Executive Summary
April 2009
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**EXECUTIVE SUMMARY**

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EXECUTIVE SUMMARY

1 This is the Executive Summary of the Leicester and Leicestershire Growth Infrastructure Assessment. The report was written by Roger Tym & Partners with specialist transport input from URS.

2 Our brief is to understand the infrastructure implications of housing and jobs growth in the Leicester and Leicestershire Housing Market Area (HMA) to 2026. We show, at a high level, the infrastructure requirements that arise from growth; how much this infrastructure costs; and how this infrastructure might be funded. We also look at how the infrastructure requirements of growth might be delivered.

The scope and emphasis of this assessment

3 This report covers the Leicester and Leicestershire Housing Market Area (HMA) which comprises the whole county of Leicestershire.

4 We are dealing with primary infrastructure in this assessment. Primary infrastructure is required to accompany development in order to allow new households to function within a wide community. Examples include schools, health, leisure and community facilities, parks, green infrastructure, and off-site transport connections to wider networks. Secondary infrastructure (such as on-site utility connections) is allowed for, but not explicitly investigated, because it will be paid for by developers.

5 There are a number of important points which must be borne in mind when using this document. In summary they are:

- Infrastructure providers reserve the right to update the information provided to ensure that it is relevant and useful.
- The estimates of infrastructure requirements, costs and funding provided here involve a high level of spatial and temporal generalisation.
- 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.
- Our calculations of site value do not purport to offer a valuation of any particular piece of land or site.
- It is not possible to translate our findings here into a Community Infrastructure Levy (CIL) charge, tariff figure, planning charge or Section 106 Development Plan Document. More detailed inputs would be required at a local authority level.
- Developers and Local Planning Authorities will not be able to use this work to negotiate Section 106 agreements.

Policy context

6 The RSS seeks to concentrate development in urban areas. In spatial terms, the regional policy of urban concentration focuses particularly around the Leicester PUA
area. Most of the sub regional district centres within Leicestershire also have plans for restructuring the central areas of their towns.

7 **NPG policy aims to accelerate housing delivery.** The New Growth Point status is not a statutory designation but is a long term partnership between Government and local partners. The NGP is accompanied by additional infrastructure funding. For 2008-09 the 6Cs partnership was allocated nearly £12m capital funding and £1.2m revenue funding for various infrastructure projects identified in the PoD.

8 Districts have signed up to a county-level **Sustainable Community Strategy**, and have or are developing Sustainable Community Strategies of their own. The city has its own Sustainable Community Strategy. There are a number of other common themes across these strategies - which include transport, quality infrastructure and sustainable development. These are reflected in our work.

9 Note that for the purpose of this assessment, the infrastructure requirements for the eco town proposal are explicitly excluded from this work.

**The evidence base that Core Strategies need on infrastructure**

10 There has been a growing recognition of the link between spatial plans and infrastructure provision in achieving timely and sustainable delivery of spatial growth.

11 The Local Government White Paper on Strong and Prosperous Communities published in October 2006 referred to local authorities playing a positive co-ordinating role in the delivery of infrastructure to ensure that the right infrastructure is provided at the right time. The Planning White Paper, CSR 07 and PPS12 all emphasise the need for an infrastructure planning evidence base.

12 However, there is no detailed guidance on what an infrastructure planning evidence base should consist of. Given this lack of guidance, we have relied more on our own knowledge of this field. It appears that the key is to ensure that we capture the infrastructure needed and identify the range of providers including the developers and others who will be responsible for funding the infrastructure.

13 Recent reports have stated that the **Community Infrastructure Levy** (CIL) will be applied to new developments to raise money from developers to pay for facilities such as schools and waste treatment plants. The devil, however, is in the detail. The situation remains unclear.

**What housing and jobs growth are we providing for?**

14 **This assessment starts from the districts' housing allocation from the East Midlands Regional Spatial Strategy.** We then identify the housing growth that remains in the pipeline, and use this as a basis for our assessment, as it is these homes which require future infrastructure planning, funding and costing. We’ve been provided with these housing numbers by districts. Directions of housing growth have been mapped. Allocated employment space has also been mapped. **The work we have undertaken here, and the information we have used, in no way prejudices future planning**
decisions. Planning decisions will, of course, be determined through the proper local development framework process.

There is then the question of the phasing of housing growth. We have used the trajectory shown in the New Growth Point Programme of Delivery (PoD) Refresh 1 Oct 2008 submission. We are fully aware that this trajectory does not take account of current delivery and market issues, and know that the client team are shortly about to enter into further discussions with GOEM about how far this can be adjusted to take account of the current economic market.

**What value of developer contributions does housing growth create? How should developer contributions be allocated?**

We estimated the amount of developer contributions available from planned growth. This is because developer contributions will be available to fund infrastructure development. Here we outline the assumptions that have been used in those calculations.

We treat any developer contributions as an unallocated sum to be used by planning authorities against particular local priorities of their choosing. We do not allocate this funding to particular infrastructure issues. That would require us to make essentially political decisions which should instead be made by elected members or their officers.

**Table 1 Developer contributions analysis assumptions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Greenfield Categories</th>
<th>Brownfield Categories</th>
</tr>
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<tbody>
<tr>
<td>Development Density</td>
<td>35 - 50dph</td>
<td>50-80dph</td>
</tr>
<tr>
<td>Net/Gross Site Ratio</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Sales Value</td>
<td>£1,884 - £2,422 psm</td>
<td>£2,200 psm</td>
</tr>
<tr>
<td>Affordable Housing</td>
<td>30% of residential units</td>
<td>15% of residential units</td>
</tr>
<tr>
<td>Grant Funding</td>
<td>£0 - £20,000 per unit</td>
<td>£30,000 per unit</td>
</tr>
<tr>
<td>Land Acquisition Cost</td>
<td>£0.5m per ha</td>
<td>£2.0m per ha</td>
</tr>
<tr>
<td>Build Costs</td>
<td>Apartments: £1,184 psm</td>
<td>Apartments: £1,184 psm</td>
</tr>
<tr>
<td></td>
<td>Houses: £766 psm</td>
<td>Houses: £766 psm</td>
</tr>
<tr>
<td>Sustainability Costs</td>
<td>Code Level 3 assumed</td>
<td></td>
</tr>
<tr>
<td>(Code for Sustainable Homes)</td>
<td>Code Level 3: + 5% build costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code Level 4: +11% build costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code Level 5: +21% build costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code Level 6: +37% build costs</td>
<td></td>
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### Site Specific / Abnormal Costs
- £0.5m per ha
- £2.0m per ha

### Secondary Infrastructure Costs
- £0.25m per ha
- £0.25m per ha

### External Works
- 15% of build costs
- 15% of build costs

### Fees & Other Costs
- 10% of build costs
- 10% of build costs

### Sales Rates
- 100 units pa
- 100 units pa

### Average Unit Sizes
- **(Private & Affordable)**
  - Apartments: 71 sq m
  - Houses: 96 sq m

### Developer's Required Rate of Return
- 17%pa
- 17%pa

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**Understanding housing-generated infrastructure requirements, costs and mainstream funding**

Here, we explain the approach taken to estimating infrastructure requirements, costs and funding.

**Our approach to estimating the requirements of infrastructure for growth**

This work focuses on the **infrastructure requirements of future housing and jobs growth**. This is distinct from trend growth in infrastructure demand (eg arising from, say, an ageing society). Also, we have not formally dealt with demographic changes, but have taken these into account informally, through our work with on service providers.

We’ve avoided loading our infrastructure assessment with a gold-plated “wish list” of perceived needs. However, this does not mean that we have excluded large infrastructure projects on the grounds of cost. These schemes will have to go through the proper assessment process. It is not our role to exclude them at this stage.

**Our approach to estimating the costs of infrastructure for growth**

The cost of infrastructure required for growth is just that - **the costs of the infrastructure necessary to allow growth to take place**. We’ve used service providers’ cost estimates where possible, and benchmarks from elsewhere where necessary.

**Our approach to estimating mainstream funding for infrastructure for growth**

We have a broad definition of **mainstream funding**, by which we mean funding from the public purse via local and regional authorities, public agencies and central Government. This might include PFI, or special purpose funding such as Growth Infrastructure Fund (GIF).
We start from the basic assumption that, where possible, mainstream funding should be used in the first instance to pick up the capital infrastructure requirements following a growth in population in a given area. We also assume that developer contributions are generally intended for capital expenditure, not revenue. We have tried to ensure that “double funding” service providers is reduced to an absolute minimum. “Double funding” is a risk when service providers are funded once through the development process, and then funded again from capitation-related mainstream funding which grows when population grows. However, service providers can in some instances legitimately argue that their capitation-based funding does not reflect the real costs of service provision in growth areas. Firstly, capitation-related funding might not provide for the capital implications of step changes in the location and distribution of demand for their service. Secondly, service providers can reasonably argue that population in their area can rise, but population-related funding does not adjust quickly enough to adapt. We call this the “time-lag” problem. We have aimed to make some allowance for these problems.

How should new infrastructure requirements be prioritised?

There must be a mechanism that will allow the prioritisation of public investment in infrastructure if the infrastructure assessment is to arrive at intelligent and reasoned choices about scarce infrastructure spending. Outside consultants have little business here: these decisions rest with elected representatives and their officers, in order to allow different areas and interests to express their different priorities. 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.

We then turned to look at the requirements, costs and funding of infrastructure to support housing and jobs growth across a range of themes. We began with transport.

Transport

Our role with regard to transport was more intensive than that with the other infrastructure issues. In line with the other infrastructure issues, we were asked to look at requirements, costs and funding, but we were also asked to provide some “critical friend” advice on the issues surrounding growth and transport demand.

We began by briefly looking at policy. National policy seeks to reduce transport and consequent demand for new infrastructure. Regional and local transport policies broadly follow the national approach.

We then turned to the growth and transport modelling already undertaken. Whilst there has been a shortage of funding for modelling transport implications of growth, the modelling and research which has been undertaken shows that the baseline position is of excess transport demand in a number of points on the network. Analysis shows the amount of travel is likely to increase significantly over the next 20 years. The major focus for modelling has been to the north, northwest and southwest of Leicester. This
has thrown up some issues - in particular, the transport implications of Thurmaston and Loughborough SUEs. The County and Charnwood Borough Council have some honourable differences that are likely to require a blend of solutions before resolution. It isn’t our role here to decide on the best way forward, but we have had to go with one set of solutions in our spreadsheet model. We have used Charnwood’s solutions as they stand at this time because they are the Local Planning Authority.

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

Our starting point in determining infrastructure requirements is our “Scheme List”. In simple terms, this is a list of schemes required to ensure that each growth site is adequately connected to the transport network. It should be noted that these initial findings are the first stage in sieving issues. More work will be required to develop them.

How can new infrastructure be funded?

The funding section shows 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 identify a mainstream funding deficit of £999m to 2026 for transport.

Issues

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.

Regarding issues related to transport planning, we found that

- Wider travel patterns focussed on the City need to be taken into account.
- The cumulative impact of development and phasing need to be considered carefully. At the moment, cumulative impacts are not properly understood in transport modelling work.
- Current transport infrastructure planning work lacks precision in some areas, and is at times fragmented. There are geographical gaps in transport modelling undertaken.
- Transport modelling work within Leicester should be developed further.
- SUEs may generate more out-migration for work than expected.
- The test of the ‘networked SUEs’ must be that the connecting thread is public transport, and not just cars. 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.
- The Highways Agency is aware of and is broadly comfortable with the implications of jobs and housing growth on “its” part of the network.
By splitting the issues by area and transport corridor, our analysis showed issues of cross-system impacts.

- In the **Charnwood corridor**, we found that the corridor is already congested. Congestion is likely to remain, and M1 improvements might increase travel demand. The Birstall Park and Ride could be influential, but might have unhelpful consequences of encouraging additional traffic to use the A46. 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. Ashton Green will require highly sustainable travel credentials, and it is absolutely crucial for transport in the area that Ashton Green is as self-contained as possible. Part of the solution may be found in the Birstall Park and Ride, but an optimum location to maximise its potential and use must be decided.

- In the **Thurmaston/ Syston corridor**, considerable amounts of congestion are experienced at peak times. The potential SUE near Hamilton benefits from a range of services nearby that may help sustainable transport objectives. There are two critical transport requirements to the successful delivery of the Charnwood SUE. They are a) a link towards Syston to facilitate local trips; and b) a dedicated public transport link directly to the city centre. Provided that a direct bus corridor can be provided between the city and the proposed SUE, together with the other mitigation measures in place, it is reasonable to assume that the impacts of the SUE would generally be modest.

- The **A6 Harborough corridor** is another prominent conduit for movement. It is at times very congested. The District Council is keen to improve journeys on the A6 and a shift from Road to Rail could help. The Rail sector may focus on the longer distance commuting market, and satisfying increased demand for local journeys such as a new station at Kibworth may not be a priority. While expanded Park and Ride in Oadby will aid local modal shift, it could also attract unwanted commuter traffic from surrounding areas.

- In the **Hinckley and Blaby corridor**, there is a risk that a new link to the adjacent M69 would entice Hinckley residents to work in Leicester, thus creating a dormitory settlement in the SUE. Such a link is however at a very preliminary stage of consideration and certainly some years from potential implementation. Blaby SUE is in an area where there is already some congestion, but it is difficult to see how the widening of the M1 would benefit this area and much would rest on the effective provision and use of public transport modes. However, we suggest that a new Blaby station is unlikely, because its location on the Leicester-Birmingham line is extremely problematic. The A47 could provide a more effective public transport connection between the City centre and Blaby if congestion along the route can be mitigated. Enderby Park and Ride Scheme is also likely to generate substantial local trips.

- Issues in the **A50 corridor** are different. Traffic movements to and from Coalville are not substantial when compared to other corridors. More significant in this corridor are flows from the M1. The National Forest line is unlikely to go ahead - so
will not benefit the Coalville SUE. Given that flows from the M1 are the main influence along this corridor and not the impact of Coalville itself the National Forest Line does not stand much chance of being viable; there simply is not the volume of demand to even consider it. The area-wide impacts of the Park and Ride at Glenfield need to be modelled, together with potential Birstall Park and Ride site.

- **Issues in the Leicester Outer Area.** The area is busy with congested radials that could hamper access to the City. 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. Bus and especially cycling and walking links for Abbey Meadows must be a priority, and Improvements to Swain Street junction and for Granby Street are essential for the New Business Quarter. We believe that there is scope for more bus routes and services that link key destinations effectively.

- **The Leicester City Centre** is a hub with wider strategic importance. Transport is a key part of economic vitality, and public transport is fundamental to the City’s Infrastructure. We have questions about the role and siting of flagship bus station. Highcross is regionally significant but many travel to it by car. An updated City Centre Access Study may be beneficial at this time. The need for mass transit solutions has led the City Council to the consideration of a tram. The role of car parking needs careful consideration.

- The specific impacts of development in Melton need to be determined.

- **At the PUA level,** 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. 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.

**Issues related to delivery**

35. **Chief amongst delivery considerations is the need to work strategically, and in a coordinated manner, with stakeholders.** Clear implementation and delivery targets must be set and accord with policy, and scheme progress and delivery will need to be monitored. More detailed transport assessment will be necessary.

36. **It is essential to assess the traffic impact of the potential development locations** in more detail once the public consultation feedback has steered the draft core strategies. The County and City Councils have recently commissioned a County transport model to predict future base traffic flows on all strategic and other relevant routes throughout the County and City. This should provide the foundation for testing various options of strategic development locations to predict the cumulative traffic impact of development on the highway network.
37 It is necessary to establish in more detail when particular enabling infrastructure is required, what impacts and requirements it will address (for example the predicted shift from car to public transport to minimise congestion) and the mechanisms required to support and fund it.

38 It will be important for the framework to maintain a 'holding list' where scheme funding is being developed. This should be reviewed each year as part of the Annual Monitoring Review (AMR) and thereby enable projects and schemes to be tracked for both funding and deliverability. Desired modal shift targets would also be helpful. One way of achieving the desired modal shift will be “Smart Choices” work: costs here should not be ignored. Finally, there is a need to establish priorities.

**Flood defence**

39 We have looked at whether flood risk is a barrier to growth, and if so, whether major flood defence investment was required in order to accommodate growth at the chosen locations.

40 The areas of growth proposed in the HMA do not feature in the current strategic investment flood risk areas of the EA for flood defence measures. Growth directions therefore appear to be well chosen.

41 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 is required.

42 Issues relating to surface water drainage have also been mentioned by stakeholders for the central areas of Harborough, Hinckley and Loughborough. A considered view of the issues to these areas, could inform how best to deal with SUDs measures 'upstream' to help to mitigate wider drainage and flooding issues in the central areas.

43 We have not identified a funding deficit here.

**Strategic green infrastructure**

44 We identify the requirements, costs and funding of strategic Green Infrastructure. The major issue here is that this theme can get overlooked: with the exception of DEFRA National Forest funding, investment in strategic green infrastructure is normally considered to be within the remit of Local Authorities but there are no dedicated mainstream sources of funding to support investment (although NGP funding has been allocated to 2010/11, and this may be extended).

45 Together with public space, parks, sport and leisure (below) we identify a funding deficit of £114m to 2026.
Public space, parks, sport and leisure

To understand requirements, PPG17-compliant assessments of open space have in many cases been completed by districts. However, open space standards have been stated in a number of different ways, cover different issues, and have often incorporated historic deficits. But this assessment is about the infrastructure needs of new growth, and seeks to avoid the inclusion of historic deficits. Because of this fact, we have used a different method to estimate the infrastructure required of growth. We have reviewed local space standards, and set these against a broader review of standards elsewhere. We have chosen reasonable standards and have applied these requirements to all housing development in all areas, across sites of all sizes. 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.

We have costed these proposed open space standards using a set of stated comparators and assumptions.

Regarding funding parks and open space, 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. We have therefore assumed that the capital costs of provision of these facilities is not available from existing mainstream funding. Regarding funding leisure centre provision, we assume that half of the capital costs of leisure centre provision will be met from mainstream funding.

Together with strategic green infrastructure we identify a funding deficit of £114m to 2026.

Early years, primary and secondary education

We start by looking at the capacity of existing infrastructure. The current surplus places at the City are less than 10% of total capacity. Demographics are predicted to absorb this surplus. At a District wide level, taking account of planned housing growth (based on consented planning permissions) Harborough and Oadby and Wigston are currently experiencing a deficit of secondary school places as at July 2008. All the other authorities are experiencing a surplus of under 10%, apart from Melton where there is 21% surplus capacity.

We then looked to translate growth into a requirement for schools infrastructure. Both County and City have a complex set of assumptions and requirements to take into account in making this calculation. In the main report, we show these assumptions and use them to translate housing growth into a requirement for schools infrastructure. We show this in tabular form.

In Leicestershire and Leicester City, nursery provision (such as playgroups, day nurseries and childminders) is generally provided by the private sector and so is not included in this infrastructure assessment. Early Years provision (at 3+ for the City,
and 4+ for the County) is built into new primary school provision and included in the requirements for primary schools.

53 We then cost these requirements using Government guidance. The main sources of capital funding are Modernisation Funding, Basic Needs Funding, and Building Schools for the Future Funding. We look at each in the main body of the report.

54 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.

55 In the case of funding information provided by the County Council, the spreadsheet model currently assumes that there will be no other mainstream funding available to cope with growth. This means that there is a funding gap present which the County hopes will be filled by developer contributions. The situation for the County could change once their submission for BSF is confirmed.

56 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.

57 Using these assumptions, infrastructure for education across the HMA shows a very significant funding deficit of £315m to 2026.

Post 16 education and FE

58 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. We therefore conclude that there are no significant infrastructure requirements arising from the growth proposals for the HMA.

59 However, 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.

60 The management of Post 16 provision is currently being reorganised. These conclusions may change in future as it becomes clearer how Post 16 Provision is to be planned and managed.

61 Given these assumptions, we do not identify a funding deficit in this theme that can be ascribed to growth.

Cultural and community facilities

62 The infrastructure requirements for cultural facilities vary considerably depending on the type of facility and location. There is not a simple standard requirement. Most of the cultural facilities listed above are at too early a stage to have any costs included in this assessment, apart from the Hinckley Creative Enterprise Centre and the Mining Lives project linked to Snibston in Coalville. In the absence of information, we think it
safest to assume nil cost for now. This information can be refined in the delivery model at a later stage, as and when this information is available.

**Funding for cultural facilities** is dependent on grant sources. 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 delivery model at a later stage, as and when this information is available.

Regarding community centres, there was a general consensus in our stakeholder consultations on the need to provide community centres / neighbourhood centres as part of the infrastructure requirements. However, stakeholders are nervous of ongoing maintenance costs arising from community centre provision.

We have used some assumptions to calculate a **requirement and cost figure**. The actual configuration, cost and management of these will vary considerably in each area.

Funding for community centres has historically come from grant funding. We identify a **funding deficit of £35m to 2026**.

### Libraries

We have used national guideline standards to assess **requirements and costs** and show these in tabular form. There is **no funding available for new growth from the city**. **County funding is not secure**, and is funded by County Council land sales which now seem uncertain. We make some assumptions (agreed with service providers) to calculate future funding levels.

On issues, we find that there is scope for efficiency savings from multi-user buildings. Further consideration will need to be given to developing the community and library provision at Ashton Green and for the Central Strategic Regeneration Area, and that there is an issue of service delivery and phasing.

We identify a **funding deficit of £5m to 2026**.

### Youth centres

**Leicester** will require two new youth centres in **Ashton Green and Abbey Meadows**. **Leicestershire envisage that each SUE and community will require a youth centre** - and that in some cases more than one will be required. The centres will cost about £0.5 million each.

We assume that there is **no mainstream funding available** for youth centres from mainstream sources. There is therefore a funding gap for this provision.

We identify a **funding deficit of £4m to 2026**.

### Adults’ social care

Societal changes, rather than housing growth, mean that demands for adult social care are rising. There are significant strategic changes to service delivery in adult social
care in order to cope with some of these demands - **meaning that infrastructure requirements for adult social care are falling.** The emphasis is on keeping cared-for adults in the social “mainstream”. Strong emphasis needs to be placed on providing housing options which allow people to stay where they are.

Social care services have suggested that they do **not anticipate a significant level of new capital infrastructure requirements** as a result of the proposed growth in housing. The increase the numbers of elderly people will drive the needs for greater service provision, but, 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. However, it is assumed that mainstream funding will adjust to reflect population changes. We **do not identify a funding gap ascribable to growth.**

### Children’s social care

We broke our work into the two parts of a) childrens homes and day care centres, and b) children’s centres.

Regarding childrens’ homes and day care centres, childrens 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 childrens’ homes and day centres. ‘Demand’ is correlated better with levels of deprivation rather than housing growth as such. As a result, they do not envisage a significant requirement for capital expenditure on buildings as a result of the new housing proposed in the HMA, and so we **do not identify a funding gap ascribable to growth.**

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 Climbie 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 provide “joined-up” provision to children and their parents. We make some assumptions about requirements and costs in both City and County areas. There is currently no specific **funding stream** for Children’s Centres post 2010. We assume the current spending rate continues. **We identify a funding deficit of £6m to 2026.**

### Police

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). **We propose that our costs and funding calculations are updated once the ACPO model is finalised.**
On requirements, we assume large, strategic developments require a new station. We cost these using the Valuation Office 2005 Practice Note.

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.

Police services are constrained in their capital spending. Funding can be expected to respond to population growth to some extent. But it is unrealistic to expect that all new policing requirements will be covered. 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.

Our general approach is therefore to account for the cost of providing both new buildings and new vehicles which are solely required for the purpose of servicing the needs of new settlements since these will almost certainly strain police resources more than incremental growth in existing towns.

We identify a funding deficit of £4m to 2026.

Fire

A new fire station/HQ and regional control centres are planned at Birstall and Castle Donington respectively. However, none of these facilities are required purely to accommodate the additional demands created by the proposed growth in the HMA area. New growth in the area will mean that a new fire station will be required at Castle Donington in addition to the Regional Control Centre.

The new Birstall facility can be funded through existing mainstream funds, but Castle Donington fire station will need additional funding to be found. The Fire Service will seek capital assistance (either through developer contributions or government grants to cope with growth areas) to fund this.

We identify a funding deficit of £5m to 2026.

Ambulance

We understand EMAS does not have any set formula for capital infrastructure requirements by population growth. However, it has stated the service is almost at capacity in terms of spatial requirements. EMAS has recommended an approach to infrastructure growth requirements and costs. We show this in the main report.

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. 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.

90 We identify a funding deficit of £1m to 2026.

Primary health care

91 We have summarised whether significant new capital spend is required to cope with growth plans. We have used high level costings to provide a very rough indication of the scale of investment required. This information is provided in detail in the main report.

92 Funding for health services is provided to PCTs on a capitation basis – so as population grows, funding should in theory follow. NHS Local Improvement Finance Trust (LIFT) is also available within the City PCT boundary although new forms of LIFT are now available countrywide. 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.

93 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. Our major concern is to overcome the “time lag” in funding that we explained above. We have assumed that the PCT will not build the facilities themselves – they will pay rental costs, to a separate entity, such as Primary Health Properties or LIFT, for the use of a new facility. 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. 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.

94 Using this approach, we identify a funding deficit of £2m to 2026. It should be noted that this approach has not been agreed with the PCTs. Further work will be required.

Gas

95 There are two gas pipeline systems: national high pressure networks and local low pressure networks. The national network does not need strengthening as a result of growth. 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, but no show-stoppers have been identified in work so far.

96 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.
We have not separately broken out costs of gas provision in our assessment. This is because they are dealt with privately. We consequently do not identify a funding gap.

**Electricity**

National Grid advises that the growth proposed for the HMA will not have a significant effect on their infrastructure. Existing capacity appears to be sufficient to deal with projected demand.

The local distribution company, Central Networks, has identified extensive reinforcements which will be required to their networks to supply development at the main growth areas. Costs are not yet known by the company.

Some funding will be come from private Central Networks coffers, but most of this reinforcement will be paid for by the developers. Because Central Networks funding is dealt with privately, we have not covered it in our spreadsheet model. On the developer side, internal site connection costs are included generically as part of our viability calculations in our spreadsheet model. We consequently do not identify a funding gap.

There are some issues which need addressing. There is a need for liaison and forward planning, as the construction of Bulk Supply Point and Primary substations involves long term investment. There is also a need for an equitable spreading of costs across site developers. However, subject to close working between the LPAs, Developers and Central Networks there appear to be no showstoppers with regard to electricity supply.

**Water**

Severn Trent’s strategic plans incorporate planned growth to 2035. These strategic plan 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.

There are likely to be some local reinforcements to cope with growth, but these are not yet understood, but a preliminary review suggests that there are no ‘show-stoppers’ as regards water supply.

Strategic projects are privately paid for through water company borrowing plans. Some funding for certain strategic projects will come from developers. Individual site connection costs are generally picked up by developers through the development process. On the developer side, internal site connection costs are included generically as part of our viability calculations in our spreadsheet model. We consequently do not identify a funding gap.

As with electricity, there is a need for liaison and forward planning, and also a need for an equitable spreading of costs across site developers.
### Sewage and drainage

106 Severn Trent and Anglia Water are the companies responsible for sewage treatment in the HMA. Severn Trent Infrastructure does not require new sewage works to deal with growth in its areas. However, Anglian Water see significant constraints in the Market Harborough area, where no significant growth is possible unless a temporary “package plant” is installed. *Without “package plant,” no housing growth will be possible in Market Harborough until at 2017 at the earliest.*

107 On-site secondary sewage infrastructure costs are picked up by developers. These are taken account of in our spreadsheet model. Water companies carry out improvements to Sewage Treatment Works at their own cost in anticipation of future revenue. Because this funding is privately raised we have not included it in our spreadsheet model. Provided reasonable notice - four to five years - is given the water companies do not envisage problems in providing additional capacity in the HMA. We consequently do not identify a funding gap.

108 Surface water now needs to be managed in line with the Government’s new water strategy, with greater emphasis being paid to the consequences of extreme rainfall. Costs for surface water (Sustainable Urban Drainage System, or SuDS) are picked by developers. SuDS will usually be adopted by the local authority with the developers providing a commuted sum for maintenance. Allowance for these costs is made in the viability section of our spreadsheet model. We consequently do not identify a funding gap.

109 The Market Harborough package plant issue must be addressed, and the water companies stress the importance of carrying out water cycle studies in growth areas in order to confirm that water supply, drainage and flood risk will not be a constraint on the levels of growth proposed. Aside from that, issues are in line with other utility providers. Early engagement is important; infrastructure development must necessarily precede development which can lead to cashflow issues; and ways of equitable cost sharing across developers in an area should be developed.

### Telecommunications

110 Telecoms provision is dealt with privately. 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. Broadband access is also almost universally available through the market, so this places no infrastructure demands on the public sector either.

111 Because investment is private, we have not costed it separately. Local site connections are taken account of generically in our spreadsheet model. Equally, funding will be private. We have therefore not quantified it.
Waste

Waste collection costs will arise from new housing in both the City and County. New households potentially give rise to a need for Civic Amenity Sites or Recycling and Household Waste Sites (RHWS); Waste Transfer Stations; and Waste Treatment Facilities. Leicestershire is intending to redevelop four Recycling and Household Waste Sites. Further work is required to determine where. A Waste Transfer Station may also be developed. In Leicester City, there is sufficient capacity to deal with proposed growth.

Total capital costs of responding to growth have been calculated in the main report.

Regarding funding, PFI Credits are available for major contracts and major waste treatment infrastructure. For recycling and recovery infrastructure, Waste Infrastructure Capital Grant is available from DEFRA. Local authority funding and developer contributions have also been used in the past. However, we assume that costs of collection for the new households and the housing growth element of expansion/new provision of RHWSs in the County will not be funded by mainstream funding sources. We identify a funding gap of £5m.

Findings

Our work suggests that there is a £1.3b funding gap to 2026, across the Housing Market Area (HMA). The headline figures on costs, mainstream funding and developer contributions are as follows.

| Infrastructure costs of       | -£2,016m |
| Mainstream funding of         | +£ 522m  |
| Developer contribution funding of | +£ 150m  |
| Leaves a funding gap of       | -£1,344m |

Looking at costs, as the chart below shows, the great majority of costs are found in transport and education themes.
In the chart below, we show the cash costs against funding identified. Mainstream public funding, will only make a limited contribution to meet estimated growth infrastructure requirements in the HMA.

Our spreadsheet model also identifies the amount of developer contributions potentially available to contribute towards the delivery of infrastructure. Whilst these
calculations come with important caveats attached (they are, for example, highly sensitive to the assumptions we have developed with the client group), our estimates suggest that developer contributions of the order of £150m is available to 2026.

We have not allocated developer contribution funding to particular infrastructure themes, as this is an essentially political decision that should be made locally.

Table 2 Developer contributions by area

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Estimated Indicative Developer Contribution Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harborough</td>
<td>£88.9m</td>
</tr>
<tr>
<td>Hinckley and Bosworth</td>
<td>£13.3m</td>
</tr>
<tr>
<td>Blaby</td>
<td>£13.3m</td>
</tr>
<tr>
<td>Melton</td>
<td>£13.0m</td>
</tr>
<tr>
<td>North West Leicestershire</td>
<td>£11.6m</td>
</tr>
<tr>
<td>Oadby &amp; Wigston</td>
<td>£6.8m</td>
</tr>
<tr>
<td>Charnwood</td>
<td>£2.3m</td>
</tr>
<tr>
<td>Leicester City</td>
<td>£0.7m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£150.0m</strong></td>
</tr>
</tbody>
</table>

Source: RTP

Using different underlying assumptions (for example, around reduced affordable housing requirements and lower assumed land values) can generate much higher developer contributions.

Whilst £150m is still a very significant amount of funding, it is very significantly lower than anticipated before the credit crunch. This is because of the long-term effects that the credit crunch has had - and will continue to have - on underlying land values. In the great majority of cases, it means that SUEs and other strategic sites will not be able to fund infrastructure from developer contributions to any great extent. The ‘pre-crunch’ approach of giving away development rights with a planning contributions price ticket attached will not work any more. We do not expect it to revive within ten years.

**Delivery issues and recommendations**

This section builds on the findings of our work discussed in the section above by discussing wider delivery issues and making recommendations. We start by contextualising our work by looking at the challenges we face, and then look at strategy, policy and management.
The challenges

123 The private new-build housing development process is currently effectively at a halt. Even if the housing market recovers quickly, land values will be negatively affected for a much longer period. Often, this reduces the ability of the development process to fund infrastructure, and a developer will look to improve other variables to try and make a profit from this land. In many instances, developers are seeking to negotiate (or renegotiate) S106 agreements at much reduced contribution levels. Whilst developers’ ability to fund infrastructure may improve over the medium term due to falls in land values, even substantial falls in land values are unlikely to have a great impact on developer contributions.

124 In this context, the challenge is to get housing, economic restructuring and infrastructure growth moving – to deliver important social and economic benefits for the HMA.

Strategic responses

125 Regarding strategy, we think that there is a fundamental need to review strategy to respond to the credit crunch. Particularly in Leicester city, strategy is to a significant extent predicated on markets and development values that do not exist now and may not exist again for a decade.

126 There needs to be some radical thinking on viability issues if Leicester and Leicestershire are to get their more difficult sites away. This will need some uncomfortable prioritisation decisions to be made. At the moment there is a real tension between competing policy demands, and the spreadsheet model provided will be a useful way of exploring the financial implications of different policy choices. We think that there is a need to focus strategy on fewer sites, and question whether, for example, the City should be tackling all SRA sites at the same time, or whether it should adopt a more focused approach on a smaller number of sites. Equally, in these new circumstances partners need to understand the central role of mainstream funding, and challenge service providers to look for innovative funding packages, perhaps involving mainstream funding, public/private partnerships, and revenue raising schemes.

Policy responses

127 Regarding policy responses, we think that New Growth Point (NGP) funding policy needs to be sharpened. NGP funding is targeted at “interventions to unlock those sites so that they become viable for private sector partners to build houses much sooner than would have happened without intervention.” Partners need to be certain that this is exactly how the spending is being deployed. NGP funding also needs to be focused on projects with the maximum economic benefit. There needs to be a clear and compelling “theory of change” about how the spending will have economically beneficial effects which go beyond the immediate effects of the project itself. Further, we believe that fewer, bigger, interventions should be targeted with NGP funding.
think that this approach is more likely to bring the game-changing opportunities needed.

There may be a role for the development of policies to stimulate the development process. Other councils are attempting to stimulate the development process to address housing need and bring wider economic benefits. Leicester and Leicestershire authorities also have a potentially important part to play here. Our suggestions are as follows.

- Consider using public funds to buy land or provide up-front infrastructure - including NGP, HCA, Council funding, and EMDA funding
- Local Authorities and/or HCA may wish to consider Compulsory Purchase Orders for some sites. If landowners are unwilling to sell at a realistic prices, the prospect of a CPO is often the only basis upon which reasonable terms can be achieved.
- Local Authorities will need to work as closely as possible with Blueprint, the HCA and EMDA. Close links with HCA will be particularly critical in implementation.
- The value of the Economic Development Company (EDC) needs to be maximised by investigating the role of LABVs and JESSICA funding.
- Investigate Regional Infrastructure Fund.

Finally, we think that the transport analysis carried out as part of this work has some important policy implications. One in particular is around the need for stakeholders to be able to respond flexibly to changing economic circumstances by altering transport infrastructure priorities (so being able to adjust transport project investment if, say, certain strategic sites did not come forward). Because of the cross-border issues involved, this task needs to be undertaken at HMA level, perhaps by the new Transport Strategy and Performance Group. It would also be very helpful to have some overarching, strategic view about which transport projects were likely to deliver the greatest economic benefits.

Management responses

Regarding management responses, we think that the Leadership Board needs to be focused around delivery. We have made a suggestion for a change to the management structure to promote pro-active project management. We suggest that one of the most important challenges facing management - either within the Leadership Board, the Leadership Board delivery team, or the EDC - is the creation of a new culture of delivery. The Leadership Board needs to think in terms of business planning approach, with a full analysis of what tasks lie on the critical path, which tasks need public sector intervention to unlock progress, the order in which those public sector interventions need to be made, and the value arising from those interventions.

This strategic level study has attempted to pull together the big picture on infrastructure planning. There is now room for a second, more detailed sweep through the issues at a local level. We suggest that this work should focus on delivery, looking for site-specific barriers to progress, and finding ways of resolving them. It is precisely this sort of detailed, practical work that will form the raw material required for the cultural shift.
from planning to delivery that we discuss above. Delivery-oriented management will also need to be tactically savvy. There are great advantages in having a “stock” of projects on the shelf - so that changes in public financing can be responded to quickly.

There is a real requirement to use the Leadership Board and this infrastructure assessment to catalyse relationships between planning authorities, wider public service providers and agencies. This is not the usual - rather hackneyed - call for closer partnership working, but instead is a point with real bite: for example, if Ashton Green does not start to deliver shortly, then the Education Authority will have to channel their £16m investment from BSF in a new secondary school at a less than optimal location for longer term sustainable development objectives. There are also opportunities to make this co-operation very practical by seeking cost and quality improvements from multi-user buildings. Stakeholders could also consider using Multi-Area Agreements to plan and manage infrastructure delivery.

Any strategic body needs to have thought through the implications of rapidly changing circumstances. Planning inspectors are looking for this as evidence of contingency planning. As a way of beginning to think about this issue, the Leadership Board may wish to review the NHS East Midlands ‘potential futures’ scenario planning tool. Work by McKinsey may be useful as a starting point.

We suggest that the assumptions used in this infrastructure assessment will need to be revisited and updated relatively frequently.

Best practice from elsewhere can be adopted, but best practice is hard to find. We’ve examined two examples, but caution that that neither is perfect.

The way forward to a Community Infrastructure Levy

We suggest a “wait and see” approach to CIL. It might be better to allow other areas to flush out the issues first. The difficulties can broadly be categorised into setting, implementing, spending and administering a CIL. We examine these in the main report.

However, some preparatory steps towards a CIL would be of great benefit if a decision was made to start a CIL, and would still useful even if a CIL was never fully developed. This would include an improvement of service planning/delivery; a concentration on particular issues; and assisting moves towards policy alignment.