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Leicester Local Plan 2020 – 2036

Infrastructure Assessment with Infrastructure Delivery Schedule

Final Report – including Reg 19 (Pre-Submission) Addendum

CIVIX

Contents

Part I

Executive Summary

a. This Infrastructure Assessment (IA) and the accompanying Infrastructure Delivery Schedule (IDS) are part of the evidence base to support the emerging Local Plan and therefore are required to be compatible with it. Whilst not policy documents, they instead respond to plan policies. They are directly concerned with the infrastructure needs arising from growth as set out in the Local Plan, and not about addressing any perceived deficiencies and/or underinvestment in the infrastructure currently provided.

b. Over the period from 2019 to 2036 – the period covered by its emerging Local Plan - the City of Leicester will be the focus of substantial housing and employment growth, which will result in increased pressure on local infrastructure, services and facilities. Given this, it is crucial that new infrastructure is provided, to support the delivery of new homes and jobs, and to create sustainable and stable communities.

c. The IA is a 'live' document – it will not be finalised until both consultations on this draft and further technical work has been undertaken. This version of the IA involves:

- identifying a comprehensive schedule of needs, costs and timing of future infrastructure provision
- recognising the complexity of identifying needs over the entirety of the Local Plan – i.e. to 2036, beyond the timescale of most service planning
- creating a narrative to explain the context in which infrastructure planning operates
- making judgements which will allow the filling of any gaps in evidence of need in circumstances where services are not entirely certain of future needs
- identifying those future infrastructure needs that are attributable to growth and contrasting this with investment in services that would be required in any event
- presenting - where it is possible to do so – as comprehensive as possible a spatial indication of where infrastructure is needed

d With the above tasks undertaken, the IA seeks to identify all relevant infrastructure needs that are anticipated over the entire timeframe of the plan from 2019 until the end of the plan period in 2036 and which can clearly be related to growth, so that there is clear evidence that such need is both known and being actively planned for.

e The contents of the IA are based on the potential implications of infrastructure requirements arising from meeting the City's own needs, factoring in the 11,535 new dwellings anticipated to be delivered over the Plan period. The document also considers the needs arising from any relevant development taking place in adjoining districts that might have significant infrastructure implications for the City.

f At the same time the IA explores the infrastructure implications of the City's unmet needs – the 7742 dwellings identified in the Plan to be delivered beyond City boundaries.

g Infrastructure can be grouped into three main headings and delivered at three different scales. Physical infrastructure includes transport, utilities and waste recycling and disposal; social infrastructure includes education, health facilities, emergency services, indoor and outdoor sports and community facilities; and green infrastructure Includes allotments, parks and gardens, formal and informal green space and green corridors.

h Infrastructure can be provided at the local, site level; at the neighbourhood level; or at the citywide/strategic level.

i The process of defining infrastructure needs is one that requires the local planning authority to work closely with infrastructure providers to determine requirements over time. This process requires infrastructure providers to give proper consideration of the scale, nature and location of growth, information which they can then factor into other elements of their service planning work, in so doing encouraging them to think long term.

j At the heart of the IA is the Infrastructure Delivery Schedule, a tabular summary of future need, both by service and over time, as well as costs, funding and delivery responsibilities.

k The IDS profiles infrastructure needs over 3 discrete periods (2019 – 2024, 2025 – 2029 and 2030 – 36) and itemises requirements per service. In summary the IDS identifies infrastructure needs over the Plan period (to 2036) costing an estimated £1.073bn. This includes a figure of £280.6m for transport infrastructure which has been identified in the separate Transport Assessment which is not examined in this Assessment and is not profiled in terms of its spread over the 3 time periods identified above. The IDS headlines are as follows:

Topic	Cost 2019 - 2024	Cost 2024 - 2029	Cost 2030 - 2036	Total Cost
Education	£6.65m	£14.06m	£12.92m	**£33.63m**
Primary Health	£60m	£60m	£30m	**£150m**
Secondary Health	£350m	£115m		**£465m**
Outdoor Sports and Leisure	£2.2m	£2.2m	£2.2m	**£6.6m**
Indoor Sports and Leisure	£10.3m	£5.1m		**£15.4m**
Burial Facilities			£1.32m	**£1.32m**
Community Facilities		£1.9m	£1.9m	**£3.8m**
Gypsy & Traveller provision		£0.875m		**£0.875m**
Police			£0.32m	**£0.32m**
Fire and Rescue	£3.15m	£3.15m	£4.45m	**£10.75m**
Full Fibre Broadband	£35m	£70m		**£105m**
Subtotal	**£467.3m**	**£272.285**	**£53.11m**	**£792.695**
Transport Costs				**£280.6m**
Grand Total				**£1,073.295m**

l We anticipate that only a very small proportion of overall infrastructure costs are likely to be attributable to growth – we think this will be around 6%[1]

m The IDS is an evolving document and as it does so it will focus on delivery in the Plan's first 5 years, as these years are the most critical. It will include capital programme funding and a range of other opportunities to secure investment, both public and private.

n Neither the IA or the IDS currently include transportation schemes and costs, which are being analysed separately within the Transport Assessment. These, when added to the IA at a later date, will have a significant impact on its contents.

o We have not to date identified any 'showstoppers' in infrastructure planning that will give rise to any concerns in finalising the IA and allowing it to be scrutinised during the examination of the Local Plan. Notwithstanding this there are several points worth noting:

- there are transformative changes in both **primary and secondary healthcare** being planned, and it will be important to reflect these; as things stand, the precise nature of investment in primary healthcare is not entirely clear, and we have found it necessary to make a number of informed assumptions in order not to understate the scale of investment required
- some services we feel are not surprisingly focusing on **current investment needs** and are not in a position to reflect infrastructure needs beyond the next 5 – 10 years; to fully cover longer term needs it is necessary for us to assess infrastructure requirements over the longer period
- **Local Plan viability work** being undertaken separately may suggest only limited developer contributions can be secured as part of new development, particularly on brownfield sites, and it will be important to manage expectations of this as a source of funding amongst service providers

p The current focus within the IA and IDS is to ensure that they reflect all known evidence and are both fit for purpose to support the emerging Regulation 18 version of the Local Plan. Thereafter (and in addition to responding to matters raised in consultations on the Regulation 18 version) the final version of the IA and IDS will:

- address cross boundary and unmet need considerations
- integrate the Transport Assessment and cross reference the Viability Assessment
- reflect emerging national local policies over time (e.g. the government's intention to identify biodiversity as an infrastructure cost)
- once more is known about the precise mix of land uses on key growth locations, prepare a comprehensive schedule of infrastructure requirements for each location

[1] Calculation does not include transport

1. Introduction

1.1 Over the period from 2019 to 2036 – the period covered by its emerging Local Plan - the City of Leicester will be the focus of substantial housing and employment growth, which will result in increased pressure on local infrastructure, services and facilities. Given this, it is crucial that new infrastructure is provided, to support the delivery of new homes and jobs, and create sustainable and stable communities.

What the Infrastructure Assessment (IA) seeks to establish

1.2 This IA seeks to identify all relevant infrastructure needs that are anticipated over the entire timeframe of the plan from 2019 until the end of the plan period in 2036 and which can clearly be related to growth, so that there is clear evidence that such need is both known and being actively planned for.

1.3 The content of the IA is based on the potential implications of infrastructure need arising from meeting the City's own needs, also considering the needs arising from any relevant development taking place in adjoining districts that might have significant infrastructure implications for the City, whilst at the same time exploring the infrastructure implications of the City's unmet needs.

1.4 Chapter 4 of this document summarises the local plan growth strategy and arrives at a total of 11,535 new dwellings that will be delivered over the plan period, together with both new employment and retail uses. It also identifies an unmet need figure of 7742 dwellings.

1.5 Identifying infrastructure need over such a long period – up to 17 years – is not a straightforward matter, however. Few infrastructure providers are actively planning over so lengthy a timeframe and for that reason alone, the identification of needs in the later years of the plan period include a degree of speculation.

1.6 More than this, however, the precise nature of what is needed in a range of services – indeed, perhaps all services – is in a constant state of flux. This is influenced by a range of factors such as changes in demographics and movements into and out of local communities, the power and influence of new technology and new arrangements for planning and delivering infrastructure – not forgetting also that expectations of what communities feel they need to be provided with – is also constantly shifting.

What do we mean by infrastructure?

1.7 For communities to thrive, it is vital that they are well served by a range of infrastructure that is appropriate to people's needs, are affordable, and are accessible.

1.8 Infrastructure can generally be grouped into three main areas:

Infrastructure category	Description
Physical Infrastructure	Includes transport infrastructure (roads, public transport, pedestrian and cycle routes, publicrights of way and bridleways), cemeteries, gas and electricity infrastructure, water provision and treatment, sewerage works and waste collection, recycling and disposal
SocialInfrastructure	Includes primaryandsecondaryschools,nurseries, further education, primary and secondary healthcare, public emergency services, libraries, sports and recreation facilities, community facilities and cultural services
Green Infrastructure	Includes open space, allotments, parks and gardens, formal and informal greenspace,greencorridors,rivercorridors,waterways,greenways, urban open land, Sites of Special Scientific Interest, conservation areas, and sports pitches

Table 1.1: Infrastructure provision characterised

1.9 As well as the characteristics of infrastructure it is also important to consider the scale at which it is provided, as different types of infrastructure are also required to support different scales of development within an area:

Scale	Infrastructure need
Local, site level	On site infrastructure (including roads and walk/cycleways, gas pipes and electricity cabling, water supply and waste water disposal pipes etc) is necessary to enable the delivery of a specific development
Neighbourhood level	Infrastructure at the local or community level (both new and proposed) required to mitigate the impact ofthedevelopment andsupport theday to day needs of established and newly emerging communities (e.g. community facilities, GP surgeries, schools, places of worship and sports facilities)
Citywide and strategic level	Larger items of infrastructure (including new waste disposal facilities, sewerage treatment works, cemeteries, cultural facilities such as museums and galleries, hospitals, electricity sub-stations, and improvements to the strategic highways network etc) are needed to supportpopulationand economic growth across the City andthe wider area

Table 1.2: Infrastructure by scale

The process of defining infrastructure needs

1.10 The process of defining infrastructure needs is one that requires the local planning authority to work closely with infrastructure providers to determine requirements over time. Such engagement is an important process in itself as it will:

- require infrastructure providers to give proper consideration of the scale, nature and location of growth, information which they can then factor into other elements of their service planning work
- encourage such providers to think beyond the short term and holistically (to see their infrastructure planning work in a wider context, including its relationship with other service providers)

- alert them as to the available public funding opportunities (including section 106 and – if introduced - the Community Infrastructure Levy (CIL), but also other public and private funding sources that are already in existence or may emerge
- identify the opportunities for them to engage in whatever appropriate governance arrangements are put in place to oversee infrastructure planning and delivery

What the IA represents

1.11 It is important from the outset to set out precisely what an IA represents (and equally what it does not).

- The IA is **part of the evidence base to support** the emerging local plan and therefore is required to be compatible with it

- The **IA is however not a policy document**, but instead responds to plan policies

- Finally, and critically, the IA is **concerned with the infrastructure needs arising from growth** as set out in the local plan, and not about addressing any perceived deficiencies and/or underinvestment in the infrastructure currently provided.

1.12 Any perceived underinvestment in infrastructure is clearly a concern, and the City Council would expect this to be addressed by infrastructure funders and/or providers. It is however unreasonable for future growth to take responsibility for remedying any past shortfalls, for example in hospital beds; these are responsibilities that must rest with those who plan for such services. Whilst the provision of infrastructure needs to be considered in the round, the IA should only address that element of need directly associated with growth

Current Content of the IA

1.13 At this stage of its life the IA is still being formulated – it will not be finalised until both consultations on this draft and further technical work has been undertaken. Therefore, at present the key elements of the IA involve:

- identifying a comprehensive schedule of needs, costs and timing of future infrastructure provision

- recognising the complexity of identifying needs over the entirety of the Local Plan – i.e. to 2036, beyond the timescale of most service planning

- creating a narrative to explain the context in which infrastructure planning operates

- making judgements which will allow the filling of any gaps in evidence of need in circumstances where services are not entirely certain of future needs

- identifying those future infrastructure needs that are attributable to growth and contrasting this with investment in services that would be required in any event

- presenting - where it is possible to do so – as comprehensive as possible a spatial indication of where infrastructure is needed

The Infrastructure Delivery Schedule (IDS)

1.14 At the heart of the IA is the Infrastructure Delivery Schedule, a tabular summary of future need, both by service and over time, as well as costs, funding and delivery responsibilities.

1.15 It is worth noting that when the final figure for future infrastructure costs has been estimated, we anticipate that only a very small proportion of this is likely to be attributable to growth – we think this is below 10%.

1.16 As the IDS evolves it will focus on delivery in the Plan's first 5 years, as these years are the most critical. It will include capital programme funding and a range of other opportunities to secure investment, both public and private.

Key issues and challenges

1.17 As a preface we should say that the IA does not currently include transportation schemes, which are being analysed separately within the Transport Assessment. We have included headline costs identified in the Infrastructure Delivery Schedule, although unlike other infrastructure costs this is a total only and is are not profiled over the three time tranches identified in the IDS. Further details including a full context to the transportation costs will be added to the next iteration of the IA at a later date. will have a significant impact on its contents.

1.18 We have not to date identified any 'showstoppers' in infrastructure planning that will give rise to any concerns in finalising the IA and allowing it to be scrutinised during the examination of the Local Plan. Notwithstanding this there are several points worth noting:

- there are transformative changes in both **primary and secondary healthcare** being planned, and it will be important to reflect these; as things stand, the precise nature of investment in primary healthcare is not entirely clear, and we are finding it necessary to make a number of informed assumptions in order not to understate the scale of investment required
- some services we feel are not surprisingly focusing on **current investment needs** and are not in a position to reflect infrastructure needs beyond the next 5 – 10 years; to fully cover longer term needs it is necessary for us to assess infrastructure requirements over the longer period
- **Local Plan viability work** being undertaken separately may suggest only limited developer contributions can be secured as part of new development, particularly on brownfield sites, and it will be important to manage expectations of this as a source of funding amongst service providers

Future actions to finalise the IA

1.19 Our current focus is to ensure that the IA reflects all known evidence and is fit for purpose to support the emerging Regulation 18 version of the Local Plan

1.20 Thereafter (and in addition to responding to matter raised in consultations on the Regulation 18 version) the final version of the IA will:

- address cross boundary and unmet need considerations
- integrate the Transport Assessment and cross reference the Viability Assessment

- reflect emerging national local policies over time (e.g. the government's intention to identify biodiversity as an infrastructure cost)

- once more is known about the precise mix of land uses on key growth locations, prepare a comprehensive schedule of infrastructure requirements for each location

Status of the IA

1.21 This document has been prepared for Leicester City Council in support of the Council's emerging Local Plan. Whilst as already noted the IA is not a policy document, it does however constitute a key piece of the City council's evidence base. It will also form the basis for any future development of the Council's Community Infrastructure Levy charging schedule should the council decide to introduce a CIL.

1.22 The IA will also assist in facilitating further dialogue with both service providers and developers, and in seeking to influence public, private and agency funding and priorities, to ensure that new development is supported by the right infrastructure. To this end, the IA is a living document, and will require updating, periodically, to take account of further updates to the plans and programmes on which it is based.

2. Profile of Leicester

2.1 The profile of Leicester gives rise to specific characteristics that will influence the nature, scope and timing of the infrastructure that is provided. The following data, drawn from the evidence base we have used to analyse infrastructure need, gives credence to this.

Area of evidence	Relevant data	Source
Education: Growth in Pupil Numbers (Primary)	36% between 2009/10 – 2020/21	DfE's School Places Scorecard
Education: Growth in Pupil Numbers (Secondary)	30% between 2009/10 – 2020/21	DfE's School Places Scorecard
Education: Increased School Place Capacity (Primary)	7130 places or 36% between 2010 - 2018	DfE's School Places Scorecard
Education: Increased School Place Capacity (Secondary)	-1 01 places or -0.4% between 2010 - 2018	DfE's School Places Scorecard
Education: Recent Fall in Birth Rates	3.2% decrease between 2017 and 2018 and a 9.9% decrease since 2012	ONS Birth Rate 2018 (August 2019)
Education: Crude birth rates (births per 1000 total population)	11.1 live births/1000, lowest since records began in 1938	ONS Birth Rate 2018 (August 2019)
Education: Participation rates in education, 2- 4 year olds	91% for 3 year olds and c100% for 4 year olds but only 60% for 2 year olds	Leicester 0 – 5 Strategy (2016)
Healthcare: Average GP consultation	Lengthened by 50% (from 8 to 12 minutes) between 1993 and 2013	Leicester, Leicestershire and Rutland BCT Strategy
Healthcare: GP consultation rates	40% increase between 2005 and 2015	Leicester, Leicestershire and Rutland BCT Strategy
Healthcare: Average number of times a year a patient sees their GP	8 times in 2017 (double the rate in 2007)	Leicester, Leicestershire and Rutland BCT Strategy
Healthcare: Average annual consultations amongst the over 75s	Has risen from 7.9 on 2000 to 12.4 in 2015	Leicester, Leicestershire and Rutland BCT Strategy
Healthcare: People with Long Term Conditions	Represent 29% of the population but accounted for 50% of all GP appointments in 2010	Leicester, Leicestershire and Rutland BCT Strategy
Police: Total charged/summonsed	7,624 (an 8.8% decrease)	Leicestershire Police Force Management Statement 2019
Police: 999 Calls	150, 536 (a 8.4% increase 2017 – 2018_	Leicestershire Police Force Management Statement 2019
Police: Domestic abuse as a proportion of all crime	1.32% (a 23.9% increase 2017 - 2018)	Leicestershire Police Force Management Statement 2019

3. Methodological Approach

3.1 The methodological approach adopted for this IA is set out in Table 3.1 below; later, we consider how the key issues of climate change, biodiversity and the City's unmet needs are covered in the IA.

Key Consideration	Methodological Approach Taken
Classification of infrastructure need on a topic by topic basis	Infrastructure need is largely topic driven, with discrete areas of need, with only a limited amount of overlap. The key areas of infrastructure need are transport, health and education but there are many other areas of need. The IA covers these in 8 separate chapters (Chapters 5 – 14)
Cross referencing of a topic based approach with an assessment of infrastructure need on a geographical basis	The overall impact of infrastructure need is experienced by City residents and businesses often at the neighbourhood/locality level, through factors such as access to GP services, schools and the immediate transportation network. This IA therefore also examines infrastructure need on a geographical basis, looking at the growth strategy in Chapter 4 and infrastructure's spatial considerations in Chapter 14
The active engagement infrastructure providers	In the preparation of the IA infrastructure providers have been directly engaged to ensure it accurately reflects their individual expectations, and the challenges in delivery that they expect to face. Where necessary the IA should be free to challenge the views expressed by providers, as there needs to be a recognition that what infrastructure providers seek and what the local plan considers appropriate in terms of infrastructure requirements to best serve the interests of the City's residents and businesses may not always be the same thing
Poorly thought out and uncosted infrastructure needs are not included	The IA should not be (and is not) a 'wish list' of aspirational infrastructure needs presented to the City Council by infrastructure providers that are either vague, unrelated to growth needs, or uncosted. Should the providers provide further details of such requirements at a later date, then these can be added to future iterations of the IA
The start and end dates of the IA are clearly defined	The IA identifies infrastructure need arising from growth from 1st April 2019 to the 31st March 2036
Infrastructure needs expressed across the plan period	Growth related infrastructure needs need to be expressed across time, drawing heavily on the Local Plan's anticipated development trajectory. The identified infrastructure needs of the 17 years of the local plan (2019 – 36) are split into two 5 year tranches (2019 – 2024, 2025 – 2029) and one 7 year tranche (2030 – 2036)
The IA identifies a start date for new infrastructure requirements. Infrastructure needs dating before this are discounted	An IA should not seek the provision of infrastructure for development that has already taken place, as it is not the responsibility of new development to remedy any historic infrastructure deficit. Any infrastructure needs not currently being met (i.e. shortage of school places, GP surgeries at overcapacity) remains the responsibility of the infrastructure providers/planners
Due consideration is given to infrastructure needs of adjoining districts of relevance to Leicester	Existing and proposed development fringing the City will impact on its infrastructure, although this is factored into the planning of that infrastructure. It is indeed a two way process, with some of the City's infrastructure need met beyond its administrative area. Additionally, some of the City's unmet needs will be met outside of the City, giving rise to infrastructure implications. Before the Regulation 19 stage of the Local Plan, when further evidence is available, the IA will explore these issues

Key Consideration	Methodological Approach Taken
The IA is backed up with a detailed evidence base	Appendix A summarises sources of evidence that have been analysed to support the IA's conclusions
Detailed consideration has been given to funding	The IA involves a comprehensive exploration of funding mechanisms. It includes both public and private funding sources and competitive bidding mechanisms as well as potential for innovative sources of funding. Appendix B to the IA summarises potential sources of funding
The IA acknowledges the challenges of infrastructure funding	The IA considers the difficulties of providing certainty that all identified infrastructure needs spread over the next 15 years can have a guaranteed source of funding. All IAs struggle to do this and it would be unrealistic to expect this IA to be any different.
The IA takes a proactive approach to infrastructure funding	The explores in detail a range of funding opportunities and proposes a strategy which will seek to maximise the securing of infrastructure funding as well as appropriate governance arrangements to oversee delivery

Table 3.1: The IA Methodological Approach

The complexities of infrastructure planning

3.2 There are wider complexities in calculating future plan based infrastructure need which will need to be factored into such work, and which make (at this stage at least) precise calculations difficult. Factors to be taken into account include the following considerations, set out in Table 3.2 below:

Area of complexity	Considerations
Limited forward planning timescales of many infrastructure providers	Many infrastructureservice providersonlyplan on a 3-5 years' time cycle. Others such as some of the utility providers tend to react only when proposals are at the planning application stage because of a lack of certainty in housing delivery. This has obvious limitations in terms of planning aheadwithinthe local plan timeframe of 2036. Emphasis has therefore been on ensuring a detailed understanding of infrastructure requirements for early phases of plan delivery in the knowledge that further work will be needed to inform requirements for later phases
The changing and short term nature of funding programmes	Most of the national funding programmes identified in the IA have been established within the last 5 years. All are relatively short term, covering at most the next 5 years (e.g. Local Growth Deal, Roads Investment Strategy, Housing Infrastructure Fund)
Lack of responsiveness by some infrastructure providers	Some providers have been reluctant to provide a response to requests for information on infrastructure needs, often because of resource constraints, but also in some instances because they fail to fully appreciate the value of good infrastructure planning. The City Council will continue to engage with these providers
New ways in delivering infrastructure in the future	Infrastructure delivery is a constantly evolving process. For instance, a move away from delivering secondary care from large district hospitals towards more community based provision is having fundamental consequences for health infrastructure planning
Changing demographics	Demographic changes have a major impact on infrastructure planning. Many of these are well known, such as the needs of an increasingly aging population and (for the moment at least) rising birth rates. These and other factors show that infrastructure planning is not about growth alone, but also other critical factors relating to the City as a whole

Table 3.2: The complexities of infrastructure planning

Climate Change and how this is reflected in the IA

3.3 There are no specific measures identified currently in the IA that can specifically be considered to be directed at combatting climate change, although this issue can increasingly be expected to influence infrastructure planning and delivery.

3.4 In July 2019 the then Prime Minister Theresa May announced the introduction of legislation to eradicate the UK's net contribution to climate change by 2050, following advice from an independent advisory body, the Committee on Climate Change (CCC).

3.5 The end year of the Local Plan (2036) is just beyond the midway point towards this commitment. Although its impact can therefore increasingly be expected to be felt on both land use planning and infrastructure planning and delivery, the precise impact is not yet entirely clear for all the individual elements covered in this Assessment.

3.6 Notwithstanding this the areas we can anticipate some changes, and these are likely to be in the following areas:

Infrastructure area	**Potential impact**
Utilities - energy	The overall impact is likely to be significant if the CCC's recommendation for no new homes to be provided with gas grid connections by 2025 and therefore there will be the gradual elimination of gas as a form of heating. This may be balanced by the need for additional reinforcements of the electricity supply network. Although there will certainly be radical shifts in the way in which power is generated (away from fossil fuels such as gas and coal towards renewables such as solar and wind) the power generated appears likely to require the same grid networks The same is true of any prospects for increased power secured through micro generation; although this can be operated independently off grid, for a while at least (to ensure backup and allow for financial compensation for excess power generated) a hook-up the grid is likely to be required. Improved battery and other technological developments may however change perspectives over time
Flood risk prevention	Although more a response to the impact of climate change than a measure to reduce its impact, an increased focus on this issue can be expected as the impact of continued global warming are faced
Potentially all infrastructure areas	Reduced car usage; this can be encouraged in one of two ways. Firstly, improved public transport infrastructure could encourage modal shift away from the car, but equally could ensure uses - including public services and the associated infrastructure needs - are located closer to established public transport networks; this may reduce the need for highway investment particularly in the Plan's later years, but it may require the nature of service related infrastructure to change – e.g. by encouraging services to share premises. The second area is potentially even more significant – reducing or indeed eliminating the need for travel to use public services. This is clearly limited in some areas, but is potentially significant in time in others, involving the use of AI and digital media to allow for instance 'remote' access to services – to a doctor perhaps but also a teacher or sports centre worker; or allow the distance monitoring of patients receiving care in their own home. This could have a significant impact on transportation infrastructure, but it could equally have impacts on other services; if GPs are increasingly holding 'virtual' surgeries for an increasing number of their patients, to what extent can they dispense with clinics that are expensive to establish and operate?

Table 3.3: Some thoughts about the possible long term impact of combatting climate changes on infrastructure provision

Biodiversity and the Infrastructure Assessment

3.7 The infrastructure implications of biodiversity within new development will be an important facet of the Infrastructure Assessment, as specific requirements to enhance biodiversity will emerge as the Environment Bill 2019 moves towards the statute book.

3.8 The key drivers of this are as follows:

- the Environment Bill (issued July 2019) which seeks to ensure that all new development produces an overall increase in diversity in both animal and plant life
- the new PPG on the Natural Environment (also July 2019) which details how net gains in the natural environment will be delivered

3.9 The most critical aspects of these requirements are as follows:

Key Aspect	Implications
There is a strict hierarchy associated with increasing diversity with new development	The hierarchy will operate as follows: provide the increased diversity on site if at all possible; If this is not feasible, provide in the local area; and only then, if no such sites are available, provide via the use of a government approved list of UK sites
Increasing diversity can follow a range of forms	This could involve creating of new habitats or enhancing existing habitats, or through measures such as green roofs, green walls, street trees and SuDs
Measures should add genuine benefits	It will not be sufficient to follow measures which simply mitigate habitat loss – there needs to be a demonstrable and measurable increase in biodiversity, and local planning authorities need to ensure this
There is a measurable increase in biodiversity required	This is that developers should provide a 10% net biodiversity gain
Authorities need to underpin these requirements with guidance	There is a requirement for them to produce 'Nature Recovery Strategies'
Gains must be enduring	Developers must guarantee "net gain" for 30 years; local authorities must oversee
There is the option for developers to purchase 'biodiversity units' if they can't enhance biodiversity locally	This will enable a unit cost of biodiversity enhancement to be established

Table 3.4: Implications of proposed new development based biodiversity enhancements

Implications for biodiversity in the Infrastructure Assessment

3.10 If developers are able to secure infrastructure enhancements within their development this will be a development cost (in the same way as internal estate roads and on-site play provision are) and will not feature in the Infrastructure Assessment (although there may be the same viability considerations that will apply to other infrastructure such as school places and transportation impact mitigation as if biodiversity enhancements are met offsite).

3.11 If biodiversity enhancements are met outside of the development site locally, or on a government approved site if this is not possible, and/or the developer purchases biodiversity units, we think this should feature within the Assessment, much in the same way as we calculate cost contributions to school places.

3.12 It is not possible at present to calculate the scale of these costs as Defra has yet to provide any guidance on calculating this (some authorities e.g. Warwickshire County Council have produced a Biodiversity calculator, an Excel based system for rating a range of 66 habitat types on their distinctiveness, condition and value) but this is not cost based.

3.13 When Defra guidance and the legislation is in place (and if further work can be done on assessing key growth locations in particular to determine the extent to which they have habitats of biodiversity value, with a calculation as to the proportion that would need to be offset) it should be possible to be able to address biodiversity infrastructure costs in future iterations of this Assessment.

Unmet needs and cross boundary issues in the IA

3.14 There are a number of considerations relating to the Infrastructure Assessment in relation to both unmet needs and cross boundary issues. For confirmation, 'unmet needs' is that growth generated within the City of Leicester which it is judged not possible to deliver within City boundaries, and cross boundary issues relate to infrastructure planning and delivery which is not confined to the City but which reaches across administrative boundaries to the districts adjacent to the City and in some instances those beyond.

3.15 That these need to be considered are testament to the fact that the City does not operate in isolation but has a critical relationship with adjoining areas in regard to infrastructure provision (as it does in many other areas).

3.16 The four critical considerations in relating to this in the Assessment are as follows:

- a number of public infrastructure providers are not confined to operating solely in the City but cover a much wider area (and may not make any distinction between infrastructure need and delivery in the City and infrastructure need and delivery elsewhere)
- in many instances the users of Leicester's infrastructure are not confined to City residents (and, equally, Leicester's residents make use of services outside the City)
- in addition to development that fringes the city there are several Sustainable Urban Extensions being planned and delivered adjoining or close to the City boundary which will have an impact on service provision in Leicester
- the significant quantum of Leicester's unmet needs to be delivered outside of the city

Infrastructure providers not specific to the City

3.17 There are a number of such providers including the utility companies and the emergency services; the former provide services to a region whilst the latter cover Leicestershire and Rutland. It is not always possible to distinguish between wider needs, but we assess the specific infrastructure implications for Leicester for these services as far as is feasible.

3.18 A significant area of infrastructure provision not confined to Leicester is healthcare. Although Leicester City CCG covers just the City it is one of three covering Leicestershire and Rutland; all three are involved in co-commissioning services and, specifically, the secondary healthcare investment strategy involving the three Leicester located hospitals; this is because these hospitals provide the bulk of secondary healthcare provision for the wider area. The secondary healthcare needs identified in the Assessment and the Schedule are for a wider area, but we do not think it appropriate to make any distinction between Leicester and its hinterland in seeking to apportion needs.

3.19 In terms of primary healthcare and the Primary Healthcare Strategy - which we cover in Chapter 8 - this relates to Leicester only (although as we note below, a significant number of people on Leicester GP's list live outsider of the City. Again, this is something that is factored into infrastructure planning.

Wider use of Leicestershire's services from residents beyond the City

3.20 There appears to be widespread evidence of non-City residents accessing City services; we have for instance been advised that around 8 – 9% City library use is by non-City residents, linked it seems with a reduction of library services provided by the City Council. Around 60,000 non-City residents appear to be on Leicester GP lists. In contrast, around a sixth of secondary age Leicester pupils attend schools beyond the City boundary.

3.21 We make no judgement about this across boundary use of services; it is a phenomenon that can be observed with every large settlement and its hinterland and it is something that service providers typically plan for, so the impact is factored into our Assessment.

Developments being planned and delivered immediately beyond the city boundary

3.22 There are several well-established proposals in the form of Sustainable Urban Extensions, with major proposals of over 1500[2] dwellings as follows:

District/Site name or location of SUE	Delivery Dates	Dwelling numbers	Proposed development
Blaby DC/ New Lubbesthorpe	2017 – 2030s	4250 (incl. 800 affordable)	District Centre (retail, commercial, employment & community use); 2 x Local Centres (retail, community, leisure); 1 x 2FE Primary school with playing fields; 1 x 3FE Primary School with playing fields 1 x 5FE secondary school with 6th form, community facilities and playing fields; health centre
Charnwood BC/NE of Leicester (Thurmaston)	To beyond 2028	4500 including c30% affordable	District centre (retail (incl foodstore) with commercial employment and community use) 2 x Local Centres; 1 x 1FE and 2 x 2FE primary schools with playing fields, 1 x 5FE secondary school with 6th form; health centre; reserve site for gypsies and travellers
Charnwood BC/N of Birstall	To beyond 2028	1500 including c30% affordable	Garden suburb with 1x Local Centre (incl small supermarket and local shops), new 2FE primary school, a community centre and other local facilities

Table 3.5: Current major development proposals of over 1500 dwellings adjoining Leicester

[2] There is also the Scraptoft North Strategic Development Area (Harborough DC) – 1200 dwellings

3.23 As can be noted from the table, these proposals are being developed with a range of supporting infrastructure, and this will go some way to alleviating and pressures on adjoining areas of the City.

Infrastructure requirements associated with the City's unmet needs

3.24 The Local Plan identifies around 7742 dwellings of the City's housing growth requirements will be met outside of the City. The City Council intends to work with local authorities in the Housing Market Area (HMA) to agree the spatial element of these unmet needs.

3.25 Depending on how the adjoining authorities accommodate their allotted proportion of unmet needs within their Local Plan housing targets and progress these allocations spatially within their individual and emerging Local Plans, later iterations of the Infrastructure Assessment may be able to say more about the infrastructure requirements of such growth and its impact on the City.

4. Local Plan Development Strategy and the Characteristics of Future Growth

Detailed Infrastructure requirements for major growth locations within the IA

4.1 The next iteration of the IA will specify infrastructure requirements associated with growth in the Plan's major development sites, which have been identified as follows:

- the CDA
- General Hospital
- Western Golf Course
- Ashton Green East
- Land North of A46
- Land West of Anstey Lane

4.2 We will undertake a similar assessment for growth within the non-strategic /non CDA parts of the City, which will be divided into the following quadrants: Inner Area; North East; South East; South; West; and North West.

5. Transport

5.1 An assessment of transportation infrastructure is being undertaken separately from the IA. It is however following the same methodological assessment of future infrastructure need and the Transport Assessment and IA will be entirely compatible.

5.2 At an appropriate point in the future – after the publication of the Regulation 18 version of the Local Plan and its supporting evidence base and following a review of consultation responses to those documents – appropriate elements of the TA will be merged with the IA to form a document which considers the entire range of Plan related infrastructure needs.

5.3 We have however taken the overall costs of future transportation investment identified over the Plan period within the Transportation Assessment and included it in the IDS, although we have not been able to profile this.

6. Education

6.1 This chapter considers:

- what is covered in education related infrastructure
- who provides education services, both now and in the future
- the overall position in terms of education provision in Leicester (this also covers the relationship with adjoining authorities)
- what future education need is likely to be over the Plan period to 2036 (in terms of both school places and, by extension, new and expanded schools)
- how we anticipate education infrastructure will be funded and delivered
- any associated factors that might influence any of the above

Education provision – what is covered

6.2 It is worth prefacing this section by noting that there is a single Local Education Authority (LEA) covering the City, with boundaries contiguous with the Local Plan, although as noted below there is a high degree of interrelationship with the adjoining LEA, Leicestershire, which oversees education provision immediately beyond the entire City boundary.

6.3 The IA explores five specific areas[3]:

- Early Years
- Primary Education
- Secondary Education
- Education for 16 – 18 year olds
- Specialist Education (otherwise known as SEND[4] education)

Early Years

6.4 This covers education provided from children aged 0 – 4. The 2006 Childcare Act placed a duty on LEAs to ensure there is enough childcare provision for parents who wish to access such services; the Childcare Act 2016 provided a specific entitlement to childcare support for working parents of young children, and from September 2017, 30 hours of free childcare for 3 – 4 year olds of parents who meet certain criteria including exceeding a minimum number of working hours and are below a maximum salary band (This is known as FEEE – Free Early Education Entitlement). There is also an additional entitlement in certain circumstances for 2 year olds.

[3] Education continues beyond the sixth form in terms of further, higher and adult education, but this is non statutory and elective education and is not covered within this Infrastructure Assessment
[4] Special Education Needs and Disability

6.5 Free entitlement to early years education is met by a variety of means – through formal arrangements such as schools with attached nurseries, day nurseries and pre-school clubs but also through childminders; provision can be provided by public bodies but also by the private, voluntary and independent sector.

6.6 The Infrastructure Assessment makes a calculation of the likely costs of future need, accepting that there are a wide range of providers who will deliver such need (some of which is privately provided and therefore do not form part of this Assessment). It also considers the issues around participation rates, taking into account the fact that early years education is not compulsory.

Primary Education

6.7 Traditional primary schools have 7 year groups, from Reception through to Year 6 for pupils aged 4 - 11. It is important to note that not all primary education may be received in schools specifically covering the ages 4 – 11 only; there are in Leicester "all through" schools (for ages 4 – 16). We use the traditional primary school format for calculating pupil yield (the numbers of new pupils that can be anticipated for any given scale of education) as this is a calculation that can be expected to differ from the yield for secondary and other age groups; other metrics such as cost of education per pupil will differ also.

Secondary Education

6.8 Traditional secondary schools have 5 year groups (Years 7 – 11) plus (if provided) a Sixth Form covering Years 12 and 13. As noted below, not all pupils will stay on to complete their education in a Sixth Form. This is factored into yield calculations.

16 – 18 Provision

6.9 Not all schools provide Sixth forms, and although there is a requirement for pupils to stay in education and training until they are 18[5], they do not have to attend a Sixth Form (there is considerable movement on to Further Education establishments).

Specialist Education (Special Education Needs and Disabilities or SEND)

6.10 This is both a growing issue and a focus for increased provision both nationally and for Leicester, with both a heightened requirement for and commitment to deliver specialist education to children and young people who have additional needs. Separate to this is the need to provide schooling for those who do not find it easy to integrate into mainstream schools; this is known as alternative provision.

6.11 In Leicester, the incidence of statemented pupils is growing at a rate that can only be partially attributed to population growth. As a consequence, the LEA is investing heavily in SEND provision.

Children, Young Persons and Family Centres

6.12 Reference needs to be made to the City's Children, Young Persons and Family Centres, established under the Sure Start programme, and which bring together a wide range of

[5] Some pupils with SEND requirements have an Education, Health and Care (EHC) Plan which can be in place until they are 25

support for the families of young children. Services provided include health visitors, midwives, Jobcentre Plus advisors, family support workers and speech and language therapists.

6.13 As of 2016 such services are provided in a total of 23 locations in 6 discrete localities covering the city. Although these are well established, nationally there has been an overall decline in provision over the austerity years. Further additional provision has not been identified in Leicester's current 0 – 5 Strategy and we have therefore assumed no future increase in the number of establishments and therefore no additional physical infrastructure requirements within this Assessment.

Who provides education services, both now and in the future

6.14 Whereas historically local educational authorities had extensive control over the planning and delivery of education services within their area, some of these responsibilities have now been removed. LEAs can no longer build schools; most school budgets are operated by the schools themselves without LEA input; and schools in most categories are their own admission authorities. Critically, the LEA has no powers to require an academy or free school to expand, and academies have the right to increase their Pupil Admission Numbers without consulting the LEA (although they must notify them).

6.15 The LEA continues to maintain a number of schools[6] (57% of the City's primary schools and 26% of its secondary schools) but this role is a gradually diminishing one (3 secondary schools passed from maintained to academy status during 2018/19). This is part of a concerted move by successive governments to create a school led, self-improving education system with a significant degree of national support including significant funding for new education infrastructure.

6.16 Like others across the country, the Leicester LEA does however retain a number of important responsibilities, all of which have implications for infrastructure planning. These are:

- its wide-ranging duty to improve the wellbeing of young children, and reduce the inequalities that affects young people's lives, which includes education services
- its requirements to ensure that there are sufficient childcare places available in Leicester for every eligible two, three and four-year-old to access their free childcare entitlements every week
- a more general responsibility (in fact its responsibility alone, as set out in the 1996 Education Act) to make sure that there are enough school places available in Leicester for all the City's children and young people, a challenging task in circumstances where the school population is growing, particularly given that LEAs

[6] These can be either community, faith or foundation schools

have no longer any physical ability to address issues themselves by building or expanding schools to meet any shortfall[7]

- a responsibility for leading the presumption process, the main route by which local authorities establish new schools in order to meet the demand for new places, both in terms of the basic need for new places but also to ensure sufficient diversity of provision within their area
- in leading the presumption process for new schools, determining the specification for any new school, and leading and implementing the process by which the new school is established
- the provision of land and capital funding for any new school
- the co-ordination of all Leicester's school admissions during the normal rounds at the start of primary and secondary school, even for those schools who are their own admission authorities. This means that parents apply through the council on a common application form and have three to six choices typically, including for schools that are their own admission authorities

6.17 The LEA expects that all new schools established in Leicester will be academies that will be established as Free Schools[8], as all recent or soon to be established schools in the City have been.

6.18 Created by the Academies Act 2010, Free Schools are:

- non-profit-making, independent, state-funded schools which are free to attend
- subject to limited local authority control, allowing them greater independence over how they operate
- not required to follow the national curriculum, although they must offer a broad and balanced curriculum and are subject to the same Ofsted inspections as other schools
- provided with other powers, such as setting their own pay and conditions for staff, and managing the length of the school term and the school day
- "all-ability" schools, meaning they can't use academic selection processes

6.19 Free Schools provide a way for groups of parents, teachers, charities, existing schools or other organisations to respond to a need for a new school in their community – whether for extra places, to raise standards or to offer greater choice. They can be primary, secondary, all-through or 16-18, and can open specifically for children with special educational needs or those who struggle in mainstream schools and need alternative provision.

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[7] There are however a range of checks and balances in place to ensure all state schools respond proactively and not unreasonably to ensuring there are school places for every child; all schools and admissions authorities are bound by the government's Statutory Admissions Code and if there are any concerns about the fairness of a school's admissions practices, complaints can be made to the Office of the Schools Adjudicator. Councils have a statutory duty to raise with the Schools Adjudicator any concerns they have about the admission policies of schools in their areas. Additionally, LEAs are required to agree a Fair Access Protocol - binding on all local state schools - to place children who are finding it hard to find a school place, have been excluded from school or are new to the area, and a defined means of dealing with perceived unfairness in continued exclusions

[8] All Free Schools are officially Academies, although not all Academies are free Schools. The latter were first established after 2000 and then greatly expanded in numbers following the 2010 Academies Act, which also ushered in Free Schools. Although funded in the same way many Academies are existing schools which transfer out of local authority maintenance, whereas all Free Schools are newly established as such

6.20 New schools can have a faith related ethos but must follow what is known as the "50% Rule", established when free schools were introduced in 2010. This stipulates that where newly established Academies with a religious character are oversubscribed, at least 50% of their places must be open places, i.e. allocated without reference to faith.[9]

6.21 It is only possible to establish a Free School after applicants have been submitted to a rigorous and exacting process. Applicant groups have to demonstrate to the Department for Education that:

- they have excellent educational expertise
- there is a strong team in place capable of governing a school responsibly
- there is demand for the school in their community
- there is a detailed education plan that will meet the needs of the proposed students

What the overall position is in terms of education provision in Leicester (this also covers the relationship with adjoining authorities)

6.22 The most up to date statistics identify education provision within the City as follows:

Early Years provision (0 - 4 years): a total of 392 establishments provide early years education, as follows:

Type of Provider	Total number as of 15/16 academic year	Note
Private/Voluntary and Independent (PVI) provision	131	130 of these provide FEEE places for 3 – 4 year olds, with 102 providing FEEE places for 2 year olds
Childminders	188	55 of which provide FEEE places for 3 – 4 year olds with 43 providing places for 2 year olds
Primary Schools with early years provision	73	65 of which provide FEEE places to 3 – 4 year olds with 7 providing FEEE places to 4 year olds only
Total	**392**	

Table 6.1: Early years providers in Leicester as of 2015/2016 (Source: Leicester's 0 - 5 strategy 2016 – 2019)

. **Primary school provision (4 – 11)**: a total of 115 primary schools[10] are operating in the City as follows:

Type of Primary School	Total number as of 18/19 academic year	Note
Maintained	63	Government funded and run by a local authority
Academy/Free School	32	Government funded but run by an academy trust rather than a local authority
Special School	7	Schools that specialise in educating pupils with special educational needs.
Independent	13	Privately run and funded
Total	**115**	

Table 6.2: Primary schools in Leicester as at 2018/19 (Source https://www.compare-school-performance.service.gov.uk/)

[9] This rule does not explicitly prevent such schools having a greater than 50% faith affiliation, as the open places established by this rule are open to faith and non-faith applications

[10] Not all of these will be traditional primary schools confined to Reception and Academic Years Reception – 6

Secondary school provision (11 – 16): a total of 34 secondary schools are operating in the City:

Type of secondary School	Total number as of 18/19 academic year	Note
Maintained	9	Government funded and run by a local authority
Academy/Free School	10	Government funded but run by an academy trust rather than a local authority
Special School	6	Schools that specialise in educating pupils with special educational needs.
Independent	9	Privately run and funded
Total	**34**	

Table 6.3: secondary schools in Leicester as at 2018/19 (Source: https://www.compare-school-performance.service.gov.uk/)

16 – 18 year old education provision: there are 17 education establishments providing education for 16 – 18 year olds:

Type of Primary School	Total number as of 18/19 academic year	Note
Maintained	4	Government funded and run by a local authority
Academy/Free School	2	Government funded but run by an academy trust rather than a local authority
Special School	4	Schools that specialise in educating pupils with special educational needs.
Independent	2	Privately run and funded
Colleges	5	Generally these are focused on the 16 to 18 phase of education and provide vocational as well as academic courses
Total	**17**	

Table 6.4: 16 – 18 educational establishments in Leicester as at 2018/19 (Source: https://www.compare-school-performance.service.gov.uk/)

6.23 In recent years there has been considerable investment in education services to increase the number of school places, respond to changing educational needs (particularly in relation to SEND provision), improve overall quality (e.g. through the provision of specialist facilities such as music/arts facilities or science laboratories) and enhance the quality of the education estate. It is important to identify these changes as these investments should be considered alongside any requirements for additional investment responding to growth related needs, should any need be identified.

6.24 There are also a number of cross boundary considerations in relation to education infrastructure, particularly given the extent of development taking place immediately beyond the City boundary, the provision of new schools within such areas, the interplay between such schools and nearby schools within the City and the ability of pupils to make choices about attending schools outside their LEA if there is a place for them to do so.

Current investment proposals to improve/extend education provision in the City

6.25 Before we focus on future growth related need we need to examine current education issues relating to the City. Aside from the transformative changes to the way in which education is delivered in Leicester, the following 4 factors are significant:

- a continued need to ensure that the childcare market provides a sufficiency of places to meet early years education needs – and specifically, each child's entitlement to FEEE
- the need for more primary school places in response to recent rises in demand
- the need for more secondary school places, also in response to recent rising demand
- the need to extend SEND provision in response to a recognition that this type of education needs to be offered to an increasing proportion of the City's pupils

6.26 In response to such factors, the City Council has taken the following actions (or has supported them):

Date	Action	Notes
Sept 2011	Opening of the 428 place faith based Krishna Avanti Primary School	Located in Evington
Nov 2016	Decision to expand a total of 8 existing secondary schools[11] to provide a total of 2500 new school places plus improved facilities	
Nov 2017	Decision to fund 1,000 new primary school places between 2016 – 2020 in response to rising school numbers	Combined cost £60.6m
Nov 2017	Decision to fund the creation of 3,400 new secondary places between 2016 and 2020 in response to rising school numbers	
Sept 2018	Opening of the new 1372 place Avanti Fields School to provide a 4 – 16 faith based academy	Permanent home will be in Hamilton
Sept 2018	City identifies more places for children and young people in specialist places for September 2018, and an increasing need for places over the next 5-7 years as the school population increases overall. 58 places were created at five specialist places in the year 2018/19 in a Stage 1 programme, with more places within a Stage 2 programme for the period to 2025	Secured under the government's £215m Capital Fund for Local Offer to help local authorities create new school places and improve existing facilities for children and young people with SEND
Nov 2018	Applications made for 8 new secondary/all-through schools in Wave 13 of the government's free schools programme	These are Avanti Green, Avanti Leicester, Beauchamp City Free School, Brook Mead Academy, Falcons Academy, The Khalsa Academy Leicester, Tree Academy Boys and Tree Academy Girls
Sept 2019	Castle Mead Academy, a non-selective secondary school opens	
Sept 2020	Beauchamp City Sixth From (350 places)	
Sept 2021	Leicester Metropolitan Academy, a 1200 place secondary school for 11 – 16 years olds	On former Abbey Park Bus Garage
Sept 2023	Brook Mead Academy due to open	To offer 420 primary, 900 secondary and 52 nursery places
Sept 2023	Lion Heart School Ashton Green due to open	1200 place primary school

Table 6.5: City Council action (or support for such action) school place provision 2011 onwards

[11] These are Babington Academy, Crown Hills Community College, Judgemeadow Community College, Rushey Mead Academy, English Martyrs Catholic School, City Of Leicester College, St Paul's Catholic School, and Soar Valley College

6.27 Data taken from the DfE's School Places Scorecard shows how overall the City is responding to the challenges posed by additional school place needs:

Primary Education	
Scorecard Measure	**Measurement**
Growth in pupil numbers 2009/10 – 2020/2021	36%
School place capacity May 2010	27,385
School Place capacity May 2018	34,515
Increased capacity 2010 – 2018 (%)	7130 places (36%)
No of new places planned for delivery 2018/19 – 2020/21	327
Estimated number of places needed to meet delivery in 2020/21	330
Percentage of offers made to applicant's top 3 preferences	97.1%
No. of permanent expansion projects	5
Secondary Education	
Scorecard Measure	**Measurement**
Growth in pupil numbers 2009/10 – 2020/2021	30%
School place capacity May 2010	20,756
School Place capacity May 2018	20,655
Increased capacity 2010 – 2018 (%)	(-0.4%)
No of new places planned for delivery 2018/19 – 2020/21	1740
Estimated number of places needed to meet delivery in 2020/21	1080
Percentage of offers made to applicant's top 3 preferences	95.3%
No. pf permanent expansion projects	0

Table 6.6: Key data from Leicester School Places Scorecard 2018

Extending Early Years provision and meeting future need

6.28 To explore this in further detail we need to examine how early years provision is met at present. The Childcare Act places a statutory duty on all local authorities to regularly undertake a detailed analysis of the childcare market, and so the City Council's latest Childcare Sufficiency Assessment, published in 2016, provides evidence on this[12].

6.29 The Sufficiency Assessment provides a wealth of information on early years supply and demand, including spatial distribution of provision which provides data on local surplus/deficit in 6 discrete areas of the City (which are amalgamations of wards and which correspond to Children Young Persons and Families locality groupings).

6.30 For the purposes of the Assessment we need to consider the current numbers of early years attendees at the various forms in which such facilities are provided as we can then extrapolate this to determine the public infrastructure that will be provided. The reason for undertaking this assessment is as follows:

- although all new primary schools and all through schools are expected to include a nursery, the childcare market within Leicester has always been strong, with families free to access a varied model of provision including full day care provision, sessional pre-school provision, childminders and early years provision within primary and academy primary schools; we have assumed the wish will be for these arrangements to continue in future

[12] We understand this is being updated in a new Childcare Sufficiency Assessment which will be published later in 2019; if so, the data contained in this section can be updated

- we have made the assumption that in terms of childminders, all those who provide such a service will not require bespoke premises to deliver such services and therefore no public capital would be involved (this becomes purely a revenue transaction between parent and childminder - or state and childminder where FEEE is involved - which is outside the scope of this Assessment)

- we have also assumed that the PVI sector will not require publicly funded premises to deliver their services

- the public infrastructure funding element of future early years provision is therefore concentrated on the early years provision which is delivered in primary schools, so to calculate the costs of growth related provision we need to determine the proportion of such provision delivered by such means

- we also note that there is a small but varied and dedicated out of school care market which includes before and after school clubs, breakfast clubs and holiday care, with some additional out of school provision delivered through some PVI sector providers and local childminders; we have assumed that such provision will make use of the available educational space outside of usual school hours[13].

Provider Type	2 – 3 year old places (%)	3 – 4 year old places (%)
PVI	3778 (95%)	6850 (44%)
Childminder[14]	194 (5%)	217 (1%)
Primary Schools	-	8417 (55%)
Total	**3972**	**15484**

Table 6.7: Early years places per sector. Source: Leicester Childcare Sufficiency Assessment 2016

6.31 Taking all the above factors into account we propose that 45% of all early years costs associated with new provision for 3 – 4 year olds will need to be met by state education provision attached to the City's primary schools; most of this likely to be within any new primary schools required consequence of growth. However, as noted below, this additional need may be extremely limited to the point where no new or extended schools are required in the foreseeable future. We will return to this issue below.

Planning for growth related education provision (new and extended schools)

6.32 There are two critical factors relating to the provision of new school places:

- the number of new school places that new development could be expected to give rise to

- the extent to which it is necessary to plan for such places, when availability of school places within such schools to meet such demand is factored in

[13] There is also a small amount of SEND early years provision, but we think that this is not significant enough to feature in this assessment

[14] Childminders who provide FEEE

Planning Pupil Yield to establish future education infrastructure need

6.33 In assessing overall long term school place need, it is possible to apply what is known as the Pupil Yield' – the number of school age children in a typical new development of, say 100 new homes (adjustable according to housing type) to make some broad assumptions which can be translated into future school places required across the entire Local Plan period in circumstances where there is no capacity.

6.34 This is an approach advised by government and used by many LEAs[15] to calculate the needs and costs of providing education in response to projected housing growth, primarily as a basis for negotiations with developers to secure contributions to such provision through planning obligations where such contributions are sought.

6.35 We have made the following assumptions in terms of such yields:

Sector	Pupil ratio per house (2 bed +)	Pupil ratio 2 bed flat	Pupil ratio 1 bed flat
Early Years (2 – 4 year olds)	0.34	0.075	None
Primary (4 – 11 year olds	0.281	0.062	None
Secondary (11-16 year olds)	0.03	0.06	0.06
16 – 18 year olds	0.033	0.007	None
Primary (SEND Schools)	0.00363	0.0008	None
Secondary (SEND Schools)	0.004	0.0009	None

Table 6.8: Pupils ratios we have identified to assess future infrastructure related needs (Sources: various, see subsequent text)

6.36 Some explanation is required of table 6.10:

- government advice is that pupil yields should be calculated on the basis of up to date evidence
- the ratios enable the calculation of the numbers of school places likely to be generated by any given future development of any given mix. Thus, for instance, the calculations set out in Table 6.10 are that development of 100 family homes could be expected to generate 28 primary age children, nearly 21 for secondary aged children, and so on
- the primary and secondary yields rates are those calculated by the City Council using live evidence from recent housing completions
- in terms of 16 – 18 education and primary and secondary SEND schools we are unaware of any ratios developed by the City Council, so have utilised those calculated by the Leicestershire LEA
- finally, in terms of Early Years the City Council does not appear to have calculations for yields; we have examined 5 Midlands LEAs who have undertaken this calculation and have utilised the median example, that being the yield used by Northamptonshire
- we propose to apply this arrangement to all schools falling into such categories, whether traditional primary and secondary schools, 'all through' schools, maintained

[15] The government is working on a detailed methodology for robust calculation of pupil yields but to date this has not been published

schools and academies and both those with or without 16 – 18 provision, as although the precise nature of education may vary between schools, we would expect pupil yields to be more or less constant

6.37 The next task is to cross reference these ratios with an appropriate development mix, so that yields reflect the likely composition of new development over the Plan period[16]. This is on the assumption that whilst individual schemes will have a variety of mixes, it should be possible to derive an average mix for the purposes of calculating school place estimates. Our development mix assumes 70% family dwellings, 15% 2 bed flats and 15% 1 bed flats. (As has been noted in Table 6.8, yield calculations for flats are much lower than those for new houses – in fact they are zero for 1 bed flats).

6.38 Taking this mix and applying it to the yields we have identified in Table 6.8 we propose an overall pupil yield for a typical mix of 100 dwellings[17]:

Education category	Pupil Yield/100 dwellings
Early Years (2 – 4 year olds)	26.63
Primary (4 – 11 year olds)	22.08
Secondary (11 - 16 year olds)	4.00
16 – 18 year olds	3.41
Primary (SEND Schools)	0.28
Secondary (SEND Schools)	0.31

Table 6.9: Pupil Yield per notional 100 dwelling scheme based on 70% houses/30% mix of 1 and 2 bed flats

6.39 The next stage is to cost each of these categories. Here we have applied the City's own calculations to 5 of the 6 categories listed above, which in turn are based on cost matrices for new school capital costs across these categories produced annually by EBDOG[18]; for Early Years we have used the Northamptonshire cost calculations[19].

6.40 We then factor in our calculation that only 45% of early years infrastructure is provided in schools and is therefore a public infrastructure cost. Still working with the notional 100 dwelling development identified above and multiplying pupil yield with pupil cost, we arrive at the following calculations:

Education Category	Pupil Yield/100 dwgs	Cost/pupil (£)	Cost/100 dwgs (£)
Early Years (2 – 4 year olds)	26.63	5,509[20]	146,700
Primary (4 – 11 year olds)	22.08	14,592	322,200
Secondary (11-16 year olds)	4.00	17,876	71,500
16 – 18 year olds	3.41	19,327	65,900
Primary (SEND Schools)	0.28	54,445	15,200
Secondary (SEND Schools)	0.31	83,707	26,000
Total cost of education provision/100 dwelling scheme			**647,500**

Table 6.10: Total cost of educational provision on a notional 100 dwelling scheme. Figures rounded

16 We have assumed a different mix for the CDA, as set out in paragraph 6.54

17 Note however that it is our intention to provide a different mix to the Central Development Area (see below)

18 The Educational Building and Development Officers Group (EBDOG), an advisory group comprising Local Authority Officers and property professionals who are responsible for effective asset management of school and other premises within their own Local Authority. These figures are based on their February 2018 cost matrix

19 An alternative would be to derive these figures from the government produced Annual School Places Scorecard, which computes annual cost of additional mainstream place calculated from the local authority's reported projects, but the latest figures do not contain an entry for secondary schools so we have chosen to use the EBDOG figures (which are in fact very close to the Scorecard figure)

20 Total cost is £12,242 per pupil; the figure here is 45% of that

Calculating total school places (and potential new schools)

Specific issues in calculating early years provision public infrastructure costs

6.41 Our calculation made earlier in this chapter is that around 45% of early years provision eligible for FEEE is met by primary schools, and which therefore is a public infrastructure funding cost. The remaining provision is met by PVI providers or by childminders, some of which provide FEEE places. We have assumed from our calculations that the proportion will remain unchanged when the implications of growth over the Plan period are factored in.

6.42 Participation rates are an issue in relation to early years. In Leicester rates are currently good for both 3 year olds (91%) and 4 year olds (c100%) although lower for eligible 2 year olds (60%), which may reflect the lack of FEEE entitlement at the time of calculation in 2016[21], although it is also likely to be affected by parental preference. Current participation rates are reflected in the pupil yields we have established but increased future take-up by the 2 year old cohort would push up these yields.

6.43 To calculate the total numbers of school places required over the Plan period we need to set pupil yields against the growth profile we have identified in Chapter 4. We will undertake this within a series of Tables (tables 6.11 – 6.15 below).[22]

6.44 The first profile overleaf identifies new school places identified by the growth figures for the city set out in two 5 year and then one 7 year tranches, as shown in Chapter 4.

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[21] 2016 figures taken from Leicester's 0 – 5 strategy (2016). This predates the increase in entitlement for 3 year olds and some eligible 2 year olds introduced in September 2017

[22] A potential caveat we would put on these figures is that for the past 3 years we have witnessed a significant decline in the birth rate – part of a national phenomenon – which in the short term will depress demand for new school places. Birth rates have historically shown peaks and troughs over time and in the long term can be expected to rise again raising demand. On balance we consider we should assume that growth will need to secure al the pupil yield related infrastructure we have described, although this is something that needs to be kept under review

Table 6.11: Pupil Yields associated with Local Plan Housing Growth 2019 – 2036: general

	2019 - 2024	2025 - 2029	2030 - 2036	Total
Early Years (2 – 4 years) - Pupil Places				
Growth Areas	737	511	750	1998
Windfalls	200	200	280	680
Non CDA/Non-Strategic	39	249	103	391
Total (Early Years)	**976**	**960**	**1133**	**3069**
Primary (4 – 11 years) – Pupil Places				
Growth Areas	611	424	621	1656
Windfalls	166	166	231	563
Non CDA/Non-Strategic	32	206	85	323
Total (Primary)	**809**	**796**	**937**	**2542**
Secondary (11 – 16 years) – Pupil Places				
Growth Areas	70	49	72	191
Windfalls	19	19	27	65
Non CDA/Non-Strategic	4	24	10	38
Total (Secondary)	**93**	**92**	**109**	**294**
16 – 18 Year Olds – Pupil Places				
Growth Areas	94	65	96	255
Windfalls	25	25	36	86
Non CDA/Non-Strategic	5	32	13	50
Total (16 – 18 Year Olds)	**124**	**122**	**145**	**391**
Primary (SEND) – Pupil Places				
Growth Areas	8	5	9	22
Windfalls	2	2	3	7
Non CDA/Non-Strategic	1	3	1	5
Total (Primary SEND)	**11**	**10**	**13**	**34**
Secondary (SEND) – Pupil Paces				
Growth Areas	**9**	**6**	**9**	**24**
Windfalls	**2**	**2**	**3**	**7**
Non CDA/Non-Strategic	**1**	**3**	**1**	**5**
Total (Secondary SEND)	**12**	**11**	**13**	**36**

Table 6.11: Pupil yields associated with Local Plan growth 2019 – 2036: general, in three tranches (Figures assume an average 30 dwellings per hectare)

6.45 The next step is to break down the Local Plan growth areas into pupil yields for each of the 6 specific housing Growth Locations, subdivided by trajectory subdivided into the same three time periods. This is the Local Plan housing growth figures with 80% of the windfall total added into the CDA, on the basis that other growth locations are finite sites with known capacities which don't have a potential for windfall development. (The remaining 20% is non CDA/non-strategic, which we shall return to in the subsequent table). We have also assumed that 80% of the CDA will be small flats which will give rise to only a very small pupil yield; this has a significant effect on pupil numbers. We do not seek to calculate SEND primary and secondary for the growth locations as the numbers for each of these are very small, so have prepared a cumulative total.

Table 6.12: Pupil Yields associated with Local Plan Housing Growth 2019 – 2036: by specific growth location with 80% of windfalls assigned to the CDA and the CDA reflecting its likely characteristic of flats development with limited pupil yield

Period	2019 - 2024	2025 - 2029	2030 - 2036	Total
Early Years				
CDA	141	41	79	**261**
General Hospital	29	67	46	**142**
Western Golf Course	0	27	97	**124**
Ashton Green East	0	80	96	**176**
Land North of A46	3	107	0	**110**
Land West of Anstey Lane	0	0	64	**64**
Total (Early Years)	**173**	**322**	**382**	**877**
Primary (4 – 11) - Pupil Places				
CDA	117	34	66	217
General Hospital	24	55	38	117
Western Golf Course	0	22	81	103
Ashton Green East	0	66	79	145
Land North of A46	3	88	0	91
Land West of Anstey Lane	0	0	53	53
Total (Primary)	**144**	**265**	**317**	**726**

Table 6.12: Pupil Yields associated with Local Plan Housing Growth 2019 – 2036: by specific growth location with 80% of windfalls assigned to the CDA and the CDA reflecting its likely characteristic of flats development with limited pupil yield (continued)

Period	2019 - 2024	2025 - 2029	2030 - 2036	Total
Secondary (11 – 16 years) – Pupil Places				
CDA	14	4	8	26
General Hospital	3	6	4	13
Western Golf Course	0	3	9	12
Ashton Green East	0	8	9	17
Land North of A46	0	10	0	10
Land West of Anstey Lane	0	0	6	6
Total (Secondary)	17	31	36	84
16 – 18 Year Olds – Pupil Places				
CDA	18	5	10	33
General Hospital	4	9	6	19
Western Golf Course	0	3	12	15
Ashton Green East	0	10	12	22
Land North of A46	0	14	0	14
Land West of Anstey Lane	0	0	8	8
Total (16 – 18)	**22**	**41**	**48**	**111**
SEND - Primary				
Total (SEND Primary)	**2**	**3**	**4**	**9**
SEND - Secondary				
Total (SEND Secondary)	**2**	**4**	**5**	**11**

Table 6.12: Pupil yields associated with Local Plan housing growth 2019 – 2036 by defined growth locations and by education category in three separate tranches

6.46 The 20% of windfalls we have identified for the non CDA/growth locations category provides the following profile of pupil numbers

Table 6.13: Pupil Yields associated with Local Plan Housing Growth 2019 – 2036 in non CDA/growth locations with windfalls assigned

	2019 - 2024	2024 - 2029	2029 - 2036	Total
Early Years	47	299	131	477
Primary	38	247	102	387
Secondary	4	29	12	45
16 – 18 Year Olds	6	38	16	60
Primary SEND	1	4	1	6
Secondary SEND	**1**	**4**	**1**	**6**

Table 6.13: Pupil yields associated with Local Plan growth 2019 – 2036 for non CDA/growth locations with windfall allocation added in

6.47 Combining Tables 6.12 and 6.13 and applying the cost per pupil set out in Table 6.10 we arrive at the following costs for education provision to meet future needs.

Table 6.14: Total Education Infrastructure needs, profiled

	2019 - 2024	2025 - 2029	2030 - 2036	Total
Early Years (2 – 4 years) - Education Costs associated with growth - baseline				
Growth Areas	£0.92m	£1.63m	£1.99m	£4.54m
Non CDA/Non-Strategic	£0.25m	£1.52m	£0.68m	£2.45m
Total (Early Years)	**£1.17m**	**£3.15m**	**£2.67m**	**£6.99m**
Primary (4 – 11 years) – Education Costs associated with growth - baseline				
Growth Areas	£2.03m	£3.56m	£4.44m	£10.03m
Non CDA/Non-Strategic	£0.54m	£3.31m	£1.43m	£5.28m
Total (Primary)	**£2.57m**	**£6.87m**	**£5.87m**	**£15.31m**
Secondary (11 – 16 years) – Education Costs				
Growth Areas	£0.30m	£0.55m	£0.64m	£1.52m
Non CDA/Non-Strategic	£0.07m	£0.52m	£0.21m	£0.80m
Total (Secondary)	**£0.37m**	**£1.07m**	**£0.85m**	**£2.29m**

Table 6.14: Total Education Infrastructure needs, profiled

16 – 18 Year Olds – Education Costs				
Growth Areas	£0.52m	£0.52m	£0.88m	£1.92m
Non CDA/Non-Strategic	£0.14m	£0.48m	£0.3m	£0.92m
Total (16 – 18 Year Olds)	**£0.66m**	**£1.0m**	**£1.18m**	**£2.84m**
Primary (SEND) – Pupil Places				
Growth Areas	£0.48m	£0.41m	£0.67m	£1.56m
Non CDA/Non-Strategic	£0.23m	£0.30m	£0.17m	£0.7m
Total (Primary SEND)	**£0.71m**	**£0.71m**	**£0.84m**	**£2.26m**
Secondary (SEND) – Pupil Paces				
Growth Areas	£0.79m	£0.63m	£1.13m	£2.55m
Non CDA/Non-Strategic	£0.38m	£0.63m	£0.38m	£1.39m
Total (Secondary SEND)	**£1.17m**	**£1.26m**	**£1.51m**	**£3.94m**
Grand Total Education Needs	**£6.65m**	**£14.06m**	**£12.92m**	**£36.63m**

Table 6.14: Pupil yields associated with Local Plan growth 2019 – 2036: general, in three tranches (Figures assume an average 30 dwellings per hectare)

Converting pupil numbers into forms of entry), with an indication how this may translate into new school provision.

6.48 To provide greater clarity on the impact of these pupil numbers, we need to convert them into expressions of physical infrastructure requirements – what this means in terms of bricks and mortar in the form of new and expanded schools to arrive at a baseline – although as noted earlier, we consider that there will be no need to provide additional school places associated with growth for the short to medium term at least.

6.49 There are two critical metrics which we need to apply to arrive at the calculation. These two metrics, and our assumptions, are as follows:

Metric	Our assumptions
Number of pupils in each form of entry (FE)	We have assumed an average 30 pupils per class from primary age to 16 – 18 and nursery classes being of 26 places[23]; both are defined as 1 form of entry
Numbers of forms of entry in a school	For primary schools we have assumed 2 forms of entry (so 7 year groups – Reception, 1 – 6 with 60 pupils in each year = a 420 place school) For secondary schools we have assumed 5 forms of entry (so 5 year groups, 7 – 11 with 150 pupils in a year = a 750 place school)[24]

Table 6.15: Metrics used in calculating Local Plan growth related education provision (numbers of forms of entry/notional number of new schools)

6.50 Applying the above metrics in Table 6.15 to the assigned pupil yields identified in Tables 6.13 and 6.14 and we arrive at the following calculations for new forms of entry for primary and secondary schools, shown by tranche and by cumulative impact over time:

<u>Forms of Entry associated with Local Plan Housing Growth 2019 – 2036: by location, with anticipated windfall development assigned</u>

Period	2019 - 2024	2025 - 2029	2030 - 2036	Total FE
Forms of Entry Associated with Local Plan growth - notional				
Primary FE per tranche	6	17	14	37
(Primary FE cumulative)	-	*23*	*37*	
Secondary FE per tranche	1	2	2	5
Secondary FE Cumulative	-	*3*	*5*	

Table 6.16: Notional Forms of Entry associated with Local Plan Growth 2019 – 2036

[23] This is an average, based on DfE advice; we can expect some variation in class sizes over time, but this standard is not used for SEND where class sizes would be much lower; the nursery calls size is taken from the government's Building Bulletin 103: Area guidelines for mainstream schools (BB103)

[24] Again, schools come in varying sizes depending on a range of circumstances; we have taken selected for the Assessment a typical sized school in demonstrating future need

6.51 To provide new schools to meet future Local Plan growth to 2036, then it would be necessary to find land for around 15 primary schools and 5 or 6 secondary schools. Around 23 nursery schools would also be needed.

Meeting additional school places associated with growth – general considerations

6.52 The next step is to how and where such needs could be met; there are a variety of general considerations which will need to be factored in. These are principally:

- the capacity of existing schools in Leicester to accommodate these additional school place needs, either because there is predicted capacity in those schools or, if not, there is the potential to expand them without compromising educational quality
- an assessment of those schools where children from the new developments are likely to attend, and a consideration of potential pupil migration, particularly where this crosses LEA boundaries
- with any new school the school standards the LEA wishes to apply, such as whether there is a minimum/maximum or optimum size of school, and what constitutes a suitable school site

6.53 If further work needs to be undertaken on this then this will take place before the next iteration of this Assessment.

Funding arrangements Leicester City schools

6.54 Excluding independent schools (which have their own, fee based, charitable or private funding arrangements), capital funding for new and extended schools is secured through either:

- direct funding from the government to local education authorities (Basic Need Funding, but also bespoke government programmes)

- developer funding through planning obligations secured through s106 agreements

- other capital funding sources including government programmes and the City Council's capital programme

6.55 Through such means the local authority meets its obligations to provide the land and buildings needed to meet future educational needs across all the school age range in suitable premises in the right locations. We look at each in turn.

Basic Need Funding/bespoke government funding programmes

6.56 Basic Need Funding is the money the government allocates local authorities to support the capital requirement for providing new pupil places by expanding existing maintained schools, free school and academies, and creating new schools. This is funding that is neither ringfenced nor time restricted, providing local authorities with some flexibility to make decisions in the best interest of their education service.

6.57 To determine such payments the government identifies school capacity (factoring in any committed expansion plans), looks at circumstances within education planning areas (the geographic grouping of schools to reflect patterns of provision) and factors a small uplift to create an operating margin. This school capacity is then compared with forecast mainstream pupil numbers from Reception – Year 11, and where the capacity is lower than the forecast, the gap is funded.

6.58 In the most recent round of allocations – for the period to 2020/21 - the DfE announced around £1.06bn of Basic Need allocations to create places until September 2021. Of this, Leicester secured £23.645m to meet future school place needs over the next two academic years.

6.59 There are additional funding programmes relating to schools, as follows:

- the Condition Improvement Fund (CIF), an annual bidding round for eligible academies and sixth-form colleges to apply for capital funding. Designed to address issues associated with improvements to the condition of school buildings, it also addresses health and safety and compliance issues and can in a small number of cases include an element of school expansion. In the latest round of the fund for 2019 to 2020 projects, the DfE is providing £433m for 1,412 projects at 1,209 academies and sixth-form colleges including 7 in Leicester

- a separate £50 million fund for a targeted scheme to support the capital costs of building whole new secondary schools through what is known as the Presumption Free School route

6.60 Local authorities also receive government support to ensure there are sufficient school places for SEND pupils. In March 2017, the Government committed £215 million of capital funding – the Special Provision Fund – covering the period 2018 to 2021 to help local authorities create new school places and improve existing facilities for children and young people with SEND, and extended support by £50m in May 2018 and a further £100m in December 2018, thereby creating a total funding programme of £365m. From this fund Leicester has received £2.67m to provide new and improved SEND provision.

Developer Funding

6.61 Given the foregoing it might be assumed that government funding for new, extended and improved schools will be sufficient to meet all requirements to extend school place provision to meet growth in the future. However, both the government and local authorities also expect that developers will meet the cost of additional school places arising from their development, and this will involve funding for construction to extend existing schools and build new ones, and the provision of (or purchase of) land where applicable. Usually these are secured through planning obligations[25].

6.62 Local authorities can pool contributions secured through s106 agreements to provide additional forms of entry to respond to the cumulative impact of need arising from a number of developments, and since the removal of pooling restrictions in summer 2019, they are not fettered in the number of obligations that can be pooled.

6.63 The ability of developers to fund new education provision through planning obligations is subject to a viability assessment examining their ability to make such contributions and potentially as well, competing calls on such contributions. When the Local Plan Viability Assessment is complete, should there ultimately be any ultimate need to fund new education provision the Local Plan viability assessment will be instrumental in helping to determine whether such provision can be funded from planning obligations.

6.64 With this in mind local authorities, in negotiating for education related planning obligations, are expected to give appropriate consideration to:

- the education needs arising from such development based on adequately calculated pupil yields
- school standards (min/max sizes, what constitutes a suitable site)
- spare capacity within any existing school that can serve that development
- an understanding of any relevant pupil migration factors, particularly that which takes place across LEA boundaries
- any sources of funding other than developer contributions to increase capacity

6.65 The government's advice on the securing of developer contributions[26] makes the following points:

Major point	**Advice**
The relationship between government support for future education provision (Basic Need Funding) and developer contributions	Basic Need Funding (and other government funding sources) should not negate developer's responsibilities to mitigate the impact of education needs, should viability allow; Basic Need Funding can be used for new school places but should be the minimum necessary
Use of other funding sources	Local authority borrowing to forward fund additional school places (with recoup from future developer contributions), developers seeking loan funding (e.g. from Homes England) or HIF funding should all be considered
Early Years	Developer contributions have a role to play in funding additional nursery places as a result of housing growth
Contributions towards 16 – 18 provision and SEND	These should be sought *'commensurate with the need arising from development'*
Costs of contribution	These should reflect the cost of provision *'linked to the policy requirement of an up to date plan that has been informed by a viability assessment'*

[25] If a local authority introduces a CIL, then CIL revenues can be directed towards the provision of new school places
[26] DfE: Securing Developer Contributions for Education (April 2019)

Major point	Advice
Education in Local Plans	Local Plans and other planning documents should set out the expectations for contributions from development towards infrastructure, including education of all phases (age 0 – 18) and special needs; this should include temporary and permanent accommodation

Table 6.17: Summary of government's advice to local authorities in terms of securing developer contributions

6.66 Additionally, the new CIL Regulations, introduced on 1st September 2019, require local authorities to annually publish "infrastructure funding statements" providing details of how much money has been raised through developer contributions, both from CIL (if introduced) and s106 agreements, and how it has been spent. Statements must be published on council websites at least once a year and councils will be required to publish their first statements by 31 December 2020.

6.67 As well as financial information, the new regulations also require details should be provided on other elements of s106 agreements, specifically on the number of school places provided (as well as affordable housing contributions).

Funding from other sources

6.68 A brief reference should be made to securing funding contributions from other sources than government programmes and developer contributions. As already highlighted in Table 6.18 above, the government advises that it is important to consider these, although our expectation is that these will tend to be 'last resource' funding solutions, for instance if there is a temporary education gap to be considered, or if viability considerations do not support developer contributions towards such costs. For the reasons we have outlined we think it unlikely that there will be any call for such sources to be explored.

Relationship between the City and the County LEAs – cross boundary movement of pupils

6.69 This is a factor in school place planning, as follows:

- we have been advised that there are preferences being shown by some Leicester pupils and their families for schools outside the City, the principal example being in Oadby, where spare primary and secondary school capacity is readily filled with pupils from Leicester (we are told that around a sixth of Leicester based pupils make this journey, although we have not been presented with any evidence to support this)

- conversely, in the 16 – 19 age range there appears that there is some movement of pupils from the county (specifically south Leicestershire) to the City. Not all schools in the former area have a Sixth Form, and pupils in such circumstances are likely to show much less loyalty to the locality and take up places in Leicester

- there are current and future cross boundary considerations that will need to be explored including the Scraptoft development (Harborough) and the Western Golf Course proposed development (parts of which are in Charnwood and Blaby as well as in the City)

6.70 As far as we are aware, both cross LEA boundary movements appear to be factors that the respective LEAs work successfully to accommodate, rather than being matters for ongoing concern.

New Schools being planned outside the Leicester LEA area but adjoining/adjacent to the City

6.71 New schools are under construction or are being planned/considered at the following locations immediately outside of the City, in adjoining districts all within the Leicestershire LEA:

Location (district)	Proposal (anticipated opening)
Lubbesthorpe SUE (Blaby DC)	2FE Primary School (Opening September 2019) 3FE Primary School 2 (After 2023)
Lubbesthorpe SUE (Blaby DC)	5FE Secondary school (to open on 2000th dwelling)
Leicester Forest East (Blaby DC)	1FE Primary School (After 2023)
NE of Leicester SUE (Charnwood BC)	2FE Primary School (2022) 2FE Primary School (After 2023) 1FE Primary School (After 2023) 5FE Secondary School (After 2023)
Broadnook SUE(Charnwood BC)	2FE Primary School (After 2023)
Wigston (Oadby & Wigston BC)	1FE Primary School (After 2023)

Table 6.18: New primary schools being planned immediately outside the City boundary (SUE – Sustainable Urban Extension) (Source Leicestershire LEA, January 2019)

6.72 Some explanation is required of Table 6.18:

- the table can be divided into (a) developments actively being pursued at present (including schools under construction) which are those with an anticipated opening date of 2022 or sooner, and (b) those being established after 2023, which are currently being explored by the Leicestershire LEA

- the post 2023 proposals will be subject to a number of considerations which may mean precise details will change; factors include when precisely development schemes come forward, and future research into demographics/school place take-ups which may reflect on the precise school places being planned for, all of which are considerations for existing and emerging Local Plans of the constituent authorities

Education requirements arising out of Leicester's unmet Local Plan need

6.73 When unmet needs have been defined, an important area of future work will be the City Council working with adjoining authorities where these unmet needs will be delivered to ensure that there is a full comprehensive planning given to all education needs, in both the City and adjoining districts.

Future Gazing

6.74 Looking forward to the delivery of new and expanded schools in Leicester beyond those currently being planned, there will be a number of factors that need to be considered:

- we are aware there is the potential for **an expanded Regional Schools Commissioner role**: the Regional Schools Commissions[27] set up by the government to overcome issues associated by underperforming schools also have a role in advising and overseeing new free schools and academies (and their expansion) and could perhaps play a stronger mediating role. There is the potential for such engagement to result in greater efficiency in provision, especially around any perceived issue of overcapacity

- **continued expansion of Early Years education**: there is a possibility that the recent expansion of Early Years education provision will continue - including potentially a greater number of free hours for younger children - and although much of this may be delivered by private providers, both the quality, distribution and format of this education may be placed under greater scrutiny. A parallel factor is the potential for increased participation rates in early years education for eligible 2 year olds, which currently is slightly under two thirds

- **the transformative technological changes that are anticipated will almost certainly have an increasing impact on the future, although precisely what the impact will be remains uncertain**: technological changes such as AI, the rollout of the 5G network and, separately, the impact of decarbonisation targets to combat climate are almost certain to have some impact on education provision, and although the largely classroom based experience pupils currently receive does not appear to be set to change any time soon, there is the possibility is that it might; if so, educational planners need to be ready to respond to this

- **Potential increase in the number of pupils educated at home**: In December 2018, the Office of the Schools Adjudicator (OSA) found that as of March 2018 there were 52,770 pupils known to be home educated in England (representing an estimated 0.7% of the school population)[28]. Although numbers are relatively small, the research also found that home schooling was currently increasing at a rate of 20% a year. A sustained increase in home schooling rates in Leicester over

[27] Leicester falls within the East Midlands and Humberside RSC
[28] As quoted by David Doster and Shadi Danechi, House of Commons Briefing Paper no 5108 July 2019

the Plan period – perhaps fuelled by factors such as better online resources, AI and 5G - would have the effect of freeing up some pupil place capacity in mainstream schools

- **Online learning:** we are aware anecdotally of growing opportunities to access lectures and seminars online in higher education, with a number of FE and HE establishments now providing such services. We have seen little to suggest that this would spread to 0 – 18 provision in the near future but should it do so, there is the potential for education infrastructure capacity to be freed up

- **School place planning:** Leicester City Council's pupil place planning team are continuing to ensure pupil place planning projections remain accurate for the City. Over the last 12 months they have seen a considerable reduction in birth rates and inward migration, which has subsequently led to pupil place projections being revised. Current projections take into account a large proposition of housing development which is already committed. Whilst there are numerous variable and changing factors which effect pupil place projections, it is highly likely that the current education infrastructure will be able to accommodate the current proposed growth over the next 5 years. As birth rates, migration and pupil yields change this will need to be reviewed and re-forecast at the end of the next 5 years, to ensure pupil place planning remains accurate

- **Cyclical reviews of school place planning:** to ensure pupil place planning remains accurate, the authority continues to do cyclical reviews of pupil place planning data against each census. This allows them to contrast and compares the accuracy of these projections and continual revise proposed education requirements

Education Needs in the Infrastructure Delivery Schedule

6.75 This will appear in the IDS as follows:

	Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Early Years	Early Years (Attached Nursery)	**£1.17m**	**£3.15m**	**£2.67m**	**£6.99m**
Primary (4 – 11)	Cost of additional forms of entry	**£2.57m**	**£6.87m**	**£5.87m**	**£15.31m**
Secondary (11 – 16)	Cost of additional forms of entry	**£0.37m**	**£1.07m**	**£0.85m**	**£2.29m**
11 - 18	Cost of additional forms of entry	**£0.66m**	**£1.0m**	**£1.18m**	**£2.84m**
SEND Primary	Cost of new specialist provision	**£0.71m**	**£0.71m**	**£0.84m**	**£2.26m**
SEND Secondary	Cost of new specialist provision	**£1.17m**	**£1.26m**	**£1.51m**	**£3.94m**
Total Education Infrastructure Needs		**£6.65m**	**£14.06m**	**£12.92m**	**£36.63m**

7. Health and Social Care

7.1 This chapter of the Assessment explores health and social care infrastructure needs associated with growth over the Local Plan period 2019 - 2036.

Recent transformative changes in healthcare provision

7.2 Following major changes brought about by the Health and Social Care Act 2012, new commissioning arrangements allow for market competition for healthcare provision, whilst there are also new measures for promoting better public health. There are 4 separate but interlinked areas we consider:

- primary healthcare - ‘initial contact’ services with a major focus on GPs, but also other healthcare services such as dentists, pharmacists and optometrists
- secondary healthcare – largely referred services (except for A & E) and divided into acute services, community services and mental health
- public health and wellbeing, with functions provided largely by Leicester City Council, but also Public Health England
- adult social care, with functions split between Leicester City Council, the NHS, voluntary/charitable organisations and private providers

Primary and Secondary Healthcare

7.3 The 2012 Social Care Act took away the responsibility for the health of citizens from the Secretary of State for Health, a role that the post has had responsibility for since the inception of the NHS in 1948; it also abolished NHS primary care trusts (PCTs) and Strategic Health Authorities (SHAs).

7.4 In its place the Act created a countrywide network of 211[29] Clinical Commissioning Groups (CCGs) and transferred up to £80 billion of "commissioning" of health care funds – to allow them to fund a range of healthcare services. CCGs in England are largely run by general practitioners (GPs).

7.5 Significant other changes include the following:

- A new executive agency of the Department of Health, **Public Health England**, was established under the Act on 1 April 2013. Public Health England’s role is to protect and improve the nation's health and wellbeing, and reduce health inequalities; it does this through a variety of methods, from promoting healthier lifestyles, preparing for and protecting the nation from public health hazards and emergencies, sharing information, supporting campaigns and advising a range of bodies on health improvement matters

[29] There have since been a number of mergers, although none affecting Leicester

- a range of **local public health responsibilities** were passed to local authorities; Leicester City Council has a duty to take steps to improve the health of people within the city, including the provision of information, services or facilities to promote healthy living, as well as the task of co-ordinating local NHS, social care, children's services and public health functions through a Health and Wellbeing Board. The Board's aims include the development, interpretation and use of a Joint Strategic Needs Assessment (JSNA) to help shape health commissioning and spending plans

- the establishment of **NHS England**, with responsibility for the overall health budget and the planning, delivery and operation of primary and secondary healthcare in England. Initially the agency was directly responsible for commissioning a range of primary care services from self-employed providers such as GPs, dentists, pharmacists and optometrists. However, since 2015 co-commissioning of such services by NHS England and individual CCGs has been possible, and together the agencies have established a joint Primary Care Commissioning Committee to make collective decisions on the review, planning and procurement of primary care services in Leicester City, under delegated authority from NHS England

- **NHS Improvement (NHSI)** has responsibilities for overseeing foundation trusts and NHS trusts as well as independent providers that provide NHS-funded care, with a remit to support such providers in giving patients consistently safe, high quality and compassionate care within financially sustainable local health systems[30]

- **NHS Property Services** - a limited company owned by the Department of Health that manages, maintains and develops an estate of around 3,600 NHS facilities not transferred to the CCGs in April 2013.

The commissioning of primary and secondary healthcare in Leicester

7.6 The commissioning of primary and secondary healthcare is in the hands of a single Clinical Commissioning Group (Leicester City CCG) covering the city of Leicester. It is however also worth noting that health provision within the City is accessible to people outside of Leicester. Additionally, that unmet growth needs over the Local Plan period to be delivered in locations outside of the city boundary will have implications for two other CCGs; East Leicestershire and Rutland CCG (covering the authorities of Blaby, Harborough, Melton and Oadby & Wigston and a small part of Charnwood, as well as Rutland, outside the county) and West Leicestershire CCG (covering the authorities of Charnwood (majority of borough), Hinckley & Bosworth and North West Leicestershire.

[30] NHS Improvement is now proposed to be merged with NHS England, with 7 regional teams established

7.7 Whilst Leicester City CCG and the two other CCGs are independently constituted, they have established a collaborative commissioning board to make joint decisions on the provision of health services where such services are common to all three CCGs. The strategies considered in this chapter (e.g. Better Care Together, Primary Care Networks) are designed to operate seamlessly across all three areas.

7.8 The 3 CCGs have together responded to the initiative which will underpin major changes to the operation of healthcare services **–** NHS England's decision to introduce Sustainability and Transformation Plans (STPs) for 44 geographical areas covering the whole of England.

7.9 They have achieved this through combining to produce a single STP for their area. The resultant strategy is entitled *Better Care Together* (August 2018) and this is providing detailed guidance on how primary and secondary healthcare services will be better integrated and reshaped to meet future needs. We explore the impact of this strategy later in this chapter, but it is worth noting that the implications of BCT for Leicester CCG are is not always easy to disaggregate from the two adjoining CCGs.

Background to the transformative changes to the NHS, and the preparation of Sustainability and Transformation Plans

7.10 The programme for transformative changes to the NHS and the way in which it delivers its services (a process which as we will note is still ongoing) dates back to October 2014, when the NHS Chief Executive Simon Stevens published the NHS Five Year Forward View to 2020/21. The key challenges that the NHS is judged to be facing include:

- dealing with any current undercapacity in services or any unmet needs associated with, say, deprivation
- reducing the number of admissions to urgent care
- seeking to provide care and support in a way that allows more people to lead as independent a life as possible for longer
- seeking to transfer appropriate services from their current locus to secure better quality, more targeted provision (for instance from acute to community services, or community to primary services)
- looking at areas of healthcare which are identified as priorities for improvement, including more extensive/comprehensive mental healthcare and speedier cancer referral/better survival rates
- meeting future needs arising from new housing
- responding to technological advances such as AI and the data economy and the way in which they will shape future healthcare provision

7.11 The Forward View identified a range of radical changes considered necessary to make healthcare provision fit for purpose in the future. As well as calls for an additional injection of public funding and major efficiency savings (which collectively were expected to have the effect of increasing the available budget by £30bn p.a.) the Forward Review called for:

- a radical upgrade in prevention and public health

- giving patients greater control of their own care

- more care being delivered locally, but with some services in specialist centres, organised to support people with multiple health conditions, not just single conditions

- new options to permit groups of GPs to combine with other specialists (e.g. community health services) to create integrated out-of-hospital care

- the redesign of urgent and emergency care services to secure better integration

- smaller hospitals being granted new options to help them remain viable, including forming partnerships with other hospitals further afield

- CCGs being given the option of more control over the wider NHS budget

- an improved focus on healthcare technology coupled with expansions in research and innovation

7.12 Whereas the 2012 Health and Social Care Act's primary focus was on the structure of health care provision and its procurement, the Forward View looks in detail at its operation and as such, stands to revolutionise the way in which such services operate in the City in the future.

Responding to the NHS 5 Year Forward View – Sustainability and Transformation Plans (STPs)

7.13 In December 2015 **-** to assist in meeting these challenges - NHS England and others published *Delivering the Forward View: NHS Planning Guidance 2016/17 - 2020/21.* This requires local NHS teams to produce five-year Sustainability and Transformation Plans (STPs), place-based and driving the Five Year Forward View, as well as a yearly Operational Plan, organisation-based but consistent with the emerging STP.

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7.14 We will return to the issue of how the Five Year Forward View has been taken forward locally within the STP covering both the City and the wider area, but before that there are two other key strands driving healthcare changes, Integrated Care Systems (ICS) and the NHS Long Term Plan.

Integrated Care Systems

7.15 To fully appreciate the way in which the healthcare system is transforming itself to respond to current pressures and future challenges it is worthwhile focusing on what ICS is, and the impact it will have.

7.16 With ICS, NHS organisations, in partnership with local councils and others, take collective responsibility for managing resources, delivering NHS standards, and improving the health of the population they serve. The overall message is that to provide better and more joined-up care for patients it is highly desirable for different organisations to work together to achieve these objectives. The reward for such integration is greater local freedom for those involved to manage the operational and financial performance of services in their area.

The NHS Long Term Plan

7.17 The next piece in the jigsaw in transforming health services is the NHS's Long Term Plan, published in January 2019. This is the key driver of the City based Primary Care Strategy published in summer 2019 and the soon to be published Secondary Care Long Term Plan, both of which are considered later in this Chapter.

7.18 As its title implies, this takes a much longer term view of the changes required to deliver the world class health services of the future, and as such, focuses on the structural and philosophical changes needed to make this happen to complement the organisational/procedural changes other health initiatives have ushered in.

7.19 We have summarised the key headlines of the Long Term Plan, the major initiatives that will stem from them and our assessment of what this might mean for health infrastructure planning and delivery is set out in Table 7.1 below:

Long Term Plan Headlines	What this will translate into	Projected implications for healthcare in Leicester
Making sure everyone gets the best start in life	Improvements in pre - and post-natal care and support, ramping up actions to improve health of children and young people (better child - focused cancer treatment, tackling obesity, better quality mental healthcare)	Enhanced maternity facilities, expanded wards for young people, additional facilities for responding to child mental health issues

Long Term Plan Headlines	What this will translate into	Projected implications for healthcare in Leicester
Delivering word-class care for major health problems	Earlier cancer and lung condition diagnosis, greater prevention of heart attacks and strokes (including education/exercise programmes), major investment in mental health/tackling mental illness	Expansions in specialised treatment areas, major investment/expansion in dedicated spaces for mental health diagnosis/treatment
Supporting people to age well	Significant increase in funding for primary and community care, helping more people to live on their own for longer	Additional pressures on the primary care and community care estate mitigated to a degree by the enhanced potential for care and support in the home

Table 7.1: A brief summary of the NHS Long Term Plan and its anticipated impact on healthcare in Leicester

7.20 A deeper analysis of the Long Term Plan draws out a number of themes which will significantly influence healthcare provision in future:

- the idea of GPs teams being at the hub of a network to co-ordinate services
- a focus on a range of initiatives that will respond to the twin imperatives to prevent illness and tackle health inequalities, both of which play into the public health narrative, which continues to grow in significance
- expanding the workforce and providing enhanced training for staff, both of which are likely to have infrastructure implications
- enhanced use of data and digital technology and increased operational efficiencies to maximise investment; both of these are likely to offset some of the infrastructure demands a modernised health service is likely to require

Better Care Together Strategy (BCT)[31] (The Leicester, Leicestershire and Rutland Sustainability and Transformation Plan)

7.21 The consequence of all three CCGs deciding to work together, the Better Care Together Strategy adopts an integrated approach, in which different NHS organisations and their partners work together to create more efficient and effective services with the stated aim of putting patients at their centre. A key element of this is the objective of working together on the "triple aims" of the NHS Five Year Forward View, these being:

- improving the health outcomes of people
- providing better quality care
- ensuring financial sustainability

[31] Next steps to better care in Leicester, Leicestershire and Rutland CCGs August 2018

7.22 The BCT partners (those who have responsibility for delivering health services in both Leicester and, in most cases, the wider area) are as follows:

Partner	Responsibilities
Leicester City CCG	Responsibility for commissioning health services in Leicester City
East Leicestershire and Rutland CCG and West Leicestershire CCG	The other health service commissioning partners
University Hospitals of Leicester	Responsible for delivering the majority of acute services in Leicester
Leicester Partnership Trust	Responsible for delivering all age community services and mental health care across the 3 CCGs
East Midland Ambulance Service NHS Trust	Provides emergency transport
Leicestershire County Council	Commissions/provides social and public health services for Leicestershire residents
Leicester City Council	Commissions/provides social and public health services for City residents

Table 7.2: Better Care Together Partners

7.23 The BCT Strategy describes the progress made and how in future an effective integrated health system across the three areas will be created, along with the next steps for improving healthcare for the local population, whilst taking full account of immediate challenges.

7.24 The Strategy was produced in response to extensive consultations during 2016 and 2017. Many of the points made have infrastructure implications:

Topic	Point made
Design of community services	Need to be reviewed, as does the type and number of community beds, to support the provision of integrated care, independence and a reduction in hospital admissions and readmissions
Acute bed capacity and access to maternity services	The need to maintain acute bed capacity and full access to maternity services within plans to reorganise the acute hospitals, as well as creating a new maternity hospital
Mental healthcare	A greater emphasis on mental healthcare, in order to achieve 'parity of esteem' with physical healthcare

Table 7.3: Responses provided to BCT consultations relating to health infrastructure

7.25 The BCT partnership has been able to secure the following:

Project	Investment secured
New emergency department at Leicester Royal Infirmary	£48m
Improvements at GP premises	£2m
Purpose-built mental health ward for children and young people with a focus on eating disorders	£8m
New intensive care units and a new ward at Glenfield Hospital	£30m
A female Psychiatric Intensive Care Unit at Glenfield Hospital	Not specified

Table 7.4: Recent health infrastructure investments secured in Leicester through BCT

Recent and current investment in Primary Healthcare

7.26 Against a background of so many changes, primary infrastructure needs are complex. There has in recent years been a high level of baseline analysis of the health estate to achieve a better understanding of what it comprises and how well it is used, most recently by the 3 CCGs in 2015 – 2016.

7.27 In reviewing actions needed to invest in improved primary care provision and ensure it is fit for purpose to meet the changes we have outlined above, the CCGs have looked carefully at precise needs, current capacity and the need to achieve an appropriate spread of services across their area.

7.28 Working carefully with these factors, robust primary healthcare plans have been developed for Leicester, Leicestershire and Rutland, and this has resulted in successful funding of £11m under the national Estates and Technology Transformation Fund (ETTF) to implement 11 projects which are being delivered over the period 2017 – 2021. Within Leicester City CCG these are as follows:

Project	Works
Saffron Lane	Acquisition of land and substantial extension of existing facility to accommodate the merger of 2 practices
Heatherbrook	Conversion of rooms/extension
Pasley Road	Acquisition of land and new purpose built health centre
Willowbrook, Springfield Road	Acquisition and conversion of existing facility to the equivalent of a new health centre

Table 7.5: Primary healthcare investment in Leicester 2017 - 2021

Better use of the current NHS Estate

7.29 We will now move on to consider the current and future provision of secondary healthcare provision but before we do it is worthwhile noting the way in which the proposed changes relate to current land and property managed by healthcare providers and the impact changes will have on this estate (and, conversely, the way in which the current estate will influence the changes that will be sought). The provision of new healthcare provision in Leicester in the future will be guided by three factors:

- needs arising as a result of growth
- needs arising as a result of changes in the composition in the city's population which may (or, more likely, will) result in greater healthcare needs
- needs arising from changes in the way in which healthcare is provided

7.30 It seems entirely possible and indeed desirable that most strategic changes in healthcare infrastructure provision will be led by modernised facilities based on a different model of healthcare provision, driven by a better use of the NHS estate and responding to rising needs amongst the population at large; needs arising from population growth may in contrast be relatively small scale.

The Naylor Report (2017)

7.31 A clear sense of what the NHS needs to do in order to make a better use of its existing land and buildings to help secure the proposed transformative changes can be obtained through an analysis of the Naylor report[32]. This set out an ambitious new NHS estates strategy focused on delivering improved care, the release of £2bn of assets for reinvestment, and delivery of land for 26,000 homes.

7.32 Naylor's key recommendations were:

- the establishment of a new and strategic NHS Property Board at arm's length from the Department for Health to act as the primary voice on estates matters

- proposals to integrate the primary and secondary estate within an overarching Estates Strategy, incorporating a long-term vision for the NHS; a clearer understanding of the current estate; clarity on leadership; appropriate governance; and improved skills

- ensuring the Estates Strategy is compatible with the vision of the Five Year Forward View

- improved guidance on building standards to ensure that future capital investment in new facilities is fit for purpose

- an overall £10bn investment in the NHS Estate to render health infrastructure fit for modern purpose

7.33 Naylor took the view that substantial capital investment is needed to deliver service transformation through STPs, with investment needs being met by contributions from three sources; property disposals, private capital (for primary care) and government funding through the Department for Health. To support this, the report recommended that:

- STPs and health infrastructure providers who develop long term investment plans should not be granted access to capital funding either through grants, loans or private finance until they have agreed plans to improve performance against benchmarks

- the Department for Health and the Treasury should provide assurances to STPs that any sale receipts from locally owned assets realised in line with STP plans should be retained locally for reinvestment

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[32] Review of NHS Property and Estates (April 2017)

- further, that the government should provide additional funding to incentivise land disposals through a “2 for 1 offer” in which public funds match disposal receipts

- NHS England should provide guidance on the roles of healthcare providers and STPs with regard to estate matters

- NHS England and the NHS Property Board should ensure primary care facilities meet the vision of the Five Year Forward View and consider linking payments to the quality of facilities and greater use of 'fit for purpose' standards, with the NHS Property Board supporting GPs to meet these standards

7.34 The government responded to the Naylor recommendations in the Autumn 2017 Budget. Naylor recommended a £10 billion package of investment, and the Budget provided £3.5bn of new capital funding for the NHS in England (this on top of the £425 million already provided within the Spring 2017 Budget). This figure included £2.6bn in infrastructure schemes, including some of the investments in the 3 local CCGs we note in this chapter.

7.35 This £3.5 billion is allowing the NHS to dispose of surplus land and buildings to the value of (at least) £3.3 billion, almost doubling the scale of investment available to the NHS, as well as unlocking land for housing. It is backed by better financial regulations and commitments to ensure health bodies maintain their facilities better than has historically been the case.

NHS Secondary Healthcare Capital and buildings

7.36 Turning to how the Naylor recommendations are being rolled out locally, the BCT Strategy identifies significant capital investment required to ensure that the buildings out of which secondary healthcare services operate are both fit for purpose and support the new ways of working identified within the NHS Five Year Forward View.

7.37 The partners recognise that these local investment priorities to support the Strategy across Leicester, Leicestershire and Rutland are now an important part of the move nationally towards allocating capital resources through partnerships such as BCT rather than to individual organisations. Consequently, in July 2018, the partners submitted a refreshed Draft Estates Strategy for Leicester, Leicestershire and Rutland to NHS England.

7.38 The Draft Estates Strategy identified the three top local priorities for national capital funding as reconfiguring acute hospitals to move acute clinical services onto two sites and creating the Leicester Ambulance Hub.

7.39 These schemes are being progressed through the national capital allocation process, with additional schemes for other services and sites being brought forward over time as proposals advance. The partners have to date been successful in securing £9.2m of transformation funding from national organisations to support transformation, as summarised in the table below:

Area of support	Funding achieved
GP 5 Year Forward View - Extended Access	£3.638m
GP 5 Year Forward View - Other	£0.792m
Diabetes Transformation	£0.827m
Area of support	**Funding achieved**
Children and Young People's Mental Health	£1.302m
Learning Disability Transformation	£0.399m
Urgent & Emergency Care Transformation	£1.668m
Other	£0.916m
Total	**£9.272m**

Table 7.6: National Funding secured by BCT to support transformation as at August 2018

Primary Healthcare Services Going Forward

Current provision and challenges in primary healthcare

7.40 The City of Leicester currently has 57 GP practices with an average list size of 7,303. Figures from the CCG in 2017 indicated that there were a total of 156 GPs and 66 registered nurses serving the city.

7.41 A key challenge facing each CCG is the demand for extended access (7 days a week) for both urgent and routine access. An integral part of the primary healthcare service offered in the city are the 4 Healthcare Hubs[33], which provide greater flexibility in securing appointments for patients suffering a wide range of conditions, with appointments bookable through a GP practice in the evenings, weekend and bank holidays as well as during the day. These hubs operate on one of three tiers; Tier 1 Primary Care 8am – 8pm/7days a week, Tier 2 Urgent Care 8am – 8pm/7 days a week, Tier 3 Urgent Care 24 hours a day/7 days a week.

7.42 Through discussions with healthcare professionals we have identified a number of key issues associated with primary care provision within the city, as follows:

- some practices are very small, and are no longer considered fit for purpose to deal with the requirements of healthcare provision going forward, and specifically, the range of services that will be provided in a GP practice in future
- a number of practices operate out of converted residential properties, particularly in the east of the city; again, these are now considered substandard, and do not meet the requirements of the new health model
- based on the population of the city, one would expect a total patient list of around 350,000; in fact, it is around 410,000, as people outside of the city can choose a GP practice within Leicester under the Patient Choice Scheme (or people move out of the city but retain their GP)

[33] **At Belgrave Health Centre, Merlyn Vaz Health and Social Care Centre, Saffron Health and Westcotes Health Centre**

- more specifically, Patient Choice allows people within the city to select a GP practice elsewhere in the city, perhaps for cultural reasons, or because it is nearer their workplace
- the closure of a patient list is considered a signal that the practice considers that increasing patient numbers will compromise the services it offers, and this can have wider ramifications, even though this can only be a temporary measure; this is judged by the CCG to be an issue on the western side of the city

GP premises in the future

7.43 In February 2017 the Better Care Together partners issued a Blueprint for General Practice, with the stated aim of delivering the NHS General Practice Five Year Forward View.

7.44 The Blueprint sees General Practice as continuing along existing lines, with registered lists being at the heart of the primary healthcare model and individual patients receiving continuity of care by their own GP close to home. However, there is also the expectation of a much greater emphasis on practices working together to provide services on multiple sites, to improve efficiency and save administrative costs and to facilitate the offering of urgent and on the day services 7 days a week, if not within their registered practice, then within the locality.

7.45 It is important however to recognise that the provision of primary healthcare services is not static, but dynamic. The Blueprint observes the following:

Metric	Change
Average GP consultation	Lengthened by 50% (from 8 to 12 minutes) between 1993 and 2013
GP consultation rates	40% increase between 2005 and 2015
Average number of times a year a patient sees their GP	8 times in 2017 (double the rate in 2007)
Average annual consultations amongst the over 75s	Has risen from 7.9 on 2000 to 12.4 in 2015
People with Long Term Conditions	Represent 29% of the population but accounted for 50% of all GP appointments in 2010

Table 7.7: The changing nature of primary healthcare services, Leicester, Leicestershire and Rutland CCGs

7.46 These figures must be seen against the backdrop of a primary healthcare system facing challenges in delivering services that communities expect to receive, with a 15% drop nationally in the numbers coming into GP training, an ageing workforce (64% of practice nurses are over 50) and a much greater reliance on locums and agency staff.

7.47 Looking forward, the Blueprint considered that responses to primary care needs will be influenced by a variety of factors:

- there will be much more of an emphasis on grouped practices to allow more integrated care and 7 days a week access to services

- there is an expectation that a significant amount of care currently provided in a secondary healthcare setting could in future be co-ordinated through general practice, particularly in relation to mental health
- whilst GPs will remain as clinical expert generalists they will increasingly be working as designated (and accountable) care co-ordinators, working directly with specialists located in primary and community settings, supported by community and social care providers to provide integrated out of hospital care
- patients will increasingly be expected to have a greater say in determining the services they should have access to as part of taking a greater level of responsibility for their own health

Primary Care Strategy

7.48 The Leicester, Leicestershire and Rutland Primary Care Strategy[34] was agreed in June 2019 by the 3 constituent CCGs. It follows on from the vision and strategy established within the Five Year Forward View, the Blueprint for General Practice and the NHS Long Term Plan and is fundamental to the delivery of the ICS, all of which are considered in detail earlier in this chapter. It is also consistent with the aims of the BCT Strategy.

7.49 The strategy for healthcare provision for the CCGs (including that covering Leicester) is to operate on the following levels:

- as an entire system across the 3 CCGs
- in 'places' – local authority boundaries – where primary care interacts with hospitals, community providers and local authorities to meet that population's needs
- in 'neighbourhoods' - defined by the Primary Care Networks - that will deliver integrated services

7.50 These Primary Care Networks thus become the cornerstone for patient-centred care, which will drive the development and delivery of localised care by integrated teams both at a 'neighbourhood' and 'place' level.

7.51 What this means in practice is that individual GP practices will no longer operate independently but will be grouped together (although they will not be entirely geographically defined). They will typically cover a population of 30,000 – 50,000 and will bring together groups of GPs plus a range of other healthcare professionals to provide a comprehensive service to patients with a range of healthcare needs, some of them complex.

[34] Leicester Leicestershire and Rutland 2019/20 – 2023/24 Primary Care Strategy

7.52 The PCN will maintain urgent and 7 day access to services and regard patients being an active part of the practice team, and not merely the recipients of healthcare.

7.53 All this will entail the creation of 10 Primary Care Networks, which were identified in the Primary Care Strategy as follows:

Name of Network	No of associated GP Practices	List size
Belgrave & Spinney	5	45,774
The Leicester Foxes	9	33,498
Leicester Central	8	51,058
Salutem	4	35,455
Aegis Healthcare	6	41,104
Millennium	7	50,971
City Care Alliance	6	38,589
Leicester City & University	2	45,234
Leicester City South	6	35,417
Leicester Health Focus	4	39,914

Table 7.8: New Primary Care Networks In Leicester

7.54 The PCS involves a root and branch restructuring of the primary healthcare budget and, as it makes clear, considerably enhanced investment to introduce a number of both major and piecemeal changes to implement the strategy. However, it stops short of specifying the detailed changes in the primary health estate to enable it to adapt to provide the quality of healthcare the PCS demands.

7.55 We have noted above that some of the current primary healthcare estate is no longer fit for purpose, and healthcare professionals we have talked to have spoken of bringing as many of the individual strands of healthcare under one roof as is possible.

7.56 Although conceived in an entirely different (pre 2012 Health and Social Care Act) regime, there are potential models in Leicester, in particular centres currently operating as Healthcare Hubs which might meet a potential model; these are as follows:

Centre (Date opened)	Facilities	Size (m^2)	Cost (£m)
Merlyn Vaz Health & Social Care Centre (2008)	Serves 50,000 residents. 3 GP practices, Healthcare Hub, pharmacy, community Dental Service, mental health services, district nurses, podiatry, physiotherapy, speech and language therapy	6191	20.66m
Belgrave Health Centre (2011)	Serves approximately 25,000 patients. 3 GP practices, minor surgery clinic and community health services	2402	9.3m

Table 7.9: Existing primary health facilities in Leicester that could serve as a potential model for a combined PCN facility

7.57 In the absence of detailed costings for the bespoke Primary Care Network centres of the future we can only speculate as to the level of investment that will be required to develop the high class facilities that will be required; however, we consider it necessary to do so for the purposes of this Infrastructure Assessment.

7.58 A state of the art centre housing all the PCNs GPs and support services could cost in the range of £30m at today's prices and, if half the PCNs in Leicester required such bespoke facilities to overcome the currently fragmented and in some cases substandard estate, the future bill will be in the order of £150m. Some secondary healthcare efficiency and opportunity savings might defray these costs, but in our view other adaptations/changes in the primary healthcare estate might well swallow this up.

Secondary Healthcare Going Forward

7.59 The city's secondary healthcare is delivered principally in the following establishments:

Hospital/location	No of beds	Principal Services
Glenfield Hospital (3 miles NW of city centre)	415	Range of services including nationally recognised medical care for heart disease, lung cancer and breast cancer care as well as children's heart services
Leicester General (3 miles E of city centre in Evington)	430	Range of medical services including care at our national centre for renal and urology patients as well as maternity services
Leicester Royal Infirmary (close to Leicester city centre)	1000	Leicester and Leicestershire's only accident and emergency service, and the base for the Children's Hospital.

Table 7.10: Principal secondary healthcare facilities in Leicester

Plans for Future Changes in Secondary Healthcare

7.60 Further substantial changes are planned in the BCT Strategy in a business case for local scrutiny prior to being submitted to NHS Improvement, NHS England and the Department of Health and Social Care for consideration (and final public consultation if the bids are successful) before implementation.

7.61 These changes – insofar as they relate directly to Leicester - are as follows:

Location	Proposal
Leicester Royal Infirmary and Glenfield Hospital	Reconfigure acute hospitals to move acute clinical services onto just these two hospital sites (from 3 currently)
Leicester General Hospital (LGH)	Retain some non-acute health services at this hospital
Leicester Royal Infirmary	Remodel maternity services to create a new maternity hospital at this location
LGH	New midwife led unit
Community Services	Redesign to ensure sufficient, geographically dispersed facilities to allow these services to provided close to people's homes

Table 7.11: The BCT Strategy proposals for major health infrastructure investment, August 2018

7.62 The BCT Strategy supplies the reasons for these proposed changes:

- the provision of acute services on 3 sites in the city has a negative effect in clinical, performance and financial terms, with medical resources spread too thinly
- elective and outpatient services provided alongside emergency services - as is currently the case - is not desirable, as when pressures on the latter increase, it is elective patients who suffer delays and last-minute cancellations
- the reconfiguration of acute medical services as described above will require major investment of £367million to provide safe, high quality specialist care for years to come, to accommodate a slight increase in admissions that is forecast, and to deal with a backlog in maintenance
- in terms of maternity services, these are currently spread across two hospitals, making it challenging to maintain adequate staffing over the two sites, and on occasions compromising the availability of resources, particularly in neonatology and obstetrics (and, in any event, maternity facilities require modernisation)
- the current provision was designed for 8,500 births a year, but there are currently 10,500 births a year, and increased demands (through a rise in numbers and in terms of complexities of delivery) are forecast in the future
- turning to community services, in order to deliver integrated care, keep people well and out of hospital and to move care closer to home, it is considered important to ensure appropriate facilities and services are in place within local communities
- there are plans for the partners to work with patients, clinicians, partner organisations and staff, to strengthen the provision of integrated care in communities, support independence and reduce hospital (re)admissions
- integration of community and adult care services can identify how district nurses and some physiotherapists can work as part of multi-disciplinary, integrated locality teams to coordinate care for patients who are frail, have multiple health conditions, or require additional support
- the provision of community and intermediate care beds can complement home-based support

7.63 Consequent to this strategy, ambitious plans have been drawn up, consistent with the transformative changes in the delivery of healthcare we have described. The main changes which have been drawn up, costed and approved by the partners are to be set out in detail as part of a long term strategy for secondary healthcare but can be summarised as follows:

- A new Maternity Hospital
- A dedicated Children's Hospital
- A planned care Treatment Centre

- Two ‘super’ intensive care units with 100 intensive care beds
- Modernised wards, theatres and imaging facilities
- Additional car parking

7.64 Details of the proposals and estimated costs are as follows:

Location	New investment planned includes
Glenfield Hospital	General Hospital expansion, relocated nephrology service, ICU expansion, associated changes/relocations
Leicester General	Ceases to become an acute hospital; confined on a smaller site (with surplus land released for development) Future function of Leicester General will encompass: - Diabetes centre of excellence - GP led community hub with onsite imaging and diagnostics - Stroke rehabilitation - Midwifery led birthing unit - The City Community Crisis response Teams - Back office functions
Leicester Royal Infirmary	Creation of a New Maternity Hospital standalone Children’s Hospital, Adult ICU expansion

Table 7.12: Summary of proposed future investment in secondary healthcare in Leicester

7.65 The changes identified above are anticipated to cost £465m and would take a number of years to complete.

The government’s Health Infrastructure Plan

7.66 Until recently the £465m of investment needed to deliver secondary healthcare fit for future needs was considered a problematic issue for the partners, as government support for capital funding for such changes was set at £100m, an issue for Leicester and a small handful of locations across the country where similar issues prevail. Although estate rationalisation and land disposals might create some additional capital, we have not seen evidence that it would be at anything like the scale to deliver these major upgrades.

7.67 In October 2019 the government published its Health Infrastructure Plan (HIP), with an objective of securing the most significant hospital building programme in a generation; it also includes proposals to modernise the primary care estate, invest in new diagnostics and technology and help eradicate critical safety issues in the NHS estate.

7.68 At the centre of HIP is a £2.7 billion investment that gives 6 new large hospital projects the funding to go ahead now, with the aim of delivering all projects by 2025[35]; one of the successful projects is the investment in Leicester's hospitals identified above.

7.69 Further details of the development programme are awaited but from the perspective of this Assessment it does not seem unreasonable to assume that the City's secondary healthcare infrastructure investment currently proposed over the timeframe of the Local Plan will be delivered in the early years of the Plan.

Future health infrastructure need and funding

7.70 In the preceding paragraphs we have provided a detailed summary of the changes that are taking place in the provision of primary and secondary healthcare in Leicester and the consequences expressed in terms of infrastructure need, and how this can be funded.

7.71 We have established that the government is investing new capital to secure strategic secondary health infrastructure investment through a combination of direct public investment and finance made available through disposals of land and buildings, and we have identified the strong possibility that significant capital funding will be needed to rollout major investment in primary healthcare to deliver the Primary Care Strategy.

The Funding of Future Healthcare Investment

7.72 As noted above we are of the view that the funding of the majority of healthcare investment over the Plan period will be secured through government investment, and capital secured through the release of land and buildings; the Naylor report identifies this and the potential for private investment particularly in the primary care sector. The question arises as to the role of developer contributions to deliver healthcare infrastructure through s106 agreements and (if introduced) CIL.

7.73 Outside of the City 4 of the 7 Leicestershire authorities seek developer contributions towards the provision of primary healthcare (none do for secondary healthcare). Contributions sought vary as follows:

- one authority seeks £470/dwelling
- two others calculate a cost of 0.11 per square metre per new patient and a cost of £1902/sq.m. for a GP surgery (of 200 sq.m.)

[35] A further 21 schemes have been given the go-ahead with the seed funding they need to develop their business cases, with the aim of delivering between 2025 and 2030, subject to business case approvals, but none of these involve healthcare proposals in Leicester, Leicestershire and Rutland

- one other undertakes the same initial calculation but assumes a cost of £2964/sq.m. for a GP surgery

7.74 This perhaps reflects the fact that there is no consistent approach adopted by the health authorities to secure funding for health infrastructure, although in September 2018 NHS Improvement did issue guidance[36].

7.75 The Guidance outlines the opportunities for Trusts to secure contributions towards healthcare infrastructure but also noted that there were some issues around the way in which such contributions were currently sought, which included:

- the fact that although some trusts had been successful in securing s106 contributions, this was the exception and not the rule

- a suggestion that the education sector was generally more successful in securing contributions

- work undertaken at national level to secure healthcare bodies access to contributions required additional work at the regional and local level to build relationships between individual STPs/Trusts and local planning authorities

- although not stated explicitly, there was an implication in the guidance that individual healthcare bodies were sometimes duplicating the work of others in seeking to engage local authorities[37]

7.76 In order to make positive progress, the guidance urged:

- a dedicated single contact within a locality to build relationships and avoid any duplication

- the use of targeted professional support

- a bespoke engagement strategy to ensure local planning authorities have a proper flow of data outlining healthcare bodies' estate plans and infrastructure requirements to ensure these are reflected in Infrastructure Delivery Plans/Infrastructure Assessments and are used as the basis of engaging the development industry for appropriate levels of financial contributions

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[36] NHS Improvement: Securing Section 106 and community infrastructure levy funds – a guide (September 2018)

[37] Similar conclusions were arrived at by the public policy thinktank Reform who in January 2020 published Planning for Patients: the role of Section 106 planning contributions. In addition to the issues identified in 7.75 above Reform also identified an issue of s106 contributions being secured by local planning authorities which then remained unspent

What are the likely health infrastructure costs associated with Local Plan growth?

7.77 It is possible to calculate the costs associated with the provision of primary healthcare infrastructure associated with growth over the Local Plan period by utilising one of the calculations embedded in the policies adopted by a number of Leicestershire local authorities (see paragraph 7.73). We do not think it is possible nor indeed relevant to make the same calculation for secondary healthcare given:

- the recognition (both by the government, in agreeing to fund the secondary healthcare transformative changes in full but also in Naylor) that this is a national not a local funding issue
- secondary healthcare in any event transcends any one locality such as the City of Leicester to include a far wider area over which such services are delivered
- the transformative changes proposed in secondary healthcare infrastructure are of such a scale as to entirely eclipse the relatively small impact wrought by growth

7.78 Utilising the figure of £421/dwelling towards the cost of primary healthcare (a figure identified by the East Leicestershire and Rutland CCG as a reasonable representation of the primary healthcare cost associated with growth) we arrive at the following costs over time[38]:

	2019 - 2024	2024 - 2029	2029 - 2036	Total
Primary Healthcare Costs associated with growth – general				
Growth Areas	£1.17m	£0.81m	£1.19m	£3.17m
Windfalls	£0.32m	£0.32m	£0.44m	£1.08m
Non CDA/Non-Strategic	£0.06m	£0.39m	£0.16m	£0.61m
Total (Primary)	**£1.55m**	**£1.52m**	**£1.79m**	**£4.86m**

Table 7.13: Primary healthcare infrastructure need over the Plan period

7.89 Turning to the key growth locations identified in Chapter 4, we arrive at the following primary healthcare costs per location, again over time:

Period	2019 - 2024	2024 - 2029	2029 - 2036	Total
Primary Healthcare Costs associated with growth – by specific growth location				
CDA	£1.1m	£0.32m	£0.63m	£2.05m
General Hospital	£0.05m	£0.10m	£0.07m	£0.22m
Western Golf Course		£0.04m	£0.15m	£0.19m
Ashton Green East		£0.13m	£0.15m	£0.28m
Land North of A46	£0.01m	£0.17m		£0.18m
W of Anstey Lane			£0.1m	£0.1m
Total (Primary)	**£1.16m**	**£0.76m**	**£1.1m**	**£3.02n**

Table 7.14: Primary healthcare infrastructure need by growth location over the Plan period

[38] These figures will need to be kept under review and any changes reflected in the Regulation 19 version of this Assessment

7.80 The figures for overall growth related primary healthcare need may be higher if a different methodology is used (we arrive at £5.85m and £9.0m with the alternative calculations identified in paragraph 7.74) the level of investment needed is very small in relation to the likely investment we think is required to institute the Primary Care Strategy. As we have stated earlier we have estimated that this could be in the order of £150m over the Plan period, so the costs identified in Table 7.13 is only 3% of this.

7.81 Aside from the relatively small quantum, although we recognise that there is some merit in the 2018 NHS Improvement Guidance (not least that of the need for professional guidance and better liaison) we are not convinced that developer contributions are an integral part of the funding of new healthcare infrastructure.

7.82 Funding for this should be driven, in our view, by:

- more effective use of the current estate generating capital receipts through land disposals
- centralised (government) not localised funding arrangements in response to the twin objectives of (a) transformative changes to the way health provision is provided to make it fit for purpose coupled with (b) additional resources to fund services where the level of provision has been historically inadequate (mental health) or where new challenges will present themselves (around an aging population)
- private investment, particularly in the primary care sector

Estimate of primary and secondary healthcare infrastructure needs

7.83 Our summary estimates of needs, expressed as costs, are set out in Table 7.15 below. This includes our estimates of the phasing of investment; we have assumed that 2 new comprehensive PCN complexes are delivered in the first two Local Plan tranches (2019 – 24 and 2025 – 29) with one in 2030 – 2036) whilst for the secondary healthcare provision, some of the £465m identified for this project rolls over from 2019 – 24 into 2025 – 2029. (We have also included our estimate of the specific growth related requirements primary healthcare requirements over the Plan period).

Primary and Secondary infrastructure investment projected over the Local Plan period				
Local Plan Timeframe	**2019 - 2024**	**2025 - 2029**	**2030 - 2036**	**Total**
Primary Care Investment	£60m	£60m	£30m	£150m
(Of the above, proportion growth related)	*(£1.55m)*	*(£1.52m)*	*(£1.79m)*	*(£4.86m)*
Secondary Care Investment	£350m	£115m		£465m
Total	**£410m**	**£175m**	**£30m**	**£615m**

7.15: Projected Investment, Primary and Secondary Healthcare 2019 - 2036

Future transformative changes in healthcare

7.84 As with other infrastructure topics there is huge potential for future infrastructure needs to be influenced by significant changes brought about through new technologies. In 2018 The Health Foundation, the Institute for Fiscal Studies, The King's Fund and the Nuffield Trust, in acknowledgement of the passing of 70 years since the introduction of the NHS, produced a publication looking at likely game changers for the future.[39]

7.85 The report identified 4 big technological changes which have the potential at least to bring about radical changes in healthcare provision, as follows:

- **Genomics** can target treatment interventions at specific sub-groups of patients, potentially making them more effective and opening up new therapeutic possibilities. The complete sequencing of the human genome in 2003 allowed the UK to become the first health system to introduce genomic medicine into mainstream health in 2015, allowing patients receiving treatments that are likely to be most effective based on the genetic, lifestyle and environmental information of the individual in question – so-called 'precision medicine'

- **Remote care** can improve access to health care services, enabling patient needs to be addressed as early as possible and potentially making systems more efficient. Advancements in remote care are happening in all parts of the health service; in primary care, NHS England has allocated £45 million over five years to support the uptake of online consultations; in secondary healthcare there are a growing number of 'virtual clinics', where GPs email consultants and ask for advice, or in outpatients services, particularly for follow up care; in social care there are examples of connecting care homes to monitoring hubs staffed by clinicians, who can make an assessment and offer advice in order to reduce A&E attendances

- **Technology-supported self-management** using digital technology can help to empower patients to better manage and understand their condition. Online health communities enable patients to share their experiences, swap tips and exchange resources; apps support medication adherence, symptom tracking and peer support; and there are a host of websites providing health information

- **Data** can provide new ways for the NHS to learn, improve and generate new research – alongside **artificial intelligence (AI)**, which is providing new analytical capacity for diagnosing patients, effective triage and logistics

[39] What will new technology mean for the NHS and its patients? Four big technological trends

Adult Social Care

7.86 The City Council has widespread responsibilities to protect a range of vulnerable groups who need care and support because of their age, health and disability, or because they are caring for others.

7.87 The focus of meeting the needs arising from those requiring support revolves around promoting, maintaining and enhancing people's independence so that they are healthier, less reliant on formal support and lead more fulfilling lives.

7.88 To achieve this the City Council has the following strategies in place:

Strategy document	Comment
Leicester City Council Adult Social Care Strategic Purpose and 6 Strategic Priorities	Measures to protect and empower the most vulnerable people in Leicester
Leicester City Council Strategic Commissioning Strategy 2015-2019	A 5 year vision and a framework for the future commissioning of services that deliver quality and value for money, safeguard users from abuse; and prevent, postpone and minimise the need for formal care and support through commissioning a system that promotes independence and well-being
Leicester City Council Adult Social Care Market Position Statement 2018 - 2020	Information for providers (organisations that may wish to provide adult social care services in future), setting out priorities, information about current and future needs, and plans for future commissioning
Adult Social Care Local Account 2015-2016 (latest available)	Annual statement showing how Leicester City's Adult Social Care services have performed over 12 months, and sets out future plans
Adult Social Care Independent Living and Extra Care Commissioning Strategy 2013	Provides an overview of the state of the current market for independent living, and the level of need
Joint Mental Health Commissioning Strategy For Leicester City April 2015 – March 2019	Produced jointly with Leicester City Clinical Commissioning Group (CCG). Sets out information about the needs of people with mental health problems and plans for commissioning services to meet those needs
Joint Learning Disabilities Commissioning Strategy for Leicester City 2015-2019	Produced jointly with Leicester City Clinical Commissioning Group (CCG). Sets out information about the needs of people with learning disabilities and plans for commissioning services to meet those needs
Leicester, Leicestershire and Rutland Autism Strategy 2014 - 2019	The needs of people with autism and the plans for commissioning services to meet those needs (currently under review)
The Joint Health, Social Care and Education Transitions Strategy 2019 - 2022	Jointly produced with Leicester CCG, this sets out an approach for improving the support offers to young people with additional needs as they move into adulthood
Joint Carers Strategy (2018 – 2021); recognising, valuing and supporting carers in Leicester, Leicestershire and Rutland	Strategy supported by a range of adult social care bodies to deliver a local vision of carers

Table 7.16: Leicester City Council strategy documents relating to relating to the provision and commissioning on adult social care

Health and Social Care Sector Growth Plan for Leicester, Leicestershire and Rutland, LLEP (2017)

7.89 In 2016, Leicester City Council, working in partnership with Leicestershire County Council, Rutland County Council and the Leicestershire Enterprise Partnership (LLEP), commissioned a growth plan for health and social care in Leicester, Leicestershire and Rutland (LLR).

7.90 The Growth Plan largely focuses on improving skills and prospects within the local workforce to promote employment in the health and social care market, an issue that has been of increasing concern for employers in this sector in recent years. The Growth Plan included a recommendation for the introduction of a joint authority-wide workstream with a remit to consider how they might invest in the social care sector with maximum impact/effectiveness. This could involve researching national and international examples of good practice and considering how the services and skills base of the private sector can be further developed.

7.91 The table below provides a summary of the support that is currently provided by the City Council:

Support provided	Numbers accessing that support
New referrals for contacts with Adult Care Services	12105
Assessment of eligible needs	4910
Minor adaptations to individual's properties	3822
Installation of assistive technology devices	3439
Reablement support to improve independence	1769
Sheltered housing placements	410 (14 developments)
Residential care places	1365
Nursing care places	235
Total people assisted	**28055**

Table 7.20: Total support, Leicester City residents, 2016 – 16 (Source Leicester City Adult Social Care Local Account 2015 – 16)

7.98 Future extra care / supported housing is likely to be secured through Council led and enabled development, potentially on Council land, utilising right to buy receipts.

Public Health and Wellbeing

7.99 A key change introduced as part of the 2012 Health and Social Care Act was the transfer of responsibility for commissioning many public health services from NHS to local authorities and a new executive agency of the Department of Health, Public Health England, was set up to *'protect and improve the nation's health and wellbeing, and reduce health inequalities'* at a national and local level.

7.100 Public Health England's key role is to protect the country from threats to health, including outbreaks of infectious diseases and environmental hazards, in the UK and abroad. It also seeks ways of improving the public's health and wellbeing through a range of campaigns (e.g. in relation to obesity, tobacco, diet, drugs and alcohol).

7.101 It also acts as the catalyst for improving public health services, through the application of good practice, influencing public health policy, and deriving solutions based on community engagement, and adopting holistic approaches to specific environments and life style choices.

7.102 Local responsibilities for public health rest with Leicester City Council working in partnership with a range of bodies including NHS England and the CCGs.

7.103 The City Council has produced a Health and Wellbeing Strategy and Action Plan 2019-2024. It is a 'call to action' to tackle the origins of ill health in the City, recognising that a more rounded approach to addressing health challenges is needed, which takes into account wider determinants of health such as the environment, communities and relationships.

7.104 The Plan takes a holistic approach to health, which means looking at how the built environment of the city itself can influence health and wellbeing, instead of looking only at the people who live in it. Its stated aim is to put the 'person' at the centre, looking at all the factors in people's lives and in their living environments that can affect their health.

A key role in joining up Health and Social Care – Health and Wellbeing

7.105 A key task is to weave together the various strands of health and social care to provide a holistic approach to health and wellbeing. Leicester's Health and Wellbeing Board is made up of local councillors, GPs, health and social care officials and representatives of patients and the public and was set up to lead and direct work to improve the health and wellbeing of the population through the development of improved and integrated health and social care services.

7.106 The role and function of the Health and Wellbeing Board is as follows:

- to identify needs and priorities across Leicestershire, and publish and refresh the Leicester Joint Strategic Needs Assessment (JSNA) so that future commissioning/policy decisions and priorities are based on evidence

- to prepare and publish a Joint Health and Wellbeing Strategy and Action Plan (see above) on behalf of the City Council and its partner clinical commissioning group so that work is done to meet the needs identified in the JSNA in a co-ordinated, planned and measurable fashion

- to approve the Better Care Fund Plan including a pooled budget used to transform local services so people are provided with better integrated care and support together with proposals for its implementation

- to have oversight of the use of relevant public sector resources to identify opportunities for the further integration of health and social care services

Health and Wellbeing Infrastructure Needs

7.107 There is a demonstrable wide ranging brief around health and wellbeing. However, the services which cover these responsibilities within the city do not themselves have specific budgets to promote infrastructure investment and instead engage with – and influence – more infrastructure areas covered within this assessment.

7.108 For example:

- an important public health and wellbeing focus is on disease prevention, so there are a links with a range of activities such as primary and secondary healthcare but also sport and leisure facilities
- in a similar vein, health education is a significant area of engagement, with the City working with other key agencies
- in regard to open space provision, there is a vital need to ensure this is accessible and has more than just amenity value, offering genuine health opportunities particularly in hard space areas of Leicester
- connectivity of activities is vital so as to overcome social isolation

8. Utilities

What this chapter covers

8.1 In this section we examine energy (electricity and gas, with a review of energy supply and renewables); wastewater; potable water; and broadband/telecoms.

Energy Supply

8.2 The energy provision and supply position for Leicester is as follows:

Electricity	UK National Grid owns, operates and maintains the 400 kV and 275 kV transmission network, with Western Power Distribution (WPD) as distribution network operator (DNO) being responsible for local supply to Leicester's homes and businesses.
Gas	National Grid provides for the conveyance of gas, with a local operator (Cadent Gas) acting as supplier

Table 8.1: Gas and electricity supply arrangements in Leicester

Overview of energy supply

8.3 There have been a range of studies that have explored energy supply infrastructure issues, as follows:

Leicester and Leicestershire Utilities Infrastructure Capacity (UIC) Study (November 2017)

8.4 This study was commissioned as part of the evidence base for the city and county-wide Strategic Growth Plan (SGP). Although it has the primary aim of establishing the likely strategic utilities infrastructure requirements needed to support intermediate-term growth to 2031 and longer term growth to 2050, it has a considerable amount of local context including those for the City, particularly for the latter part of the Local Plan period. The study covers electricity and gas supply networks and telecommunications networks (including broadband) but not water or sewerage infrastructure.

8.5 To model the impact of growth on current utility infrastructure provision the study used local economic and development growth forecasts to predict future utility demands, mapped across the study area and then compared to the utility network provider's growth plans. Follow up contact with operators then took place to identify potential shortfalls.

8.6 In summary the study concluded that in the long term - and beyond the City - some longer term growth might have some restricted capacity due to the level of commitments in place for developments already planned. However, this lack of capacity should not at this stage be viewed as a constraint to such growth, and in any event the concerns were for areas outside Leicester (to the north and the south) that would be the priority for further investigations; these would assess the potential time and cost implications of network capacity upgrades to support development in these areas.

8.7 In any event, the Study identifies that aside from investment to improve capacity through network reinforcements there were a number of other infrastructure investment measures to unlock the growth potential of Leicester and beyond, including:

Action	Potential initiative
Energy Consumption Reduction	To release network capacity through reducing demand and increasing efficiency; there are many opportunities focusing on retrofitting/physical improvements to buildings, services and appliances, coupled with exemplar standards for all new buildings
Smart Grids and Peak Reduction Demand	Aside from the issue of reducing overall demand is the imperative to seek reductions in demand at peak periods (the times at which the most power is withdrawn from the National Grid).This is both an issue for the network and the user, and there are smart techniques which can flatten out demand such as Automated Demand Reduction (ADR) which closes down non critical uses at peak periods
Embedded small scale generation	Small scale low carbon energy plants close to network connections that can be brought on line to boost local distribution at peak times
Battery storage	Technology is improving but capital costs are high, and the regulations need to be changed (so network operators can own these themselves, rather than relying on third parties)

Table 8.2: Leicester and Leicestershire UIC Study investment measures proposed

8.8 There are significant factors here. More generally, demand side response (DSR) is becoming an increasing factor in managing supply. Under DSR, organisations are incentivised to shift energy use from peak to off-peak times, offsetting the nation's power requirements in real time without the need for additional electricity generation. The capability of achieving this will be strengthened by the rise in capability of battery storage, with the Renewable Energy Association and All-Party Parliamentary Group on Energy Storage predicted in 2017 would rise above 8 GW by 2021, up from just over 60 MW of capacity at that time.

The Leicester & Leicestershire Local Enterprise Partnership (LLEP) Energy Infrastructure Study

8.9 The LLEP's Energy Infrastructure Study (October 2018) explores a number of issues associated with achieving future decarbonisation and proposed a number of actions aligned to the UK government's Clean Growth Strategy[40], including the energy efficiency of homes and businesses, accelerating the shift to low carbon transport and supporting clean growth. It also proposes two actions that will have implications for the energy infrastructure.

[40] UK Clean Growth Strategy 2017 (As amended 2018); This strategy sets out a comprehensive set of policies and proposals that aim to accelerate the pace of 'clean growth', i.e. deliver increased economic growth and decreased emissions.

8.10 Firstly, the study recognises an important challenge is co-ordinating the reinforcement of the electricity grid to accommodate the anticipated rollout of housing and employment growth, in so doing avoiding any obstacles to delivering such growth, whilst at the same time ensuring that reinforcements are actually required and do not become 'stranded assets' - investment that ultimately is either not needed or if needed, not utilised for a period of time. If this happens, this is a cost that is borne by existing customers, not the occupants of new development.

8.11 The current regulatory framework does not allow for DNOs such as WPD to invest ahead of need if it cannot show a benefit to the customer; what this means that the DNO is unlikely to be incentivised to undertake the investment as it involves a risk that is not within its control (i.e. it is reliant on the development industry to bring forward proposals in a timely fashion, which experience would suggest cannot be guaranteed). This is a significant factor that can lead to delays in connections.

8.12 The LLEP identified the potential for it to provide a role as facilitator between new customers (i.e. new development) and the DNO, with sharing both the risk and cost of upgrading the network[41]. There is an indirect benefit in allowing the network operator to plan for network growth with assurance, but perhaps more significantly in growth terms, a direct benefit in reducing the risk of growth being delayed.

8.13 A potential second intervention involves non-domestic high demand customers being offered flexibility in terms of connection (i.e. a lower standard of connection to avoid grid reinforcements).

Energy Supply issues by Location in the UIC

8.14 The UIC study identified key issues of demand outstripping capacity in some local authority areas by 2050; Hinckley and Bosworth (by 2034) Charnwood (by 2037) and Oadby & Wigston, but not, critically, in Leicester. Similarly, looking at primary growth locations identified in the SGP, no known capacity issues were identified before 2050, suggest there is sufficient headroom in terms of supply to way beyond the end of the Plan period.

Electricity Supply in Leicester

8.15 National Grid owns, operates and maintains the 400kV and 275kV national electricity transmission network. At a local level Western Power Distribution (WPD) are then responsible for the electricity distribution network at 132kV. The electricity supply to

[41] The LEP is doing just that in West Loughborough (Charnwood); in 2018 the LLEP prepared a business case to part fund the upfront costs to support the installation of a critical first phase of electricity infrastructure to support two critical strategic developments, a major housing scheme south west of Loughborough (West Loughborough SUE) and the Loughborough University Science and Enterprise Park (LUSEP) where WPD was unwilling to take the risk of delays in development rollout and therefore the prospects of 'stranded assets' might increase. Although such circumstances are not anticipated to arise in the City, should they do so in the future there is the potential for a similar interventions to avoid power supply being an inhibiter of development rollout

Leicester is generally supplied by the 33kV grid to local low voltage substations and thence to the end user.

8.16 Generally speaking electrical supply planning is reactive, although demand is modelled to an extent on'natural growth' in energydemand. WPD has not advised on any specific requirements relating to load increases required within the City as a result of growth, as it is not able to analyse detailed network requirements before site specific allocations have been made.

8.17 It is not possible to assess actual upgrades in advance, although its modelling is dynamic and updated annually, and this gives an estimate of the future loads in the network and indicates where and when the network may reach capacity and whether further works, such as upgrading of a sub-station, will be required. Capacity can also be reserved for up to 12 months.

8.18 If a new substation is required, this is likely to cost in the region of £2.5 million and the cabling is likely to cost around £5 million per kilometre. This will be a commercial cost falling on the end user and not a public infrastructure cost.

Electricity infrastructure in the Infrastructure Delivery Schedule

8.19 From the above we conclude that there are no specific electricity related infrastructure requirements relating to the provision of supplying power to new growth related development in the City, as there are no known capacity issues on the wider strategic network, and that power connectivity at the local level is a contractual matter~~s~~ between the suppler and end user.

8.20 This will appear in the IDS as follows:

Electricity Infrastructure Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Electricity infrastructure provision	**No specific public infrastructure costs identified**			

Table 8.3: Assessment of electricity infrastructure needs within Plan period

Renewable energy in Leicester

8.21 Figures for the production of renewable energy have been obtained from the quarterly BEIS Renewable Energy Planning Database (September 2019 version). This reveals that there is a single operational large scale (>1MW) renewable energy scheme in Leicester involving Solar Photovoltaics at the National Space Centre, which produced 4MW. Off grid power generation for both renewables and non-renewable forms of energy generation is possible, but most microgenerators currently favour grid connections to enable them to export surplus power, although as battery technology improves, circumstances could change.

Charging Points for Electric Vehicles

8.22 A study for the Committee on Climate Change[42] explored the electric vehicle charging infrastructure required to 2030, taking into account factors such as increased battery range, the number and pattern of trips taken using EVs, the availability of different types of rapid chargers and their associated charging speeds and times, as well as the behavioural factors including 'range anxiety'.

8.23 The study's conclusions were as follows:

Finding	Comment
Distinction between different types of charging facilities	Two types are distinguished; long distance *en route* rapid charging and localised 'top up' charging
Future anticipated need for *en route* chargers	Rapid chargers located near the major roads network need to expand from 460 in 2016 to 1,170 by 2030
This is a relatively modest rise (2.5 times current provision when there are expected to be 27 times the numbers of EVs)	This can be explained by increases in range (with an estimated 1% of vehicles needing to charge en route) and faster charging rates leading to greater charging utilisation
A significant increase in public chargers for 'top up' charging, from 2,700 in 2016 to 27,000 by 2030	Public parking based charging in towns and local areas reflecting a continued demand for 'top up' parking despite an increase in battery size and range and reductions in range anxiety
Battery charging rates are being revolutionised	The study estimates that around 85% of chargers in 2030 will be either fast (22kW) or rapid (43+ kW)
There are uncertainties around this requirement	Most of these uncertainties are behavioural, around range anxiety and how long EV drivers are prepared to wait for a charger to become available
The total cost for charging infrastructure across the UK is estimated at £530m	This breaks down into £500m for 'top up' charging and £30m for *en route* charging
There are some geographic factors relating to distribution	For Leicester and Leicestershire, with a location in the centre of the country and the proliferation of motorways passing through the county, EV charging infrastructure needs are likely to be proportionately higher

Table 8.4: Key Findings from the 'Plugging the Gap' report for the Committee on Climate Change, January 2019

8.24 The City Council has taken a proactive role in the installation of EV charging points. In 2018, as part of its Air Quality Action Plan, it surveyed the city's residents on potential

[42] Plugging the Gap: An Assessment of Future Demand for Britain's Electric Vehicle Charging Network (January 2018)

charging points and is now running a trial installation of electric vehicle charging points on residential streets. On top of around 150 public charging points available at council and other car parks across the city, the first charging points for residential streets are being installed in summer 2019 and anticipate further installations by March 2020.

8.25 EV usage is expected to be heavily influenced by government policy. In its Road to Zero Strategy, published in July 2018, the government proposed to end the sale of new conventional petrol and diesel cars and vans by 2040; it wants almost every car and van to be zero emission by 2050, and in the lead up to these dates, wishes to see at least 50%, and as many as 70%, of new car sales and up to 40% of new van sales being ultra-low emission by 2030. The government will legislate to ensure these targets but expects this transition to be industry and consumer led.

8.26 Given the above, a significant energy infrastructure consideration is the impact on energy needs of an increasing use of EVs, particularly if the government's stated aim of proscribing the sale of non-zero emission vehicles by 2040. By that scenario, one would anticipate a significant proportion of vehicles on the road by the end of the Plan period in 2036 would be expected to be electrically powered.

8.27 In such circumstances, additional demands would be placed on the electricity grid. It is not entirely clear how much this will be, and it will depend on a range of variables. The National Grid's 2017 study of this issue[43] put forward a range of scenarios; of these the scenario with the maximum take up of EVs would, it was estimated, require an additional 46TWH of electricity in 2050 (or around 11% of the total annual electricity demand for that year). Although this sounds reasonably significant, it should also be noted that (a) overall electricity demand by 2050 is expected to be much lower than that of today's, and that (b) a proportion of that energy need will be self-generated and therefore have no net impact on the grid.

8.28 In December 2018 the government announced that all government funded home charging points for electric vehicles must use innovative 'smart' technology from July 2019, able to be remotely accessed, and capable of receiving, interpreting and reacting to a signal. With smart charging there will be reductions in peaking of electricity demands, minimising the cost of electric vehicles to the electricity system, keeping costs down for consumers by encouraging off-peak charging. The government also offers grant funding of up to £500 to install charging points at home and in the workplace.

8.29 Although recently there has been public infrastructure investment in the EV charging network we think that with improvements in the quality and extent of home charging (coupled with public charging points being seen as a commercial venture) there will be little if any public investment in such infrastructure and we have therefore not identified anything in this Assessment or in the IDS.

[43] National Grid: Future Energy Scenarios, July 2017

Gas Supply

8.30 The issue of gas supply to growth is overshadowed by the possibility (if not probability) that the use of gas for heating homes and businesses (currently robust, with the largest share of the market in heating homes) is set to fall drastically over the lifetime of the Local Plan as a consequence of the UK's need to meet legally binding climate change goals. The Committee for Climate Change's recommendations in its February 2019 report[44]' stated that to meet such goals, no new homes should be connected to the gas grid from 2025.

8.31 The government appears likely to back the Committee's recommendations, and in his 2019 Spring Statement the then Chancellor announced the creation of a Future Homes Standard to significantly enhance energy efficiency in new housing development, which would involve proscribing the use of gas boilers in residential development by 2025.

8.32 The transmission network - owned by National Grid - feeds a national distribution network countrywide via high-pressure (HP) pipelines. The distribution network then connects to the local high-pressure network (operated by Cadent) before reducing the pressure at a Pressure Reducing Installation (PRI) to distribute supply Intermediate (IP), Medium (MP) and Low pressure (LP) as required by different end-users (mainly LP for domestic users).

8.33 Below PRI level everything is a contractual matter between the distributor and the consumer. (This equates to the grid substation level on the electricity network). The UIC study found that the costs of increasing capacity of PRIs can vary greatly from £100,000 to £6m, depending on the scale of works; however, the Study also concluded that both PRIs in Leicester had spare capacity.

Gas infrastructure in the Infrastructure Delivery Schedule

8.34 From the above we conclude that there are no specific gas related infrastructure requirements relating to the provision of gas supplies to new development, as above and at PRI level there are no known capacity issues, and beneath PRI these are contractual matters between the suppler and user.

8.35 This will appear in the IDS as follows:

Gas Infrastructure Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Gas infrastructure provision	**No specific public infrastructure costs identified**			

Table 8.5: Assessment of gas infrastructure needs within Plan period

[44] 'UK housing, fit for the Future?' Committee on Climate Change, February 2019

Water Supply and Waste Water

8.36 Both potable water and sewerage are services provided by Severn Trent. The company has a general duty under section 94 (clauses 1a and 1b) of the Water Industry Act 1991:

- to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers and any lateral drains which belong to or vest in the undertaker as to ensure that that area is and continues to be effectually drained; and

- to make provision for the emptying of those sewers and such further provision (whether inside its area or elsewhere) as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers.

8.37 In effect, this places an absolute obligation upon Severn Trent Water to provide such additional capacity as may be required to treat additional flows and loads arising from new domestic development.

8.38 Importantly, as a business, Severn Trent is specifically funded to discharge this legal obligation through the charging mechanism, as overseen by Ofwat through the five yearly Periodic Review process. Because Severn Trent is directly funded to provide additional sewage treatment capacity to cater for new domestic development, the Company is unable to accept individual developer contributions towards increasing the capacity of a specific sewage works.

8.39 Severn Trent Water is also under a legal duty to comply with its own sewage treatment works discharge permits, issued by the Environment Agency under the Water Resources Act 1991 (as amended by the Environment Act 1995 and the Environmental Permitting Regulations of 2010). Should it be in a position of being unable to comply with a permit to discharge as a consequence of growth within the sewerage catchment, water companies are obliged to remedy the situation using their own resources.

The regulatory framework in which water and sewerage companies operate

8.40 In the water and sewerage sector, the planning process is split into 5-year “asset management periods” or AMPs. The current period is AMP 6, running from 2015-2020, and AMP 7 will run from 2020-2025. The year before each AMP starts, Ofwat sets out its methodology for that AMP’s “Price Review”, and water and waste water undertakers are required to submit business plans, which Ofwat reviews before setting the prices for that AMP.

8.41 The business plans must also take into account a longer 25-year water resource management plan, approved by the Environment Agency, and showing how the undertakers will ensure an efficient, sustainable secure supply of water over the 25-year planning period, and any cross water company collaboration.

8.42 Ofwat set its methodology for the 2019 Price Review in December 2017, and Severn Trent submitted its Business Plan (known as PR19) in September 2018, receiving Ofwat's approval in January 2019, one of only 3 of the 18 companies receiving sign-off at the first attempt.

8.43 Ofwat's primary focus is on regulating the prices charged to consumers and seeking to improve undertakers' performance. In AMP 7 the key focus is on environmental improvements (e.g., reducing leaks), resilience, and affordability. The concerns that there are in relation to the Review and the delivery of future water related infrastructure are that:

- Ofwat is seeking to reduce the extent to which water companies can pass their financing costs onto consumers; the companies concerned may show reluctance to borrow to finance strategic infrastructure, notwithstanding the current reduced cost of borrowing

- the government's Strategic Priorities Statement to Ofwat (to which the regulator must comply) sets no specific objectives in relation to the delivery of water and sewerage infrastructure, but instead requires Ofwat to further increase water supply resilience, through both the planning and delivery of new supply and also measures to improve water supply efficiency and reduce demand. Ofwat has interpreted this requirement as a cost assessment framework that treats demand and supply based solutions neutrally, but this does not work well in growth locations where efficiency measures and demand limitation is certain to be outstripped by a need to increase overall infrastructure to deliver that growth

- a more general geographic factor is that water companies like Severn Trent work across multiple local authorities, and whilst water companies are encouraged to work with local authorities to address specific infrastructure needs within local plans, their investment decisions tend to address needs across their entire operational level (they also collaborate with adjoining water companies), which may require local authorities promoting growth related water and sewerage infrastructure investment to pursue this on a pan authority basis

- the financial model operated by Ofwat allows water companies to recover "efficient costs" of delivery, but issues can arise where companies spend more than this to meet their obligations as the responsibility for covering these additional costs falls on their investors. To promote growth Ofwat could be encouraged to adopt a different financial model for areas viewed as growth locations; it could be asked to establish objectives to allow for the forward funding of strategic infrastructure, perhaps with a third party such as a LEP initially underwriting some/all of the costs

PR19 Business Plan and the development of the first Drainage and Wastewater Management Plan

8.44 As part of the PR19 submission document Severn Trent included a draft of its first Drainage and Wastewater Management Plan. This will cover the investments the company plan to make over the next 5 year period (2020 to 2025), as well as setting out a long term (25 year) strategy for how it is going to deliver a reliable and sustainable wastewater service.

8.45 The first full publication of Drainage and Wastewater Management Plans (DWMPs) is not scheduled until 2022/23, but Severn Trent have elected to provide a draft of its initial findings to:

- support the strategic investments it is proposing for AMP7
- demonstrate its commitment to long term, sustainable, wastewater planning
- provide an early benchmark to show support within the sector in the development of DWMPs

8.46 Severn Trent intend to produce another update on its DWMP in 2020/21 to aid early customer and stakeholder consultation and inform the next 'State of the Nation' report by the National Infrastructure Commission (NIC). It then intends to further refine its plans with latest data and with further consultation before producing a full DWMP in 2022/23 to inform its PR24 business plan submission.

8.47 The first assessment stage of a DWMP is to complete a risk-based catchment screening to identify those catchments that require further, more detailed, investigation. Each of the 1,010 'Tactical Planning Units' (into which the combined Severn Trent Catchments are subdivided) were assessed against 16 screening metrics (a combination of both performance and risk assessment measures) set out in the DWMP Framework.

8.48 In total 65% of the Company's Tactical Planning Units have been identified by the risk-based catchment screening as needing to progress to a further level of assessment in the DWMP. Of these, seven of the larger catchments are included in the PR19 Business Plan for significant investment that will help address the needs identified through the risk-based screening. However, none of these are in or adjoining Leicester and there is only one in Leicestershire[45].

Water and Sewerage Capacity issues specific to Leicester

8.49 Detailed evidence specific to Leicester can be gleaned from evidential work undertaken on behalf of Severn Trent to feed into the City Council's Water Cycle Study during 2018.

[45] This is Snarrows (North West Leicester, serving Coalville and Whitwick, where there are Combined Sewer Outflow and flooding issues)

8.50 As detailed below, Severn Trent operates a number of sewage treatment works in and around the Leicester local authority area, all discharging ultimately to the River Soar. All of the sewage treatment facilities in the Leicester local authority area operate under effluent discharge permits, as issued by the Environment Agency. These permits specify both a volumetric limit (termed 'Dry Weather Flow') and limits on specific pollutants.

8.51 The quantification of 'Dry Weather Flow' is subject to specific definitions which are laid down by the Environment Agency in the treatment works' discharge permits. The difference between the measured DWF and the permitted DWF is termed headroom, and this is a critical consideration in determining the capacity of sewage treatment works to treat waste water from proposed new development.

8.52 There are however a number of factors (in addition to new developments) that can affect the quantification of headroom such as:

- natural year on year variations in measured DWF
- assessment of headroom against data defining the volume of flows that exceed the average level against a specified percentile
- any changes in water consumption (both domestic and trade)
- closure of trade effluent dischargers (or increase in water reuse)
- assumptions around water consumption in newbuild houses

8.53 Severn Trent bases its capacity calculations on the long term average of measured flow data when assessing headroom, not annual variation. Table 8.6 sets out existing DWF permits for sewage treatment works in the City and adjoining area in which growth is anticipated taking place.

Name of Sewage Treatment Works	Current DWF Permit (m3/discharge)	Permit Revisions agreed with Environment Agency (m3/d)
Countesthorpe	1,500	
Great Glen	1,160	1,090
Oadby	4,980	4,100
Wanlip	135,000	
Whetstone	6,165	
Wigston	10,000	

Table 8.7: current capacity, STWs serving the City of Leicester

8.54 Table 8.8 then looks at the capability of existing works to accommodate additional growth as calculated by Severn Trent in 2018, with projected numbers projected against capacity. They arrived at the following conclusion (note that the dwelling numbers take into account development outside of Leicester but within the catchment area on the basis that growth in the City cannot be viewed in isolation but instead, holistically.

Name of Sewage Treatment works	Measured DWF	Volumetric Headroom	Equivalent number of new dwellings	Housing growth numbers identified
Countesthorpe	1,308	192	693	805
Great Glen	775	314	1,135	731
Oadby	3,693	406	1,468	150
Wanlip	137,056	-	-	16,805
Whetstone	4,695	1,470	5,306	494
Wigston	4,969	5,031	18,161	1,050

Table 8.8: capability of existing STWs to accommodate future growth

8.55 In addition to the above the allocation of flow from the Lubbesthorpe development remains the subject of a strategic review, with options including allocation to Whetstone, allocation to Wanlip or a dedicated treatment works.

8.56 Having looked at the allocation of development sites to sewage treatment works based on the proximity of development areas to existing catchments, Severn Trent conclude from this work that should it come to pass that if any of the treatment works in the Leicester area reaches a point whereby incoming flows exceed the volumetric permit (as appears to be occurring at Wanlip STW, although the works was compliant with its permit in 2017) there are a number of options available to Severn Trent to restore compliance. These include:

- seek an increase in the volumetric permit from the Environment Agency
- if there is a mismatch between growth locations and the availability of headroom at the works within the locality, Severn Trent could explore the possibility of local sewerage catchment transfers between works within the catchment to match supply and demand (as an example, the catchments of Oadby, Wigston and Wanlip STWs are all relatively close together and it may be feasible to transfer flows between these catchments)
- review sewage works discharge permits on a whole catchment basis to address a specific issue of a works exceeding its DWF

8.57 Turning to potable water, we have not identified any specific issues with regards with its future supply, any growth related issues.

Waste and potable water infrastructure in the Infrastructure Delivery Schedule

8.58 From the above we conclude that there are no specific waste and potable water related infrastructure requirements relating to new development, as Severn Trent is legally obligated to provide additional sewage treatment capacity to cater for new development and, although there is the potential for some capacity issues at some sewage treatment works, there are suitable mechanisms for overcoming this which should avoid this being an issue.

8.59 This will appear in the IDS as follows:

Potable and Waste Water Infrastructure Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Potable and waste water infrastructure provision	**No specific public infrastructure costs identified**			

Table 8.9: Assessment of potable and waste water infrastructure needs within Plan period

Water and sewerage – a long term perspective

8.60 A final focus is on the long term issues facing the industry, looking ahead to the end of the Local Plan period. A sense of this can be obtained from the Environment Agency's most recent 'State of the Environment' report on this issue[46].

8.61 The key challenges facing the industry include the following:

Key Challenge	Comment
Climate change is likely to have a long term impact	Climate change means the UK having hotter and drier summers. By 2040, with more than half of our summers exceeding 2003 temperatures, resulting in water shortages: by 2050, the amount of water available could be reduced by 10-15%, with some rivers seeing 50%-80% less water during the summer months
A consequence of climate change will be likely increased prevalence of severe drought conditions	Persistent drought will have significant economic and environmental consequences. The Agency estimates that the cost of an extreme drought could top £40bn
Making water resources more resilient is therefore an imperative	An investment of £21bn (roughly half the cost consequences of an extreme drought) is needed to avoid the consequences of such an event
High winter river flows have increased over the past 30 years	The consequences of this are a subsequent increase in the frequency and magnitude of flooding
A significant proportion of abstraction is unsustainable in environmental terms	Abstraction, drainage and altered water levels are major causes of damage to wetlands. In 2017, abstraction from around 28% of groundwater bodies and up to 18% of surface waters was at higher than sustainable levels. In 2016, unsustainable abstraction prevented at least 6% and possibly up to 15% of river water bodies from meeting good ecological status or potential.
UK water consumption is at unsustainable levels	Average daily water consumption in the UK is close to 150 litres; Waterwise considers that a more sustainable level of consumption should be around 100 litres
Population growth will also have a significant impact on the industry	UK's population is expected to rise from 67m now to 75 million in 2050; the additional numbers will need houses, roads, energy, food and places to work, all of which will require more water
Sufficient clean water to 100% of the population 100% of the time cannot be guaranteed	The industry, government and the regulators will need to focus their efforts on sufficient water supplies, which cannot be taken for granted

Table 8.10: Key Future Challenges facing the water and sewerage industry

[46] Environment Agency: State of the Environment: Water (May 2018)

Telecommunications – Broadband and 5G

Superfast Broadband

8.62 With broadband provision there are two main types of technology deployed:

- FTTC (Fibre to the cabinet): download speeds up to 350 mbps[47], with upload speed typically 10% of download speed

- FTTP (Fibre to the Premises): downloads speeds that can exceed 1000 mbps with upload speeds symmetrical to download

8.63 FTTC is a part-fibre technology: fibre optic cables run to a street cabinet, and then existing copper telephone wires are used to connect the cabinet to individual premises. The speed of connection decreases the further away from the cabinet the premises is based, because the signal loses strength as it travels along the copper wire. The rollout of superfast broadband in the UK has mainly been delivered using this technology.

8.64 FTTP is a broadband technology that involves fibre optic cables running directly to individual premises. Fibre optic cables use light signals to carry data, so the signals travel very fast with significantly less signal loss with distance compared to copper wires. Much higher download and upload speeds are possible.

8.65 Other variations of FTTC include **BT's Gfast** which works by extending the frequency range for broadband signals on last-mile copper networks and is installed at street cabinets already served by fibre, representing a substantial saving when compared to last-mile fibre. Originally planned to serve 10 million homes and premises by 2020, a recent scaling back has taken place to allow a focus on higher speed all fibre networks. **Virgin Media's 'Project Lightning'**, announced in February 2015, has connected 1.8 million properties, with DOCSIS 3.0 and 3.1 technology which is capable of speeds of up to 350 mbps.

8.66 **Fixed Wireless** uses specific frequencies of the radio spectrum to transmit signals through the air in a similar way to mobile phone networks, in so doing dispensing with wires. Depending on the number of users served by the wireless connection, it is capable of delivering superfast speeds; however, most wireless providers only offer limited coverage in specific areas, such as rural villages and there is no record of it being used in Leicester.

Current agreed government obligation to deliver superfast broadband

8.67 The rollout of superfast broadband in the UK has primarily been led by private companies such as Openreach and Virgin Media. Government support is focused on the

[47] Mbps – megabits a second

rollout of superfast broadband to those areas not reached by private investment. To do so the government has been providing funding to local bodies through the superfast broadband programme managed by Broadband Delivery UK (BDUK), part of the Department of Digital, Culture, Media and Sport (DCMS).

8.68 Under the superfast broadband programme local bodies draw up broadband delivery plans and procure contracts with broadband providers to build infrastructure to target areas in their locality.

8.69 **The Gigabit Broadband Voucher scheme**[48], announced by the government in March 2018 is a £67m scheme for vouchers that can be used by small businesses and local communities surrounding them to contribute to the installation cost of a gigabit-capable connection. Businesses can claim up to £2,500 against the cost of connection either individually or as part of a group project. Residents can benefit from the scheme with a voucher worth £500, also as part of a group project.

8.70 **Free or co-funded access to new development;** in February 2016 the government announced an agreement with Openreach – BT's local access network business - and the Home Builders Federation (HBF) to deliver superfast broadband connectivity to new build residential properties in the UK.

8.71 The deal sees fibre based broadband offered to all new developments either for free (for developments of 30 dwellings and over) or as part of a co-funded initiative (for developments of under 30 dwellings). As part of the agreement, Openreach has introduced an online planning tool for developers. This tells them whether properties in a given development can be connected to fibre for free, or if a contribution is needed from the developer to jointly fund the deployment of the local fibre network.

8.72 **A Universal Service Obligation for Broadband**; from 2020 (with requests for connections expected to start in late 2019) the government is introducing a UK-wide measure to deliver broadband connections to the hardest to reach premises or those with speeds below a defined threshold, thus filling the gap left by the existing superfast broadband roll-out programmes.

8.73 The USO will provide a legal right to request a broadband connection of at least 10 mbps download speed for less than £45 a month and be available to customers where those conditions do not prevail. Eligible consumers and businesses will be able to request a connection under the USO and a Universal Service Provider(s) will be required to fulfil all requests up to a cost threshold of £3,400. The USO will be funded by industry through a cost-sharing fund.

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[48] Gigabit capable connection = 1 Gbps (1000 Mbps) upload or download speeds)

Current nationwide superfast broadband coverage

8.74 Recent independent modelling by Thinkbroadband has estimated the following:

- superfast broadband has reached 95.8% of coverage in the UK as of January 2019
- of this, FTTP is available to 5.47% of premises
- 76% of this delivery was achieved by purely commercial investment (e.g. BT Openreach/Virgin Media) and the remainder by the £1.6bn of public funding secured through the Broadband Delivery UK programme
- the prediction is that future public funding reinvestment, achieved through clawback and gainshare from high take-up and efficiency savings in earlier BDUK deployments will push UK coverage of superfast broadband speeds to 'at least' 98%, leaving the remaining 2% to be covered by the Universal Services Obligation

Superfast broadband in Leicester

8.75 Superfast Leicestershire (Leicestershire County Council, the district councils and BT in additional to Leicester City Council) has been responsible for the implementation of superfast broadband in Leicester City and Leicestershire. Phase 1 of implementation from June 2014 to March 2016 saw coverage increase from 83% to 92%. Phase 2 increased coverage to 97% by September 2018. Superfast broadband provision in the City is now close to complete, although there are still pockets of underprovision.

Rollout of FTTP and Leicester

8.76 With FTTC using 'last mile' copper wiring largely in place, attention has turned to the delivery of full fibre to the home or business premises – FTTP. As noted above, less than 6% of establishments are served by full fibre; the UK lags behind many other developed countries and there is widespread acknowledgement that all communities and business need to be served with the new technology as speedily as possible to secure all the economic and social benefits it will bring.

8.77 In July 2018 the government revealed its intention to ensure that the UK would enjoy full fibre broadband coverage across all of the UK by 2033. Ofcom has facilitated this by announcing plans this year to allow other operators unrestricted access to Openreach's extensive network of poles and ducting.

8.78 Progress is being made, with Openreach already deploying FTTP in 74 locations, including a number of large cities such as Birmingham, Belfast, London, and Manchester. On average it makes FTTP available to more than 20,000 new homes and businesses every week across the UK. At present Openreach aims to reach 4 million premises by March 2021 with FTTP and there is an ambition for 15 million by around 2025. This represents around half of all premises in the UK.

8.79 The government has signalled its wish to accelerate full FTTP rollout to 2025 and now views the 2033 deadline as unambitious. However this does not represent government policy at present, and broadband operators have pushed back against this proposed new target; in essence the remaining 50% of premises that they do not intend to serve with FTTP by 2025 are far less economic and in their view would need public investment to support it, much in the same way as was necessary for FTTC rollout.

8.80 We have only anecdotal evidence of costs associated for full fibre to every premises, but the oft quoted sum is £400 each for the first 50% 'easy to reach' premises and up to £4,000 each for the remaining 50% 'harder to reach' premises.

Full Fibre broadband in the Infrastructure Assessment

8.81 The position is currently far from certain about when full fibre rollout to every premises will be achieved in Leicester and how much commercial installation costs will be. We suggest however that:

- costs per premises will be at the lower end of the spectrum – we would suggest an average £750/premises
- the 2025 aspiration for full rollout seems ambitious currently so we would suggest 50% in the first tranche of the Local Plan (2019 – 2024) at £500/premises and 50% in the second tranche (2024 – 2029) at £1000/premises
- full fibre costs after 2029 will be built into new development, if not before, and should be viewed as a development cost not a public infrastructure cost

8.82 This will appear in the IDS as follows:

Full Fibre Broadband				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Full Fibre Broadband rollout	**£35m**	**£70m**		**£105m**
Total	**£35m**	**£70m**		**£105m**

Table 8.11: Assessment of full fibre broadband infrastructure needs within Plan period

Proportion of infrastructure need we think attributable to growth

8.83 We consider that no more than 5% of these infrastructure costs we have identified in Table 8.11 can be attributable to growth – all premises will require the installation whether they are existing properties or newbuild.

8.84 Funding we consider is likely to be a combination of service provider investment for a commercial return and – specifically for the second phase 'harder to reach' areas – public funds from government and government agencies and - possibly at least - local authorities. We think this is unlikely to be funded by developer contributions; increasingly this will be seen as a standard scheme development cost for connection, much in the same way other utility connections are.

Mobile Networks and 5G

8.85 The main strategic infrastructure investment in mobile networks will be the rollout of 5G in the UK.

8.86 5G stands for the fifth generation of mobile networks, following previous mobile generations 2G, 3G and 4G. Compared to today's networks (which primarily use 4G and 3G technology), 5G is set to be far faster and more reliable, with greater capacity and lower response times.

8.87 Unlike previous generations of mobile network, 5G is not expected to be defined by any single form of technology. It is often referred to as "the network of networks" for the way it will bind together multiple existing and future standards, including current advanced 4G networks, and will open up opportunities for a wide range of innovations, including:

- enhanced mobile broadband connectivity
- will dramatically increase mobile speeds, allowing for higher quality downloads to happen quicker. This will be an enabler for 4k streaming, VR and AR services, remote working, cloud based gaming as well as difficult to predict new services
- Massive Machine Telecommunications – increased communications from machines and sensors to each other; it is anticipated that this will rapidly overtake person to person and person to machine communications relatively soon and as such will be at the core of future developments in AI
- Ultra Reliable, Low Latency Communications, with the speed and accuracy of communications being at the core of a wide range of technologies such as driverless cars and remote/distance healthcare for patients

8.88 5G is able to deliver the following benefits:

Benefit of 5G	Comment
More information at a faster rate	Use of higher radio frequencies; as these are less well suited to carrying information over longer distances, 5G will need a network of local transmitters to boost signals, instead of standalone masts
'Slicing' of networks	Instead of being homogeneous – a common network for all needs - 5G can be divided to provide different capacity for different uses (e.g. high for an autonomous car, low for streaming a film) This will enable capacity to be managed much better; It will for instance be possible for high capacity users such as businesses to have their

	own dedicated part of the network rather than having to share with others as they do at present
Benefit of 5G	**Comment**
Much faster speeds	Whilst the prediction and reality can sometimes be at odds, 5G should be able to deliver speeds at least 10 times and possibly 100 times that of 4G
Near instantaneous response	Existing systems have a delay between command and response which inhibits the rollout of autonomous cars and remote robotics; with 5G responses are almost instantaneous
Greater network capacity	The quality of 4G connections is largely dependent on the number of other mobile device connections within the vicinity; this will be vastly reduced by 5G through its much greater headroom and the fact that it can be tailored to individual needs. Although 5G is designed for mobile networks, there is the potential for it to serve broadband customers, particularly areas proving difficult to reach by FTTP (although without a full fibre network, 5G will be limited as it does not travel as effectively as 3G or 4G

Table 8.12: The perceived benefits of 5G

8.89 5G has now been launched in the UK by the four main mobile network operators in selected cities, with other areas covered during the early 2020s, although there have been teething problems. The other side of the equation will be the marketing of 5G phones, so the real benefits of 5G are not likely to be seen for 3 - 4 years. When in full operation, however, 5G will drive many of the technological changes we have identified above.

5G in the Infrastructure Assessment

8.90 We are unable to identify a credible cost for the rollout of 5G in Leicester, so this does not figure in the Infrastructure Delivery Schedule; it is hoped to address this in future iterations of this document. Our expectations are that this will be a purely a commercial transaction, with installation costs initially borne by operators and then clawed back through user charges, although as with other previous platforms there will remain the question of patchy coverage and the willingness of operators to address this without public subsidy.

9. Social Infrastructure

What is covered

9.1 Social infrastructure is vital for the creation of sustainable and cohesive communities, to tackle disadvantage and to improve health and wellbeing. Topics covered include indoor and outdoor sports and leisure; library, community and youth facilities; open space and strategic green infrastructure; gypsy and traveller provision; and burial facilities.

Outdoor sports and leisure

9.2 This section assesses current levels of provision and likely future needs, including the growth related element of any future need

Current provision

9.3 Evidence relating to outdoor recreation facilities is provided by the City Council's Playing Pitch Strategy (2017) which included Action Plans.[49] The Strategy was considered necessary in order to inform the Local Plan but above all, to respond to the Healthy Leicester manifesto; it seeks both to support the ambitions for new and improved sports facilities but also to promote greater access and participation in sport and, more generally, physical activity.

9.4 The Strategy and Action Plans covered the following sports; football, cricket, rugby union, rugby league, hockey, tennis and bowls across the City and surrounding areas.

9.5 Despite budget reductions during the austerity years the Strategy sought to take a positive statement towards fulfilling the following:

- meeting both national and corporate targets relating to a range of health and wellbeing objectives
- more generally, contributing to healthier lifestyles
- seeking the enduring participation of children and young people in sport
- recognising the benefits of sport and recreation to better adult social care outcomes
- providing a platform for future investment in facilities, including by the national governing bodies for a range of sports

9.6 There are a range of generic considerations relating to future playing pitch infrastructure demand and supply, and some specific to the City and its surroundings:

9.7 Generic considerations include the following:

Consideration	Comment
Quality of provision is a key	Users may go elsewhere if facilities (both pitches/courts and associated facilities) are inadequate; equally, better facilities will stimulate demand, some of it possibly latent

[49] Leicester Playing Pitch Strategy and Action Plans (June 2017) Neil Allen Associates

Consideration	Comment
Improved quality will however bring in users from outside the city	Improving facilities may well have the effect of reducing opportunities for local teams/residents if demand from a wider area is stimulated
Pitch provision cannot therefore be considered in isolation	What this points to is that the quality/quantum of pitch provision cannot be considered in isolation – hence the need for the Strategy to look beyond the City
Demand for facilities is never static	Demand for facilities changes over time, with sports increasing or decreasing in popularity and therefore participation rates
Artificial Grass Pitches (AGPs) are a valuable way of expanding pitch use in the right circumstances	Although relatively expensive to provide and not suitable for all pitch based activities (and with different specifications for different sports) AGPs are a way of significantly increasing usage of sports venues

Table 9.1: Sports pitch provision: generic considerations

9.8 Considerations specific to the City include the following:

Consideration	Comment
The City's boundaries are tightly drawn, and this has consequences	The Strategy identifies considerable movement across boundaries as users seek to access the best, most affordable or appropriate sporting facilities, or those which cater to their particular needs
Authorities are collaborating on playing pitch provision, although this is not as straightforward as it might be	The fact that individual local plans are at different stages of their preparation means that it is difficult to establish a unified baseline of need going forward
The City's approach to playing pitch provision is heavily influenced by the emphasis placed on both sports participation and health and wellbeing	These are key priorities in the City, so considerable emphasis is placed on the quantity, quality and accessibility of facilities

Table 9.2: Sports pitch provision: Leicester centred considerations

9.9 We consider the key principles adopted in the strategy to be as follows:

- the focus should not be on merely noting and accepting the current status quo, it should be about promoting and facilitating participation in outdoor sports

- whilst investing in new and improved sports pitch infrastructure should be locally derived from citywide circumstances, full regard should be had to the playing pitch strategies promoted by Sport England and the discrete strategies of the individual governing bodies for the sports concerned

- quality of provision is as important as quantity

- an overriding goal should be to maximise sustainable solutions, involving 'value for money' outcomes, and the promotion of hubs where economies of scale can apply

- any new and improved investment needs to be delivered in partnership with both local, regional and national partners

- priorities for investment will be those with the greatest possible impact

9.10 Turning to individual sports, the Strategy and individual Action Plans for the sports concerned can be summarised as follows:

Sport	Current Position	Future investment priorities
Rugby League	No current provision; Leicester Storm keen to move back into the City	New venue for Leicester Storm (if required, club does not appear to have played any games since 2015)
Rugby Union	13 sites containing 19 pitches with 4 community rugby clubs running a mix of adult and youth teams. Capacity and some quality issues	Protect and enhance facilities, possible additional pitches on an existing site, possible new AGP (3G)
Tennis	117 active tennis courts on a mix of public, private and school sites. Some quality issues but currently no capacity issues	Protect and enhance facilities
Hockey	9 clubs running 19 teams on 9 full size AGPs, 3 of which can be used for competitive play, some spare capacity; population growth pitch will have limited impact	Protect and enhance facilities
Football	152 individual football pitches with a total of 360 teams, some spare capacity but also some overuse	Potential for 2 or 3 full size AGPs (3G)[50]
Cricket	13 sites with 19 pitches in the City, of varying quality. Sufficient provision to meet demand across the season but insufficient capacity at peak times. Many Leicester teams play outside city, putting pressure on these facilities	Potential 6 new pitches – can be met from new provision, bringing pitches back into use (including schools) and provision outside city. Population growth could require an additional pitch
Bowls	18 greens containing 23 rinks, with evidence of recent decline in usage	No additional demand but protect and enhance usage and seek to increase participation rates

Table 9.3: Potential future pitch needs

9.11 The 2017 Playing Pitch Strategy and Action Plans do not provide either a list of investment priorities, specific proposals, or associated costs. For the IA we need to make a number of informed assumptions. These are:

- whilst it is important to maintain and enhance quality of provision, only certain sports appear to require enhanced provision; these are rugby union, football and cricket

[50] Specific to football, Leicester City Council and local partners are currently contributing towards the production of a local football facilities plan (LFFP). The LFFP seeks to identify priority projects for football facility investment in Leicester. The emerging draft identifies a potential priority for two full sized 3G Football Turf Pitches, potential improvements to grass pitches and changing room pavilions/clubhouses, and the provision of small sided facilities across the city

- on balance cricket appears possible by revitalising unused provision, so it seems to us that modest investment to achieving this is the way forward (plus we are informed that there is a new pitch at St Oswald Road coming on stream in 2020)
- the primary investment, it would seem, is investment in new AGP pitches, perhaps 2 for football and 1 for rugby; the level of use of such facilities allows potential for future growth in need to be met across a range of sports by releasing capacity elsewhere
- we acknowledge that pitch needs are complex and ever changing, with demand not always predictable and with supply in the hands of a range of organisations of differing management standards, so it will be important to monitor future changes
- important too will be the need for Leicester City Council to work with adjoining authorities to address pitch supply and demand over a wider area

9.12 Taking all these factors into account we have arrived at the following provision in terms of outdoor sports infrastructure needs:

Sport	Investment required
Football	Provide new and improved existing 3G and grass pitches in several areas
Cricket	Enhance facilities in several locations including changing pavilions, sightscreens, practice nets and covers
Rugby Union and League	Construction of a 3G pitch and enhancement of ancillary facilities
Tennis	Upgrade many tennis courts with artificial surfaces, improve fencing and secure access gates; improved fencing and installation of remote access gates
Bowls	Improvements to greens at several locations and enhancement of changing rooms
Golf	Enhance entrance area, install land drainage to back nine holes
Athletic	Refurbish 400m track, new 3G pitch to infield area
Total estimated cost	£6.6m

Table 9.4: Proposed investments in outdoor sports facilities over the Plan period

Outdoor Sports Infrastructure Need over the Plan period

9.13 For the purposes of the Assessment we have assumed three new AGPs will be required, one in each of the 3 Plan tranches (2019 – 2024, 2025 – 2029, 2030 – 2036. Based on Sport England's Sports Facility Calculator we have assumed a total cost of £3.3m, £1.1m for each. We have not identified locations and we have not specified the sports for which they will be used, although it may be logical to look for 2 football and 1 rugby pitch.

9.14 Additionally we have assumed a similar level of total in upgrading existing facilities at a rate of £1.1m a Local Plan tranche, totalling £3.3m. This gives a total investment cost of £6.6m, which should be we think sufficient to maintain and enhance supply.

9.15 In the Infrastructure Delivery Schedule this will appear as follows:

Indoor Sports and Leisure Facilities				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
3 new AGP pitches	£1.1m	£1.1m	£1.1m	£3.3m
Pitch and facility enhancements	£1.1m	£1.1m	£1.1m	£3.3m
Total	**£2.2m**	**£2.2m**	**£2.2m**	**£6.6m**

Table 9.4: Assessment of Outdoor Sports and Leisure infrastructure needs within the Plan period

Built Sports and Leisure facilities

Background

9.16 Built sports and leisure facilities cover those public facilities operated by Leicester City Council. They cover a range of sports, the principal activities being fitness based activities including gyms; indoor court based games such as badminton; and swimming.

9.17 Such sports facilities often include an element of outdoor sports such as attached all weather football pitches, and these are covered here. For the most part outdoor sports including football, cricket, hockey and athletics are covered separately in the Outdoor Leisure section to this chapter (see above).

9.18 In addition there are private sports and leisure centres, which although not covered in the Assessment are both significant and increasing in number, offering an alternative to the public offer. The main private provision is in gym/sports centre facilities including some pools (provided by UK wide companies such as Everlast and Nuffield) but also at the city's universities, the Queen Elizabeth Diamond Jubilee Leisure Centre at De Montfort University and the Danielle Brown Sports Centre at Leicester University.

9.19 Additionally, there are both private and public leisure facilities immediately beyond the city's boundaries, such as the recently refurbished Wigston Pool and Fitness Centre. The City's officers have developed 'heat maps' which appear to show considerable cross boundary movements associated with participation in these facilities.

9.20 There are important links with other services, particularly Public Health and the promotion of healthier lifestyles, and also education, although we have observed that public use of school sports facilities is relatively limited. The Council facilities have been rebranded recently as Active Leicester Centres and will perform a greater role moving forward as local hub venues for health and wellbeing support working closely with the Public Health Integrated Lifestyle Service.

9.21 A number of strategies underpin the City's built sport and leisure facilities:

Strategy	Relevance to the Built Sports and leisure estate
Active Leicester Sport & Physical Activity 2017 - 2022	Aims to increase activity levels for an additional 20,000 residents, identifies the needs associated with an increased population and the promotion of healthy lifestyles – especially for children and young people – through a high quality, efficient and accessible network of sport and leisure facilities, with targeted action to secure investment in these
Healthy Weight for Children, Young People and Families 2018 – 2023	Seeks to create an environment where a healthy choice is the easy choice for all children, and where being physically active is built into how children play and learn lifelong habits.
Healthy Leicester. Joint Health and Wellbeing 2019 – 2024	This Strategy and associated Action Plan identify 5 themes covering Healthy Places, Healthy Lives, Healthy Aging, Healthy Start, and Healthy Minds. Through these themes the focus is on reducing negative factors that impact on residents' health, with clearly identified links with physical health and the promotion of local facilities which can help meet these needs
National curriculum in England (National Adopted Policy) Swimming and water safety (October 2018)	All schools to provide swimming instruction either in key stage 1 or key stage 2 to ensure pupils can swim competently, confidently and proficiently over a distance of at least 25 metres as part of a drive to ensure all children can swim by end of primary school

Table 9.5: Strategies underpinning the operation of the City's built sports and leisure facilities

Current public provision

9.22 There are 8 built sports and leisure facilities[51] operated by the City Council, as follows:

Centre (Year Built) (Extended)	Main provision
Aylestone Leisure Centre (1988)	6 court Main sports hall with seating for 600 people, 3G football pitch, ancillary sports hall for judo, keep-fit, gymnastics, 25m main swimming pool and 18m teaching pool, gym with cardio and resistance machines and a large free weights area, dance studio and meeting room
Braunstone Leisure Centre (2005)	Community pool and main swimming pool which can be divided into two and with seats for 300 spectators, 60 station gym, 6 court sports hall with seating for up to 400 people spectators
Cossington Street Sports Centre (1976)	30m swimming pool, sauna facilities, gym, outdoor ball court including five-a-side pitches with floodlights, 3 court sports hall with facilities for five-a-side football, badminton, table tennis and fitness classes
Evington Leisure Centre (1973 (2007))	25 metre and 18 metre swimming pools, 4 court sports hall providing badminton, basketball, indoor football and cricket nets, 45 station fitness studio with cardiovascular, resistance and functional training facilities, function room
Leicester Leys Leisure Centre (1985)	Leisure pool with wave machine, two flume rides, activity pool and a toddlers and baby pool, gym, squash courts, climbing centre, trampolining, judo and gymnastics

[51] In addition, a new cricket pitch – St Oswald Road – will open in 2020

Centre (Year Built) (Extended)	Main provision
Saffron Lane Athletics Stadium (1967)	8 Lane running track, space for field events, clubhouse and seating for 1500 spectators
New Parks Leisure Centre (1975)	Two swimming pools - a main and small pool used for public swimming and lessons, squash courts, 3G football pitch, fitness suite, function room/activity room
Spence Street Sports Centre (1980)	Swimming pool, facilities for activities including, swimming lessons and cricket, gym

Table 9.6: Leicester City Council built sports and leisure facilities

9.23 We have identified a range of investment in two phases, the first being as follows:

Priority One	
Location	**Proposed investment**
Aylestone Leisure Centre	Reconfigure reception area with fast track access control
Braunstone Leisure Centre	Extend gym from 64 to 100 stations
Evington Leisure Centre	Reconfigure/extend reception area with fast track access and new changing village
Leicester Leys Leisure Centre	Reconfigure reception area, include secure fast track access control, replace aquatic play equipment, add changing village
St Oswald Road cricket pitch	Phase 2 works (new pavilion/fencing)
Saffron Lane Athletics Stadium	Relocations/reconfigurations, new reception/fencing
Spence Street Sports Centre	Reconfigure entrance area with fast track access control, reconfigure disabled changing/back office areas
Total for Priority One (includes contingency, fees and future cost inflation)	**£10.3m**

Table 9.7: Proposed Phase One investment works, Leicester City built sports and leisure estate

9.24 Proposed Priority Two investment works are as follows:

Priority Two	
Location	**Proposed investment**
Aylestone Leisure Centre	Reconfigure small hall to spin room and adventure activity
Braunstone Leisure Centre	New external functional fitness area
Cossington Street	New external functional fitness area and refurbished office
Leicester Leys Leisure Centre	Sports Hall – convert to adventure activity facility; squash courts – convert 2 No courts to additional gym and weights training including new mezzanine floor; reconfigure climbing facility
New Parks Leisure Centre	Upgrade squash court provision transfer from Leicester Leys
Saffron Lane Athletics Stadium	Reconfigure/reform car park with disabled and bus parking
Total for Priority 2 (incudes contingency, fees and future cost inflation)	**£5.1m**

Table 9.8: Proposed Priority Two works, Leicester City built sports estate

9.25 No timeframe for delivering such investment has been identified to us so we have assumed for the purposes of this assessment that Priority One investment will take place in Tranche 1 of the Local Plan covering its first 5 years (2019 to 2024) and Priority Two investment taking place in Tranche 2 (2025 to 2029).

9.26 We have then considered the potential for further investment in the built sports and leisure facilities estate over the Plan period. Notwithstanding the fact that we have not been able to identify any pressures to extend the number of such facilities, we think it is more likely than not that towards the end of the Plan period there will be pressures to either completely rebuild an existing facility or replace it with an entirely new facility established from scratch.

9.27 We volunteer this view in the knowledge that by the end of the Plan period the City Council's sports centres will vary in age between 31 and 63 years, with an average age of over 51 years. Although a rolling programme of refurbishment can delay the need for a replacement we consider that there is a limit to the number of times this can be done before the facilities on offer start to diminish in quality.

9.28 For the purposes of the Assessment however we have not assumed any replacement of existing facilities. Were replacement facilities be proposed in the future Sport England's Sports Facility Calculator identifies that a typical indoor sports facility (comprising a 6 court sports hall, 4 lane swimming pool, 1 rink indoor bowls facility and 1 outdoor 3G artificial football pitch) would cost in the order of £9.1m to construct.

9.29 In the Infrastructure Delivery Schedule indoor sports infrastructure needs will appear as follows:

Indoor Sports and Leisure Facilities				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Priority One Indoor Sports Facilities Investment (£m)	10.3			10.3
Priority Two Indoor Sports Facilities Investment (3m)		5.1		5.1
Total	**10.3**	**5.1**		**15.4**

Table 9.9: Assessment of Indoor Sports and Leisure infrastructure needs within the Plan period

Libraries, Youth Services and Community Halls

9.30 We cover here the entire spread of community facilities provided in Leicester, including:

- the City's libraries, including the Central Library
- Youth facilities
- Community Halls accessible to the general public and community groups
- the grouping of a number of activities in Multi-Service Centres

Background

9.31 A wide range of community services are provided by the City Council. These operate within 6 discrete areas – the South, West, Northwest, Northeast, East and Central parts of the city and there are links to the Ward Community Engagement Team where 54 ward councillors in 21 wards have a budget for engaging local communities.

9.32 There are links with a large number of separate services such as the City's housing service, public health, the police and adult learning. The provision of library services by local authorities continues to remain a statutory service under the 1964 Public Libraries and Museums Act.

9.33 Current provision of Libraries and Community Centres for the city has recently been reviewed through the Transforming Neighbourhood Services (TNS) programme. Nine multi-service centres were identified through the programme and a larger number of stand-alone sites to ensure adequate coverage across the city. Following the review of neighbourhood buildings a number of the retained facilities have been invested in to ensure they are appropriately located and configured and that they are fit for the immediate future.

9.34 The TNS strategy has been to reduce the overall number of buildings through the development of multi-service centres hosting two or more services, for example libraries and hireable community spaces. Whilst this approach would militate against any expansion of neighbourhood facilities in the near future, it is possible that the growth of local populations and landlord decisions regarding the efficiency of older buildings may result in recommendations for the development of replacement multi-service centres facilities over the next 25 years. The changes involved reducing the number of buildings in which such services were provided, merging some activities that had been run separately into shared use premises, and involving local communities and the voluntary sector in running some operations. To achieve this outcome, it was necessary to:

- engage local communities throughout the review process
- work out which buildings were most likely to best serve future needs given their location, condition and versatility; and which did not
- ensure an effective geographic spread of facilities, using the premises rationalisation process to create as even a spread as possible within a smaller estate

- determine investment priorities, and then roll out that investment; over £2.5m was invested in total with a further £0.5m for the Central Library refurbishment

9.35 A key to this transformative strategy was the development of Multi-Services Centres (MSCs) through the selection of the most promising premises to bring 2 or more services together. Leicester's 9 MSCs are as follows:

MSC	Range of activities offered
Belgrave Neighbourhood Centre	Hall with stage and balcony seating, range of multi-purpose meeting rooms, Adult Skills and Learning Service, Neighbourhood Police Office
St Matthews Community Centre	Hall and community room, meeting rooms, sports hall, library, housing office, tenants support centre, Adult Skills and Learning Service, Youth Sessions
The BRITE Centre	Large sub-dividable hall, various rooms for community use, Library, Café, Adult Skills and Learning Service, Self Service Point
New Parks Centre	Library, Community Rooms, Training Kitchen, Adult Learning, Self Service Point
Beaumont Leys Library	Library, Community Rooms, Housing Office, Self Service Point
Hamilton Library	Library, Community Hall, Self Service Point, Adult Skills and Learning
St Barnabas Library	Library, Housing Office, Adult Skills and Learning
Highfields Library	Library, Community Room
Pork Pie Library and Community centre	Community rooms and theatre, Library, Adult Skills and Learning Service, Self Service Point

Table 9.10: Leicester's Multi-Service Centres

9.36 3 new centres were built to replace old facilities over the last 20 years: Brite Centre (New Deal Funded), New Parks Library Centre (BIG Lottery Funded) and Hamilton Library and Community Centre (s106 funded). No known replacement projects are currently identified, and there is no expected requirement for developer contributions towards projects.

9.37 In addition to the MSCs identified above, the Transforming Neighbourhood Services programme has achieved the following:

- reduced 43 buildings down to 27, securing significant efficiencies
- delivered significant gains, such as bringing the iconic Pork Pie building back into a full range of uses by merging community functions
- maintained and enhanced 16 libraries across the city plus a mobile library service
- ensuring appropriate released buildings enter into a Community Asset Transfer scheme where following a business case appraisal, leases of 5 – 25 years are being granted to appropriate community organisations

Looking to the future

9.38 The transformative changes we have listed above appear to have secured a service fit for the future, and our discussions with providers does not suggest to us any wish to expand the estate for the time being at least; the services concerned have by and large factored in growth locations into their programme of changes.

9.39 That said, we are aware that some facilities remain less than optimal in terms of their scope and condition, and we are also understand that some centres are in locations where the 'centre of gravity' in terms of community focus has recently shifted, meaning that in the long term, the geographical spread of services may need revisiting.

9.40 Libraries in particular may be subject to future shifts in focus in the future. The service is already responding to the rise of e-books and e-magazines, which are offered on a 24 hour basis, and is seeking to tackle the issue of the 'digitally excluded' – the 11% - 12% of the population unable or unwilling to use online services.

9.41 The service is also actively exploring rolling out 'self-access' (sometimes known as the Smart Library or/Open Library concept); this will allow library members to use a library card to access the buildings outside of staffed hours, to borrow, return and renew library books, meet with others as a group or make use of many other library facilities. This will expand the potential for maximising the operational time of libraries.

Future Libraries, Youth Services and Community Halls needs over the Plan period

9.42 As noted above, the service itself is currently not anticipating any new facilities, but also recognises that its built estate could benefit from improvements, and that some judicious relocations would help to improve the services provided.

9.43 Given all factors, we consider that in the 19 years to the end of the Plan period we would expect some further investment in the service to maintain the quality of provision. We therefore think it prudent to make an assumption for the Assessment of the construction of two replacement MSCs in the lifetime of the Plan – and further assume that one will be provided between 2024 – 2029 and the other in the period 2030 – 2036. We do not think it necessary to speculate which premises might be involved.

9.44 We have estimated the cost of a purpose built multi-function centre of 900m^2 at £1.9m, so the total cost of new provision would be £3.8m. This will appear in the IDS as follows:

Libraries, Youth Services and Community Hall Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
2 no replacement libraries/community centres operating as MSCs		**£1.9m**	**£1.9m**	**£3.8m**
Total		**£1.9m**	**£1.9m**	**£3.8m**

Table 9.11: Assessment of Libraries, Youth Services and Community Hall infrastructure needs within the Plan period

Gypsy and Traveller Site Accommodation

Background

9.45 Future Gypsy and Traveller infrastructure need in Leicester is informed by the Leicester City and Leicestershire Gypsy, Traveller and Travelling Showpeople Accommodation Assessment (GTAA) published in May 2017[52]. This was a Leicester and Leicestershire-wide examination which had as its primary objective a robust assessment of current and future need for these groups. A partial update for the City was completed in September 2019 as an addendum report.

9.46 As well as updating previous GTAAs, the principal reason for completing the study was the publication of a revised version of Planning Policy for Traveller Sites (PPTS) in August 2015. The GTAA seeks to provide a robust and credible evidence base which can be used to aid the preparation and implementation of Local Plan policies and the provision of new Gypsy and Traveller pitches and Travelling Showpeople plots for the period up to 2036.

9.47 The examination of future need is based on an interpretation of whether those who identify themselves as Gypsies and Travellers meet the definition set out in PPTS**.**

Gypsies and Travellers in Leicester – current provision

9.48 Current provision in the city is as follows:

Permanent Sites	
Site	**Number of pitches**
Greengate Nook	6
Meynalls Gorse	21
Redhill Nook	10
Total Permanent Sites	**37**
Travelling Showpeople Yards	
Site	**Number of Pitches**
Bath Street	19
Total Travelling Showpeople Yards	**19**

Table 9.12: Gypsy, Travellers Site and Travelling Showpeople provision in the city of Leicester, as at May 2017 (Source GTAA report)

9.49 The Redhill Nook and Greengate Nook sites opened in 2015, close to doubling capacity in the city; in the same year, the Meynalls Gorse site was refurbished. The GTAA report did not identify incidences of any private sites, ‘tolerated sites’ – long term occupation without the benefit of planning permission - or any unauthorised developments.

[52] Produced by Opinion Research Services

Future provision

9.50 Analysis in the GTAA showed that there were 2 Gypsy or Traveller households identified in Leicester City that met the planning definition, 11 unknown households that may meet the planning definition and 24 households that do not meet the planning definition.

9.51 Based on this analysis the GTAA identifies a need for **6 additional pitches** for households that meet the planning definition. This is made up of 2 from concealed households or adults, 2 from older teenage children in need of a **pitch of their own** in the next 5 years, and 2 from new household formation based on the site demographics of existing provision. Additionally, another may be required for an as yet unidentified household. The addendum report 2019 increased the need for additional pitches to address unidentified household needs by one. **The total need for pitches up to 2036 is 7.**

9.52 There were no additional needs for plots for travelling show people that met the planning definition. There may be a need for two additional plots. This could be accommodated on the existing site. With regards to transit provision, a minimum of twelve caravan spaces (or managed equivalent) is identified.

Gypsy and Traveller Site future infrastructure need

9.53 Based on the above, we believe the GTAA report identifies future needs up to the end of the Plan period of 7 new pitches in total.

9.54 We have not had any new sites identified to us and it does not appear to us that any costings have been undertaken. However, from examining recent provision around the country the cost of provision appears to vary between £100,000 and £150,000 per new pitch.

9.55 If a midpoint of these costs is assumed we would calculate that a new 7 pitch Gypsy Site would cost in the order of £875,000. A further assumption we have made is that this would be required towards the midpoint of the Local Plan timeframe (e.g. 2025 – 2029).

9.56 In time it may be necessary to revisit this calculation – when the GTAA is updated or if and when planning definitions are amended. Any iterations will be identified in future iterations of this Assessment.

9.57 In the Infrastructure Delivery Schedule this will appear as follows:

Gypsy and Traveller Site Accommodation				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
7 pitch permanent Gypsy Site (£m)		**£0.875**		**£0.875**

Table 9.13: Assessment of Gypsies, Travellers and Travelling Showpeople infrastructure Need within the Plan period

The Funding and Delivery of Gypsy and Travellers Site Accommodation

9.58 Specific funding for Gypsy and Travellers accommodation has ceased (the former Homes and Communities Agency operated a Traveller Pitch Fund between 2011 and 2015) although the provision of affordable pitches is a category within the agency's Shared Ownership and Affordable Homes Programme.

9.59 Notwithstanding this we consider the most likely source of funding will be the City Council's capital programme.

Cemeteries and Crematoria

Introduction – what infrastructure is involved?

9.60 With the exception of public health funerals[53] there is no statutory duty for a local authority to cremate or bury people. Some local authorities (including a number in London) do not provide burial facilities but for social, cultural and environmental reasons many do, including Leicester, and for the purposes of this Assessment we have assumed that if new burial facilities are required within the Plan period, they are a public infrastructure cost.

9.61 The management of burial facilities is governed by the Local Authorities' Cemeteries Order 1977. Local authorities are defined as burial authorities and given the power to provide cemeteries by virtue of the Local Government Act 1972.

9.62 Around three quarters of people who die in the UK are cremated. Although around two thirds of existing crematoria are council run, new facilities are mainly private facilities, and whatever their ownership can be regarded as self-funding, with cremation fees meeting operating costs. This Assessment therefore focuses on burials only, the overwhelming majority of which take place in council run cemeteries – an arrangement we do not think is likely to change in the foreseeable future.

Burial grounds in Leicester – current position

9.63 As of 2019 the position in terms of cemeteries in Leicester is as follows:

Cemetery	Year opened	Size (Ha)	New interments possible?	Anticipated spare capacity until
Welford Road	1849	12.3	No	N/A
Belgrave	1881	2.0	No	N/A
Gilroes	1902	30.1	Yes	2030 - 35
Saffron Hill	1931	16.5	Yes	2030 - 35

Table 9.14: Cemeteries in Leicester as at 2019

9.64 The key considerations in relation to future demand and supply is as follows:

- no new cemeteries in the city have been provided in more than 80 years, and whilst some capacity remains, it is being used up steadily
- demand currently appears more or less constant at around 900 interments/year
- due consideration has to be given for separate denominational plot requirements for both the Muslim and Jewish Community
- a third of interments are in reopened graves and around 15% are for cremated remains which have significantly less space requirements than traditional graves
- this brings the net demand for new plots to around 400 interments a year
- the population of Leicester is growing, and it is also ageing
- some demand is inelastic – for instance, the Muslim and Jewish faiths do not permit cremation

[53] Where local authorities arrange to cremate or bury people who have died alone, in poverty, or are unclaimed by relatives

9.65 In response to these issues, and to anticipate that cemetery space will run out in the not too distant future, the City Council produced a cemetery strategy in 2014[54]. This identified the following:

- a vision to provide long term sustainable development solutions to the decreasing availability of burial space
- a summary of available capacity
- a proposal to create a new cemetery, including a specification and potential sites

9.66 As of 2019, current burial capacity is as follows:

Category	Grave Capacity
Adult non-denominational	3,800
Jewish	200
Muslim	3,000
Child	550
Cremation Plots	1500

Table 9.15: Current cemetery category (Gilroes and Saffron Hill Cemeteries, June 2019) Source: Leicester Bereavement Services

Site requirements

9.67 Leicester Bereavement Services has set out additional cemetery requirements, as follows:

- a single new site (rather than multiple sites, which would increase costs and be less efficient)
- Provide for 950 – 1,000 burials per annum
- Minimum 50 years of use
- able to provide multiple faith sections and natural burial options

9.68 These criteria lead to the proposal of creating a 16.5 ha cemetery site with good access/accessibility, with no adverse groundwater or topographical constraints. Bereavement Services are working towards meeting this provision and have not yet identified a suitable site (which could be outside the City). If the current rate of burials continue, then non-denominational plots will be used up by around 2029. We therefore think it is reasonable to assume that a new site needs to be brought forward within the period 2030 -2036 and would expect that it will be opened in phases.

9.69 Costs have not been identified but by benchmarking elsewhere (Charnwood, Dover[55]) we have assumed a figure of £220,000 per hectare to provide all the necessary

[54] Leicester City Council Burial Space Strategy (2014)

[55] Cemetery Development Services: Analysis of Sites for Suitability as a Potential New Cemetery (for Charnwood BC March 2017); Cemetery Development Services: Site assessment report for Dover Town's potential new cemetery development (For Dover BC September 2010)

infrastructure for a new cemetery (access, car parking, paths, landscaping, boundary treatment, reception space etc). A 6 ha first phase would therefore cost in the region of £1.32m.

9.70 Although this could potentially be partially funded from developer contributions or CIL (if introduced) we have made the assumption that this is likely to be funded from the City Council's capital programme as the principal driver is the existing population of Leicester and its changing demographics as well as associated cultural factors. In these circumstances we consider that no more than 10% of the total cost of the new facilities should be attributable to growth.

9.71 With this in mind we have programmed future investment in burial ground facilities in the City as follows:

Burial Facilities Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
New burial ground Phase 1			**£1.32m**	**£1.32m**
Total			**£1.32m**	**£1.32m**

Table 9.16: Assessment of burial facilities infrastructure needs within the Plan period

10. Flood Defence and Surface Water Drainage

10.1 It has not yet proved possible to identify the precise infrastructure implications of seeking to implement the necessary flood defence and surface water drainage requirements over the Plan period. This will be addressed in the next iteration of the Infrastructure Assessment.

11. Emergency Services

Police

Background

11.1 Police services are provided by Leicestershire Police, which covers the whole of the county as well as Rutland, and is one of 43 covering England and Wales. The service is run as a single entity, meaning there are no specific services requirements, performance benchmarks or bespoke provision relating just to the City itself.

11.2 In the year ended March 2019 the force recorded 92,454 crimes, an increase of 9.7% on the previous year's figures. The details beneath this headline figure are however complex. Key data for April 2018 – March 2019 underpinning this change include:

Key Data	Recorded figure	Change since 2017 - 2018
999 Calls	150,536	8.4% increase
Online reports	7,400	280% increase
Charges/summonsed	7,624	8.8% decrease
Total Anti-Social behaviour incidents	14,323	5.2% decrease
Domestic abuse as a proportion of all crime	1.32%	23.9% increase

Table 11.1: Changes in police data Leicestershire Police, for Year ended March 2019 (Source: Leicestershire Police Force Management Statement 2019)

11.3 Such statistics are indicative of the fact that the characteristics of crime are changing – and will continue to do so. The service's Strategic Assessment for 2019/20 identified the following force priorities:

- Drugs Supply and County Lines
- Organised Acquisitive Crime
- Firearms
- Knife Crime
- Cyber Crime and Fraud
- Child Sexual Exploitation and Abuse
- Sexual Offences
- Domestic Abuse
- Modern Slavery and Human Trafficking
- Vulnerability and Exploitation
- Repeat Victims and Offenders

11.4 Each of these strategic priorities is assigned a strategic lead officer who is responsible for the creation and maintenance of a delivery plan in the format of the 4 "Ps" – Prevent, Pursue, Protect and Prepare.

11.5 In addition to local strategic priorities the Home Secretary has placed a statutory mandate known as the Strategic Policing Requirement (SPR) on all forces to ensure they make an effective contribution to national policing issues as well as satisfactorily policing their area. The SPR covers matters such as large scale public order matters, terrorism and national civic emergencies.

The Police and Crime Commissioner for Leicester

11.6 The Police Reform and Social Responsibility Act 2011 created the role of Police and Crime Commissioner, with the first incumbents elected in 2012. The core functions of police and crime commissioners are to secure the maintenance of an efficient and effective police force within their area.

11.7 Operational policing remains the duty of the Chief Constable and the Commissioner does not get involved in operational decisions. Key duties that are the Commissioner's responsibility include:

- the creation of a Police and Crime Plan; the Plan must include the Commissioner's objectives for policing of the area, what resources will be provided to the Chief Constable and how performance will be measured. Both the Commissioner and the Chief Constable must have regard to the Police and Crime plan in exercising their duties
- the holding of the Police Fund (from which all policing of the area is financed) and raising the local policing precept from council tax. It is the Commissioner's responsibility to set the budget for the force area, which includes allocating enough money from the overall policing budget to ensure the Commissioner can discharge his or her own functions effectively
- promoting and facilitating partnership working and commissioning the services of partner agencies to ensure a joined up approach

11.8 The current Police and Crime Plan for Leicestershire covers the period 2017 – 2021. This sets out the Commissioner's priorities (reflected in the force's Strategic Assessment) and details how the £171.5m annual budget is to be spent. In addition to the funding passed to the Chief Constable the Plan sets out funding of £3.1m to commission services and £2.5m to support the capital programme.

Policing now and in the future

11.9 The following Neighbourhood Policing Teams and stations operate in the City :

Neighbourhood Policing Team (station)	No of assigned officers
Abbey (Beaumont Way)	8 (4 PCs, 4 PCSOs)
City Centre (Mansfield House)	12 (5 PCs, 7 PCSOs)
Clarendon (Mansfield House)	6 (2 PCs, 4 PCSOs)
Cultural Quarter (Mansfield House)	11 (5 PCs, 6 PCSOs)
Beaumont Leys (Beaumont Way)	9 (4 PCs, 5 PCSOs)
Belgrave North (Keyham Lane)	7 (4 PCs, 3 PCSOs)
Belgrave House (Keyham Lane)	8 (4 PCs, 4 PCSOs)
Evington (Keyham Lane)	5 (3 PCs, 2 PCSOs)
Fosse (Norfolk Street)	7 (4 PCs, 3 PCSOs)
Hinckley Road (Norfolk Street)	7 (4 PCs, 3 PCSOs)

Neighbourhood Policing Team (station)	No of assigned officers
Humberstone (Keyham Lane)	5 (2 PCs, 3 PCSOs)
New Parks (Beaumont Way)	11 (5 PCs, 6 PCSOs)
Northfields, Tailby and Morton (Keyham Lane)	5 (3 PCs, 2 PCSOs)
Riverside (Mansfield House)	7 (3 PCs, 4 PCSOs)
Rushey Mead (Keyham Lane)	6 (3 PCs, 3 PCSOs)
Spinney Hills (Keyham Lane)	8 (4 PCs, 4 PCSOs)
Stoneygate (Keyham Lane)	8 (4 PCs, 4 PCSOs)
Thurncourt (Keyham Lane)	5 (3 PCs, 2 PCSOs)
Westcotes (Beaumont Way)	10 (4 PCs, 6 PCSOs)

Table11.2: Neighbourhood Policing Team and stations in Leicester August 2019

11.10 In addition, Leicestershire Police have headquarters situated in Enderby, just off the M1 motorway at junction 21. The headquarters is not an operational police station but is home to a number of the police's departments including the Leicestershire Roads Policing Unit, the Roads and Armed Policing Team, central contact, training and the vehicle fleet.

11.11 The force also operates 3 Custody Suites in Leicester; Beaumont way (14 cells), Euston Street (36 cells) and Keyham Lane (17 cells). Individual forces are generally reliant on mutual aid from adjoining police areas when suites are under severe pressure, and indeed there is a great deal of cross force co-operation in areas such as procurement.

11.12 As with many public services Leicestershire Police have had to restructure their services in the face of reduced resources, and this has seen a reduction in police numbers by 560 officers since 2010.

11.13 This trend is now being reversed, and in the 2019 Force Management Statement the Chief Constable was able to announce an increase in numbers by 80 additional officers in 2019/20 and a further 27 during 2020/21. Since this statement the Home Office announced in July 2019 that around 20,000 new police officers would be recruited nationally, in effect restoring police numbers to around the 2010 complement. We are not yet aware as to how this announcement will precisely impact on numbers in Leicestershire, although it would be reasonable to assume there will be still further increases in operational numbers.

Infrastructure needs costs, timing and funding

11.14 The police services have regularly sought (and obtained) developer contributions towards the cost of policing services for major new developments in parts of the country; for instance, funding for a police presence was secured as part of the s106 agreement negotiated by Blaby DC for the New Lubbesthorpe development. It does not currently secure development contributions in the City.

11.15 We understand Leicestershire Police have paused any attempts to seek developer contributions to policing. We have been advised however that the force has been invited to bring forward costings for new police infrastructure by two Leicestershire authorities preparing to negotiate s106 agreements. One of the key issues is that although Neighbourhood Policing Teams have been established, it does not follow that the team will be located in the neighbourhood it serves. For instance, elsewhere in the force area, police services for Lutterworth operate out of a station in Market Harborough. We think it cannot be taken as a certainty that with major new development, a police presence will be established within the development area.

11.16 Allied to this is evidence that police services generally – and Leicestershire appears to be no exception – are adopting new working practices enabling officers to work at home, on the move and from police premises other than the one in which they are based. We think this is likely to dampen future demand for additional premises.

11.17 In discussion with police representatives no additional accommodation needs have been identified and it may be that a force that has been reorganised around new service priorities in recent years has no need to expand its estate in the foreseeable future.

11.18 We think however it may be prudent to allow for a limited amount of additional police accommodation within the Infrastructure Assessment to respond to the planned increases in police numbers and to sustain a local police presence. A new police base – either located in the CDA or in the NW quadrant of the city – could house up to 10 officers at a projected cost of £320,000. We have made the assumption that if such a facility is needed, it should be provided in the final tranche of the Local Plan timeframe – i.e. 2030 – 2036.

11.19 This will appear in the IDS as follows:

Police Service Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
New police base (emergency response/enquiries etc)			**£0.32m**	**£0.32m**
Total			**£0.32m**	**£0.32m**

Table 11.3: Assessment of police infrastructure needs within Plan period

Ambulance Services

11.20 Ambulance Services for Leicester are provided by East Midlands Ambulance Service NHS Trust (EMAS), which provides emergency and urgent care, patient transport, call handling and clinical assessment services for the 4.8 million people in six counties of the East Midlands, an area covering approximately 6,425 square miles across the counties of Derbyshire, Leicestershire, Lincolnshire (including North and North East Lincolnshire), Northamptonshire, Nottinghamshire and Rutland.

11.21 EMAS employs more than 2,900 staff across the region, based at more than 60 locations, including two Emergency Operations Centres at Nottingham and Lincoln. The main staff grouping is made up of accident and emergency 999 crews, who operate a fleet in excess of 500 vehicles, including emergency ambulances, fast response cars, specialised vehicles and patient transport vehicles.

11.22 Each day the Trust receives around 2,000 calls from members of the public who have phoned 999 (or an average of once every 45 seconds). A key feature is the frontline accident and emergency (A&E) teams of community paramedics, technicians, nurse triage advisors, emergency care practitioners, community first responders and volunteer lifesavers, who provide 24 hour response to emergencies.

11.23 An Urgent Care service was launched in April 2018 with the specific aim of reducing delays on patient response and taking pressure off operational staff. Other services include a specialist Hazardous Area Response Team (HART), and there is close co-operation with the separate Air Ambulance services. Separately, TASL provide patient transfer services.

11.24 The future infrastructure requirements are bound up with the major secondary healthcare changes we highlight in Chapter 7. In the long term sharing of premises with other emergency services is a possibility (the Fire Service started sharing premises with the Police in Market Harborough in September 2019 and there are tri service bases in Nottingham and Lincoln where EMAS is a partner). For the present, whilst we can expect that demands for the service will change over time - and this will have infrastructure implications - we have not been able to identify areas of major future infrastructure investment in this service.

Fire Services

11.25 The Leicester, Leicestershire and Rutland Fire and Rescue service operates as a single entity governed by the Leicester, Leicestershire and Rutland Combined Authority. Its latest service plan is the Corporate and Integrated Risk Management Plan (IRMP) covering the period 2018 – 2021. Overall there are 20 fire stations and 574 operational staff attending over 8,000 incidents a year.

11.26 The principles on which the Fire Service operates is on the following basis:

- prevent incidents from happening if at all possible
- limit their impact when they do happen
- respond in the right way and at the right time when the service is needed

11.27 In adopting this approach, the service has to ensure that it demonstrates value for money, properly engages its workforce and keeps communities well informed. Service needs are affected by the following factors:

Factor	Effect
Fewer fires are being fought, but materials, construction techniques and building technologies have become more complex	The shocking events at Grenfell Tower bears tragic witness to this and the service, like others, is learning from the experiences
The protection of local communities is becoming even more paramount	A more complex role for the service is being developed, with new skills around flexibility in approaches to major incidents and emergencies
Austerity continues to have an effect	The service has had to adapt over the austerity years, requiring closer working with others and greater efficiencies and effectiveness
There is an increasing emphasis within the service on ICT	Staff are being exposed to rapid changes in processes, with ever greater reliance on new technology, and so have had to develop the skills to make the most of the opportunities this offers

Table 11.4: Key factors affecting Fire Service priorities

11.28 There are 4 Fire Stations serving Leicester – Central, Eastern, Southern and Western. All are whole time (24 hour) crewed.

11.29 The service has a rolling programme of operational changes and building works to respond to new demands. All these are relatively minor in scale and the current IRMP favours organic adjustment over root and branch transformations. Building work is ongoing outside Leicester (at Wigston and Lutterworth) and 5 Tactical Response Vehicles have been purchased using capital finance.

11.30 During the last 4 years the service has invested an average £0.375m a year in building works and £1.2m a year in vehicle purchase from the capital programme. Until the next iteration of the IRMP is produced we cannot be certain what future investment levels will be and how much of it would be committed within Leicester, but our assumption for the purposes of the IA is that this investment will continue and a proportion – we suggest 40% - will be invested in the City. On this basis we have made the assumption that the Fire Service will be looking to invest around £0.15m a year on building works and £0.48m on new vehicles.

11.31 This will appear in the IDS as follows:

Fire Service Provision				
Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Building works on Leicester Fire Stations	**£0.75m**	**£0.75m**	**£1.05m**	**£2.55m**
Vehicle purchase for Leicester based appliances	**£2.4m**	**£2.4m**	**£3.4m**	**£8.2m**
Total	**£3.15m**	**£3.15m**	**£4.45m**	**£10.75m**

Table 11.5: Assessment of fire service infrastructure needs within Plan period

Proportion of infrastructure need we think attributable to growth

11.32 We consider that no more than 10% of the fire service infrastructure costs we have identified in Table 12.3 can be attributable to growth – any investment will be largely driven by changes in the service and the way it responds to modern and changing fire service needs, although we accept that there is a small underlying growth element.

11.33 We would anticipate that fire service infrastructure costs will continue to be met through the service's capital programme as they are currently. Whilst in theory the service's infrastructure needs could be supported by developer contributions, given the fact that this is a generic service covering a wide geographical area, and that we are of the view that most infrastructure needs are not attributable to growth, we think that this is an unlikely source of funding.

12. Public Realm

12.1 Public realm includes all the outdoor places in cities such as Leicester that are accessible to all. The public realm includes the everyday spaces that people move through, work beside and play in. The public realm should not be seen in isolation but within the context of its adjacent buildings, their uses and its location in a wider network of public and private space.

12.2 New development increases the demands on public realm. As well as new and larger public spaces, growth and development may increase the need for seating; require more durable surfaces such as harder pavers or more resilient grass; necessitate new or replacement trees or alternative greening techniques (e.g. water features where tree planting may not be possible).

12.3 Such requirements are in addition to the green spaces that are provided as part and parcel of new development, which are considered normal development costs.

12.4 Public realm investment opportunities are being brought forward within the context of the Transportation Assessment, which will provide the context of both need and opportunity. As the IA moves forward public realm investment proposals, costed and programmed over time, will be brought into the next iteration of this document.

12. Waste

12.1 Within Leicester the City Council is both the Waste Collection Authority, collecting household waste and a limited amount of household waste, and the Waste Disposal Authority. With the responsibility for arranging the disposal of the waste collected in the area by the Waste Collection Authority.

12.2 The City Council has commissioned a separate Waste Assessment. When this is available any local and strategic waste infrastructure investment will be added to the Infrastructure Assessment.

13. Infrastructure Needs by Service Summarised

13.1 Infrastructure needs across a range of services over the Plan period will be addressed in the final version of this Assessment.

14. Infrastructure Needs Summarised Spatially

14.1 A spatial summary of infrastructure needs will be provided in the final version if this Assessment.

15. Engagement of Key Partners

15.1 The preparation of the IA has involved a range of, where possible, face to face meetings with key personnel engaged in delivering infrastructure within the City;

15.2 The purpose of this contact has been to explore critical issues and draw further and more detailed information from providers, particularly where service plans do not run to the end of the Plan period of 2036 (which for the most part is that case).

16. Viability Considerations

16.1 Separate to the Infrastructure Assessment, the City Council has commissioned a Viability Appraisal to inform the emerging Local Plan. Specifically, the Viability Appraisal will undertake:

- a review of affordable housing policy within the City (including tenure split).
- a whole plan viability assessment to consider all other standards and policy requirements.
- a consideration of the scope for a Community Infrastructure Levy (CIL)

16.2 This version of the Infrastructure Assessment has been prepared without the benefit of the outcomes of the viability work that has been commissioned. When available the conclusions from this work will be fed into the IA, with particular reference to the ability of future development to contribute to the cost of new infrastructure either directly (through a s106 agreement) or indirectly (through CIL revenues, which can be directed more generally towards infrastructure needs).

16.3 The ability of new development to help fund new infrastructure is not certain to be a given; whatever the outcome from this work it will help shape future infrastructure funding strategies within the IA, which will be revisited once the outcomes from the Viability Appraisal are known.

17. Funding and Delivery Considerations

17.1 There are a variety of ways in which growth related infrastructure can be funded and delivered: these include

- direct investment by infrastructure providers (e.g. the City Council's capital programme, private sector investment e.g. Broadband, utility companies)
- developer contributions (s106 agreements and CIL, if adopted within the City)
- funding from public bodies – the government directly through a range of programmes, and also bodies and key partners such as the LLEP, Homes England and Sport England

17.2 The Council will continue to work with partners and funding bodies to ensure the timely delivery of infrastructure.

18. Infrastructure Definition, Funding and Delivery in the first 5 years of the Local Plan

Introduction

18.1 Particular attention needs to be given to the planning, funding and delivery of infrastructure for the Plan's first 5 years to March 31st 2024 to ensure that it is secured in a timely fashion and this form a platform for future growth. Over the next 5 years, it is estimated that 3663 new dwellings can be expected to be delivered. This represents around 32% of the total overall growth expected over the plan period.

A commitment to the rigorous pursuit of timely and high quality infrastructure

18.2 To maximise the delivery of the early infrastructure the City Council will look to commit itself and the infrastructure providers operating within Leicester to the following measures:

Measure	Comment
The continuous refinement, exploration and updating of precise infrastructure needs will continue	The City Council will not halt its commitment to identify infrastructure needs for its growth strategy with either the publication of the final version of this document or the adoption of the local plan. Instead, needs will continue to be kept under review
Ongoing masterplanning work on the key growth locations will develop and refine infrastructure needs for these areas as well the means to secure their funding and delivery	Masterplanning work on these sites will need to define development principles, and such work will need to be kept under review and enhanced as appropriate in the process of these sites moving through from the planning to the implementation phase
Demands will be made of Infrastructure providers to make their case for need	The dialogue that has been established between the City Council and infrastructure providers will continue
Best use to be made of spare infrastructure capacity	The City Council will push infrastructure providers to make the maximum use of any spare infrastructure capacity in the currently the system through appropriate resource management systems
An early introduction of CIL to be considered, should viability allow	If the City Council is minded to introduce a CIL it should seek to do so at the earliest opportunity
The establishment of appropriate governance arrangements	As These will establish at the earliest opportunity to allow the direction of CIL (if introduced) s106 and other income towards infrastructure investment priorities
Bidding capability for existing and emerging infrastructure funds will be enhanced	The City Council will build capacity within the organisation and with external partners to take the maximum possible advantage of infrastructure funding particularly those which involve a competitive bidding process

Measure	Comment
Continue to promote work with Leicester & Leicestershire LEP	The City Council will continue to explore the opportunities for securing infrastructure funding through future rounds of the LEP's Growth Deal fund, and likewise, with the emerging Local Industrial Strategy
Support for innovative infrastructure solutions and funding sources	The City Council will give particular consideration to funding that is beyond the mainstream sources of funding, or more generally any measures that will reduce the overall infrastructure burden without any diminution of quality of services provided to the City's residents and its businesses
Making the best use of newly emerging technologies in relation to infrastructure provision	Finally, whilst the introduction of new technologies will never be a substitute for the provision of much needed new infrastructure to support existing and emerging communities, every opportunity should be taken to ensure such technologies play their part in keeping down costs of new provision as well as making maximum use of any existing provision

Table 18.1: The City Council's commitment in relation to the delivery of timely infrastructure in the local plan's first 5 years

19. Infrastructure definition, funding and delivery in the remainder of the Plan

19.1 In addition to the continuation of actions identified in the Plan's earlier years (see Chapter 18) attention needs to be given at an early stage to the planning, funding and delivery of infrastructure for the Plan's final 10 years from 1st April 2026. Over this period it is estimated that around 3663 new dwellings can be expected to be delivered. This represents around 32% of the total overall growth expected over the plan period.

Specific actions that can be undertaken now to promote growth

19.2 The following actions can be explored to help future proof longer infrastructure planning and delivery issues identified in the IA**:**

Longer Term Action	Comment
Encouraging infrastructure providers to think longer term than the immediate future	Progress has been made on longer term visioning in Leicestershire with the Strategic Growth Plan to 2050 infrastructure providers need to follow suit. Particular targets are expected to be: Primary Healthcare – thinking beyond the Primary Care Strategy (runs to 2025) and the NHS Long Term Plan (runs to 2029) Secondary Healthcare – thinking beyond the NHS Long Term Plan (runs to 2029) Education planning - rolling forward forecasting on an annual basis (currently runs to 2029) Water Utility Companies Asset Management Plans - emerging AMP runs to 2020 – 25 Police – Police and Crime Plan runs to 2021 Fire Service – Corporate and Integrated Risk Management Plan runs to 2021
'Future gazing'	Looking increasingly at the infrastructure implications of AI and the digital economy Climate Change Biodiversity New ways of delivering services

Table 19.1: Longer term actions around infrastructure planning and delivery

20. Monitoring and Future Proofing the Infrastructure Assessment and the Infrastructure Delivery Schedule

20.1 To take forward the principles set out in the last row in Table 20.1 we need to examine critical dependencies and how to future proof infrastructure planning and delivery over the next 17 years, the timeline of the Local Plan.

Critical dependencies

20.2 Critical dependency is a project management term to describe a task that needs to be undertaken (often within a specific time window) in order for subsequent tasks to be undertaken otherwise the project will be delayed. It has applicability to effective infrastructure planning, and it is a consideration we think should be applied to all actions involved in all proposed infrastructure investment initiatives related to its planning and delivery.

20.3 Critical dependencies will vary from situation to situation, and it is not our intention within the IA to produce a detailed checklist or handbook of what actions to take in any given circumstances; it is much more about the discipline that should be applied to all infrastructure planning including individual projects.

20.4 Table 20.1 provides a selection of Critical Dependencies and possible responses:

Issue	Dependency	Possible Action
1. Project 'insufficiently well regarded" with funders (most probably at the regional/national level) to secure funding	Raise project profile	Develop a USP; create bespoke partnership to promote credibility; demonstration of 'value added'
2. Key principles of new growth not well defined	Vision then masterplan to define expectations	City Council to take charge of the visioning/masterplanning process
3. A major initiative is 'stalled'; because developers (or provider) unwilling to take on the risk/cost of providing a specific item of infrastructure	Intervention to unlock development	City Council and its partners to assess risk/return to determine whether they forward fund; consider loan/pump priming; or seek to access available public funding source
4. Needs of various infrastructure providers unclear	Define infrastructure need to avoid undermining development quality	Active engagement of providers – involve them in visioning, masterplanning, seek 'future proofing' including any early interventions to avoid difficulties down the line
5. Clear gap identified between infrastructure funding requirements and availability of funding to deliver them	Actions to plug gap to avoid delay in development rollout	Consider access to government or other public funding; possible loan; or funding based on future receipts/developers' contributions etc
6. Can't bid for funding because project not fully developed	Instigate feasibility studies/business case	Bid for capacity funding/forward funding from own resources (possibly repayable down the line?)

Issue	Dependency	Possible Action
7. Infrastructure promoter feels that it lacks the competencies to ensure a high quality of development in a major scheme	Establish capability before either quality or deliverability threatened	Establishing partnerships may widen expertise; explore government capacity funds; consider a pooled resource with other public bodies; buy in expertise at critical points

Table 20.1: Critical dependencies and possible actions

Future Proofing Infrastructure Investment

20.5 This IA is no different from other similar studies in exploring and defining infrastructure needs in accordance with the here and now – what infrastructure *of the type we are already familiar with* is required to move people around using conventional modes of transport, to allow pupils age 2 – 19 to attend appropriate educational establishments, and to give people access to GP surgeries and secondary healthcare facilities such as hospitals and other facilities.

20.6 The reality is, however, that strategic infrastructure needs as we know them now are not certain to be the same in the future as community needs and expectations around public services and accessibility may well have changed substantially by 2036.

20.7 Societal trends that develop are driven by the interplay of a number of factors, including:

Key driver of change	Comment
Cost imperative	"We can give you what you already have/want more cheaply" [56]
Quality outlook	"This will mean we can improve on the service/good you want"
Prospect of convenience	"By doing X you don't have to put up with doing Y or Z"
Perceived opportunity	"You haven't been able to do A up until now, but by doing B you now can"
A changing society	"We are Generation E, and we don't find it acceptable what Generations C and D have had to put up with. We demand you do F so we can do G"
Diktat from above	"We are in charge, and we want you to stop doing H so we can achieve J. Accordingly, you must now do K"

Table 21.2: What drives societal changes in infrastructure provision

20.8 In addition to trends there is the issue of take-up. Table 21.3 overleaf shows the traditional S curve of technological uptake, applicable for a range of inventions, be it the printed book through to dishwashers and thence to smart phones:

[56] Always likely to be a major driver, if not the main one

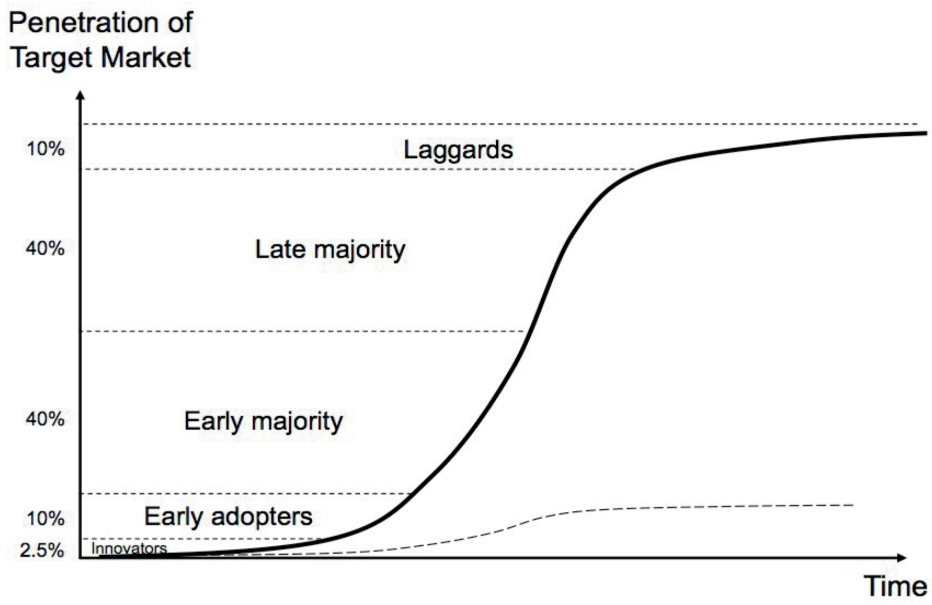

Table 20.4: The traditional S curve of new technology uptake

20.9 What is significant about the take-up of technology is not the vertical line on the graph but the horizontal one. Anecdotal evidence is that over time, this line gets shorter and shorter with each new invention, as witness by the mass penetration of the market by smart phones (66% of all adults in the UK in 2015, a mere 8 years after the launch of the first phone with an interactive screen/app download)[57]. Should this continue the pace of change speculated on in Table 21.4 will be quicker rather than slower.

20.10 Looking forward up to the year 2036 we can be certain that infrastructure needs will change over that period, even if we cannot be certain of the 'why when and how'. Even a casual speculation based on the extrapolation of emerging or potential trends suggests however that the future will be radically different than now

20.11 It is hard to be certain how we should take into account potential future trends, and it will be important not to gamble too much with the future. There are, however, some straightforward steps we can take to make sure the City Council and its partners are primed and ready to respond to a future infrastructure world: these are:

- a simple recognition that this is an issue we should at least be aware of and monitor
- establish an annual 'sense check' about what is happening against our long term investment plan, and those of our partners
- engage with relevant bodies, including the research elements of our further and higher education facilities, our high tech businesses and the Leicester and Leicestershire LEP, so we have an expanded awareness of this issue
- take any opportunity that emerges which is considered appropriate to test out innovation in the delivery of infrastructure and services

[57] Ofcom press release 6 August 2015

21. Policy Recommendations

21.1 We will cover policy recommendations in the final iteration of this assessment. Principally we expect this to relate to the potential creation of a Planning Obligations Supplementary Planning Document.

21.2 Without prejudice to our eventual recommendations as to the framing of the SPD, we consider that it will need to cover:

- consistency with the emerging Local Plan and its policies, together with any other Supplementary Planning documentation brought forward
- have due regard to the separate Viability Assessment, including the Whole Plan Viability Assessment
- identify those infrastructure areas where contributions will be sought
- identify appropriate triggers, thresholds and any unit cost formulae
- consistency with NPPF paragraphs 34, 54, 56 and 57

The Infrastructure Delivery Schedule

	Local Plan Timeframe	2019 - 2024	2025 - 2029	2030 - 2036	Total
Education					
Early Years	Early Years (Attached Nursery)	**£1.17m**	**£3.15m**	**£2.67m**	**£6.99m**
Primary (4 – 11)	Cost of additional forms of entry	**£2.57m**	**£6.87m**	**£5.87m**	**£15.31m**
Secondary (11 – 16)	Cost of additional forms of entry	**£0.37m**	**£1.07m**	**£0.85m**	**£2.29m**
11 - 18	Cost of additional forms of entry	**£0.66m**	**£1.0m**	**£1.18m**	**£2.84m**
SEND Primary	Cost of new specialist provision	**£0.71m**	**£0.71m**	**£0.84m**	**£2.26m**
SEND Secondary	Cost of new specialist provision	**£1.17m**	**£1.26m**	**£1.51m**	**£3.94m**
Total Education		**£6.65m**	**£14.06m**	**£12.92m**	**£36.63m**
		Healthcare			
Healthcare	Primary Care Investment	**£60m**	**£60m**	**£30m**	**£150m**
Healthcare	Secondary Care Investment	**£350m**	**£115m**		**£465m**
Total healthcare		**£410m**	**£175m**	**£30m**	**£615m**
		Social Infrastructure[58]			
	Local Plan Timeframe	**2019 - 2024**	**2025 - 2029**	**2030 - 2036**	**Total**
		Outdoor Sports and Leisure			
Outdoor Sports and Leisure	3 new AGP pitches	**£1.1m**	**£1.1m**	**£1.1m**	**£3.3m**
Outdoor sports and leisure	Pitch and facility enhancements	**£1.1m**	**£1.1m**	**£1.1m**	**£3.3m**
Total Outdoor Sports and Leisure		**£2.2m**	**£2.2m**	**£2.2m**	**£6.6m**
		Indoor Sports and Leisure			
Indoor Sports and Leisure	Priority One Indoor Sports Facilities Investment (£m)	**£10.3m**			**10.3**
Indoor Sports and Leisure	Priority Two Indoor Sports Facilities Investment (3m)		**£5.1m**		**£5.1m**
Total Indoor Sports and Leisure		**£10.3m**	**£5.1m**		**£15.4m**
		Library and Community Facilities			
Library and Community Facilities (continued)	2 no replacement libraries/community centres operating as Multi Service Centres		**£1.9m**	**£1.9m**	**£3.8m**
Total Library and Community Facilities			**£1.9m**	**£1.9m**	**£3.8m**

[58] Not yet calculated – Open Space, Strategic Green Infrastructure

Social Infrastructure (continued)					
Gypsy and Traveller Provision					
Gypsy and Traveller provision	7 pitch permanent Gypsy Site		**£0.875m**		**£0.875m**
Total G & T provision			**£0.875m**		**£0.875m**
Burial Facilities					
Burial Facilities	New burial ground Phase 1			**£1.32m**	**£1.32m**
Total Burial Facilities				**£1.32m**	**£1.32m**
Emergency Services					
Police					
Police	New police base (emergency response/enquiries etc)			**£0.32m**	**£0.32m**
Total Police				**£0.32m**	**£0.32m**
Fire and Rescue	Works on Leicester Fire Stations	**£0.75m**	**£0.75m**	**£1.05m**	**£2.55m**
Fire and Rescue	Vehicle purchase for Leicester based appliances	**£2.4m**	**£2.4m**	**£3.4m**	**£8.2m**
Total Fire and Rescue		**£3.15m**	**£3.15m**	**£4.45m**	**£10.75m**
Ambulance Services	**No specific needs identified beyond those forming part of Secondary Healthcare changes (see above)**				
Utilities					
Broadband and 5G					
Broadband and 5G	Full Fibre Broadband rollout	**£35m**	**£70m**		**£105m**
Broadband and 5G	**No specific costs of 5G rollout identified**				
Total Full Fibre Broadband rollout		**£35m**	**£70m**		**£105m**
Flood Risk and Sustainable Drainage					
Flood Risk and Sustainable Drainage	**No figures available currently**				
Utilities					
	Local Plan Timeframe	**2019 - 2024**	**2025 - 2029**	**2030 - 2036**	**Total**
Electricity infrastructure	**No specific public infrastructure costs identified**				
Gas Infrastructure	**No specific public infrastructure costs identified**				
Potable & Waste Water	**No specific public infrastructure costs identified**				
Subtotal of infrastructure costs excluding transport		**£467.3m**	**£272.285**	**£53.11m**	**£792.695m**
Transportation infrastructure cost total					**£280.6m**
Grand Total infrastructure cost					**£1,073.295m**

Requirements within Infrastructure Delivery Schedule Attributable to growth

Infrastructure Item	Key Issue	Requirements in schedule attributable to growth
Education (all age groups)	Although in the short term there may be some spare capacity due to a short term reduction in the birth rate we feel this will be balanced over time and, therefore, all new development within the plan period will be required and that all new development will require the requisite school places	£100%
Primary healthcare	Major transformative investment to respond to the Primary Care Strategy – no detailed investment plans revealed to us, so we have made some assumptions for the IA	3% max – most investment attributable to widescale changes in provision
Secondary healthcare	Major investment identified, supported by government funding	0% - we think that none of the new investment can realistically be attributable to growth factors
Public Health	No specific infrastructure requirements – subsumed in other investment	N/A
Indoor Sports and Leisure	Investment needed in improving existing facilities	10% - investment largely to improve existing estate
Libraries and Community Facilities	Major changes to the current estate have been implemented but we believe future investment will be required to maintain quality – hence 2 new or replacement Multi Service Centres	20% - mainly investment to maintain quality but with the potential for an improved geographical spread
Outdoor Sports and Leisure	Investment needed to improve existing facilities, but we suggest 1AGP could be considered to be necessary as a result of growth	17% - 1 of 3 AGPs which collectively make up 50% of the investment we think necessary
Gypsy and Traveller Provision	New pitches identified in current strategy	Limited – possibly only 10% as provision deals largely with existing identified requirements
Burial facilities	New facility identified by service	Limited – possibly only 10% as capacity will be exhausted regardless of growth
Police	No new need identified to us, but we feel that the Police Service will need to revisit their infrastructure needs to respond to the planned increases in police numbers and to sustain a local police presence	10% - largely driven by underlying changes in the force, although there is a small growth element
Fire and Rescue	We have not identified any new requirements but consider that the service will continue to invest in its existing stations and its capital equipment	10% - largely driven by underlying changes in the force, although there is a small growth element
Ambulance	New requirements subsumed in secondary healthcare investment proposed	N/A
Waste and Potable Water, Electricity and Gas	No requirements identified; any cost will either be met by the utility company if obliged to do so, or user charge	N/A
Broadband	New investment in full fibre and 5G largely secured by deal between developers and industry, possibly with public funding support	Around 5%, a universal service obligation to provide full fibre to new development

Growth Related infrastructure needs[59] calculated as a proportion of all infrastructure investment over the Plan period

Service	Overall infrastructure cost estimate	Proportion we consider attributable to growth	Growth related infrastructure as a percentage need
Education	£33.63m	£33.63m	100%
Primary Healthcare	£150m	£4.86m	3%
Secondary Healthcare	£465m	£0m	N/A
Outdoor Sports and Leisure	£6.6m	£1.1m	17%
Indoor Sports and Leisure	£15.4m	£1.54m	10%
Burial Facilities	£1.32m	£0.13m	10%
Community Facilities	£2.2m	£0.44m	20%
Gypsy & Traveller provision	£0.875	£0.08m	10%
Police	£0.32m	£0.03m	10%
Fire and Rescue	£10.75m	£1.07m	10%
Broadband	£105m	£5.25m	5%
Total	**£792.695m**	**£48.13m**	**6%**

[59] Does not at this stage include transport infrastructure costs

The Infrastructure Funding Deficit

Introduction

1.1 In order to meet the requirements set out in the statutory Community Infrastructure Levy (CIL) Guidance (2019) – and should it determine it appropriate to introduce a CIL - the City Council, as the charging authority, must identify the total costs of infrastructure it wishes to fund in whole or in part from the levy.

1.2 To do this the authority must identify the additional infrastructure needed to support development, and the available sources of funding for it not including CIL. Should this show an aggregate infrastructure funding gap (where available resources fail to meet the cost of necessary infrastructure) then the need for the authority to charge a CIL will have been demonstrated.

1.3 The infrastructure requirements to support growth will be set out in detail in the final version of this document prepared to support the emerging Local Plan. The IA seeks to identify short, medium and long term infrastructure associated with growth to be delivered during the Plan period from the date of its preparation to the end of the Plan period (2036) in a range of different categories (including heath, education and transport).

1.4 Given that infrastructure requirements will change over time in response to a variety of factors, and that the IA is a living, regularly updated document, the Infrastructure Funding Gap will only be determined at the last possible moment.

1.5 The infrastructure funding gap analysis does not have any direct relationship with the rate at which CIL is to be set, but simply provides evidence that there is an infrastructure funding gap that CIL could help fill. The rate at which CIL is set is determined purely through financial viability analysis, set locally at a level at which development will remain viable without threat to its delivery.

1.6 It should also be recognised that there will be no attempt within the Infrastructure Funding Gap analysis either to prioritise infrastructure projects or to indicate which of them will be funded wholly or partially from the CIL when this is introduced. The governance arrangements that will be put in place by the authority to manage CIL revenues will have the responsibility for making such judgements, and the Infrastructure Funding Statements that authorities will be required to produce will reinforce this.

Appendix A: List of documents analysed to support the Infrastructure Assessment's conclusions

A: General			
Document	**Date (Latest Version)**	**Prepared For/By**	**Summary of content**
Growth and Infrastructure Assessment	April 2009	Roger Tym/URS for Leicester and Leicestershire HMA authorities	Highly detailed investigation of infrastructure need for whole of HMA
Growth & Infrastructure Assessment Leicester extract	January 2010	Roger Tym/URS for Leicester and Leicestershire HMA authorities	As above, for the City
Community Infrastructure Levy CIL Infrastructure Projects List and Funding Gap	February 2015	City Mayor by Leicester City Council	Follows on from GIA work setting out major projects that could be funded by CIL plus funding gap (the gap between funding needed and funding secured for identified infrastructure)
Leicester and Leicestershire 2050: Our Vision for Growth (the Strategic Growth Plan)	September 2018	10 organisations (Leicestershire's 7 district councils, Leicester City, Leicester County Council and The Leicester & Leicestershire LEP)	A vital document which seeks to ally growth to infrastructure investment over an extended time period to 2050, the SGP is a critical document.
Leicester & Leicestershire Strategic Infrastructure Review 2011 - 2050	In preparation	Partners as for SGP	When complete will provide a wider context to the IA in looking at longer term strategic growth and delivery issues and the cost, timing and funding of strategic infrastructure
B: Education			
Budget 2018 – 2019, draft Budget 2019 – 2020 and draft capital programme 2018 – 2019 to 2019 to 2020	November 2017	Leicester City Council (prepared by Director of Finance)	Investment in capital works including new school places in the short term
Leicester 0 – 5 Strategy 2016 - 2019	2016	Leicester City Council	Explores Early Years provision in the City
DfE: Securing Developer Contributions for Education	April 2019	DfE	Government advice to local authorities on securing developer contributions
C: Healthcare			
Leicester, Leicestershire and Rutland CCGs Operational Plan June 2018	June 2018	Leicester, Leicestershire and Rutland CCGs	Latest operational plan for 2018/19 and key changes in services to be planned for

Document	Date (Latest Version)	Prepared For/By	Summary of content
C: Healthcare (Continued)			
Better Care Together: The next steps to better care in Leicester, Leicestershire and Rutland	August 2018	The Local Sustainability and Transformation Partnership for the 3 CCGs covering the County and City (East Leicestershire and Rutland, Leicester and West Leicestershire CCGs) plus University Hospitals of Leicester NHS Trust, Leicestershire Partnership NHS Trust and East Midlands Ambulance Service	Sets out progress made on developing an integrated health system and next steps to meet future challenges
Blueprint for General Practice	February 2017	BCT partners	Delivering the NHS Forward View through GP practices
Leicester, Leicestershire and Rutland Primary Care Strategy	June 2019	The 3 CCGs	A strategy and programme for primary changes in the primary healthcare strategy including the establishment of Primary Care Networks
Department for Health	September 2019	Department for Health	Plans for a significant hospital rebuilding programme, including transformative changes to the 3 Leicester hospitals
Leicester Partnership NHS Trust Quality Strategy 2016/17 to 2018/19	July 2016	Leicestershire Partnership NHS Trust	An operational strategy for improving the health and wellbeing of the communities served by the Trust
Delivering Care at its Best: Our 5 year plan and 2016/17 priorities	July 2016	University Hospitals of Leicester NHS Trust	A strategy to provide better care and meet immediate priorities
Health and Social Care Sector Growth Plan	2017	Leicester and Leicestershire Local Enterprise Partnership (Cambridge Econometrics)	A health and social care growth and investment plan for Leicester, Leicestershire and Rutland
NHS Long Term Plan	January 2019	NHS England	The NHS 10 year plan for improved/expanded delivery of healthcare services to patients, with more integrated services, a focus on prevention and the better use of data and digital technology
Review of NHS Property and Estates (The Naylor Report)	April 2017	Department for Health	An estates strategy aimed at facilitating improved care through reinvestment in property funded through the release of surplus NHS land

Document	Date (Latest Version)	Prepared For/By	Summary of content
D: Adult Social Care			
Leicester City Council Adult Social Care Strategic Purpose and 6 Strategic Priorities		Leicester City Council	Measures to protect and empower the most vulnerable people on Leicester
Strategic Commissioning Strategy 2015-2019		Leicester City Council	A 5 year vision and a framework for the future commissioning of that deliver quality and value for money, safeguard users from abuse; and prevent, postpone and minimise the need for formal care and support through commissioning a system that promotes independence and well-being
Adult Social Care Market Position Statement 2018 - 2020		Leicester City Council	Information for providers (organisations that may wish to provide adult social care services in future), setting out priorities, information about current and future needs, and plans for future commissioning
Adult Social Care Local Account 2015-2016 (latest available)		Leicester City Council	Annual statement showing how Leicester City's Adult Social Care services have performed over 12 months, and sets out future plans
Adult Social Care Independent Living and Extra Care Commissioning Strategy 2013		Leicester City Council	Provides an overview of the state of the current market for independent living, and the level of need
Joint Mental Health Commissioning Strategy For Leicester City April 2015 – March 2019		Leicester City Council/Leicester CCG	Sets out information about the needs of people with mental health problems and plans for commissioning services to meet those needs
Joint Learning Disabilities Commissioning Strategy for Leicester City 2015-2019		Leicester City Council/Leicester CCG	Produced jointly with Leicester City Clinical Commissioning Group (CCG). Sets out information about the needs of people with learning disabilities and plans for commissioning services to meet those needs
Leicester, Leicestershire and Rutland Autism Strategy 2014 - 2019		Leicester City Council/Leicester, Leicestershire and Rutland CCGs	The needs of people with autism and the plans for commissioning services to meet these needs
The Joint Health, Social Care and Education Transitions Strategy 2019 - 2022		Leicester City Council/Leicester CCG	Jointly produced with Leicester CCG, this sets out an approach for improving the support offered to young people with additional needs as they move into adulthood
Joint Carers Strategy (2018 – 2021); recognising, valuing and supporting carers in Leicester, Leicestershire and Rutland		Leicester City Council/Leicester, Leicestershire and Rutland CCGs	Strategy supported by a range of adult social care bodies to deliver a local vision of carers

Document	Date (Latest Version)	Prepared For/By	Summary of content
D: Public Health			
Health and Wellbeing Strategy and Action Plan 2019 - 2024		Leicester City Council	Call to actions to tackle the origins of ill health in the City
E: Flood Risk Assessment			
Leicester City Council Level 2 Strategic Flood Risk Assessment Final Report	February 2012	URS for the City Council	Assesses the flood risk associated with the then Core Strategy
Leicester City Council Surface Water Management Plan	May 2012	URS for the City Council	As above, for surface water
Leicester Future Flood Risk Study	2017	Riverscape Environmental Consultancy with Arcadis	A new flood risk management strategy designed to help manage future flood risks in Leicester and improve the city¹s natural river environment
F: Utilities – Water and Sewerage			
PR19 (Price Review Mechanism)	September 2018	Severn Trent	Planning for water and sewerage services for the future, including headline targets and investment
Serving Our Communities: Seven Trent Business Plan 2020 - 25	September 2018	Severn Trent	Sets out the company's investment plans for the Asset Management Period 2020 – 2025 (AMP7)
Final Price Control Determination 2015 – 2020 for Severn Trent	March 2014	Ofwat	Determines financial controls and performance requirements for each water company over AMP6 (2015 – 2020)
G: Utilities - Electricity			
Long Term Development Studies for the East Midlands	November 2017	Western Power Distribution	Statement providing an overview on the 132kV, 66kV and 33kV systems and the associated transforming mechanisms
Leicester & Leicestershire Utilities Infrastructure Capacity Study	November 2017	SGP Partners	The identification of the likely strategic utilities infrastructure requirements needed to support immediate term growth to 2031 and longer term growth to 2050
Energy Infrastructure Strategy	November 2018	Leicester and Leicestershire Local Enterprise Partnership	An energy strategy responding the National Industrial Strategy around the opportunities for clean growth
H: Utilities - Gas			
Long Term Development Plan	October 2018	Cadent Gas	A strategy for meeting future demand, including innovation and measures to meet long term carbon reduction
I: Utilities - Broadband			
Superfast Broadband presentation	June 2018	Superfast Leicestershire	A summary of progress made since the Leicestershire Broadband Plan 2012 and future actions/challenges

Document	Date (Latest Version)	Prepared For/By	Summary of content
J: Social Infrastructure			
Leicester Greenspace Strategy 2009 - 2015		Leicester City Council	Research into the existing quantity and quality of green spaces across the city with proposals for how our they can be improved to be safer, cleaner, and more sustainable places
Leicester Green Infrastructure Study 2015 - 2025		Leicester City Council/Natural England	Sets strategic vision for the City's green sites and the ways in which they can be created, managed and maintained> Has 4 key priorities, linked to other City objectives including economic growth, greenspace, transport, flood storage and climate change
Leicester City Council Playing Pitch Strategy Assessment Report	May 2017	Neil Allen Associates for Leicester City Council	The assessment report for the Outdoor Sports Pitch Strategy for the City For each of the sports covered, it summarises the current supply and characteristics of playing pitches; current and projected demand (and the adequacy of current provision to meet demand; and issues for the Outdoor Sports Pitch Strategy to address
Leicester City Council Playing Pitch Strategy and Action Plans	June 2017	Neil Allen Associates for Leicester City Council	Includes a series of action plans and intended to act as a basis on which to consider potential sports Investment, and a vehicle for ongoing discussion between the City Council, Sport England, Sport National Governing Bodies and sports clubs through existing governance structures already in place to support the strategic planning of sport in the City. It will also help inform decision making on planning Applications
Open Space, Sport and Recreation Study	2017	Leicester City Council	A study that provides evidence of publicly accessible open space in Leicester setting the city in the context of open space provision in the county. It also asks questions about open space provision and the requirements going forwards
Green Wedge Review July 2017	July 2017	Leicester City Council	Examines the City's 1 Green Wedges to determine their relative "strength" and provide evidence for the emerging Local Plan
Active Leicester Sport & Physical Activity 2017 - 2022	2018	Leicester City Council	Aims to increase activity levels for an additional 20,000 residents, identifies the needs associated with an increased population and the promotion of healthy lifestyles – especially for children and young people – through a high quality, efficient and accessible network of sport and leisure facilities
Healthy Weight for Children, Young People and Families 2018 – 2023		Leicester City Council	Seeks to create an environment where a healthy choice is the easy choice for all children, and where being physically active is built into how children play and learn lifelong habits

Document	Date (Latest Version)	Prepared For/By	Summary of content
J: Social Infrastructure (Continued)			
National curriculum in England (National Adopted Policy) Swimming and water safety (October 2018)			All schools to provide swimming instruction either in key stage 1 or key stage 2 to ensure pupils can swim competently, confidently and proficiently over a distance of at least 25 metres as part of a drive to ensure all children can swim by end of primary school
Leicester City and Leicestershire Gypsy, Traveller and Travelling Showpeople Accommodation Assessment	May 2017	Opinion Research Associates for Leicester and Leicestershire authorities (except Hinckley & Bosworth)	Current and future pitch provision
GTAA update	September 2019	As above	Partial update of the 2017 Study
K: Emergency Services			
East Midlands Ambulance Service Quality Improvement Plan	July 2016	East Midlands Ambulance Service NHS Trust	How the Trust will seek to improve the services it provides, including weaknesses identified by the Care Quality Commission
Force Management Statement 2018 - 2019	2019	Leicestershire Police	An annual statement by the Chief Constable of the financial resources of the force, the demand for service on the force, and a statement of the assets which the force has to meet that demand.
Police and Crime Plan 2017-2021	2017	Police and Crime Commissioner For Leicester, Leicestershire and Rutland	A plan with the aim of ensuring effective policing across Leicester, Leicestershire and Rutland, through reductions in offending/reoffending; victim/witness support; safer neighbourhoods and communities; protecting vulnerable people; and crime prevention
Corporate and Integrated Risk Management Plan (IRMP) 2018 - 2021	2018	Leicester, Leicestershire and Rutland Fire and Rescue Service	Latest service plan

Part II - ADDENDUM - November 2022

Leicester Infrastructure Study – Reg 19 (Submission) Addendum

Introduction

As part of the regulation 18 consultation, CIVIX on behalf of Leicester City Council produced an infrastructure assessment (IA) to support the draft local plan. This addendum forms an update to the above report, explaining what has changed since the previous report and the reasons for this change. This document provides an updated infrastructure list, showing the revised costings, which also forms an appendix in the submission local plan.

The infrastructure assessment is a 'live' document, which will need to be regularly updated, following consultation; discussions with stakeholders; and potentially following The Examination in Public.

Education

Following discussions with the local authority Education Service, there have been significant revisions in the cost per place and pupil yields (pupils/dwelling). This, along with rising construction costs, is likely tol more than double the original estimate for education infrastructure, across its entire spectrum, (i.e. Early Years; Primary; and Secondary Education; Education for 16 – 18 Year Olds; and SEND provision). This will be subject to further review before the Local Plan is formally submitted.

Health and Social Care

Primary Health

The previous regulation 18 study identified the potential need for 5 major new primary healthcare complexes, to achieve the rollout of Leicester, Leicestershire and Rutland's Primary Care Strategy in the City. This remains valid for regulation 19.

Secondary Health

Same as regulation 18 but costs uplifted due to inflation.

Social Care

Infrastructure costs were excluded from the March 2020 IA, as a city-wide Care Strategy had not yet been agreed. The updated list now includes these. The cost is based entirely on profiling the 396 units of accommodation, that were identified in the Supported Living and Extra Care Housing Strategy 2021 – 2031, plus the funding for Adaptations and Assistive Technology.

Utilities

Energy Supply

This has not been revised at this stage, as the conclusions of the regulation 18 study remain valid.

Water Supply and Waste Water

This has not been revised at this stage, as the conclusions of the reg 18 study remain valid.

Full Fibre Broadband

Full fibre/gigabit capable broadband costs have been revised downwards since regulation 18, because of significant recent rollout and the expectation that newbuild housing will see its own associated provision, as a development requirement, not as a public infrastructure cost from 2025.

Social Infrastructure

Outdoor Sports & Leisure & Indoor Sports and Leisure

No change in figures since regulation 18, however these may be revised in due course.

Burial facilities

A combination of increases in death rate (Covid 19); significant increases in plot purchasing; and ongoing death rates well above a rolling 5-year average (+14.2% in May 2022) has accelerated a need for a new 8 ha cemetery.

Community facilities

The Library Service sees no investment needs beyond the £0.59m, that are already allocated for securing extended hours self-access to the City's libraries; therefore at its request, the March 2020 IA assumption of 2 x replacement facilities towards the end of the Plan period has been removed.

Gypsy and Traveller Provision

Whilst the original provision of a 7 pitch permanent site from reg 18 is still valid,following updates to the evidence for the local plan there is now justification for including provision for a 12-pitch transit site.

Flood Defense and Surface Water Drainage

A refresh of the level 2 Strategic Flood Risk Assessment (SFRA) was prepared in July 2022. This update incorporated the latest flood risk data to map flood defenses, the extent of flooding in Leicester (including for surface water flooding) and provided planning guidance for carrying out Sequential and Exception tests. The evidence has been prepared with the Environment Agency and Lead Local Flood Authority. The Council will periodically update the SFRA, as climate change allowances and flood risk data change, in accordance with guidance from both the Environment Agency and LLFA.

Emergency Services

Police

No change since regulation 18, still a provision of small police base to serve a growth location, with the location yet to be determined.

Fire and Rescue

No change since regulation 18, and assumes an extension of the current "building work investment programme and appliance replacement", but with a reduction in the assessment period, rolled forward from 2019 to 2022.

Infrastructure required for the local plan - Updated List 2022.

Below is a list of the proposed infrastructure, required to support the adopted local plan.

Topic	Total projected infrastructure investment 2022 - 2036
Education	£70.3m
Primary Health	£150m
Secondary Health	£495m
Social Care	£55.2m
Outdoor Sports & Leisure	£6.6m
Indoor Sports and Leisure	£15.4m
Burial facilities	£4m
Community facilities includes libraries, Youth Services and Community Halls	£0.59m
Gypsy and Traveller Provision	£0.875m
Police	£0.32m
Fire and Rescue	£9.45m
Full Fibre Broadband	£76.0m
Totals	£954.385m