29.10 As set out above, the spreadsheet model shows a total estimated infrastructure cost of approximately £1.2 billion to cope with anticipated housing growth in Leicester City to 2026.

Estimated infrastructure costs by infrastructure category

Transport dominates infrastructure costs

- 29.11 Figure 29.1 and Table 29.1 below show estimated infrastructure costs by category. Transport dominates estimated infrastructure costs in Leicester City (approximately 88% of total costs), with education representing the second highest cost (approximately 8% 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 29.1 Estimated Infrastructure costs by Infrastructure Category (%) - Leicester City only



Source: RTP

- 29.12 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 - Leicester City only

	Total Estimated Cost
Transport	-£1052.7m
Education	-£90.0m
Post 16 education and FE	£0.0m
Parks, open space & public realm, leisure/ sports	-£34.0m
Community & Cultural facilities	-£9.5m
Libraries	-£1.6m
Health	-£1.8m
Adult Social Care	£0.0m
Childrens' Social Care & Centres	-£1.0m
Youth Centres	-£1.5m
Police	-£1.0m
Leicestershire Fire and Rescue Service	£0.0m
Ambulance Service	£0.0m
Waste	£0.0m
Electricity	£0.0m
Gas	£0.0m
Sewage & Drainage	£0.0m
Water	£0.0m
Telecoms	£0.0m
Flood	£0.0m
Total	-£1193.0m

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

- 29.13 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 68% of the costs.

Table 29.2 “Big ticket” projects - the top ten costs: Leicester City only

	Infrastructure Item	Description	Area	Infrastructure Category	Estimated Cost
1	TRAM LINE (Line 1)	Tram	Leicester City (non-site specific)	Transport	-£400.0m
2	TRAM LINE (Line 2)	Tram	Leicester City (non-site specific)	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	CITY CENTRE IMPROVEMENTS	Walk/Cycle	Rest of Leicester City Centre	Transport	-£55.0m
6	IMPROVED CROSSINGS OF INNER RING ROAD	Walk/Cycle	Rest of Leicester City Centre	Transport	-£30.0m
7	RAIL STATION IMPROVEMENTS	Rail	Rest of Leicester City Centre	Transport	-£20.0m
8	New Secondary School	1,200 pupils. Relocation and redevelopment of Babington Secondary School to Ashton Green, which will cater for existing and planned growth.	Ashton Green SUE	Education	-£18.0m
9	Joint New Secondary School	New secondary school for 1200 places to server wider central area.	Waterside & Abbey Meadows	Education	-£18.0m
10	LINK ROAD AND RIVER BRIDGE (Waterside)	Cycle/Road	Waterside	Transport	-£15.0m
Total					-£1033.0m

Source: RTP

29.14 Large projects such as this will need to demonstrate clear value for money in project appraisals if they are to go ahead.

Understanding infrastructure costs by geographies

29.15 We have included this analysis to put the Leicester City costs in context with the other costs identified in the original GIA. However, two caveats need to be borne in mind here.

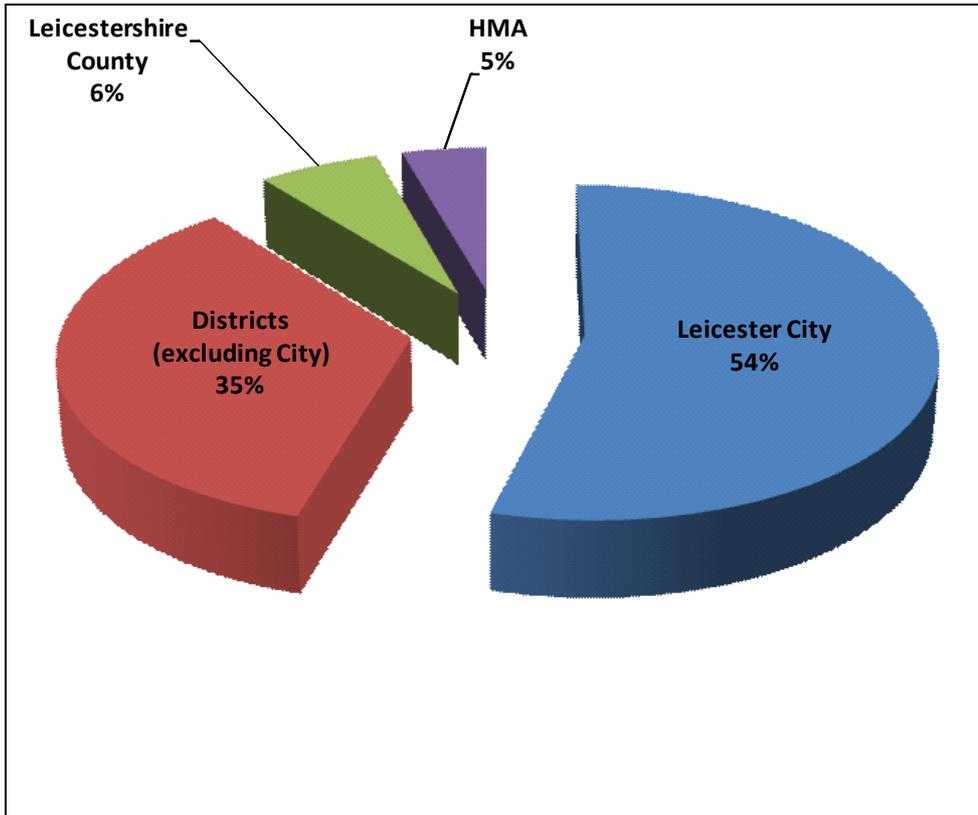
- Firstly, the objective here is not to apportion costs to particular organisations (such as a particular district council) but instead to understand how the infrastructure costs arising from housing and jobs growth could be allocated across particular geographical areas. That means, for example, that 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.
- 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 made up 70% of total infrastructure costs in the HMA, 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

29.16 Figure 29.2 below shows the estimated infrastructure costs allocated within the spreadsheet model by different areas.

Figure 29.2 Infrastructure costs by area (percent)



Source: RTP

29.17 In cash terms, the costs by area are as follows.

Table 29.3 Infrastructure costs by area

Area	Estimated 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

29.18 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

29.19 The strategic sites account for 44,515 out of the 58,366 dwellings in the HMA, and 13,100 out of the 15,900 in Leicester City. The specific costs attributed to these strategic sites in the spreadsheet model are set out in Table 29.4 below.

29.20 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 in Leicester City and across the HMA. However, further work and refinement will be required before this data could be used to make these sorts of prioritisation decisions.

29.21 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 - Leicester City only

Strategic Site	Estimated No. of Dwellings	Estimated Cost
Waterside	3,000	-£66.4m
Ashton Green SUE	3,500	-£36.9m
Abbey Meadows	3,200	-£29.8m
Hamilton Extension SUE	700	-£20.0m
St Georges	1,700	-£10.9m
New Business Quarter (B1 Office)	0	-£8.7m
Rest of Strategic Regeneration Area	1,000	-£2.7m
Total	13,100	-£175.4m

Source: RTP

29.22 Table 29.4 shows that the specific infrastructure costs for the strategic costs in Leicester City represent only approximately 15% of the overall infrastructure costs. This is because most of the largest costs (see Table 29.2) have not been apportioned to the strategic sites in the spreadsheet model.

29.23 The highest costs in the spreadsheet model have been allocated to Waterside. This includes a link road and river bridge estimated at £15m, two new primary schools at £12m and a new secondary school at £18m. It should be noted the latter has been identified to serve the wider central area, and the costs could therefore shared with developments such as Abbey Meadows development.

Costs by delivery partners

29.24 The table below shows infrastructure cost responsibilities by the assumed lead delivery partner. As a Unitary Authority, we have assumed Leicester City Council will be the lead partner for nearly all the infrastructure identified. However, the Council will need to work in partnership with other bodies for some key infrastructure, such as Network Rail in the case of the rail station improvements.

Table 29.5 Infrastructure costs by lead delivery partner - Leicester City only

Assumed Lead Partner	Estimated Cost
Leicester City	-£1185.4m
Leicestershire County Council	-£4.9m
Leicester City Primary Care Trust	-£1.8m
Leicestershire Constabulary	-£1.0m
Total	-£1193.0m

Source: RTP

Estimated timing of infrastructure costs

- 29.25 Table 29.6 below shows the estimated timing of infrastructure costs in Leicester City. The two largest cost categories, transport and education, are assumed to require the majority of expenditure to provide infrastructure required to accommodate the growth (based on the PoD housing delivery phasing) in 2011/12-2020/21.
- 29.26 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- Leicester City only

Infrastructure Category	2009/10-	2010/11-	2011/12 -2015/16	2016/17 -2020/21	2021/22 - 2025/26	Total Estimated Cost
Transport	-£28.3m	-£26.7m	-£292.1m	-£676.7m	-£28.7m	-£1052.4m
Education	£0.0m	£0.0m	-£84.0m	-£6.0m	£0.0m	-£90.0m
Parks, open space & public realm, leisure/ sports	-£2.6m	-£2.9m	-£14.4m	-£7.8m	-£6.1m	-£33.9m
Community & Cultural facilities	-£0.7m	-£0.8m	-£4.0m	-£2.2m	-£1.7m	-£9.5m
Libraries	-£0.1m	-£0.1m	-£0.8m	-£0.4m	-£0.4m	-£1.6m
Health	£0.0m	-£0.1m	-£0.8m	-£0.5m	-£0.5m	-£1.8m
Childrens' Social Care & Centres	£0.0m	-£0.1m	-£0.3m	-£0.3m	-£0.3m	-£1.0m
Youth Centres	-£0.1m	-£0.1m	-£0.6m	-£0.4m	-£0.3m	-£1.5m
Police	-£0.0m	-£0.0m	-£0.4m	-£0.3m	-£0.3m	-£1.0m
Total	-£31.7m	-£30.8m	-£397.4m	-£694.5m	-£38.3m	-£1192.7m

Source: RTP

Analysing estimated mainstream public funding

- 29.27 We have assessed the potential availability of mainstream public funding to pay for the infrastructure requirements resulting from the assumed growth in Leicester City. We have interviewed service providers, consulted strategic documents, and undertaken our own research to get an answer here.

Mainstream funding disaggregated from HMA level

- 29.28 As set out in section 1, 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) was only allocated at HMA level in the original spreadsheet model.
- 29.29 Where mainstream funding applied to specific sites, such as education funding, we have disaggregated this information for Leicester City. In other instances where mainstream funding was only assessed at an HMA level, such as transport funding, we have pro-rated this funding to Leicester based on housing numbers.
- 29.30 Consequently, some of the estimated mainstream funding figures for Leicester City sites or the district are different to that set out in the original GIA.
- 29.31 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 in its entirety.

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

- 29.32 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.
- 29.33 This indicates that mainstream public funding will make a limited contribution to meet estimated growth infrastructure requirements in Leicester City. Approximately 20% of identified infrastructure costs are covered by mainstream funding.

Table 29.7 Estimated mainstream public funding against costs, showing funding gap excluding developer contributions- Leicester City only

	Total Cost	Estimated Mainstream Funding	Funding Gap (excluding developer contributions)	% Costs Covered by Mainstream Funding
Transport	-£1052.7m	£176.6m	-£876.1m	17%
Education	-£90.0m	£54.0m	-£36.0m	60%
Post 16 education and FE	£0.0m	£0.0m	£0.0m	-
Parks, open space & public realm, leisure/ sports	-£34.0m	£1.2m	-£32.8m	3%
Community & Cultural facilities	-£9.5m	£0.0m	-£9.5m	0%
Libraries	-£1.6m	£0.0m	-£1.6m	0%
Health	-£1.8m	£1.4m	-£0.4m	78%
Adult Social Care	£0.0m	£0.0m	£0.0m	-
Childrens' Social Care & Centres	-£1.0m	£0.3m	-£0.7m	30%
Youth Centres	-£1.5m	£0.0m	-£1.5m	0%
Police	-£1.0m	£0.0m	-£1.0m	0%
Leicestershire Fire and Rescue Service	£0.0m	£0.0m	£0.0m	-
Ambulance Service	£0.0m	£0.0m	£0.0m	-
Waste	£0.0m	£0.0m	£0.0m	-
Electricity	£0.0m	£0.0m	£0.0m	-
Gas	£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	-
Flood	£0.0m	£0.0m	£0.0m	-
Total	-£1193.0m	£233.5m	-£959.6m	20%

Source: RTP

29.34 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 £2m.

Some service providers are relying on developer contributions

29.35 Some categories that require significant investment - notably transport - are currently showing large mainstream funding gaps in the spreadsheet model. This is in part because no dedicated mainstream funding has been identified for large infrastructure items, such as the tram lines. Developer contributions may need to be relied on to fund these infrastructure requirements.

29.36 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.

Analysing estimated developer contributions to infrastructure

29.37 Section 4 set 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 Leicester City and the wider HMA.

Developer contributions are estimated in our spreadsheet model based on agreed assumptions

- 29.38 Our original spreadsheet model 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.
- 29.39 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.
- 29.40 Based on the assumptions used (which are set out in the original GIA report) 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.
- 29.41 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

- 29.42 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 original developer contribution analysis for the GIA was not intended to work at a site specific level, and should be treated carefully when applied to Leicester City

29.43 The purpose of our analysis of developer contributions in the original GIA was to understand what level of such funding could potentially be available from growth in the HMA to pay for related infrastructure requirements. As explained in detail in section 4 of the original report, we did not seek to estimate potential developer contribution levels on a site by site basis. Consequently, too much reliance was not recommended to 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.

The estimated level of developer contributions for Leicester City in the spreadsheet model were negligible

29.44 The original spreadsheet model showed a total estimated indicative developer contribution level in the HMA of approximately £150m. However, the developer contributions attributed to Leicester was only £0.7m. The breakdown of this for the different development categories is shown in Table 29.9 below. Given that the majority of the growth in Leicester City is expected to be on brownfield development sites with potentially high land and abnormal costs, we would still expect that it could be potentially difficult to secure any significant level of developer contributions from these sites given the likely viability issues.

29.45 To account realistically for the effects of recession, that only half the above level of contributions were assumed in the spreadsheet model prior to 2013, although this does not impact on contributions in Leicester City based on the original assumptions used. It should also be noted that in the Medium Density Residential Brownfield category, 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 - Leicester City only

Development Category		Estimated Indicative Developer Contribution	No. of Sites	Estimated No of Residential Dwellings
Brownfield	Med Den Resi	£0.0m	1	3,200
	High Den Resi	£0.0m	3	4,000
	Med Den Mixed	£0.7m	3	4,500
	Employment	£0.0m	1	0
Greenfield	Med Den/Med Val	£0.0m	1	4,200
	Employment	£0.0m	2	0
Total		£0.7m	9	15,900

Source: RTP

There is the potential to achieve higher contributions on some sites with lower abnormal costs, particularly at Ashton Green

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 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 was 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). This could include Ashton Green, which we assumed was a Medium Density/Medium Value greenfield site.

Other districts in the HMA may be able to provide higher contributions

- 29.49 In the original GIA report we found that, based on the assumptions used, other authorities had potentially higher contributions than Leicester City. The results of this analysis are summarised in Table 29.10 below.
- 29.50 This was because authorities such as Harborough had growth assumed to be in the Medium Density/High Value category. As set out above, too much reliance should not be placed on the level of developer contributions arising at a local authority level though, and in reality we would expect there to be less variance.

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

29.51 Here we return to the “headline findings” shown above at the beginning of this section. To 2026 in Leicester City, we showed infrastructure costs of £1,193m; mainstream funding of £233m; and developer contributions of £7m. This left a funding gap of £959m.

Seeing the funding gap on a per annum basis makes the gap appear more tractable

29.52 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 £56m.

If we concentrate on top priority items, the funding gap narrows but still exists

29.53 Different infrastructure requirements will have different levels of importance in the HMA and in Leicester City. 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, although there is still over £150m assumed to be only Priority 5.

29.54 It should be noted one tram line 1 at an estimated cost of £400m was assumed to be Priority 10, with tram line 2 estimated at £350m Priority 8. We also assumed all the transport mainstream funding would be directed at the highest priority category.

Table 29.11 Infrastructure costs and identified mainstream funding by priority categories (excludes developer contributions) - Leicester City only

Assumed Priority	Infrastructure Category	Estimated Cost	Estimated Mainstream Funding	Funding Gap
10	Transport	£521.4m	£176.6m	£344.8m
	Education	£90.0m	£54.0m	£36.0m
	Health	£0.0m	£1.4m	£1.4m
	Waste	£0.0m	£0.0m	£0.0m
	Flood	£0.0m	£0.0m	£0.0m
10 Total		£611.4m	£232.0m	£379.4m
9	Health	£1.8m	£1.4m	£0.4m
9 Total		£1.8m	£1.4m	£0.4m
8	Transport	£380.2m		£380.2m
	Post 16 education and FE	£0.0m	£0.0m	£0.0m
8 Total		£380.2m	£0.0m	£380.2m
7	Parks, open space & public realm, leisure/ sports	£34.0m	£1.2m	£32.8m
	Libraries	£1.6m	£0.0m	£1.6m
	Police	£1.0m	£0.0m	£1.0m
	Leicestershire Fire and Rescue Service	£0.0m	£0.0m	£0.0m
	Ambulance Service	£0.0m	£0.0m	£0.0m
	Waste	£0.0m	£0.0m	£0.0m
	Childrens' Social Care & Centres	£1.0m	£0.3m	£0.7m
	Youth Centres	£1.5m	£0.0m	£1.5m
	Community & Cultural facilities	£0.0m	£0.0m	£0.0m
7 Total		£39.0m	£1.5m	£37.6m
6	Community & Cultural facilities	£9.5m	£0.0m	£9.5m
6 Total		£9.5m	£0.0m	£9.5m
5	Transport	£151.1m		£151.1m
5 Total		£151.1m		£151.1m
Total		£1193.0m	£234.8m	£958.2m

Source: RTP

Reprioritising or cost-engineering some big schemes could be part of the solution

29.55 Priority 10 infrastructure has a mainstream funding gap of £379m. It appears likely that further prioritisation work will be necessary.

The impact on potential developer contribution funding of changes to key variables

29.56 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.

29.57 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).

29.58 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

Revised developer contribution requirements mean Ashton Green provides £10,000 per unit, but brownfield sites still provide no contribution

29.59 We have then taken the developer contributions values shown in Table 29.12 above and translated them to the Leicester City sites (Table 29.13). Using these changed assumptions, the table shows that the developer contribution funding produced by the

spreadsheet model increases to approximately £35m. This is because Ashton Green is assumed to provide £10,000 per unit. The brownfield sites still do not provide a contribution on the above basis.

Table 29.13 Estimated indicative developer contribution by development category from sensitivity testing outputs- Leicester City only

Development Category		Estimated Indicative Developer Contribution	No. of Sites	Estimated No of Residential Dwellings
Brownfield	Med Den Resi	£0.0m	1	3,200
	High Den Resi	£0.0m	3	4,000
	Med Den Mixed	£0.7m	3	4,500
	Employment	£0.0m	1	0
Greenfield	Med Den/Med Val	£34.9m	1	4,200
	Employment	£0.0m	2	0
Total		£35.6m	11	15,900

Source: RTP

Revised assumptions increases contributions substantially across HMA

29.60 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. In addition to Leicester City, Charnwood also shows much higher developer contribution levels as the large SUE sites assumed as Medium Density/Medium Value had a contribution of £10,000 per unit applied, as opposed to £0 per unit previously.

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

- 29.61 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.
- 29.62 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).
- 29.63 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 Leicester City (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

- 29.64 As less of the costs associated with the major infrastructure requirements are assumed in the spreadsheet model to be required in the first few years, the funding gap in this period is therefore lower.
- 29.65 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

- 29.66 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) - Leicester City only

Infrastructure Category	2009/10-	2010/11-	2011/12 -2015/16	2016/17 -2020/21	2021/22 - 2025/26	Estimated Gap in Mainstream Funding
Transport	-£28.3m	-£26.7m	-£231.7m	-£617.6m	£28.4m	-£875.8m
Education	£4.1m	£4.7m	-£61.1m	£6.5m	£9.8m	-£36.1m
Parks, open space & public realm, leisure/sports	-£2.5m	-£2.8m	-£13.9m	-£7.6m	-£5.9m	-£32.7m
Community & Cultural facilities	-£0.7m	-£0.8m	-£4.0m	-£2.2m	-£1.7m	-£9.5m
Libraries	-£0.1m	-£0.1m	-£0.8m	-£0.4m	-£0.4m	-£1.6m
Health	£0.1m	£0.1m	-£0.2m	-£0.1m	-£0.2m	-£0.4m
Childrens' Social Care & Centres	£0.1m	£0.0m	-£0.2m	-£0.3m	-£0.3m	-£0.7m
Youth Centres	-£0.1m	-£0.1m	-£0.6m	-£0.4m	-£0.3m	-£1.5m
Police	-£0.0m	-£0.0m	-£0.4m	-£0.3m	-£0.3m	-£1.0m
Leicestershire Fire and Rescue Service	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m
Ambulance Service	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m
Waste	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m
Indicative Developer Contribution	£0.1m	£0.1m	£0.3m	£0.2m	£0.0m	n/a
Total	-£31.6m	-£30.7m	-£397.1m	-£694.3m	-£38.3m	-£959.4m

Source: RTP

There are potential costs that have been identified across the County and HMA that would need to be borne by all authorities

29.67 There were infrastructure costs which were assumed to spill across administrative borders to more than one local authority in the spreadsheet model, and were therefore assumed to be at County and HMA level (see Figure 1.3). These costs had a mainstream funding gap estimated at approximately £140m and £95m respectively (see Table 29.16 below), and will need to be borne by the relevant local authorities as these broader costs will be necessary to deliver growth in their respective areas.

The Leicester City area showed the largest funding gap (excluding mainstream funding)

29.68 The Leicester City area showed a much greater funding gap (excluding mainstream funding) in comparison to other authorities in the HMA 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.

29.69 We recommended this assumption is reviewed by the HMA local authorities following this study, and the spreadsheet model refined accordingly.

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

30 DELIVERY ISSUES AND RECOMMENDATIONS

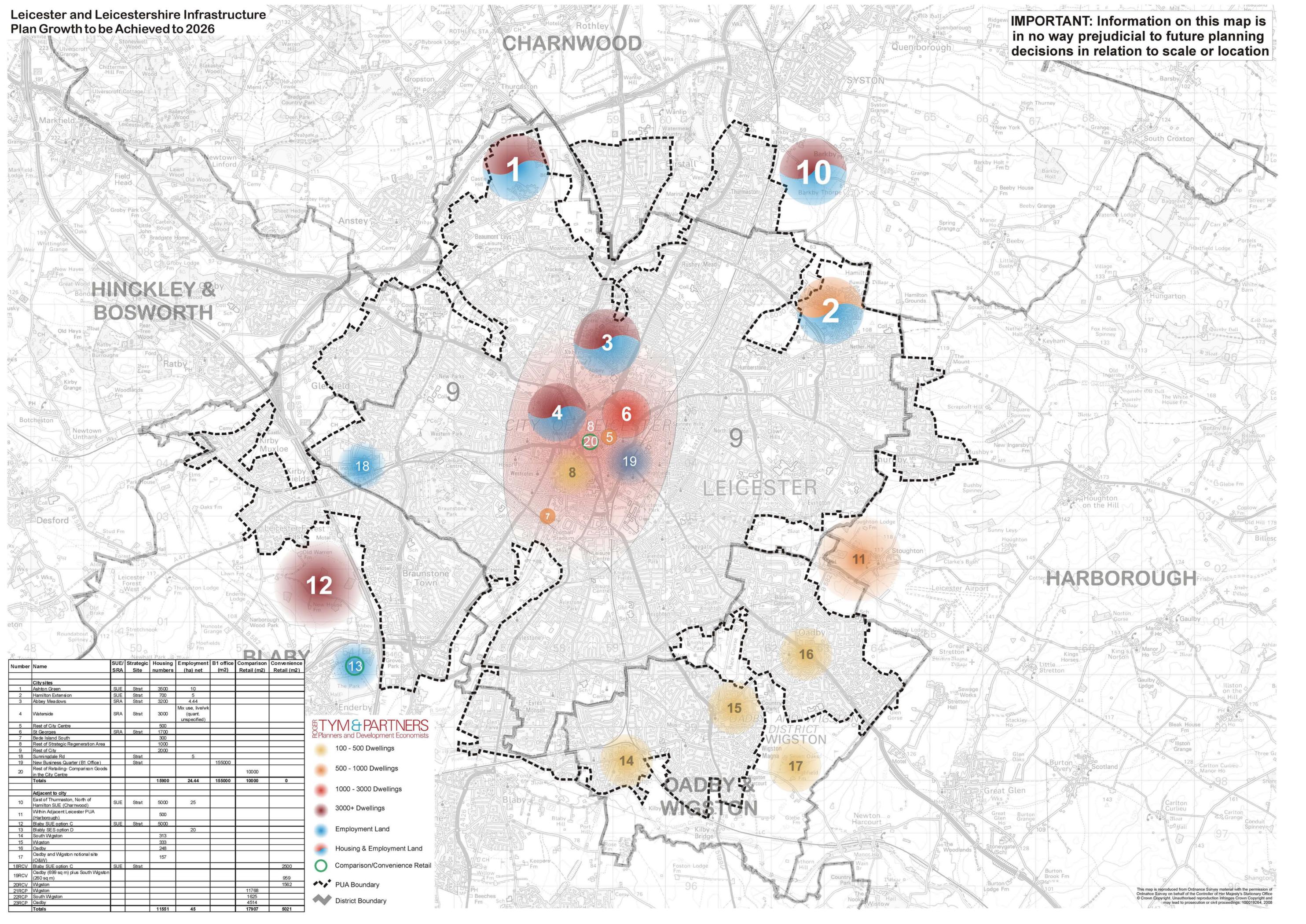
- 30.1 This section of the original GIA set out the delivery issues and recommended responses to them.
- 30.2 In particular, it included recommendations on strategic, policy and management responses and the way forward to a Community Infrastructure Levy (CIL). We understand Leicester City Council is formulating its own response to the infrastructure issues as part of its LDF, and we have therefore not included this information in this report.

APPENDIX 1

HOUSING AND JOBS GROWTH MAP LEICESTER AND PUA

Leicester and Leicestershire Infrastructure Plan Growth to be Achieved to 2026

IMPORTANT: Information on this map is in no way prejudicial to future planning decisions in relation to scale or location



Number	Name	SUE/SRA	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
City sites								
1	Ashton Green	SUE	Strat	3500	10			
2	Hamilton Extension	SUE	Strat	700	5			
3	Abbey Meadows	SRA	Strat	3200	4.44			
4	Waterside	SRA	Strat	3000	Mix use, live/work (quant unspecified)			
5	Rest of City Centre			500				
6	St Georges	SRA	Strat	1700				
7	Bede Island South			300				
8	Rest of Strategic Regeneration Area			1000				
9	Rest of City			2000				
18	Summerville Rd		Strat		5			
19	New Business Quarter (B1 Office)		Strat			155000	1000	
20	Rest of Retailing- Comparison Goods in the City Centre						10000	
Totals				15900	24.44	155000	10000	0
Adjacent to city								
10	East of Thurmaston, North of Hamilton SUE (Charnwood)	SUE	Strat	5000	25			
11	Within Adjacent Leicester PUA (Harborough)			500				
12	Blaby SUE option C	SUE	Strat	5000				
13	Blaby SE SUE option D			313	20			
14	South Wigston			333				
15	Wigston			248				
16	Oadby			157				
17	Oadby and Wigston notional site (O&W)							
18RCV	Blaby SUE option C	SUE	Strat					2500
19RCV	Oadby (699 sq m) plus South Wigston (260 sq m)							959
20RCV	Wigston							1562
21RCV	Wigston						11788	
22RCV	South Wigston						4514	
23RCV	Oadby						4514	
Totals				11551	45		17907	8021

ROGER TYM & PARTNERS
 Planners and Development Economists

- 100 - 500 Dwellings
- 500 - 1000 Dwellings
- 1000 - 3000 Dwellings
- 3000+ Dwellings
- Employment Land
- Housing & Employment Land
- Comparison/Convenience Retail
- PUA Boundary
- District Boundary

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APPENDIX 2

HOUSING AND JOBS GROWTH MAP LEICESTERSHIRE

Leicester and Leicestershire Infrastructure Plan Growth to be Achieved to 2026

IMPORTANT: Information on this map is in no way prejudicial to future planning decisions in relation to scale or location

Charnwood								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
25	Science Park Extension	SUE	Strat					
26	Loughborough SUE	SUE	Strat	3500	20			
27	Service Centres & Other Urban Areas East of Thurmaston, North of Hamilton SUE	SUE	Strat	1500				
14	Charnwood (Majority Loughborough)	SUE	Strat	5000	25		25,975	
61RCP	Charnwood (Majority Loughborough)							7069
62RCV	Charnwood (Majority Loughborough)							7069
Totals				10000	72		25975	7069

Melton								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
28	Bottesford			100				
29	Melton Villages			610				
30	Asfordby			100				
31	Melton Central		Strat	1000				
32	Melton West		Strat		11			
33	Melton SUE Option	SUE	Strat	1000				
63RCP	Melton Mowbray						9993	
64RCV	Melton Mowbray							1547
Totals				2810	11		9993	1547

North West Leicestershire								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
53	Castle Donington West		Strat	500				
54	Castle Donington East		Strat	2650	50			
55	Stephensons Way Sites		Strat	4500	25			
56	South-East Coalville	SUE	Strat	1050				
57	South-West Coalville		Strat	500				
58	Ashby De La Zouch			400				
59	Thringstone			400				
60	Remaining Rural Areas			100				
73RCP	Coalville Retail (Aeda 3531 sq m) & (Ford Garage 2135 sq m)						3017	
74RCV	Coalville Retail (Aeda 883 sq m) & (Ford Garage 2135 sq m)							5665
75RCV	Ashby (Tesco Extension)							2760
Totals				9700	75		3017	8425

Hinckley and Bosworth								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
44	Hinckley & Burbage		Strat	1415	25			
45	Hinckley Town Centre Office Development		Strat		3.4			
46	Barwell SUE	SUE	Strat	2500	15			
47	Earl Shilton SUE	SUE	Strat	2000	10			
48	Market Bosworth			100				
49	Newbold Verdon			110				
50	Groby			110				
51	Desford			110				
52	Remaining Rural and Other Urban Areas			510				
70RCV	Bus Station and Railway Station		Strat					9305
71RCP	Bus Station						5300	
72RCP	Hinckley Town Centre - Britannia Centre						6500	
Totals				6855	53.4		11800	9305

Oadby & Wigston						
Number	Name	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
18	South Wigston	313				
19	Wigston	333				
20	Oadby	248				
21	Oadby and Wigston notional site (O&W)	157				
76RCV	Oadby (659 sq m) plus South Wigston (260 sq m)					959
77RCV	Wigston					1562
78RCP	Wigston				11768	
79RCP	South Wigston				1625	
80RCP	Oadby				4514	
Totals		1051	0		17907	2521

Blaby								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
16	SUE Option C	SUE	Strat	5000	20			
17	SES Option D	SUE	Strat					
38	East Blaby			200				
39	Countesthorpe			150				
40	Whetstone South			250				
41	Llithorpe			300				
42	Stoney Stanton			100				
43	Elmesthorpe			150				
67RCV	Blaby All							1725
68RCV	SUE Option C							2500
69RCP	Blaby All						6700	
Totals				6150	20		6700	4225

Harborough								
Number	Name	SUE	Strategic Site	Housing numbers	Employment (ha) net	B1 office (m2)	Comparison Retail (m2)	Convenience Retail (m2)
34	Market Harborough incl. SUE (all)	SUE	Strat	2800				
15	Within/Adjacent Leicester PUA			500				
35	Luthenworth			700				
36	Broughton Asfley			600				
37	Remaining Rural Areas			1,300				
65RCP	Market Harborough						8,200	
66RCV	Market Harborough							5,400
Totals				5900	0		8200	5400

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- 100 - 500 Dwellings
- 500 - 1000 Dwellings
- 1000 - 3000 Dwellings
- 3000+ Dwellings
- Employment Land
- Housing & Employment Land
- Retail
- PUA Boundary
- District Boundary
- County Boundary

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APPENDIX 3

FLOOD RESPONSE INPUTS FROM ENVIRONMENT AGENCY

Initial Comments regarding flood risk- Leicestershire Growth Maps

In view of the scale and distribution of development around Leicester City, a Surface Water Strategy should be undertaken. The strategy should include/ build upon hydraulic and hydrological modelling of the urban watercourses which run through Leicester. These watercourses are a significant and largely unquantified source of flood risk at the present time, and are heavily influenced by urban runoff. The Agency is looking to begin modelling work on these watercourse in the near future, which could inform the study.

General:

- i) It is impossible to give specific advice given the scale of the plan and the very general locations given. The advice below should be interpreted only in a general sense and used alongside the flood zone maps provided.
- ii) In all cases SUDS is necessary. Where mentioned specifically below, a more detailed analysis and additional balancing or flood defence measures may be required
- iii) Large areas, even if shown as zone 1, are likely to be crossed by minor watercourses that will have an associated floodplain, it is just that these may not have yet been mapped.
- iv) n/a refers to areas falling into other EA offices. Harborough n/a's= Anglian Region. North West Leicestershire n/a's= Midlands Central Area.
- v) An 8 metre minimum undisturbed (i.e. natural) buffer must be left to all watercourses, free of all development including gardens.
- vi) SFRAs are available for most planning authorities in Leicestershire. These should be referred to, but used with caution and EA guidance.

Leicester City

Area	Watercourse	Comments
1 Aston Green	Minor watercourses	Flood zone 1. Runoff into Rothley Brook a concern. Significant SUDS required
2 Blackbird Road		Blackbird road is in a different location to that marked on the plan. Generally flood zone 1 in this area, though zone 3 nearer to the River Soar.
3 Hamilton Extension	Melton Brook	Partly zone 3 from Melton Brook which must be avoided. Further SUDS required in support of any new development.
4 Abbey Meadows	River Soar	zone 3 in this area, though Wolsey Island is generally higher land. Check previous planning permissions for further guidance.
5 Leicester College	River Soar/ Willow Brook	Development previously agreed on this site with mitigation, and a limit to developable area to avoid floodplain. See planning permissions
6 Towers Hospital	minor watercourses	zone 1, SUDS necessary. Melton Brook to very south of site, might possibly be a risk (allotment area) due to topography
7 Waterside	River Soar	Various agreements reached with City/ Regeneration Company. High risk, mitigation generally required. See previous planning permissions. ✓
8 Filbert St	River Soar	River Soar is nearby but generally this is zone 1.
9 Rest of City Centre		Various watercourses run through the City Centre, all are a flood risk. SUDS required.
10 St Georges		Zone 1, SUDS necessary.
11 Bede Island	River Soar	Already developed in part. Some floodplain which must be avoided, and 8 metre buffer left to the river.
12 Rest of LRC		Various watercourses run through the City Centre, all are a flood risk. SUDS required.
13 Rest of City infill		Various watercourses run through the City Centre, all are a flood risk. SUDS required.
14 East of Thurmaston	Barkby Brook, Melton Brook.	Partly zone 3, which must be avoided. Barkby Brook is a risk downstream in Syston. Melton Brook is a risk to the City Centre. SUDS required on a large scale potentially.
15 Within adjacent Leicester PUA	Willow Brook, Thurnby Brook, Evington Brook and possibly upper reaches of River Sence.	Partly zone 3. Significant runoff issues downstream. Major SUDS required.
16 Blaby SUE	Lubbesthorpe Brook	Mostly zone 1, but significant flooding issues downstream adjacent to the brook. SUDS is a significant issue here and major works will be required.
17 Blaby SES	Lubbesthorpe Brook (tributary)	zone 1, but the brook may pose some local risk. SUDS a significant issue.
18 South Wigston	River Sence and minor watercourse	Land to the south of the canal is high risk. An urban watercourse draining from Tesco area may be a risk, regular blockage at canal syphon. SUDS necessary.
19 Wigston		Zone 1. Saffron Brook downstream is a flood risk, SUDS required.
20 Oadby	Wash Brook	Wash Brook in Oadby Centre is an unknown quantity in terms of flood risk, potentially high due to small culverts and development. Brook and associated floodplain to be avoided, SUDS necessary.

21 Oadby & Wig notional site	Wigston Harcourt Brook	flood zone 1 generally, but areas around brooks to be avoided as possible zone 3. Wigston Harcourt downstream is at risk, SUDS very important. Equally so for that part of the area draining to the Wash Brook
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Leicestershire

Charnwood

1 Science Park Extension	Burleigh and Shortcliffe Brooks	Previously discussed/ agreed. Partly zone 3. Development to keep out of floodplain and implement SUDS. Same for any further development.
2 Loughborough SUE	River Soar, Black Brook	Zone 3 to the north east of the A6, high risk.; Lower risk to the SE of A6 but Black Brook floodplain to be avoided
3 Rest of Charnwood		River Soar runs centrally through Charnwood and frequently floods. Most villages have a smaller brook, usually main river, that is a source of risk
4 Hamilton area	Barkby Brook, Melton Brook.	Partly zone 3, which must be avoided. Barkby Brook is a risk downstream in Syston. Melton Brook is a risk to the City Centre. SUDS required on a large scale potentially.

Melton

5 Bottesford	River Devon and Winter Beck	Major flood 2001. Various parts of central village and outskirts at risk. SUDS necessary, floodplain to be avoided.
6 Melton Villages	Various	Many villages have a brook running through centre, source of risk. SUDS required, zone 3 to be avoided. Impossible to give further guidance without more detail.
7 Asfordby	River Wreake	Lower part of village at risk. Asfordby Valley at risk from Welby Brook, flood defence built.
8 Melton Central	River Wreake	The River Wreake has previously caused widespread flooding in the centre. A flood relief dam has been built upstream (Brentingby). Reduces risk significantly but does not remove it entirely. Floodplain should still be avoided, and some functional floodplain (i.e. frequent flooding) is retained to optimise dam storage capacity. Scalford Brook similar. Thorpe Brook is also a risk. Refer to SFRA
9 Melton West	River Wreake	The Wreake Valley itself is not appropriate for development in the floodplain. The more southern part is zone 1 (towards A607> Some risk from smaller brook. Refer to SFRA.
10 Melton Arc Options	River Wreake plus minor watercourses	River Wreake flows centrally through this area from east to west, partly zone 3 which is to be avoided.

Harborough

11 Adjacent to Leicester	Willow Brook, Thurnby Brook, Evington Brook and possibly upper reaches of River Sence.	Partly zone 3. Significant runoff issues downstream. Major SUDS required.
12 n/a- EA Anglian Region		
13 n/a- EA Anglian Region		
14 Broughton Astley/ Great Glen	Broughton Astley Brook, River Sence, Burton Brook	Risk in Great Glen from River Sence and Burton Brook. Defences, but not with climate change freeboard. Risk in Broughton Astley from Broughton Astley Brook. Both villages partly zone 3.
15 n/a- EA Anglian Region		

Blaby

16 Blaby SUE	Lubbesthorpe Brook	Mostly zone 1, but significant flooding issues downstream adjacent to the brook. SUDS is a significant issue here and major works will be required.
17 Blaby SES	Lubbesthorpe Brook (tributary)	Generally zone 1, but the brook may pose some local risk. SUDS a significant issue.
18 East Blaby	River Sence	Partly zone 3 with frequent flooding. Zone 1 to the south of this area.
19 Countesthorpe	Countesthorpe Brook	Generally zone 1 but with zone 3 adjacent to the brook on the eastern side of the village.
20 Whetstone	Whetstone Brook	Generally zone 1 but with zone 3 adjacent to the brook. SUDS a significant issue. Flooding problems downstream in Whetstone.
21 Littlethorpe	River Soar, Cosby Brook	Land to the SE of Littlethorpe is generally zone 1. Land to the west of Cosby Road is zone 3, high risk, not appropriate. The north and north east of Littlethorpe floods annually.
22 Stoney Stanton	Minor watercourses	Generally zone 1 but with some local risk adjacent to brooks.
23 Elmesthorpe	Minor watercourses	Generally zone 1 but with some local risk adjacent to brooks.

Hinckley & Bosworth

24 n/a- EA Central Area		
25 n/a- EA Central Area		
26 n/a- EA Central Area		
27 Earl Shilton SUE	Minor watercourses	Generally zone 1 but with some local risk adjacent to brooks.
28 n/a- EA Central Area		
29 Newbold Verdon	Minor watercourses around village	Generally zone 1 but with some local risk adjacent to brooks.
30 Groby	minor watercourses	Generally zone 1 to the south west of the A50. Some risk to the north east of A50 from Slate Brook
31 Desford	Minor watercourses around village	Generally zone 1 but with some local risk adjacent to brooks.
32 n/a- EA Central Area		

North West Leicestershire

33 Castle Donnignton West	Stud Brook, Trent	Generally zone 1, some local risk from Stud Brook. Northern area (around railway line) at risk from Trent, though defended to a degree.
34 Castle Donnignton East	Hemington Brook, Lockington Brook, Trent	Generally zone 1, some local risk from brooks. Northern area (around railway line) at risk from Trent, though defended to a degree.
35 Stephenson's Way	Minor watercourses	Generally zone 1, but these are the headwaters of the Grace Dieu Brook, rapid response catchment. SUDS very important here to reduce risk downstream. Previous flooding in Thringstone and Whitwick.
36 n/a- EA Central Area		
37 n/a- EA Central Area		
38 n/a- EA Central Area		
39 Thringstone	Grace Dieu Brook	Previous flooding (2001). SUDS very important, there is a need to reduce risk.

APPENDIX 4

Leicester City Education Capital Allocation 2008-2011

Schools Capital Allocations

Local Authority (856) Leicester
Region East Midlands.

Produced on **20/03/2008**

	2008-09 (£)			2009-10 (£)			2010-11 (£)			2008-11 (£)
	Grant	Supported Borrowing	Total	Grant	Supported Borrowing	Total	Grant	Supported Borrowing	Total	3 Year Total
Devolved Formula Non-VA Schools	5,026,251		5,026,251	4,976,251		4,976,251	4,976,251		4,976,251	14,978,752
Devolved Formula VA Schools	576,807		576,807	576,807		576,807	576,807		576,807	1,730,420
DFC Academies			0			0			0	0
* City Technology Colleges			0			0			0	0
* Non-Maintained Special Schools			0			0			0	0
DFC Total	5,603,057	0	5,603,057	5,553,057	0	5,553,057	5,553,057	0	5,553,057	16,709,171
~ Primary Capital Programme (See footnote)			0	4,954,378		4,954,378	7,332,378		7,332,378	12,286,756
Modernisation Allocation	564,760	1,739,257	2,304,017	564,760	2,053,441	2,618,201	3,119,864	265,928	3,385,792	8,308,011
Modernisation Advance (paid 07-08)	564,760		564,760	564,760		564,760	564,760		564,760	1,694,280
Modernisation Net	0	1,739,257	1,739,257	0	2,053,441	2,053,441	2,555,104	265,928	2,821,032	6,613,731
Basic Need		4,227,173	4,227,173		4,227,173	4,227,173		4,227,173	4,227,173	12,681,520
Schools Access Initiative		612,608	612,608		612,608	612,608		612,608	612,608	1,837,824
Extended Schools	576,962		576,962	611,305		611,305	315,955		315,955	1,504,222
ICT										
Harnessing Technology Grant	901,850		901,850	998,933		998,933	1,090,061		1,090,061	2,990,844
Other ICT		482,176	482,176			0			0	482,176
LCVAP Allocation	701,402		701,402	701,402		701,402	701,402		701,402	2,104,207
LCVAP advance (paid 07-08)	70,017		70,017	70,017		70,017	70,017		70,017	210,052
LCVAP Net	631,385	0	631,385	631,385	0	631,385	631,385	0	631,385	1,894,155
TCF										
14-19 diplomas, SEN and disabilities			0			0			0	0
# Kitchens										
# Standards and Diversity										
TOTAL	7,713,254	7,061,214	14,774,468	12,749,058	6,893,223	19,642,280	17,477,940	5,105,710	22,583,650	57,000,398

Notes DFC Totals for 2009-10 and 2010-11 are provisional. TCF projects, including One School Pathfinders, already announced are not shown here.

* These figures are based on January 2007 School Census. Grants will be paid directly to the institution.

TCF, Kitchens and Standards and Diversity will be announced in due course.

~ PCP allocations are indicative until the LA's primary strategy for change has been agreed with the Department. Allocations are capex values.

LAs with a LEP will be expected to deliver part of their primary programme through the PFI.

Leicester Local Authority is in BSF wave 1.

For wave 1 BSF capital allocations are currently £165 m of conventional funding, and £151 m of PFI credits.

BSF Amounts shown may be subject to change.

Devolved Formula Capital Allocation Formula

Un-modernised school				Modernised school			
Per School	Per Secondary Pupil	Per Primary Pupil	Per Special School or PRU Pupil	Per School	Per Secondary Pupil	Per Primary Pupil	Per Special School or PRU Pupil
18,500	94.50	63.00	189.00	9,250	47.25	31.50	94.50

APPENDIX 5

Leicester City Primary Strategy for Change - Indicative Funding Profile 2009-2011

Appendix E1 - 1 from Leicester's Primary Strategy for Change

INDICATIVE FUNDING PROPOSALS

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		2009/2010 £	2010/2011 £	2011/2012 £	2012/2013 £	2013/2014 £	2014/2015 £	2015/2016 £	2016/2017 £	2017/2018 £	2018/2019 £	2019/2020 £	2020/2021 £	2021/2022 £	2022/2023 £
Sources of Funding															
Primary Capital		4,954,378	7,332,378	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685	4,338,685
Modernisation Funding		2,053,441	2,821,032	3,385,792	3,231,902	3,078,012	2,924,122	2,770,232	2,616,342	2,462,452	2,308,562	2,154,672	2,000,782	1,846,892	1,692,996
Schools Access - improvements initiative (SAI)	Bfwd 2008/9	187,500	-	-	-	-	-	-	-	-	-	-	-	-	-
Schools Access - improvements initiative (SAI)	Ongoing	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304	306,304
LC VAP Modernisation		326,919	326,919	326,919	312,059	297,199	282,339	267,479	252,619	237,759	222,899	208,039	193,179	178,319	163,459
VA 10% Funding contribution		32,692	32,692	32,692	31,206	29,720	28,234	26,748	25,262	23,776	22,290	20,804	19,318	17,832	16,346
		2,906,856	3,486,947	4,051,707	3,881,471	3,711,235	3,234,695	3,064,459	2,894,223	2,723,987	2,553,751	2,383,515	2,213,279	2,043,043	1,872,701
Devolved Funding Capital	LCC Primary	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640
	Special	-	-	13,503	13,503	13,503	-	-	-	-	-	-	-	-	-
		200,640	200,640	214,143	214,143	214,143	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640	200,640
ICT Technology Harness Grant		100,000	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-
Extended Schools	Bfwd 2008/9	288,481	-	-	-	-	-	-	-	-	-	-	-	-	-
Extended Schools	Ongoing	305,653	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955
		594,134	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955	319,955
CMF fund	s 52 Landlord	7,103	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323	7,323
	LCC Primary Corporate contribution	270,000	270,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000
		277,103	277,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323	247,323
Prior Funding set aside for planned schemes															
TCF Bid Funding		-	617,921	-	-	-	-	-	-	-	-	-	-	-	-
CMF - Bfwd prior year funding		-	850,000	400,000	-	-	-	-	-	-	-	-	-	-	-
Basic Need - Bfwd prior year funding		-	1,975,000	600,000	-	-	-	-	-	-	-	-	-	-	-
New Pupil Places - Bfwd prior year funding		-	928,000	130,000	-	-	-	-	-	-	-	-	-	-	-
One off Revenue support (reserves)		-	2,310,079	-	-	-	-	-	-	-	-	-	-	-	-
		-	6,681,000	1,030,000	-	-	-	-	-	-	-	-	-	-	-
Subtotal : Capital Funding		9,033,111	18,398,244	10,301,813	9,101,577	8,931,341	8,341,299	8,171,063	8,000,827	7,830,591	7,660,355	7,490,119	7,319,883	7,149,647	6,979,305
Supplementary Funding															
Basic Need - capital funding		4,227,173	4,227,173	4,227,173	845,435	422,717	211,359	105,679	105,679	105,679	105,679	105,679	105,679	105,679	105,679
S 106 Indicative Funding		456,820	884,757	2,201,510	476,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000
		4,682,993	5,111,930	6,428,683	1,321,435	772,717	561,359	455,679	455,679	455,679	455,679	455,679	455,679	455,679	455,679
Childrens Centre : Surestart Funding															
Surestart funding	Bfwd 2008/9	358,224	-	-	-	-	-	-	-	-	-	-	-	-	-
Surestart funding	Ongoing	767,622	414,516	-	-	-	-	-	-	-	-	-	-	-	-
Indicative Phase 4 funding	Ongoing	-	-	333,333	333,333	333,333	-	-	-	-	-	-	-	-	-
		1,125,846	414,516	333,333	333,333	333,333	-	-	-	-	-	-	-	-	-
Total Funding Available		14,841,950	23,924,690	17,063,829	10,756,345	10,037,392	8,902,658	8,626,742	8,456,506	8,286,270	8,116,034	7,945,798	7,775,562	7,605,326	7,434,984

TOTALS 149,774,088

APPENDIX 6

NGP FUNDING (NGP POD OCT 2008)

Scheme	£ Capital 09/10	£ Capital 10/11	Notes
Leicester Regeneration Projects			
Leicester City Abbey Meadows: Wolsey Island and Riverside West	1,000,000	1,000,000	
Leicester City Abbey Meadows: BUSM New Belgrave Community	1,000,000	1,000,000	Funding already agreed.
Waterside South Bridge & Link Road	1,000,000	1,000,000	
St George's North	500,000		
Waterside - Rally Park		2,000,000	
Waterside - Sanvey Gate Junction	900,000		
Waterside - Public Realm Improvements	1,000,000	500,000	
New Business Quarter (Granby Street Gateway and Charles Street Gateway)	2,350,000		
Renewable energy project	250,000		Funding already agreed.
Other Urban Regeneration Projects			
Loughborough Eastern Gateway	500,000	500,000	Funding already agreed.
Loughborough Eastern Gateway Public Realm Implementation	300,000		
Loughborough Town Centre Masterplan: Public Realm Implementation	150,000	150,000	
Earl Shilton town centre regeneration and environmental improvements	300,000		Funding already agreed.
Barwell Town Centre Improvements	125,000	125,000	
HMA - Wide Projects			

Making Places	40,000	40,000	
Transport model for Leicester and Leicestershire	560,000		
Green Infrastructure			
Stepping Stones Project- Resources Development Officer and Part time Project Officer and "Plant a Parish" scheme	27,000	27,900	
Total	10,002,000	6,342,900	

Revenue Programme 2009-11

Organisation / Scheme	£ Revenue 09/10	£ Revenue 10/11	Notes
Sustainable Urban Extensions			
Masterplanning, including of SUEs	910,000	125,000	Including for west of Leicester, south Charnwood, north Charnwood, Earl Shilton/ Barwell, Coalville, Ashton Green, Melton Mowbray and Loughborough Town Centre.
Renewable Energy Feasibility Study for SUEs	75,000		
Cycling Strategy for the SUEs	75,000		
Public Transport Planning and Delivery for the SUEs	100,000		
Ptolemy - Melton SUE Sustainability testing	37,500		
Melton SUE Green Infrastructure (Holwell Works)	18,750		

Barwell Community House	22,000	22,000	
HMA - Wide Projects			
HMA NGP Co-ordinator	50,000	50,000	Funding already agreed.
Transport model for Leicester and Leicestershire	200,000		
Green Infrastructure			
Stepping Stones Project- Resources Development Officer and Part time Project Officer and "Plant a Parish" scheme	46,918	48,325	
TOTAL	1,418,168	173,325	

Reserve Schemes for the 2009-11 Programme

Green Infrastructure improvements at/ near SUEs
 Transport Improvements for SUEs
 Loughborough Town Centre Masterplan Transport and Access Improvements
 Windmill Road Eco Centre and Loughborough Waterfront
 Masterplanning for Priority Neighbourhoods in Charnwood
 Loughborough Resource Centre and Community Hub
 Market Harborough Town Centre Development Strategy
 Market Harborough Town Centre Improvements
 Coalville Town Centre Environmental Enhancements
 Oadby & Wigston Town Centre Enhancements
 Central Leicestershire Park and Ride - Glenfield

APPENDIX 7

Transport Scheme Capture List

WORKSHOP FOLLOW-UP – Scheme List Capture Sheet

Scheme Ref No.	Scheme Name & Location	Growth Area Ref No.	Scheme Type Bus, Cycle, Rail Road etc	Impact			Delivery Champion Authority/ Developer etc	Cost (£m) Estimated	Funding Source S106, LTP, RFA etc & Proportion	Timescale When Necessary	Category			Priority Against others on list
				Strategic	Regional	Local					Essential	Desirable	Tentative	
CITY01	A50 QUALITY BUS CORRIDOR	9	Bus		x		Leicester City / Leics County	1.20	RFA, NGP, LTP, Developer	2010/2011	x			
CITY02	A47 HUMBERSTONE ROAD QUALITY BUS CORRIDOR	9	Bus		x		Leicester City / Leics County	3.70	RFA, LTP		x			
CITY03	A607 MELTON ROAD QUALITY BUS CORRIDOR (See CH02 & COUNTY03)	9	Bus		x		Leicester City / Leics County	2.00			x			
CITY04	A426 AYLESTONE ROAD QUALITY BUS CORRIDOR	9	Bus		x		Leicester City / Leics County	2.70	LTP	2010/2011	x			
CITY05	NEW BUS STATION	5	Bus	x			Leicester City Council	Up to £67M	RFA, LTP	2014/2015	x			
CITY06	RAIL STATION IMPROVEMENTS	5	Rail	x			Network Rail / East Mids Trains	20.00	Developer, LTP	2012/2013		x		
CITY07	IMPROVED CROSSINGS OF INNER RING ROAD	5	Walk/Cycle			x	Leicester City Council	Up to £30M	LTP					
CITY08	CITY CENTRE IMPROVEMENTS	5	Walk/Cycle			x	Leicester City Council	55.00	LTP					
CITY09	PARK-AND-RIDE (Enderby)		Bus		x		Leics County / Leicester City	8.80	LTP, NGP	2009/2010	x			
CITY10	PARK-AND-RIDE (Birstall) (See COUNTY18)		Bus		x		Leics County / Leicester City	5.50	Developer, CIF	2010/2011	x			
CITY11	PARK-AND-RIDE (Glenfield) - (See COUNTY14 & BL09)		Bus		x		Leics County / Leicester City	24.00	RFA	2012/2013	x			
CITY12	PARK-AND-RIDE (St. Nicholas Place)	5	Bus		x		Leicester City / Leics County	1.95	NGP + LTP	2009/2010	x			
CITY13	CONGESTION (Quality Bus Corridors, junction improvements, ATC etc. to 2026)	9						60.00	LTP					
CITY14	CYCLE WAY		Cycle					TBA						
CITY15	LINK ROAD AND RIVER BRIDGE (Waterside)	4	Cycle/Road			x	Leicester City Council	15.00	NGP, City Council, RFA	2012/2013	x			
CITY16	CANAL BRIDGE (Waterside)	4	Cycle/Road		x	x	Leicester City Council	7.00	NGP, City Council, RFA	2013/2014	x			
CITY17	TRAM LINE (Line 1)		Tram		x		Leicester City Council	400.00			x			
CITY18	TRAM LINE (Line 2)		Tram			x	Leicester City Council	350.00				x		
CITY19	PUBLIC REALM							5.00						
CITY20	SANVEY GATE JUNCTION IMPROVEMENTS (Waterside)	4	Cycle/Road		x	x	Leicester City Council	4.50	CIF, NGP, LTP, Developer		x			
CITY21	MELTON ROAD/ TROON WAY JUNCTION IMPROVEMENTS	9						0.50		2011/2012				
CITY22	CANAL BRIDGE (Abbey Meadows - BUSM)	3	Cycle/Road			x	Leicester City Council	5.50	RFA, NGP, CIF, Developer	2013/2014	x			
CITY23	CANAL FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	3	Walk/Cycle	x	x	x	Leicester City Council/LRC	1.00	NGP/SUSTRANS/Developer	2013/2014		x		
CITY24	RIVER FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	3	Walk/Cycle	x	x	x	Leicester City Council/LRC	1.50	NGP/SUSTRANS/Developer	2010/2011		x		
CITY25	FILL IN SUBWAY PLUS NEW PEDESTRIAN/CYCLE CROSSING (NBQ2)	19	Walk/Cycle			x	Leicester City Council	2.00	NGP	2009/2010		x		
CITY26	CHARLES STREET IMPROVEMENTS (NBQ2)	19				x	Leicester City Council	1.00	NGP	2009/2010		x		
CITY27	SWAIN STREET JUNCTION IMPROVEMENTS (NBQ2)	19			x	x	Leicester City Council/LRC	4.00	NGP, RFA	2010/2011	x			
CITY28	GRANBY STREET IMPROVEMENTS (NBQ2)	19				x	Leicester City Council	1.70		2011/2012		x		
CITY29	FRIDAY STREET IMPROVEMENTS (St. Johns)	9	Cycle/Road			x	Leicester City Council	3.00	Developer, NGP, RFA	2011/2012		x		
CITY30	ASHTON GREEN (Infrastructure to support 3,500 dwellings)	1					Leicester City Council	TBC						
CITY31	SMARTER CHOICES						Leicester City Council	£40 per household	LTP					

LEICESTER CITY COUNCIL V3.0

NOTES

IMPACT
Note: Multiple Selection is available if scheme fulfils more than one objective
Strategic - Trunk Road, National Rail, National Cycle etc
Regional - Inter-Urban corridors within Leicestershire serving movement around County and between districts etc. (e.g. by-pass, P&R hub)
Local - Local impacts associated mainly with individual developments (e.g. local Distributor Road, local cycle route etc)

CATEGORY
Please Select One Only
Essential - Development will not proceed without it (e.g. new bridge to enable site access). Potential 'Show-Stopper' if not delivered.
Desirable - Will enhance development delivery and add benefit to local infrastructure
Tentative -Desirable, possibly essential however high level of uncertainty on justification, commitment or deliverability at this time.

WORKSHOP FOLLOW-UP – Scheme List Capture Sheet														
Local Authority		Please Insert Authority Name					Provided by:			Please Insert Contact Name				
Scheme Ref No.	Scheme <small>Scheme Name & Location</small>	Growth Area <small>Ref No.</small>	Scheme Type <small>Bus, Cycle, Rail Road etc</small>	Impact			Delivery Champion <small>Authority/ developer etc</small>	Cost <small>Estimated</small>	Funding Source <small>S106, LTP, RFA etc & Proportion</small>	Timescale <small>When Necessary</small>	Category			Priority <small>Against others on</small>
				Strategic	Regional	Local					Essential	Desirable	Tentative	
1	Bus Station Improvements - Anywhere Town Centre	24	Bus				e.g. Developer & LTP3	340K	e.g. S106 (85%), LTP (15%)	2011 - 2016				3
2														
3														
6														
7														

GROWTH AREA Ref No
 Reference number(s) identified from RTP borad site allocation plan to indicate development(s) to which required infrastrctre is likely to apply

FUNDING SOURCE:
 Where funding anticipated to come from. Proportion of total cost anticipated to be allocated to funding source.

TIMESCALE
 Anticipated year or period during which infrastruture will be required e.g. 2018, 2011-2016 etc. Please be as specific as practicable at this time.

Please add any comments, Caveats etc as appropriate
 This can either be on a separate covering sheet or in the comments work sheet.
 Additonal information will be appreciated where it can aid understanding of scheme aselection nd current status of progress in terms of justification and LDF status.

APPENDIX 8

Site by Site Infrastructure Requirements

Leicestershire HMA Infrastructure Study

Funding Model

Summary Table - Cost By Site (excludes all funding):

Leicester City Only

Site Name	SUE/ SRA	Infrastructure Category	Infrastructure Item	Description	2009/10-	2010/11-	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	Estimated Total Cost*	
Abbey Meadows	SRA	Transport	CANAL BRIDGE (Abbey Meadows - BUSM)	Cycle/Road			-£5.50m			-£5.50m	
			CANAL FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	Walk/Cycle			-£1.00m			-£1.00m	
			RIVER FOOTBRIDGE/CYCLEWAY (Abbey Meadows)	Walk/Cycle		-£1.50m				-£1.50m	
		Education	New Primary School x2	420 pupils. Likely to require 2 primary school.				-£12.00m			-£12.00m
			See Waterside	Secondary School for 1,200 pupils. Provision to be met from expansion of existing and central area school							
		Parks, open space & public realm, leisure/ sports	Allotment					-£0.10m	-£0.04m	-£0.04m	-£0.18m
			Cemeteries								
			LEAP					-£1.35m	-£0.56m	-£0.56m	-£2.47m
			Leisure centre					-£0.95m	-£0.39m	-£0.39m	-£1.74m
			Local park					-£0.43m	-£0.18m	-£0.18m	-£0.78m
			NEAP					-£0.41m	-£0.17m	-£0.17m	-£0.74m
			Playing field					-£0.50m	-£0.21m	-£0.21m	-£0.92m
			Strat GI								
		Libraries	Library - Expansion of existing provision	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.				-£0.18m	-£0.07m	-£0.07m	-£0.33m
		Community & Cultural facilities	Community Centre - apportioned new provision					-£1.05m	-£0.44m	-£0.44m	-£1.92m
Youth Centres	New youth centre					-£0.27m	-£0.11m	-£0.11m	-£0.50m		
Police	Joint new facility assumed	Joint facility - Abbey Meadows, Waterside, St Georges				-£0.11m	-£0.04m	-£0.04m	-£0.19m		
New Business Quarter (B1 Office)	SRA	Transport	FILL IN SUBWAY PLUS NEW PEDESTRIAN/CYCLE CROSSING (NBQ2)	Walk/Cycle	-£2.00m					-£2.00m	
			CHARLES STREET IMPROVEMENTS (NBQ2)							-£1.00m	
			SWAIN STREET JUNCTION IMPROVEMENTS (NBQ2)					-£4.00m			-£4.00m
			GRANBY STREET IMPROVEMENTS (NBQ2)					-£1.70m			-£1.70m
		Parks, open space & public realm, leisure/ sports	Allotment								
			Cemeteries								
			LEAP								
			Leisure centre								
Local park											
NEAP											
Playing field											
Strat GI											
Rest of Strategic Regeneration Area	SRA	Transport									
		Parks, open space & public realm, leisure/ sports	Allotment				-£0.01m	-£0.01m	-£0.02m	-£0.01m	-£0.06m
			Cemeteries								
			LEAP				-£0.14m	-£0.15m	-£0.31m	-£0.16m	-£0.77m
			Leisure centre				-£0.10m	-£0.10m	-£0.22m	-£0.11m	-£0.54m
			Local park				-£0.04m	-£0.05m	-£0.10m	-£0.05m	-£0.24m
			NEAP				-£0.04m	-£0.04m	-£0.09m	-£0.05m	-£0.23m
			Playing field				-£0.05m	-£0.06m	-£0.12m	-£0.06m	-£0.29m
			Strat GI								
Community & Cultural facilities	Community Centre - apportioned new provision				-£0.11m	-£0.12m	-£0.24m	-£0.13m	-£0.60m		
St Georges	SRA	Transport									
		Education	New Primary School	Expansion of existing provision and one new primary school. Secondary to be met by Central provision.				-£6.00m		-£6.00m	

Site Name	SUE/ SRA	Infrastructure Category	Infrastructure Item	Description	2009/10-	2010/11-	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	Estimated Total Cost*		
St Georges	SRA	Parks, open space & public realm, leisure/ sports	Allotment		-£0.01m	-£0.01m	-£0.03m	-£0.03m	-£0.03m	-£0.10m		
			Cemeteries									
			LEAP		-£0.12m	-£0.08m	-£0.43m	-£0.35m	-£0.35m	-£1.31m		
			Leisure centre		-£0.08m	-£0.05m	-£0.30m	-£0.24m	-£0.24m	-£0.92m		
			Local park		-£0.04m	-£0.02m	-£0.13m	-£0.11m	-£0.11m	-£0.41m		
			NEAP		-£0.03m	-£0.02m	-£0.13m	-£0.10m	-£0.10m	-£0.39m		
			Playing field		-£0.04m	-£0.03m	-£0.16m	-£0.13m	-£0.13m	-£0.49m		
			Strat GI									
		Libraries	Library - Expansion of existing provision	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.	-£0.02m	-£0.01m	-£0.06m	-£0.05m	-£0.05m	-£0.17m		
		Community & Cultural facilities	Community Centre - apportioned new provision		-£0.09m	-£0.06m	-£0.33m	-£0.27m	-£0.27m	-£1.02m		
Police	Joint new facility assumed	Joint facility - Abbey Meadows, Waterside, St Georges	-£0.01m	-£0.01m	-£0.03m	-£0.03m	-£0.03m	-£0.10m				
Waterside	SRA	Transport	LINK ROAD AND RIVER BRIDGE (Waterside)	Cycle/Road			-£15.00m			-£15.00m		
			CANAL BRIDGE (Waterside)	Cycle/Road			-£7.00m			-£7.00m		
			SANVEY GATE JUNCTION IMPROVEMENTS (Waterside)	Cycle/Road	-£0.34m	-£0.39m	-£1.91m	-£1.04m	-£0.81m	-£4.50m		
		Education	New Primary School x2	Primary provision will initially be met by existing schools. Two school likely over longer term.				-£12.00m			-£12.00m	
			Joint New Secondary School	Looking to secure a new secondary school for 1200 places for 2014 to server wider central area.				-£18.00m			-£18.00m	
		Health	New Health facility				-£0.51m	-£0.16m	-£0.16m	-£0.82m		
		Parks, open space & public realm, leisure/ sports	Allotment					-£0.10m	-£0.03m	-£0.03m	-£0.17m	
			Cemeteries									
			LEAP					-£1.43m	-£0.44m	-£0.44m	-£2.32m	
			Leisure centre					-£1.01m	-£0.31m	-£0.31m	-£1.63m	
			Local park					-£0.45m	-£0.14m	-£0.14m	-£0.73m	
			NEAP					-£0.43m	-£0.13m	-£0.13m	-£0.70m	
			Playing field					-£0.53m	-£0.17m	-£0.17m	-£0.86m	
			Strat GI									
		Libraries	Library - Improvement of City Centre library package	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				-£0.43m	-£0.13m	-£0.13m	-£0.70m	
		Community & Cultural facilities	Community Centre - apportioned new provision					-£1.11m	-£0.35m	-£0.35m	-£1.80m	
Police	Joint new facility assumed	Joint facility - Abbey Meadows, Waterside, St Georges				-£0.11m	-£0.03m	-£0.03m	-£0.18m			
Ashton Green SUE	SUE	Transport	ASHTON GREEN (Infrastructure to support 3,500 dwellings)									
		Education	New Primary School	One new primary of 420 places, expansion of existing primary schools			-£6.00m			-£6.00m		
			New Secondary School	1200 pupils.			-£18.00m			-£18.00m		
		Health	New Health facility				-£0.05m	-£0.29m	-£0.31m	-£0.31m	-£0.96m	
		Parks, open space & public realm, leisure/ sports	Allotment					-£0.01m	-£0.06m	-£0.06m	-£0.20m	
			Cemeteries									
			LEAP					-£0.15m	-£0.81m	-£0.87m	-£0.87m	-£2.71m
			Leisure centre					-£0.11m	-£0.57m	-£0.61m	-£0.61m	-£1.90m
			Local park					-£0.05m	-£0.26m	-£0.27m	-£0.27m	-£0.85m
			NEAP					-£0.05m	-£0.24m	-£0.26m	-£0.26m	-£0.81m
			Playing field					-£0.06m	-£0.30m	-£0.32m	-£0.32m	-£1.01m
			Strat GI									
		Libraries	Library - Increase provision at the nearby Beaumont Leys Centre library.	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 stan				-£0.02m	-£0.11m	-£0.12m	-£0.12m	-£0.36m
		Childrens' Social Care & Centres						-£0.06m	-£0.30m	-£0.32m	-£0.32m	-£1.00m
Community & Cultural facilities	Community Centre - apportioned new provision					-£0.12m	-£0.63m	-£0.68m	-£0.68m	-£2.10m		
Adult Social Care												
Youth Centres	New youth centre					-£0.03m	-£0.15m	-£0.16m	-£0.16m	-£0.50m		

Site Name	SUE/ SRA	Infrastructure Category	Infrastructure Item	Description	2009/10-	2010/11-	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	Estimated Total Cost*		
Ashton Green SUE	SUE	Police	New facility assumed			-£0.03m	-£0.14m	-£0.15m	-£0.15m	-£0.48m		
Hamilton Extension SUE	SUE	Education	Extention to Existing Primary Schools	Expansion of existing primary school. Replacement of existing secondary school planned as part of the BSF.								
			New Secondary School	Expansion of existing primary school. Replacement of existing secondary school planned as part of the BSF.			-£18.00m				-£18.00m	
		Parks, open space & public realm, leisure/ sports	Allotment			-£0.02m	-£0.02m					-£0.04m
			Cemeteries									
			LEAP			-£0.27m	-£0.27m					-£0.54m
			Leisure centre			-£0.19m	-£0.19m					-£0.38m
			Local park			-£0.09m	-£0.09m					-£0.17m
			NEAP			-£0.08m	-£0.08m					-£0.16m
			Playing field			-£0.10m	-£0.10m					-£0.20m
		Strat GI										
		Libraries	Library - Expansion of existing provision	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.		-£0.04m	-£0.04m					-£0.07m
Community & Cultural facilities	Community Centre - apportioned new provision			-£0.21m	-£0.21m					-£0.42m		
Bede Island South	N/a	Education										
		Parks, open space & public realm, leisure/ sports	Allotment			-£0.00m	-£0.00m	-£0.01m	-£0.00m			-£0.02m
			Cemeteries									
			LEAP			-£0.04m	-£0.04m	-£0.09m	-£0.05m			-£0.23m
			Leisure centre			-£0.03m	-£0.03m	-£0.07m	-£0.03m			-£0.16m
			Local park			-£0.01m	-£0.01m	-£0.03m	-£0.02m			-£0.07m
			NEAP			-£0.01m	-£0.01m	-£0.03m	-£0.01m			-£0.07m
Playing field			-£0.02m	-£0.02m	-£0.04m	-£0.02m			-£0.09m			
Strat GI												
Community & Cultural facilities	Community Centre - apportioned new provision			-£0.03m	-£0.03m	-£0.07m	-£0.04m			-£0.18m		
Sunningdale Rd	N/a	Education										
		Parks, open space & public realm, leisure/ sports	Allotment									
			Cemeteries									
			LEAP									
			Leisure centre									
			Local park									
			NEAP									
Playing field												
Strat GI												
Rest of Leicester City Centre	N/a	Transport	NEW BUS STATION	Bus			-£67.00m			-£67.00m		
			RAIL STATION IMPROVEMENTS	Rail			-£20.00m				-£20.00m	
			IMPROVED CROSSINGS OF INNER RING ROAD	Walk/Cycle		-£2.27m	-£2.60m	-£12.73m	-£6.93m	-£5.42m	-£30.00m	
			CITY CENTRE IMPROVEMENTS	Walk/Cycle		-£4.16m	-£4.77m	-£23.34m	-£12.71m	-£9.94m	-£55.00m	
			PARK-AND-RIDE (St. Nicholas Place)	Bus		-£1.95m						-£1.95m
		Parks, open space & public realm, leisure/ sports	Allotment			-£0.01m	-£0.01m	-£0.01m	-£0.01m			-£0.03m
			Cemeteries									
			LEAP			-£0.07m	-£0.07m	-£0.16m	-£0.08m			-£0.39m
			Leisure centre			-£0.05m	-£0.05m	-£0.11m	-£0.06m			-£0.27m
			Local park			-£0.02m	-£0.02m	-£0.05m	-£0.03m			-£0.12m
			NEAP			-£0.02m	-£0.02m	-£0.05m	-£0.02m			-£0.12m
			Playing field			-£0.03m	-£0.03m	-£0.06m	-£0.03m			-£0.14m
		Strat GI										
Community & Cultural facilities	Community Centre - apportioned new provision			-£0.06m	-£0.06m	-£0.12m	-£0.06m			-£0.30m		
Rest of Leicester City	N/a	Transport	A47 HUMBERSTONE ROAD QUALITY BUS CORRIDOR	Bus		-£0.28m	-£0.32m	-£1.57m	-£0.85m	-£0.67m	-£3.70m	
			A426 AYLESTONE ROAD QUALITY BUS CORRIDOR	Bus			-£2.70m				-£2.70m	

Site Name	SUE/ SRA	Infrastructure Category	Infrastructure Item	Description	2009/10-	2010/11-	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	Estimated Total Cost*
Rest of Leicester City	N/a	Transport	CONGESTION (Quality Bus Corridors, junction improvements, ATC etc. to 2026)		-£4.54m	-£5.21m	-£25.46m	-£13.86m	-£10.85m	-£60.00m
			MELTON ROAD/ TROON WAY JUNCTION IMPROVEMENTS			-£0.50m				-£0.50m
			FRIDAY STREET IMPROVEMENTS (St. Johns)	Cycle/Road	-£1.50m	-£1.50m				-£3.00m
			A50 QUALITY BUS CORRIDOR	Bus		-£1.20m				-£1.20m
		Parks, open space & public realm, leisure/ sports	Allotment		-£0.02m	-£0.02m	-£0.05m	-£0.02m		-£0.11m
			Cemeteries							
			LEAP		-£0.29m	-£0.30m	-£0.63m	-£0.32m		-£1.55m
			Leisure centre		-£0.20m	-£0.21m	-£0.44m	-£0.23m		-£1.09m
			Local park		-£0.09m	-£0.09m	-£0.20m	-£0.10m		-£0.49m
			NEAP		-£0.09m	-£0.09m	-£0.19m	-£0.10m		-£0.46m
			Playing field		-£0.11m	-£0.11m	-£0.23m	-£0.12m		-£0.58m
		Community & Cultural facilities	Strat GI							
Community Centre - apportioned new provision			-£0.22m	-£0.23m	-£0.49m	-£0.25m		-£1.20m		
Youth Centres			-£0.09m	-£0.10m	-£0.20m	-£0.11m		-£0.50m		
Leicester City (non-site specific)	N/a	Transport	PARK-AND-RIDE (Enderby)	Bus	-£8.80m					-£8.80m
			CYCLE WAY	Cycle						
			TRAM LINE (Line 1)	Tram	-£1.00m	-£1.50m	-£107.50m	-£290.00m		-£400.00m
			TRAM LINE (Line 2)	Tram				-£350.00m		-£350.00m
			PUBLIC REALM		-£0.38m	-£0.43m	-£2.12m	-£1.16m	-£0.90m	-£5.00m
		SMARTER CHOICES		-£0.05m	-£0.06m	-£0.27m	-£0.15m	-£0.12m	-£0.64m	
		Parks, open space & public realm, leisure/ sports	Strat GI							
					-£31.70m	-£30.80m	-£397.43m	-£694.53m	-£38.27m	-£1193.04m

* costs in the table are rounded to the nearest £10,000, and therefore costs in the time periods will not necessarily add up precisely to the total

APPENDIX 9

Chapter 4-7

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 was a key output of our infrastructure cost and funding spreadsheet model for the original GIA. As set out in Section 1, our assessment was for the purposes of assessing across the HMA, as opposed to individual developments or districts.
- 4.3 In this section we have set out the basic methodology used in the GIA, and the subsequent results. For more information on the methodology used and the assumptions made, please refer to the corresponding section of the original GIA report.

Our approach in the original GIA

Development sites put into broad “categories”

- 4.4 As stated above, it was not possible within the scope of the original GIA assessment to estimate the level of contribution available for each individual site in the HMA.
- 4.5 However, there are likely to be large differences between sites in terms of key variables, such as land costs and sales values. For example, some 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 understood that the majority of other sites in the HMA (such as Ashton Green in Leicester City) are essentially “greenfield” sites with much lower existing use values and therefore site assembly costs.
- 4.6 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)

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

- 4.7 Based on the assumptions made in the original GIA study, our spreadsheet model generated the following contributions (per unit), for the different development categories.
- 4.8 In many instances, there were 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 4.1 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

- 4.9 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

- 4.10 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.

- 4.11 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 4.2 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

- 4.12 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.
- 4.13 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).
- 4.14 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 4.3 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

Sensitivity testing of land costs, affordable housing and sustainability requirements

- 4.15 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 analysed the following key variables in the original GIA report:
- Lower land costs
 - Lower affordable housing requirements with HCA grant
- 4.16 For more information on the sensitivity testing, please refer to 4.148 of the original GIA report. The results of this analysis are set out below:

Table 4.4 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

Table 4.5 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

We did not allocate developer contributions to particular service providers

We treated any developer contributions as an unallocated sum to be used by planning authorities against particular local priorities of their choosing in the original GIA. We did 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. Instead, we showed a “lump sum” developer contribution which could 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 was on housing developments in the original GIA, we also looked at the infrastructure requirements of employment development, and how those requirements might be costed and funded.
- 5.2 We split employment development into the two categories of a) non-retail employment, and b) retail employment. The assumptions we used in the original GIA are summarised below; for more information, please refer to the original GIA report.

Summary of assumptions from the original GIA

Non-retail employment assumptions

- 5.3 We assumed there were no primary infrastructure requirements arising from non-retail employment sites in the original GIA, and that the costs of infrastructure on non-retail employment sites are picked up by developers. We also assumed non-retail employment makes no developer contribution.

Retail employment assumptions

We assumed retail employment may give rise to primary transport infrastructure requirements only in the original GIA, and that all infrastructure costs would be funded by the developers. We also assumed that retail development generates developer contributions for use against wider social and economic impacts. In line with our approach on housing developer contributions, we treated any developer contributions as an unallocated sum to be used by planning authorities against particular local priorities of their choosing.

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

Introduction

- 6.1 As set out in section 1, we have extracted only those requirements, costs and funding related to Leicester City from the original GIA and that no additional research has been undertaken for this report.
- 6.2 We have summarised our assumptions in the original GIA below; for more detailed information, please refer to the corresponding section of the original GIA report.

Summary of assumptions from the original GIA

- 6.3 The key issues and assumptions used in the original GIA are set out below:

Infrastructure requirements of growth issues and assumptions

- Our work focused on the infrastructure requirements of future growth; we did not look at “historic infrastructure deficits”
- We did not formally deal with demographic changes, but took these into account informally
- We tried to avoid the “wish list” approach to infrastructure requirements. We used a rule of thumb in order to determine reasonable infrastructure requirements
- Service delivery is continually being reconfigured. Strategies change. This affects levels of infrastructure required to support new growth
- In most instances, the precise nature of growth was unknown - meaning that being precise about the required infrastructure was not possible
- We split housing sites into strategic and non-strategic categories. The amount of detail we provided on infrastructure requirements varied, depending on the strategic status of the site

Infrastructure costs of growth issues and assumptions

- We used service providers’ cost estimates where possible, and “ready reckoner” figures where necessary

Infrastructure mainstream funding for growth issues and assumptions

- We assumed that service providers use mainstream funding to cope with the needs of growth wherever possible
- Developer contributions are generally intended for capital expenditure, not revenue
- Funding for some service providers is related to population - so as population grows, funding grows

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

7 HOW SHOULD NEW INFRASTRUCTURE REQUIREMENTS BE PRIORITISED?

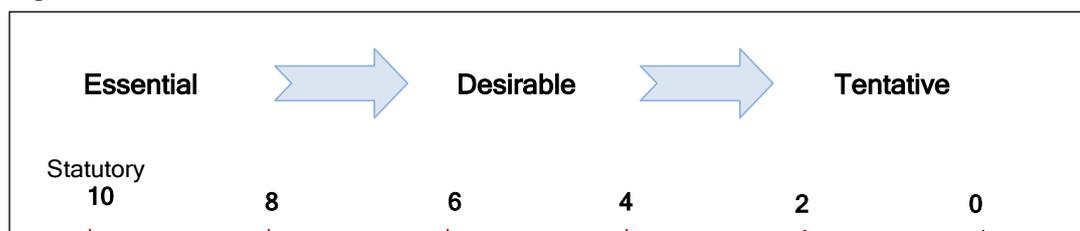
Introduction

- 7.1 We undertook a prioritisation of infrastructure requirements in the original GIA. For more information on this, please refer to the original GIA report.
- 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

- 7.4 However, we have summarised the categories for the purposes of this report:
- **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.
- 7.5 We have shown our scale on the figure below.

Figure 7.1 Prioritisation scale



Source: RTP