

Hertsmere Borough Council
Infrastructure Delivery Plan
Part 1: Baseline Infrastructure
Capacity Report

Final | 3 September 2021

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Ove Arup & Partners Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

ARUP

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		Name	Ed Waters Gio Loperfido	Rob Webster	Anna Richards
		Signature			
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			Prepared by	Checked by	Approved by
		Name	Rob Webster	Anna Richards	Anna Richards
		Signature			
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Executive Summary

This Baseline Infrastructure Capacity Report is the first of two parts of a new Infrastructure Delivery Plan for Hertsmere. It has been prepared in the context of the Council's ongoing review of its Local Plan covering a period to 2037/38, and is intended to support the overall spatial strategy and selection of sites for inclusion in the Local Plan by setting out the baseline context of infrastructure provision across the borough as a whole and in individual settlements.

The study considers 30 infrastructure types; covering transport, utilities, education and social infrastructure, healthcare and emergency services, and green infrastructure. Through a combination of desktop assessment and stakeholder engagement we have sought to set out relevant policy and context issues for each infrastructure type, summarise existing levels of infrastructure provision, and set out conclusions on the implications for future development.

There are no infrastructure types for which our discussions with stakeholders have indicated a fundamental inability to deliver likely levels of growth anticipated over the plan period to 2037/38. There are also no specific settlements which are completely constrained by infrastructure capacity at the present time. Although in some cases the amount of growth is restricted. Varying degrees of infrastructure investment will be needed to mitigate the impacts of development, at a high level these are considered to be feasible and deliverable.

There are six infrastructure types where we have identified particular challenges that the Local Plan process will need to address:

- **Transport** – Hertfordshire County Council's transport strategy is focussed on achieving modal shift, primarily through bus service improvements and the provision of better infrastructure for active travel. Whilst this is a positive approach with sustainability benefits, it will be reliant on a thorough delivery and funding approach as well as the direction of development towards the most well-connected locations.
- **Electricity supply** – UK Power Networks has indicated a need for increased capacity at Potters Bar's primary substation, although this will serve a wider area and therefore need to be planned with regard to all planned development with costs attributed equitably.
- **Water supply** – There are known issues with water stress and abstraction. Given the age of the Hertfordshire Water Study, at the time of writing these are not fully understood.
- **Schools** – A significant number of additional primary and secondary school places will be required to support growth. Given challenges identified by HCC in finding suitable school sites, the Local Plan will need to assist in identifying locations and allocating land.
- **Primary healthcare** – The Herts Valleys CCG has indicated a need for additional primary healthcare capacity within the borough – both in terms of expansions/relocations and new provision. Suitable sites will need to be considered through the Local Plan process.
- **Green infrastructure** – The Open Space Assessment recently undertaken for the Council by KKP has indicated deficits in existing levels of provision for most types of green infrastructure and sports provision across most of the borough's settlements.

Within Chapter 5 the report sets out specific settlement-level infrastructure requirements, including for the delivery of the Council's envisaged new settlement at Bowmans Cross, and for a new media quarter site in Borehamwood. It summarises recommendations for potential Local Plan policy approaches to allow the delivery of certain types of infrastructure.

1 Introduction

1.1 Overview

- 1.1.1 Hertsmere Borough Council (referred to throughout as ‘HBC’ and ‘the Council’) has commissioned Ove Arup and Partners Limited (Arup) to undertake an Infrastructure Delivery Plan for the Hertsmere local authority area.
- 1.1.2 HBC are currently working on a new Local Plan for the borough, which will supersede the current Local Plan and will set out site allocations as well as new policies for the determination of planning applications. The new Local Plan will cover the period to 2037/38. The process of preparing the new plan began in late 2016, with a Regulation 18 Issues and Options consultation held from September until November 2017¹. This was followed by consultation on Potential Sites for Housing and Employment which ran from October to December 2018². The next stage of the plan making process is currently programmed to be the publication of a full Regulation 18 Draft Local Plan. This will be consulted on for a minimum of 6 weeks and will set out the Council’s preferred spatial strategy and policy approach. Following Regulation 19 publication and examination, the Local Plan is currently scheduled for adoption by late 2023.
- 1.1.3 The Infrastructure Delivery Plan will form a key element of the Council’s evidence base to support the Local Plan. The importance of infrastructure is a key theme set out in the 2017 Issues and Options consultation. This clear recognition at an early stage of the plan making process will help the Council respond to infrastructure constraints and address the need for infrastructure in new development at the earliest stage possible.
- 1.1.4 Through bringing together the views of and data from stakeholders on the current provision of infrastructure, future infrastructure requirements, funding mechanisms and projected costs and development viability, the Infrastructure Delivery Plan will set out infrastructure requirements that are necessary to support any proposed future growth within HBC. Within the context of limited and diminishing Council funding, establishing a reliable and concise infrastructure evidence base document will ensure any investment decisions are based on a sound understanding of infrastructure requirements and growth. This will offer greater certainty to service providers, funders and developers about how infrastructure will be funded and delivered, enabling growth and encouraging investment.
- 1.1.5 The Infrastructure Delivery Plan comprises two inter-linked parts. This first part outlines the current baseline position on existing infrastructure capacity and sets out implications for future growth. The second part sets out the anticipated future infrastructure needs of the borough, around established levels and locations of growth.
- 1.1.6 This document was first drafted in May 2020, and the draft informed the Council’s development of the Local Plan and choices around site selection. The document was updated in early 2021 and again in summer 2021 to reflect changes of circumstance since that time, including matters where a different or more advanced understanding had emerged through work on the parallel Part 2 document. The implications of the Covid-19

¹ <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/Local-Plan/New-Local-Plan/New-Local-Plan-Planning-for-Growth.aspx>

² https://hertsmere-consult.objective.co.uk/portal/pp/potential_sites_2018/pshe2018_1?tab=info

pandemic on infrastructure provision and service delivery are not yet clear, however, and will be considered through future iterations of the IDP.

1.2 Role of the Infrastructure Delivery Plan

1.2.1 The purpose of this Study is to inform the preparation of the new Local Plan for Hertsmere, and form evidence underpinning and justifying the Local Plan as it progresses towards its examination in public. It will also be capable of use by the Council as part of the Development Management process, to underpin CIL charging and negotiations for developer contributions, to inform the whole-plan viability assessment, as well as the ongoing monitoring and prioritisation of projects through the Infrastructure Funding Statement. The two parts of the IDP have a distinct role:

1.2.2 Part 1: Baseline Infrastructure Capacity Report: This first part of the IDP provides the baseline context for existing infrastructure capacity in Hertsmere. It will inform Hertsmere's final selection of site allocations by:

- Analysing infrastructure and service provider's investment plans;
- Identifying cross-boundary implications with duty-to-cooperate bodies;
- Providing an understanding of infrastructure services, networks and facilities in Hertsmere, and identifying existing capacity surpluses and deficits on a borough-wide basis and a settlement-by-settlement basis where possible;
- Identifying how these infrastructure capacity constraints might have implications for the Local Plan, including setting out any issues that might be a barrier to future growth;
- Policy recommendations to enable the delivery of infrastructure necessary to support the development strategy, particularly for key strategic development sites, including approaches to the development management process;
- Assessing the potential to deliver a new settlement within the borough, based on an understanding of infrastructure necessary to support it, as well as assessing the future infrastructure requirements for the proposed media quarter.

1.2.3 Part 2: Infrastructure Delivery Schedule: The second part of the IDP sets out the infrastructure requirements of the development strategy to be consulted upon in the Council's Draft Local Plan, finalised following Part 1. It includes:

- The required infrastructure; and for each infrastructure item the details of the responsible infrastructure service provider, capacity required, likely cost, and funding gap where possible to establish;
- A clear identification of the methodology taken to identifying infrastructure surpluses and deficits, the methodology by which costs have been calculated, and the limitations of forecasting infrastructure requirements;
- Identification of potential funding and delivery streams for the infrastructure identified.

1.2.4 The Part 2 document will also help to inform the Council's approach to charging under the Community Infrastructure Levy, and considerations around the viability of development in Hertsmere. The Council is reviewing its CIL charging schedule in parallel with the Local Plan review.

1.3 Document Structure

1.3.1 Whilst self-contained to inform the preparation of the Council's Regulation 18 Local Plan, this Part 1 Baseline Infrastructure Capacity Report is intended to be read in combination with the Part 2 Schedule.

1.3.2 This document is laid out as follows:

- **Chapter 2** sets out the local and national policy context of relevance to the production of an Infrastructure Delivery Plan;
- **Chapter 3** sets out the scope and methodology of the Infrastructure Delivery Plan (across both Parts 1 and 2, for completeness);
- **Chapter 4** sets out the baseline infrastructure position affecting Hertsmere (including cross-boundary infrastructure issues), across all infrastructure types in the scope of the study, and sets out general implications for growth including indicative costings for potential infrastructure improvements and interventions (where known);
- **Chapter 5** forms the conclusions of this report and sets out the ability of infrastructure to accommodate new development within Hertsmere, on a boroughwide and settlement-by-settlement level. This chapter also includes consideration of infrastructure requirements necessary to deliver a new settlement at Bowmans Cross, and to deliver a major new media quarter in Borehamwood.

2 Understanding the Policy Context

2.1 Introduction

2.1.1 The following section outlines the national and local planning policy context for infrastructure planning within Hertsmere. This includes consideration of Local Enterprise Partnerships, and cross-boundary planning matters with respect to neighbouring authorities in both Hertfordshire and Greater London.

2.2 National Planning Policy Context

2.2.1 The National Planning Policy Framework 2021³ (NPPF) and its supporting Planning Practice Guidance strongly underline the need for the proper planning and delivery of infrastructure as part of the plan making process. The requirements of the NPPF, and the advice set out in the Planning Practice Guidance, have informed the approach of this Infrastructure Delivery Plan.

National Planning Policy Framework

2.2.2 The NPPF is founded on the need to deliver and achieve sustainable development. This means supporting strong and healthy communities, protecting and enhancing our built, natural and historic environment and contributing to building a strong, responsive and competitive economy by identifying and coordinating development requirements, including the provision of infrastructure.

2.2.3 The NPPF 2021 identifies the crucial role of the Local Plan process in planning appropriately to meet infrastructure needs, including those arising as a result of new development. Paragraph 20 states that:

“Strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for:

- a. housing (including affordable housing), employment, retail, leisure and other commercial development;*
- b. infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);*
- c. community facilities (such as health, education and cultural infrastructure); and*
- d. conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.”*

2.2.4 Specific references to infrastructure provision also run as a thread through the individual topic chapters throughout the NPPF. These include:

- Chapter 6, Building a strong competitive economy – Paragraph 82: *“Planning policies should seek to address potential barriers to investment, such as inadequate infrastructure”*

³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

- Chapter 8, Promoting healthy and safe communities – Paragraph 92: *“Planning policies and decisions should aim to achieve healthy, inclusive and safe places which enable and support healthy lifestyles, especially, where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure”*
- Chapter 9, Promoting sustainable transport – Paragraph 102: *“Transport issues should be considered from the earliest stages of plan-making and development proposals, so that opportunities for existing or proposed transport infrastructure are realised”*
- Chapter 9, Promoting sustainable transport – Paragraph 106: *“Planning policies should provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking”; and “Provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation”*
- Chapter 10, Supporting high quality communications – Paragraph 114: *“Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of electronic communications networks”*

2.2.5 The NPPF also identifies the need for local authorities to work collaboratively to deliver new infrastructure. At Paragraph 16 it sets out the requirement for Local Plans to be *“shaped by early, proportionate and effective engagement”* with infrastructure providers and operators. At Paragraph 26, it also states that:

“Effective and on-going joint working between strategic policy-making authorities and relevant bodies is integral to the production of a positively prepared and justified strategy. In particular, joint working should help to determine where additional infrastructure is necessary, and whether development needs that cannot be met wholly within a particular plan area could be met elsewhere.”

2.2.6 The NPPF also outlines the importance of the Local Plan process in the delivery of infrastructure –and at Paragraph 34 highlights the challenges of balancing infrastructure requirements with development viability: *“Plans should set out the contributions expected from development [towards infrastructure]. Such policies should not undermine the deliverability of the plan.”*

2.2.7 The NPPF places emphasis on the importance of understanding viability at the plan-making stage (rather than on a case-by-case basis through the determination of planning applications). This allows it to be demonstrated from the outset that planning policies are realistic, and that the ‘costs’ to developers of those policies (such as infrastructure provision and affordable housing) do not render development unviable and unachievable. Paragraph 58 states that:

“Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended

approach in national planning guidance, including standardised inputs, and should be made publicly available.”

National Planning Practice Guidance

2.2.8 National Planning Practice Guidance expands on the policy set out in the NPPF, and provides an additional layer of advice in relation to the delivery of infrastructure. Paragraph 059 of the guidance on Plan-Making states the following:

“A plan is an opportunity for the strategic policy-making authority to set out a positive vision for the area, but the plan should also be realistic about what can be achieved and when. This means paying careful attention to providing an adequate supply of land, identifying what infrastructure is required and how it can be funded and brought forward.

At an early stage in the plan-making process strategic policy-making authorities will need to work alongside infrastructure providers, service delivery organisations, other strategic bodies such as Local Enterprise Partnerships, developers, landowners and site promoters. A collaborative approach is expected to be taken to identifying infrastructure deficits and requirements, and opportunities for addressing them. In doing so they will need to:

- Assess the quality and capacity of infrastructure, and its ability to meet forecast demands. Where deficiencies are identified, policies should set out how those deficiencies will be addressed; and*
- Take account of the need for strategic infrastructure, including nationally significant infrastructure, within their areas⁴.*

2.2.9 Following the publication of the 2019 revisions to the NPPF, Planning Practice Guidance has been updated to reflect the new emphasis on understanding the viability of development at the plan-making stage. Paragraph 001 of the guidance on Viability states that *“policy requirements should be informed by evidence of infrastructure and affordable housing need, and a proportionate assessment of viability that takes into account relevant policies, and local and national standards, including the cost implications of the Community Infrastructure Levy and Section 106”⁵.*

2.2.10 Paragraph 002 of the guidance of Viability emphasises the collaborative nature of this process – *“it is the responsibility of site promoters to engage in plan making, take into account any costs including their own profit expectations and risks, and ensure that proposals for development are policy compliant”⁶.* Accordingly, local planning authorities and developers should both now be able to emerge from the plan making process with certainty about each party’s requirements and commitments in terms of the funding of new infrastructure. The conclusions of the Infrastructure Delivery Plan (particularly at Part 2) will therefore form a key input to the viability assessment of the Local Plan.

Other National Infrastructure Context

2.2.11 Since the production of the first National Infrastructure Plan in 2010, the National Infrastructure Delivery Plan (2016 – 2021, updated in November 2018⁷), has set out infrastructure interventions which seek to support growth and create jobs, raise the

⁴ <https://www.gov.uk/guidance/plan-making>, Paragraph 059 – Reference ID: 61-026-20190315

⁵ <https://www.gov.uk/guidance/viability>, Paragraph 001 – Reference ID: 10-001-20190509

⁶ <https://www.gov.uk/guidance/viability>, Paragraph 002 – Reference ID: 10-002-20190509

⁷ <https://www.gov.uk/government/publications/national-infrastructure-delivery-plan-2016-to-2021>

productive capacity of the economy, drive efficiency and boosting international competitiveness. The Plan details intended investment in infrastructure by central government over the next 10 years; including in transport, energy, communications, flood and coastal erosion, science and research, water and waste, social infrastructure, housing and regeneration.

2.2.12 In November 2018, the National Infrastructure Delivery Plan was supplemented by the National Infrastructure and Construction Pipeline. This contains nearly 700 projects, programmes and investments with a total value of more than £600 billion⁸.

Recent changes to policy and legislation

2.2.13 Previously, Regulation 123(3) of the Community Infrastructure Levy Regulations 2010 imposed a ‘pooling restriction’ on local authorities seeking to fund infrastructure through Section 106 contributions on planning applications. Whilst intended to drive the take-up of the Community Infrastructure Levy (CIL) as a means of funding infrastructure, some infrastructure still needs to be funded through the Section 106 route – the restriction meant that a maximum of five developments could make a contribution to any one single item of infrastructure.

2.2.14 This pooling restriction was lifted on 1 September 2019, with the commencement of The Community Infrastructure Levy (Amendment) (England) (No. 2) Regulations 2019⁹. In its response to the consultation on the change, the Government reasoned that *“lifting the pooling restriction will address the uncertainty, complexity and delay that the restriction creates”*¹⁰.

2.2.15 The 2019 CIL Regulations also introduced a new requirement of all local authorities to publish an Infrastructure Funding Statement by the end of December each year (starting from December 2020). This replaces the previous requirements for the publication of Regulation 123 lists by authorities with adopted CIL charging schedules (including Hertsmere), which set out how CIL would be spent. The new Infrastructure Funding Statements are still required to do this, but also the following in relation to Section 106 contributions:

- The total amount of money to be provided under any planning obligations which were entered into during the reported year;
- The total amount of money under any planning obligations which was received during the reported year;
- The total amount of money under any planning obligations which was received before the reported year and has not yet been allocated by the authority;
- Summary details of any non-monetary contributions to be provided under planning obligations which were entered into during the reported year, including details of—
 - In relation to affordable housing, the total number of units which will be provided;

⁸ <https://www.gov.uk/government/publications/national-infrastructure-and-construction-pipeline-2018>

⁹ <http://www.legislation.gov.uk/ukdsi/2019/9780111187449/contents>

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806284/Developer_contributions_government_response.pdf

- In relation to educational facilities, the number of school places for pupils which will be provided, and the category of school at which they will be provided;
- The total amount of money (received under any planning obligations) which was allocated but not spent during the reported year for funding infrastructure;
- The total amount of money (received under any planning obligations) which was spent by the authority (including transferring it to another person to spend);
- In relation to money (received under planning obligations) which was allocated by the authority but not spent during the reported year, summary details of the items of infrastructure on which the money has been allocated, and the amount of money allocated to each item;
- In relation to money (received under planning obligations) which was spent by the authority during the reported year (including transferring it to another person to spend), summary details of—
 - The items of infrastructure on which that money (received under planning obligations) was spent, and the amount spent on each item;
 - The amount of money (received under planning obligations) spent on repaying money borrowed, including any interest, with details of the items of infrastructure which that money was used to provide (wholly or in part);
 - The amount of money (received under planning obligations) spent in respect of monitoring (including reporting under regulation 121A) in relation to the delivery of planning obligations;
- The total amount of money (received under any planning obligations) during any year which was retained at the end of the reported year, and where any of the retained money has been allocated for the purposes of longer-term maintenance (“commuted sums”), also identify separately the total amount of commuted sums held.

2.2.16 HBC have prepared an IFS covering the financial period between 1 April 2019 and 31 March 2020¹¹. The report provides information on the monetary (and non-monetary) contributions sought and received from developers for the provision of infrastructure to support development in the borough. The total amount of CIL collected within 2019/20 totals £4,413,091.44 and the total amount of money received from planning obligations in 2019/20 was £1,944,739.45.

2.3 Hertfordshire County Policy Context

2.3.1 Hertfordshire County Council (HCC) are responsible for certain aspects of planning within Hertsmere, such as waste, minerals, and certain services such as libraries, schools and roads.

¹¹ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Infrastructure-and-delivery/Infrastructure-Funding-Statement-2019-2020.pdf>

Waste Planning

2.3.2 HCC is the Waste Planning Authority for Hertfordshire, and has a legal responsibility to provide a Waste Local Plan. The Waste Local Plan is part of the Development Plan for Hertsmere and identifies land that may be suitable for future waste management facilities and sets out relevant policies used to determine planning applications for waste management. The Waste Local Plan comprises two documents:

- The Waste Core Strategy and Development Management Policies¹² document sets out the Waste Management Strategy.
- The Waste Site Allocations¹³ document sets out the existing waste facilities and sites with potential for future waste development.

2.3.3 These documents are further explored in Section 4.2.6 of this report.

Transport Planning

2.3.4 HCC is the local highway authority and is responsible for providing a safe, efficient and resilient transport system across the borough. Hertfordshire's latest Local Transport Plan 2018 - 2031¹⁴ sets out HCC's strategy for future transport provision. The plan seeks to encourage where possible the transition from the private car to sustainable transport (e.g., walking, cycling and passenger transport).

Guide to Developer Infrastructure Contributions

2.3.5 HCC undertook consultation on an update to their Planning Obligations Toolkit, now known as the 'Guide to Developer Infrastructure Contributions' in 2019 and again in February 2021¹⁵. The Guide covers funding requirements across a number of service areas which are relevant to this study, including transport, education, libraries, waste management and fire and rescue services. Once adopted, this update will replace the 2008 version, and will present an up-to-date view of HCC's standard requests for Section 106 (S106) agreements across the county. The February 2021 consultation version of the Toolkit forms the basis for calculations in the IDP, although it is understood that HBC has some concerns regarding the approach set out in the toolkit. These concerns will continue to be explored as the Local Plan is progressed.

2.3.6 It is important to note that the new Guide and existing Planning Obligations Toolkit are not statutory planning documents. Local planning authorities (including HBC) have the responsibility of weighing up the importance of the guide and the identified planning obligations against competing requirements/issues when considering planning applications.

¹² <https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/planning/planning-in-hertfordshire/waste-local-plan/waste-core-strategy-and-development-management-policies-document.pdf>

¹³ <https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/planning/planning-in-hertfordshire/waste-local-plan/the-waste-site-allocations-document-2.pdf>

¹⁴ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/ltp4-local-transport-plan-4-complete.pdf>

¹⁵ <https://www.hertfordshire.gov.uk/about-the-council/consultations/environment/draft-guide-to-developer-infrastructure-contributions-consultation.aspx>

2.4 Hertsmere Local Policy Context

2.4.1 The Development Plan for Hertsmere currently consists of the Core Strategy Development Plan Document (DPD)¹⁶, the Site Allocations and Development Management (SADM) Policies Plan¹⁷, and the Elstree Way Corridor Area Action Plan (AAP)¹⁸.

Current Local Plan 2012 to 2027

2.4.2 The Core Strategy was adopted in January 2013 and includes a variety of strategic spatial policies to guide development in the Borough. The Core Strategy indicates a housing target of 3,990 new homes in the 15 year period, at a rate of 266 dwellings per year. The Core Strategy's strategy is focussed on previously developed land, and did not envisage a need for Green Belt release.

2.4.3 Employment growth across the plan period equates to approximately 2,700 new office jobs and 240 new warehousing jobs and 660 fewer industrial jobs over 15 years. The Core Strategy states that the intention is for this level of growth to be accommodated within existing town centres and through new provision on larger sites currently planned in adjoining Boroughs.

2.4.4 Policy SP1 of the Core Strategy outlines the ambition to encourage sustainable development across the borough, and states that development should minimise and mitigate the impact on local infrastructure and services. This is further emphasised by Policy CS1, which states that new homes and other development will be located in the most accessible locations, taking into account of local infrastructure capacity.

2.4.5 If housing targets are not being met, and new land outside of allocations and potentially within the Green Belt are identified for development, this will only be permitted if satisfactory arrangements are in place to provide the necessary infrastructure (Policy CS3).

2.4.6 The Site Allocation and Development Management (SADM) Policies Plan was adopted in November 2016 and has three main purposes: to provide environmental and other criteria against which all development proposals can be judged; to define sites and areas (including Green Belt, towns and villages, employment areas, housing sites and open spaces); and to deliver the policies set out in the Core Strategy.

2.4.7 The SADM provides an update to the housing supply targets provided in the Core Strategy, showing a supply of 4,177 dwellings over the 15 year period (2012-2027). It is noted in the SADM that by 2016 over half of the housing target for the period had already been completed or obtained planning permission.

2.4.8 The Elstree Way Corridor AAP was adopted in 2015 and is a spatial strategy for the coordinated development and design of the Elstree Way Corridor area of Borehamwood. The Core Strategy identified that there is the potential for housing led regeneration in Elstree Way, to contribute an estimated 800 dwellings to the overall 3,990 target. However, it is identified in the AAP that the Elstree Way Corridor is capable of accommodating

¹⁶ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Core-Strategy-DPD-2013.pdf>

¹⁷ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/FINAL-ADOPTED-SADM-01-02-2017.pdf>

¹⁸ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/EWC-AAP-Final-Adopted-Plan.pdf>

between 1,000 – 1,500 residential units in total, 500 of which were either built or under construction at the time the AAP was subject to Examination (October 2014).

- 2.4.9 Policy EWC9 in the AAP identifies the need for developer contributions, stating that “*On-site infrastructure requirements to mitigate the specific impact of development proposals will be required.*”

Neighbourhood Plans

- 2.4.10 There are currently two made (adopted) neighbourhood plans within Hertsmere, namely, Radlett Neighbourhood Plan and Shenley Neighbourhood Plan. These plans set out the characteristics, challenges, and opportunities across each of the areas they cover and set out development management policies that shape the form of development coming forward.

- 2.4.11 The Radlett Neighbourhood Plan¹⁹ supports the allocation of land on Watford Road for new housing, (Policy HD2), and makes recommendations for improved walking and cycling provision within Radlett.

- 2.4.12 The Shenley Neighbourhood Plan²⁰ does not allocate specific development sites, although does note that the Parish Council has sought to influence the Local Plan’s site selection process. The Neighbourhood Plan lists 12 Community Priority Projects, including:

- Improving the walking and cycling environment in and around the village through speed reduction schemes, and making roads around schools pedestrian friendly;
- A new Parish Council Office with public computer access, flexible co-working space, and a community café, to be located on London Road;
- Replacement of the old sports pavilion in Harris Lane;
- New and improved outdoor sports and leisure facilities, including an exercise trail around Shenley, and a pond dedicated for use by dogs in the village centre;
- A regular shuttle bus to local train stations and essential services; and
- Improvement of play and sports facilities, such as the re-use of a sunken tennis court, and a new play area on Andrew Close Green.

- 2.4.13 In the areas covered by the two neighbourhood plans 25% of CIL receipts will now be passed to Aldenham (for Radlett) and Shenley Parish Councils, in accordance with Regulation 59A of the Community Infrastructure Levy (Amendment) Regulations 2013. It will be for the parish councils to determine how these receipts should be spent – acceptable areas of funding include the provision, replacement, operation or maintenance of infrastructure, or anything else that is concerned with addressing the demands that development places on the area.

New Local Plan

- 2.4.14 Paragraph 33 of the NPPF now requires that “*policies in local plans and spatial development strategies should be reviewed to assess whether they need updating at least once every five years*”. As a result, HBC began producing a new Local Plan in 2016. This Infrastructure Delivery Plan forms part of the production of the new Local Plan, which will

¹⁹ <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/Radlett-Neighbourhood-Plan.aspx>

²⁰ <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/Shenley-Neighbourhood-Plan.aspx>

cover the period to 2037/38. Three stages of the plan-making process have been undertaken to date:

- Initial public consultation between November 2016 and April 2017, to introduce the idea that there is an objectively assessed need for a larger number of homes than was currently planned for through the Hertsmere Local Plan 2012-2027 and to help gauge the views of residents and businesses around the borough about how this projected growth should best be accommodated.
- Issues and Options consultation between September and November 2017 to gain views on how the new Plan should approach providing for the growth in homes, jobs and infrastructure that is required over the next 15 years.
- Engagement on potential sites for housing and employment between October and December 2018, during which HBC asked for the public's views on sites that had been put forward for development by landowners and site promoters.

2.4.15 At the time of writing, a Regulation 18 draft of the new Local Plan is due to be published later in 2021, and it is currently expected that the new Local Plan will be adopted in late 2023. The new plan will be a single 'combined' Local Plan and will therefore replace the Core Strategy, the Site Allocation and Development Management Policies and Elstree Way Corridor Area Action Plan.

2.5 Local Enterprise Partnerships

2.5.1 Hertsmere is within the area covered by the Hertfordshire Local Enterprise Partnership (HLEP). HLEP's Strategy Economic Plan²¹ (SEP), published in July 2017, sets out a "route map" for Hertfordshire, charting both what HLEP and its partners are seeking to achieve, and the priority interventions that are needed to make this happen. The purpose of the SEP is to help understand the economic context of the county better, identifying both its potential and its challenges.

2.5.2 The SEP sets out the vision for HLEP, which is:

"By 2030, Hertfordshire will be among the UK's leading economies, helping to realise the full economic potential of the assets and opportunities within the Golden Triangle [between London, Cambridge and Oxford]."

2.5.3 The SEP lists four priorities that much be advanced for HLEP to achieve their aspirations:

- Maintain the global excellence in science and technology
- Harness positively the interconnectedness of the HLEP area, particularly the relationships with London and elsewhere
- Re-invigorate the area's places for the 21st Century
- Build the wider foundations for growth across the populations of both business and people

2.5.4 Whilst the LEP's motivations are primarily economic, its vision and priorities are reliant on the provision of good infrastructure. HLEP undertakes several activities for which it receives specific grants from HM Government, which are held by HCC. These include the

²¹ <https://www.hertfordshirelep.com/media/5417/hertfordshire-lep-sep-report-interactive.pdf>

Local Growth Fund, Growing Places Fund, and funding to support Hertfordshire Growth Hub and the Careers & Enterprise Company programme.

- 2.5.5 The Local Growth Fund grant is received by MHCLG and is for capital projects agreed through the Growth Deal. In the 2018/19 financial year, key funded projects across Hertfordshire included: the enhancements to the A602; West Herts College Phase 2; University of Hertfordshire Business Hub; and Stevenage land assembly. A full list of funded projects can be found in the HLEP Annual Report 2019²², though it should be noted that none of these projects are within Hertsmere.

2.6 Duty to Cooperate and Cross-boundary issues

- 2.6.1 There are seven local authorities which are directly adjacent to Hertsmere. Four are in Hertfordshire – St Albans, Three Rivers, Watford and Welwyn Hatfield – and three are in Greater London – Barnet, Enfield and Harrow. Hertsmere is also part of the South West Herts grouping of authorities, which includes St Albans, Three Rivers and Watford; along with Dacorum which is approximately three miles north-west of the borough. This results in a total of eight local authorities with the potential for cross-boundary infrastructure linkages with Hertsmere. The spatial relationships are shown in Figure 1.
- 2.6.2 The intricate arrangement of local authority boundaries in Hertfordshire makes cross-boundary engagement particularly crucial – there are a number of areas of contiguous urban development which are split across administrative boundaries (such as). Radial transport corridors out from London also have a key role to play in infrastructure patterns – for example, Potters Bar has closer linkages with Barnet and Welwyn Hatfield than it does to Bushey, despite it being within the same borough.
- 2.6.3 Because many of the boundaries within Hertfordshire do not necessarily reflect day-to-day linkages and movement patterns, close working within neighbouring authorities is crucial. Hertsmere Borough Council is therefore working with Dacorum, St Albans, Three Rivers and Watford to produce a Joint Strategic Plan for South West Hertfordshire²³, to ensure that needs for new homes, jobs and infrastructure across the five authorities' areas are properly coordinated. This will not replace the need for Local Plans but provide a more strategic overarching approach under which Local Plans will then be prepared. However, this is a longer-term process than the Local Plan for which this IDP is being prepared, and will cover a period up to 2050.

²² <https://www.hertfordshirelep.com/news/2020/annual-report-2020-the-roadmap-to-recovery/>

²³ <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/SW-Herts-Joint-Strategic-Plan/South-West-Herts-Joint-Strategic-Plan.aspx>

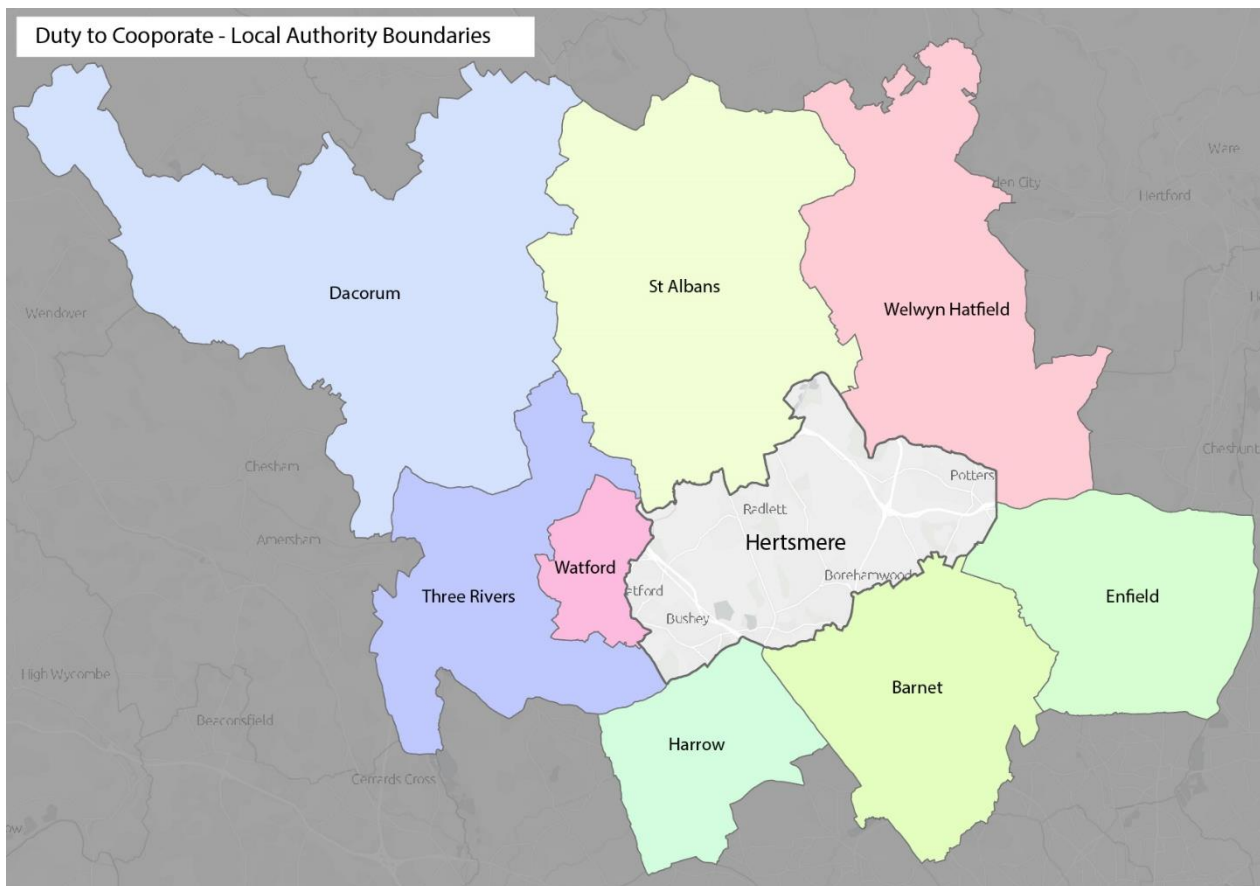


Figure 1 Location of Hertsmere in relation to neighbouring authorities

2.6.4 As part of the process of producing this baseline document, we have had specific correspondence or considered the minutes of previous discussions under the Duty to Cooperate with planning policy officers at all eight duty to cooperate authorities identified in Figure 1. Through these discussions, summarised below, we have sought to establish the following:

- What is the nature of the spatial relationship between these authorities and Hertsmere – to what extent does each rely on the other for the provision of infrastructure?
- What is the current status of each authority’s local plan, and how does that inter-relate with the plan review process underway in Hertsmere?
- Are there any cross-boundary infrastructure issues which this study needs to be mindful of, or which might more broadly need to be reflected in Hertsmere’s plan review?

South West Herts Authorities

2.6.5 The South West Herts area surrounds Watford, which is entirely urbanised – the Watford urban area overflows the local authority boundary into Oxhey, Carpenters Park, Croxley and Leavesden in Three Rivers (south, west and north-west), Kings Langley in Dacorum (north), Bricket Wood in St Albans (north-east) and Bushey in Hertsmere (east). The South West Herts area also includes other significant settlements; notably Rickmansworth (Three Rivers), Hemel Hempstead and Berkhamsted (Dacorum), St Albans and Harpenden (St Albans) and Borehamwood and Potters Bar (Hertsmere).

- 2.6.6 All of the South West Herts authorities have a shared reliance on the same strategic infrastructure; including the M1, M25, A41 and A405/A414 road corridors, West Coast Main Line railway, secondary healthcare provision at Watford Hospital, and sewerage provision at Maple Lodge Waste Water Treatment Plant. Impacts upon these need to be carefully considered across South West Herts as a whole.
- 2.6.7 Individual local authorities have also raised the following more local considerations:
- Dacorum Borough Council – This is the only duty to cooperate authority which does not directly adjoin Hertsmere. However, the A414 road corridor was raised as a pertinent issue due to the planned growth east of Hemel Hempstead.
 - St Albans City and District Council – It was noted that a number of children attend schools across the boundary, due to parental choice based on selection, faith, or Ofsted ratings of schools. A new GP facility has recently opened in London Colney, which the CCG advises will have spare capacity and may be able to serve new development in other areas. The now-withdrawn Local Plan being prepared by St Albans also included provision for a new school in London Colney, with the potential to serve areas of growth within Hertsmere.
 - Three Rivers District Council – Given the lack of direct transport connections to Hertsmere there are relatively few cross-boundary links, although a planned new secondary school in Carpenters Park may have some positive impacts for secondary school capacity in Bushey by providing for a wider catchment across the Watford Urban Area.
 - Watford Borough Council – Hertsmere and Watford have overlapping secondary school catchments, with extensive levels of cross-boundary movement. This is partly the result of parental choice (reflecting school ratings, selection and faith), but also reflects a lack of space for school expansion within Watford. Future provision for schools within Bushey is likely to need to help in meeting new needs arising from within Watford, as part of a wider integrated approach. The need to fully understand and plan for more general vehicular movement to and through Watford from Hertsmere has also been highlighted.

Welwyn Hatfield Borough Council, Hertfordshire

- 2.6.8 Welwyn Hatfield is located to the north-east of Hertsmere. Its two main settlements are the towns of Welwyn Garden City and Hatfield. Hatfield is located only around one mile north-east from the closest part of Hertsmere, with Welwyn Garden City approximately 5 miles further north. Areas of Welwyn Hatfield immediately adjacent to Hertsmere are mostly rural, although Potters Bar's area of influence extends beyond the borough boundary into Little Heath, and the large village of Brookmans Park is only around one mile to the north.
- 2.6.9 With regard to links with Hertsmere, Welwyn Hatfield experiences the same shared reliance seen with the other South West Herts Authorities, such as potable and waste water, strategic road network, and the rail network.
- 2.6.10 In addition, whilst it is noted that Watford Hospital is the closest hospital for most of Hertsmere, residents of Potters Bar are likely to also use the New QEII Hospital in Welwyn Garden City or Barnet Hospital.

London Borough of Barnet

- 2.6.11 The London Borough of Barnet is located to the south of Hertsmere, with the suburbs of High Barnet and Edgware located within 3 miles of the border with Hertsmere. As both of these areas are served by the London Underground, they provide good access for commuters travelling into London from Hertsmere (either by park and ride or bus connections).
- 2.6.12 In consultation with Barnet Council, it was raised that Transport for London (TfL) plan to redevelop land around High Barnet and Edgware stations, including the car parks²⁴. It is expected that this development will permanently reduce the number of parking spaces available, which could have an impact on commuters parking there.
- 2.6.13 It was also highlighted that new sports hubs are being developed at Copthall and High Barnet, and there was an expectation that these facilities may be used by sports clubs and residents of Hertsmere. No formal agreements are expected to be made, but these new developments provide additional sporting facilities.
- 2.6.14 The Watling Chase Community Forest was raised as an asset that crosses the boundary of the two authorities, and therefore any works to areas of the forest will likely have an impact on the residents of different boroughs and districts. This point is further emphasised due to the fact that the forest also covers other surrounding districts and boroughs, namely St Albans, Welwyn Hatfield, Watford, Three Rivers and Harrow.
- 2.6.15 Barnet Hospital and Edgware Community Hospital are also located close to the border with Hertsmere, offering alternative options (to Watford) for Hertsmere residents seeking secondary healthcare. However, it was noted in discussions that the impact of this is largely choice-based and is not easily measured.

London Borough of Enfield and London Borough of Harrow

- 2.6.16 The London Boroughs of Enfield and Harrow are located to the south-east and south-west of Hertsmere respectively. Both serve as gateways to London (particularly to the London Underground) for Hertsmere residents, with Cockfosters (Enfield) and Stanmore (Harrow) each located a short distance beyond the borough boundary. Similarly to High Barnet and Edgware, car park land around these stations has also been identified by TfL for redevelopment^{25 26}, potentially impacting on their ability to serve Hertsmere commuters.
- 2.6.17 In consultation with the London Borough of Harrow, secondary educational pupil flows (particularly to Hindu faith schools) from Bushey into Harrow were identified. Harrow identified that it has general constraints in secondary education capacity, which may need to be addressed in the future.
- 2.6.18 Other infrastructure linkages with these London Boroughs are considered to be more distant than those with Barnet. Whilst Chase Farm Hospital in Enfield was formerly a ‘full service’ hospital including accident and emergency provision and would have served residents of Potters Bar, it now only provides a more limited Urgent Care Centre. Given the proximity of other hospitals, it is therefore not understood to cater significantly to Hertsmere residents.

²⁴ <https://highbarnetconsultation.com/>

²⁵ <https://www.givemyview.com/cockfosters>

²⁶ <https://stanmore.commonplace.is/overview>

3 Study Methodology

3.1 Scope of study

3.1.1 The IDP incorporates a wide range of infrastructure types in its scope:

Category	Infrastructure Type
Transport and Movement Infrastructure	Highways
	Rail Services
	Bus Services
	Active Travel and Cycling Provision
Utilities and Digital Infrastructure	Gas
	Electricity
	Water Supply
	Sewerage
	Flood Management
	Waste Management Facilities
	Digital Communications
Education and Social Infrastructure	Primary and Secondary Schools
	Special Educational Needs
	Further and Higher Education
	Early Years Provision
	Libraries
	Cemeteries
	Community Spaces and Halls
Healthcare and Emergency Service Infrastructure	Places of Worship
	Primary Healthcare
	Secondary Healthcare
	Social and Care Services
	Ambulance Services
	Police Services
Leisure and Green Infrastructure	Fire Services
	Formal Parks and Gardens
	Natural Green Space
	Provision for Children and Young People
	Indoor Sports Provision
	Outdoor Sports Provision
Allotments	

Table 1 Infrastructure Types considered in the Infrastructure Delivery Plan

3.2 Part 1: Baseline Infrastructure Capacity Report

3.2.1 In setting out the baseline infrastructure capacity position in Hertsmere, Part 1 of the Infrastructure Delivery Plan (contained within this report) has three key roles:

- For each infrastructure type, to consider the overarching policy and strategy context and current levels of provision to establish the implications for future growth across the borough. This forms Chapter 4 of the Phase 1 report.
- Utilising the conclusions for each infrastructure type from Chapter 4, to establish the potential future development capacity across Hertsmere and in each of the borough's

settlements, as well as considering the infrastructure requirements of an entirely new settlement at Bowmans Cross. This forms Chapter 5 of the Phase 1 report.

- Based upon the conclusions in Chapters 4 and 5, to inform the schedule of infrastructure requirements for the detailed growth strategy and sites considered in Part 2.

3.2.2 The methodology below sets out our approach.

Review of existing evidence and strategy

3.2.3 We have carried out a thorough desk-based review of relevant published evidence base documents and strategies from the full breadth of infrastructure providers and public-sector agencies. Importantly, this has provided a broad understanding of the local infrastructure picture, in order to establish the issues we are likely to need to explore further throughout the IDP. Specifically, we have sought to understand:

- The methodology used to assess future infrastructure requirements;
- The adequacy of baseline provision and whether there is an existing deficit or oversupply;
- Whether the infrastructure plan timeframes and assumed development levels adequately provide for the levels of growth envisaged; and
- Whether there are priority infrastructure projects that should be highlighted in the Infrastructure Delivery Plan.

3.2.4 Details of the documents and strategies considered are set out in footnotes within the section for each infrastructure type in Chapter 4, and listed fully in the bibliography (Appendix 1).

Engagement with infrastructure stakeholders

3.2.5 Our experience producing other infrastructure studies demonstrates the value of consultation with infrastructure stakeholders, both in the private or public sector. This approach is generally successful in drawing out important evidence and reflects the emphasis in Planning Practice Guidance. As part of this study, and to inform the baseline infrastructure findings, we undertook consultation with a wide range of stakeholders.

3.2.6 Stakeholders were initially contacted in late 2019/early 2020 about estimated growth levels (see 3.2.12 below), and were contacted again in late-2020 and mid-2021 once the growth scenario and sites had been agreed for Part 2 of the IDP. The following stakeholders were reached (infrastructure types discussed in brackets):

- Hertfordshire County Council (*Highways, Rail, Bus, Active Travel and Cycling, Flood Management, Waste Management, Digital Communications, Primary and Secondary Schools, Special Educational Needs, Early Years Provision, Libraries, Social and Care Services, Fire & Rescue*)
- Highways England (*Highways*)
- Network Rail (*Rail*)
- Cadent Gas (*Gas*)
- UK Power Networks (*Electricity*)
- Thames Water (*Sewerage*)
- Herts Valleys Clinical Commissioning Group (*Primary Healthcare*)
- Hertfordshire Police (*Policing*)
- Hertsmere Borough Council (*Cemeteries, Leisure and Green Infrastructure*)

3.2.7 Despite best efforts during the preparation of this report (including repeated attempts at contact by the Council), we have been unable to engage with the following stakeholders:

- West Hertfordshire Hospitals Trust
- Royal Free Hospitals Trust

3.2.8 The conclusions set out in Chapter 4 for these infrastructure types are therefore based on published strategies and information otherwise already available in the public domain.

Engagement with duty-to-cooperate bodies

3.2.9 It is recognised that infrastructure provision does not respect administrative boundaries. The successful cross-boundary resolution of infrastructure matters is a key requirement of national policy, and also essential to demonstrate compliance with the duty-to-cooperate. As part of this study, we have engaged with the following duty to cooperate bodies to make sure that the study identifies as many of the cross-boundary infrastructure matters as possible:

- London Borough of Barnet
- Dacorum Borough Council
- London Borough of Harrow
- Hertfordshire County Council
- St Albans City and District Council
- Three Rivers District Council
- Watford Borough Council
- Welwyn Hatfield Borough Council

3.2.10 Despite best efforts during the preparation of this report (including additional attempts at contact by Hertsmere Borough Council), we have been unable to engage with the London Borough of Enfield and the Hertfordshire Local Enterprise Partnership specifically regarding the IDP. Officers at Hertsmere Borough Council have however met with these authorities as part of wider duty to cooperate liaison, and relevant outputs from these meetings have been provided to Arup for information.

3.2.11 The conclusions set out throughout Chapter 2 and 4 of this report where relevant to these duty-to-cooperate bodies are therefore based on published strategies and information already available in the public domain.

Understanding the quantum of potential growth

3.2.12 As noted above, as part of our consultation with infrastructure providers we have sought to provide a degree of clarity about the likely extent of development over the new plan period. Our experience from previous infrastructure studies demonstrates that this returns far more useful responses. In late 2019, prior to the development quantum in each settlement being fixed in Part 2 of the IDP, the Council provided us with indicative ranges for the numbers of dwellings which might conceivably be expected in each settlement (Table 2 below).

3.2.13 During through the production of the IDP the levels of anticipated growth were further refined by the Council, to reflect the extension of the plan period to 2037/38 and further site assessment work having been undertaken. This resulted in a revised set of indicative ranges for the numbers of dwellings conceivably expected in each settlement (Table 3). All infrastructure providers were advised of the amended figures in early 2021, and asked to

comment on whether this changed any of their overall infrastructure conclusions. There were no indications of a need for any changes in the context of Part 1 of the IDP. More detailed discussions also took place with a number of infrastructure providers around infrastructure requirements for the specific sites listed in Part 2.

Settlement	Existing commitments	Anticipated windfall	Potential allocations in new Local Plan	Total in new plan period
Bushey	550	250	1,400 – 1,900	2,220 – 2,700
Elstree & Borehamwood	550	250	1,100 – 1,600	1,900 – 2,400
Potters Bar	200	250	1,700 – 2,300	2,150 – 2,750
Radlett	100	125	800 – 1,300	1,025 – 1,525
Elstree Village	25	25	350 – 450	400 – 500
Shenley	25	50	450 – 550	525 – 625
South Mimms	25	25	350 – 450	400 – 500
Others (Incl. new settlement)	25	25	1,950 – 2,700	2,000 – 2,750
Total	1,500	1,000	8,100 – 11,250	10,600 – 13,750

Table 2 Initial 2019 indicative housing numbers for 2018-2036 plan period

Settlement	Existing commitments	Anticipated windfall	Potential allocations in new Local Plan	Total in new plan period
Bushey	315	240	2,340	2,895
Elstree & Borehamwood	375	240	2,155	2,770
Potters Bar	190	240	1,750	2,180
Radlett	60	120	760	940
Elstree Village	20	25	190	235
Shenley	15	45	290	350
South Mimms	10	25	225	260
Others (Incl. new settlement)	15	25	2,490	2,530
Total	1,000	960	10,210	12,160

Table 3 Updated 2021 indicative housing numbers for 2022-2038 plan period

3.2.14 Initially relatively small amounts of non-residential development (such as offices, industrial and warehousing) were anticipated in Hertsmere throughout the new plan period. However, following the new ‘Call for Employment Sites’, it is likely that more sites will be allocated. At a boroughwide level, non-residential development will typically place less demand on social and green infrastructure but is still important for transport and utilities. Infrastructure needs arising from proposed non-residential sites are considered in Part 2 of the IDP.

Assessment of infrastructure and growth capacity at a settlement level

3.2.15 Utilising the outcomes of this baselining stage of the assessment, we have assessed the borough’s current infrastructure, and provided commentary on the resultant baseline growth potential – i.e. that which only factors existing planned infrastructure upgrades. We have used benchmark infrastructure standards to do this wherever possible, or location-specific information provided to us by infrastructure stakeholders.

3.2.16 We have utilised these findings to produce settlement-specific conclusions that will assist the Council in forming an overall development strategy. This has included reporting on any existing infrastructure deficits within settlements which need to be addressed.

3.2.17 Based upon the requirements of this study, the report will identify growth capacity for the following settlements:

- Elstree & Borehamwood

- Elstree Village
- Potters Bar
- Bushey
- Radlett
- Shenley
- South Mimms

3.2.18 Given the likely need for the Council to deliver a new settlement at Bowmans Cross in order to meet the housing target, we have separately set out the anticipated infrastructure impacts it will have.

3.2.19 The Local Plan is likely to allocate a major new media quarter at Rowley Lane in Borehamwood, delivering against the borough's economic development objectives. We also separately set out the anticipated infrastructure impacts of this development.

3.2.20 In cases where discussions with infrastructure stakeholders indicate a need to consider future infrastructure requirements on a catchment area basis (this could for example be conceivable for infrastructure types such as primary education and sewerage), our conclusions are made on the basis of groups of settlements.

3.3 Part 2: Assessment of Strategic Growth Scenarios

3.3.1 The parallel Part 2 of the Infrastructure Delivery Plan tests the infrastructure needs of the Council's emerging development strategy – including the proposed site allocations for both residential and non-residential uses. It sets out specific infrastructure interventions for each site or settlement. The methodology for Part 2 is set out in the Part 2 report.

4 Baseline Infrastructure Position

4.0.1 This chapter of the report sets out the baseline infrastructure position affecting Hertsmere (including cross-boundary infrastructure issues), across all infrastructure types within the scope of the study. For each infrastructure type, it sets out in turn:

- The overarching policy and strategy context which governs that infrastructure type, including coverage of the relevant infrastructure providers and their responsibilities;
- The current levels of provision for that infrastructure type within Hertsmere, including any notable capacity issues which have been identified;
- The implications for accommodating future growth, as a result of the consideration of the two issues above.

4.0.2 The subsequent Chapter 5 then sets out the overall implications for accommodating growth across the borough as a whole and in each of the borough's individual settlements, in order to inform the Infrastructure Schedule in Part 2 of the IDP.

4.1 Transport

4.1.1 This section considers the full spectrum of transport infrastructure provision within Hertsmere. Transport infrastructure of one form or another is likely to be utilised by most residents on a daily basis, as well as by every visitor to the borough. It therefore has a crucial impact on how Hertsmere operates – on its economy, and on quality of life.

4.1.2 This section considers the following transport infrastructure types:

- Highways
- Rail Services
- Bus Services
- Active Travel and Cycling Provision

4.1.3 There are a number of strategy and policy documents specific to the individual transport infrastructure types listed above, reviewed in the corresponding sections of this chapter. This section covers strategic transport policy documents relevant to all transport modes.

Local Transport Plan

4.1.4 Hertfordshire's latest Local Transport Plan 2018 – 2023 sets out HCC's strategy for future transport provision. The newest edition of the Local Transport Plan (LTP4) seeks to encourage a switch from private car use to more sustainable transport where possible, and sets out objectives, policies and key schemes that will help to achieve this mode shift. Supporting the LTP4 is data derived from the Traffic and Transport Data Report for 2018 (TTDR)²⁷, covering all modes of transport.

²⁷<https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/transport-and-accident-data/ttdr/traffic-and-transport-data-report-2019.pdf>

Growth and Transport Plans

4.1.5 HCC are currently developing a series of Growth and Transport Plans which will include a detailed approach to delivering the policies and objectives of the LTP4. Each plan considers current and future challenges and identifies interventions aligned to the LTP4 objectives. The Growth and Transport Plans replace former Urban Transport Plans, most recently produced for Potters Bar in 2011 and for Elstree & Borehamwood in 2014.

4.1.6 The Growth and Transport Plans have been developed with involvement from district/borough councils and other stakeholders, to consider the key problems and opportunities which currently exist or may occur in the future on the transport network, and to identify what types of interventions are needed to improve the transport network.

4.1.7 The South Central Hertfordshire Growth and Transport Plan (SCGTP)²⁸ covers the majority of Hertsmere, including the towns of Hatfield, Welwyn Garden City, Potters Bar, Borehamwood, Radlett and St Albans, and key transport links between these towns and to surrounding areas. It includes a number of proposed schemes, or ‘packages’, and the table below provides details of the packages relevant to Hertsmere.

Package	Settlement	Transport type	Overarching Aim of Package
PK17	Potters Bar	Active Travel	To develop an active travel corridor between Hatfield, Welham Green, Brookmans Park and Potters Bar
PK18	Potters Bar	Active Travel	To make Potters Bar a safe, attractive, and convenient place to walk and cycle, and enhance cycle connections to north London
PK19	Potters Bar	Bus	To increase the attractiveness of public transport as the preferred mode of choice for journeys within and beyond Potters Bar, and facilitate seamless interchange between modes
PK20	Elstree & Borehamwood	Active Travel	To make Borehamwood a safe, attractive, and convenient place to walk and cycle by connecting key locations with active travel infrastructure and urban realm improvements that prioritise the needs of pedestrians, cyclists and public transport users
PK21	Elstree & Borehamwood	Active Travel	To improve connectivity by active travel modes between Borehamwood, Elstree, and Centennial Park employment area
PK22	Elstree & Borehamwood	Bus / Active Travel	To maintain and improve connections between Borehamwood and north London by strengthening sustainable transport links and addressing pinch points, which reduce congestion and improve non-car connectivity
PK23	Radlett	Rail / Active Travel	To improve accessibility by active modes to Radlett station as a key node for inter-urban journeys

Table 4 South Central Hertfordshire Growth and Transport Plan Interventions

4.1.8 The South West Hertfordshire Growth and Transport Plan²⁹ (SWGTP) covers Bushey.

Package	Settlement	Transport type	Relevance to Hertsmere
PK4	Bushey / Watford	Bus	Work with bus operators to explore potential reconfiguration of bus services throughout Watford and connections to

²⁸ <https://www.hertfordshire.gov.uk/about-the-council/consultations/transport-and-highways/south-central-growth-and-transport-plan.aspx>

²⁹ <https://www.hertfordshire.gov.uk/media-library/documents/highways/sw-herts-gtp-prospectus.pdf>

			neighbouring settlements, including Bushey and the London fringe in liaison with TfL.
PK8	Bushey	Bus / Active Travel / Road	Exploring enhanced bus priority infrastructure and services, and cycling links, through Bushey. Proposed reconfiguration of the M1 junction 4 to open up new routing opportunities for motorists heading to/from north London.

Table 5 provides details of the relevant packages.

Package	Settlement	Transport type	Relevance to Hertsmere
PK4	Bushey / Watford	Bus	Work with bus operators to explore potential reconfiguration of bus services throughout Watford and connections to neighbouring settlements, including Bushey and the London fringe in liaison with TfL.
PK8	Bushey	Bus / Active Travel / Road	Exploring enhanced bus priority infrastructure and services, and cycling links, through Bushey. Proposed reconfiguration of the M1 junction 4 to open up new routing opportunities for motorists heading to/from north London.

Table 5 South West Hertfordshire Growth and Transport Plan Interventions

4.1.9 At the time of writing in August 2021, Hertsmere Borough Council was preparing to commission further transport strategy and sustainable transport study. This will identify necessary interventions to support the allocation of sites in the Local Plan in a joined-up way, having regard to cumulative impacts. It will particularly focus on measures that support the modal shift required by HCC’s Local Transport Plan and Growth and Transport Plans, and minimise the need for private car use in new developments as far as possible. Its findings will be reflected in the Regulation 19 publication Local Plan, and in future iterations of the IDP.

4.1.1 Highways

Policy and context

4.1.10 Highways within Hertsmere are the responsibility of two organisations. Highways England manages the strategic road network, comprising motorways and major A roads. Hertfordshire County Council manages the remainder of the borough’s A roads, as well as all B roads and unclassified roads. The key policies and strategies of these organisations are set out across the following documents.

4.1.11 Highways England’s Strategic Business Plan 2015-2020³⁰ sets out the approach to modernising maintaining and operating the strategic road network. Noteworthy schemes include the wider rollout of smart motorways (with 400 miles of route network delivered over a five year period), upgrade of key non-motorway routes to the Government’s new ‘expressway’ standard (an intermediate level between a standard dual carriageway and full-scale motorway), and improving facilities for non-vehicular users on non-motorway routes managed by Highways England.

³⁰ <https://www.gov.uk/government/publications/highways-england-strategic-business-plan-2015-to-2020>

- 4.1.12 Highways England are developing detailed designs for a smart motorway between A1(M) junctions 6 and 8. The new scheme will mean drivers will benefit from a three-lane motorway between junction 3 (Hatfield) and junction 9 (Baldock / Letchworth), and work had been due to start in March 2020. Highways England announced in August 2020 that the proposed works are currently on pause³¹. It is not yet clear how this scheme will be affected by the government's review of smart motorways, through which the Transport Secretary has announced the imposition of various new safety measures³².
- 4.1.13 The objectives of the LTP4 highlight the need to enhance connectivity between urban centres in Hertfordshire, aspiring to a resilient network. The reduction in carbon emissions is also a key objective, and the principles of the LTP4 include to encourage modal shift away from the private car. Policy 1 reflects this principle, providing a transport user hierarchy, stating that HCC will consider opportunities to reduce travel demand; vulnerable road users; and passenger transport users, before the priorities of the private car in the design of any scheme and development of any transport strategy. Policy 5 of the LTP4 states that HCC will only consider new accesses onto primary and main distributor roads where special circumstances can be demonstrated in favour of the proposals.
- 4.1.14 The LTP4 is limited in scope in terms of highways improvements envisaged with one of the key schemes being the improvements to the A414, including the Hertford Bypass. However, HCC have confirmed that improvements to the A414 are unlikely to happen, instead the focus has shifted to providing Mass Rapid Transit (MRT) infrastructure locally³³
- 4.1.15 The SWGTP identifies improvements to the M1 junction 4 slip roads as a key opportunity, to increase accessibility to the M1 South and reduce traffic within Watford town centre area, including Bushey. It is acknowledged that due to the complex nature of this work, it is unlikely to be delivered for another ten years, but a reconfiguration of the junction could open up new routing opportunities for motorist heading to/from north London boroughs.

Current levels of provision

- 4.1.16 Hertsmere is served by four strategic routes managed by Highways England – the M1 and A41 to the west, and the M25 and A1(M) to the east. This provides a relatively good level of strategic connectivity and the majority of the principal settlements are well serviced, with Radlett the only major settlement with no direct strategic road link.
- 4.1.17 As shown in Figure 2 on the following page, there is a lack of east-west connectivity across the borough by strategic highway routes, particularly from Radlett to South Mimms/Potters Bar. This poor east-west connectivity is reflected across the wider county. Improvements to the road system around the proposed Radlett Strategic Rail Freight Site (located near Frogmore, St Albans) are included in the LTP4. These proposals include improvements to the A5183, which may in turn provide enhanced connectivity for Radlett.
- 4.1.18 The majority of roads within Hertsmere saw a minimal change (<5% change) in traffic flows between 2017 and 2018³⁵. However, the Hertfordshire Traffic and Transport Data

³¹ [A1\(M\) junction 6 to junction 8 smart motorway - Highways England](#)

³² <https://www.gov.uk/government/speeches/strategic-roads-update-smart-motorways-evidence-stocktake>

³³ <https://www.hertfordshire.gov.uk/about-the-council/consultations/transport-and-highways/a414-corridor-summary-of-consultation.aspx>

Report shows that the Hertfordshire motorway, trunk and principal A road network carry traffic flows which are over double the national average.

4.1.19 The main congestion hotspots in Hertsmere are where the strategic road network joins the local road network (M25 J23, M1 J5) and at junctions within the larger settlements such as Radlett and Borehamwood. Furthermore, it is important to note the recent improvements to junction 23 of the M25 where all major works have now been completed allowing for a more free-flowing network and reduced congestion.

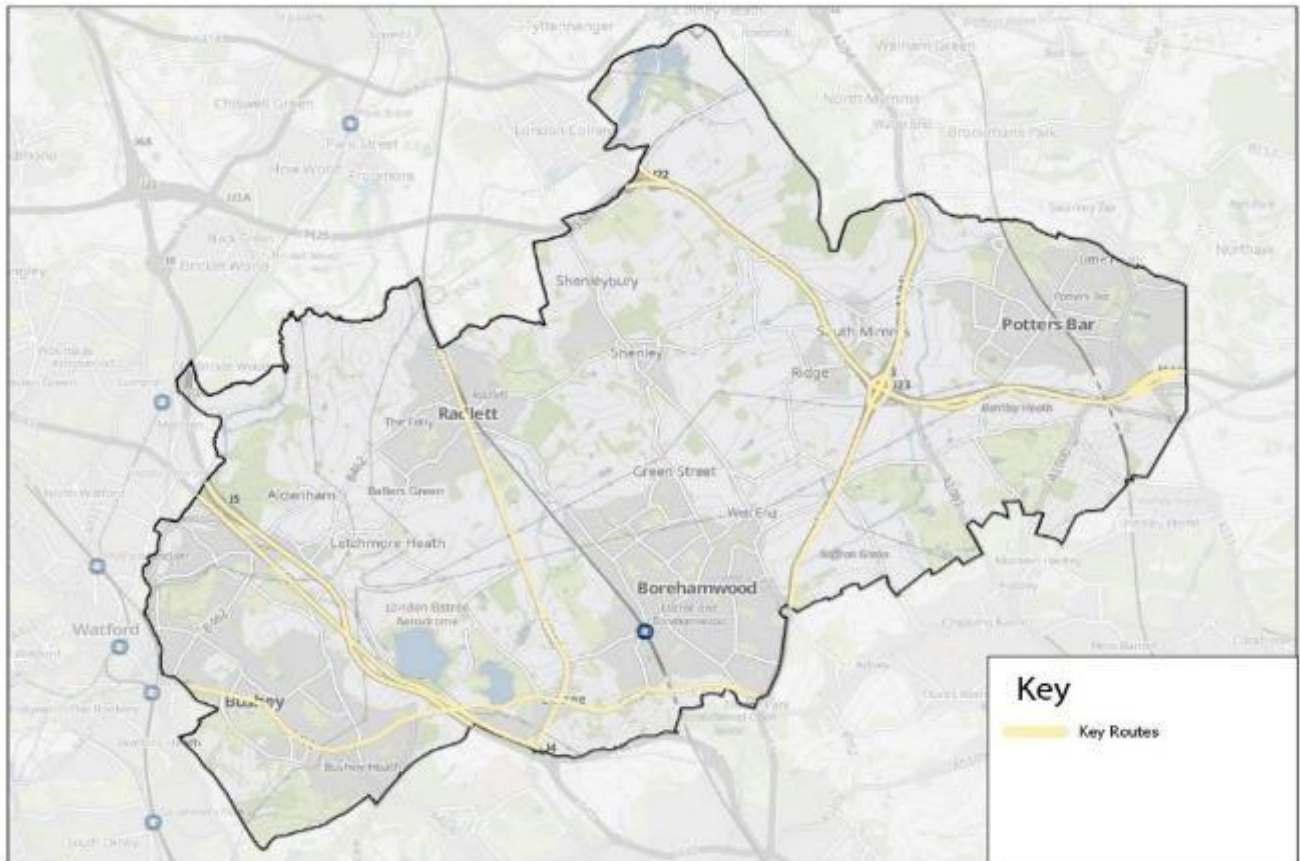


Figure 2 Key Highway Routes in Hertsmere

Implications for future growth

4.1.20 The existence (or lack) of highway capacity within a settlement is likely to be a key factor in determining the quantum of growth that can be accommodated within it. Consideration would be given to whether proposed levels of development can fund the highways mitigation required.

4.1.21 The overarching objective of HCC's policies for transport and travel across Hertsmere is to encourage and enable a shift to more sustainable transport modes, including public transport, cycle provision, and other forms of active travel. The LTP4 proposes an east west Mass Rapid Transit (MRT) scheme between Hemel Hempstead and Welwyn Garden City, with a potential link to Potters Bar via Bowmans Cross. The LTP4 also highlights that some of the planned interventions to combat congestion are about behavioural interventions, a point which was confirmed by HCC during consultation.

- 4.1.22 However, forecasts from the latest Hertfordshire Traffic and Transport Data Report predict that traffic flows within Hertsmere will increase by 18.1% by 2036³⁴.
- 4.1.23 As stated above and in the LTP4, accesses onto primary and main distributor roads will only be supported in special circumstances, and whilst some new large-scale developments may be able to provide an evidence base to support such accesses, this should be taken into consideration when determining which settlements are able to accommodate growth. However, provision for new roads within new developments may be required such as spine roads which connect to multiple points on the existing highway network.
- 4.1.24 The proposed works to the M1 junction 4 detailed within the SWGTP could provide improved links to north London boroughs. Whilst this intervention sits on the border, or slightly outside, of Hertsmere, if it were to be implemented, it should have a positive impact on the congestion across areas in the south-west of Hertsmere. It is noted that this proposal is at its early stages of development and would need support from Highways England to be eventuated.
- 4.1.25 Discussions have taken place between the Council and Highways England in relation to the impacts of the new settlement at Bowmans Cross on Junction 22 of the M25. These indicated that Highways England would be unlikely to accommodate mitigation for the impacts of additional traffic on the junction in its own scheme for junction improvement – with this being scoped to deal with existing capacity issues on the motorway. Therefore, it is likely that the Bowmans Cross development would be required to fund any highway mitigation required and further modelling will be needed to assess the impact of the new development on capacity.

4.1.2 Rail Services

Policy and context

- 4.1.26 Rail service provision in the UK is highly complex, with a number of agencies involved. Governance and oversight is generally the responsibility of the public sector, with franchise and service specification undertaken by the Department for Transport (although there are varying degrees of opportunity for local authority involvement in this process), and regulatory oversight provided by the Office for Road and Rail. Strategies for the usage of the network are produced by Network Rail, a public-sector organisation, which is also responsible for the day-to-day maintenance and upgrade of the network. A new public body, Great British Railways (GBR) was announced by the government in May 2021 and will be responsible for integrating the railways, owning the infrastructure, collecting fare revenue, running and planning the network, and setting most fares and timetables. The operation of train services will largely remain the responsibility of a number of private-sector Train Operating Companies (TOCs) and Freight Operating Companies (FOCs), however GBR will contract private partners to operate most trains to the timetables and fares it specifies.
- 4.1.27 Network Rail produces a number of Strategic Plans and geographically-focussed Route Studies. Of relevance to Hertsmere is the London North Eastern & East Midlands Route

³⁴ <https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/transport-and-accident-data/ttdr/traffic-and-transport-data-report-2019.pdf>

Strategic Plan³⁵. The strategies include key deliverables and interventions required in order to achieve the route objectives identified. In each case they also present likely costings and deliverability of each scheme, and suggest levels of prioritisation.

4.1.28 At a local level, HCC's Rail Strategy³⁶ sets the strategic framework against which decisions regarding future investment in infrastructure can be identified and prioritised. The strategy is divided by route corridor, as the rail infrastructure in Hertfordshire includes sections of five lines (the West Anglia Main Line, Midland Main Line, London to Aylesbury Line, East Coast Main Line and West Coast Main Line) and each of the route corridors is operated by a different franchise.

4.1.29 From 2018, local rail services operating along the East Coast Main Line (serving Potters Bar) and Midland Main Line (serving Elstree & Borehamwood and Radlett) were significantly overhauled and are now part of an extended Thameslink rail network. New services have entered operation from Hertfordshire direct to places such as Brighton, Horsham, Gatwick Airport and North Kent via central London. This has been accompanied by the introduction of new trains with greater capacity and operating at more frequent intervals. This has the potential to increase the attractiveness of rail.

4.1.30 One of the key aims identified in the current Hertsmere Local Plan is, "To raise the levels of access by seeking development in locations not dependent on access by car and by requiring the provision of physically accessible transport interchanges and other buildings¹⁶,"

4.1.31 The SCGTP²⁸ highlights the importance of providing good access by sustainable travel modes to railway stations from towns within the district, specifically in Package 23, which aims to improve accessibility to Radlett Station. To improve the active travel connections with the railway station, Package 23 consists of:

- Improvement of footways, cycleways, and crossings in the vicinity of Radlett town centre and station.
- Increased provision of cycle parking at the train station.
- Marketing and promotion of active travel opportunities in Radlett.

4.1.32 Similarly, the Elstree & Borehamwood Urban Transport Plan lists improvements to the highways leading up to the railway station. The Station Road/Allum Lane/Theobald Street/Shenley Road roundabout is a point of congestion and requires upgrading. It was indicated by HBC during consultation that this upgrade is still due, and HCC (in their role as highways authority) are currently developing a design.

Current levels of provision

4.1.33 It is noted in HCC's Rail Strategy that there is a lack of good east-west rail links in Hertfordshire, creating connectivity gaps as much of the rail network in the county runs to and from London.

4.1.34 This issue is apparent in Hertsmere, which is served by two railway lines:

³⁵ <https://www.networkrail.co.uk/wp-content/uploads/2018/02/London-North-Eastern-and-East-Midlands-Route-Strategic-Plan.pdf>

³⁶ <https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/local-transport-plan-live/rail-strategy.pdf>

- Midland Main Line (London St Pancras to Bedford) – stopping at Elstree & Borehamwood and Radlett stations
- East Coast Main Line (London Kings Cross to Peterborough) – stopping at Potters Bar station

4.1.35 Thameslink, which is part of train operating company Govia Thameslink Railway, operates trains running through Radlett and Elstree & Borehamwood. Great Northern, also owned by Govia Thameslink, operates trains running through Potters Bar. Govia Thameslink’s current franchise runs until September 2021. London North Western Railway also provides connectivity to the westernmost parts of the borough at Watford Junction and Bushey, as well as along the Abbey Line. However, these stations are located a short distance beyond the borough boundary.

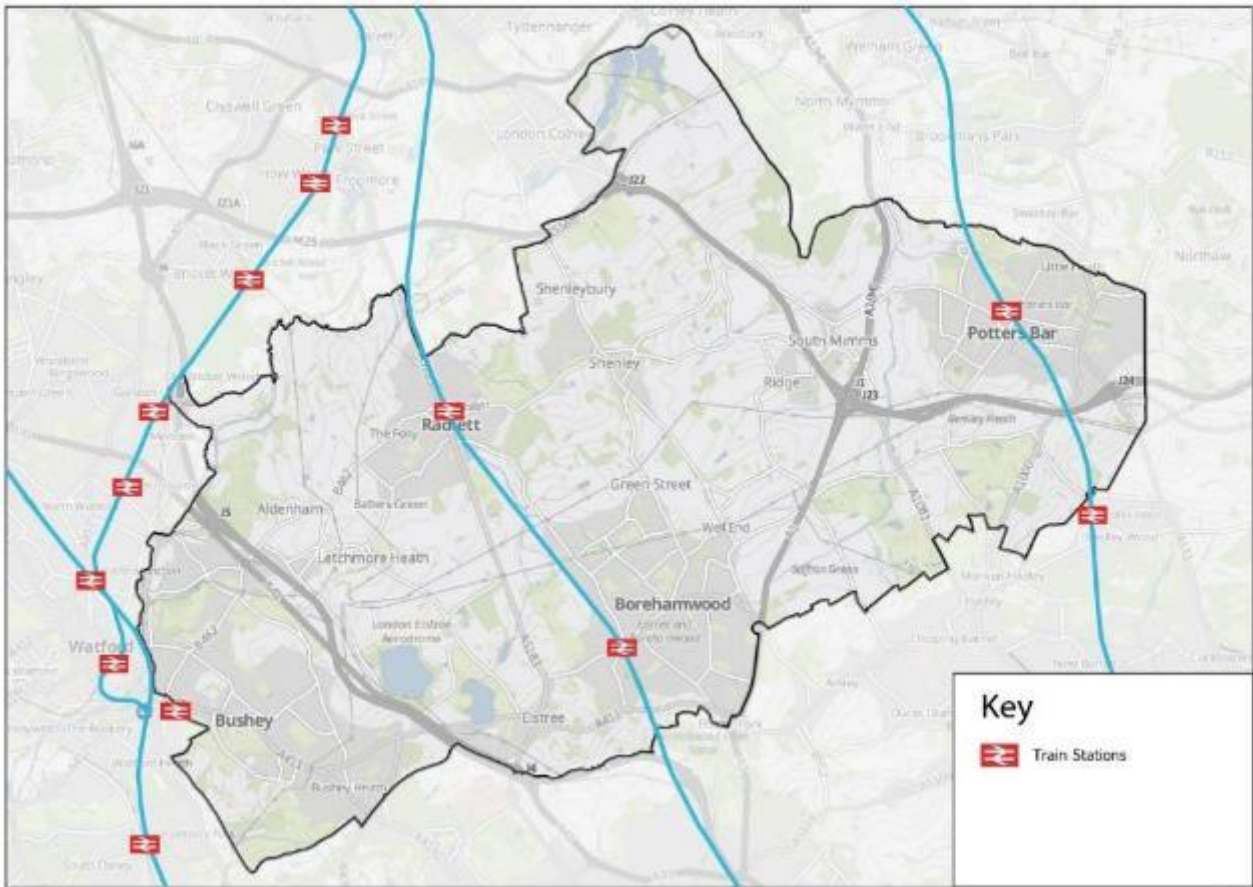


Figure 2 Railway Routes and Stations within and around Hertsmere

4.1.36

Station	2014-15	2015-16	2016-17	2017-18	2018-19
Elstree & Borehamwood	4.04 million	3.38 million	3.25 million	3.33 million	3.23 million
Potters Bar	1.85 million	1.95 million	1.98 million	2.00 million	2.04 million
Radlett	1.20 million	1.19 million	1.20 million	1.20 million	1.23 million

Table 6 below provides information on the number of entries and exits seen at each of the three railway stations within the borough, taken from the Hertfordshire Travel Survey Report³⁷.

³⁷ <https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/transport-and-accident-data/final-report-to-hertfordshire-travel-survey.pdf>

This suggests a steady decline in usage at Elstree & Borehamwood, steady increase at Potters Bar, and broadly static annual passenger figures at Radlett. Against a backdrop of generally improving rail infrastructure over this time (albeit a time which has also included high-profile operational difficulties for rail operators), this does not appear to indicate any worsening of capacity at stations within the borough. Furthermore, the Elstree and Borehamwood platform extension completed in 2019 means increased number of train cars and capacity. Improvement to station facilities and accessibility have also been made.

Station	2014-15	2015-16	2016-17	2017-18	2018-19
Elstree & Borehamwood	4.04 million	3.38 million	3.25 million	3.33 million	3.23 million
Potters Bar	1.85 million	1.95 million	1.98 million	2.00 million	2.04 million
Radlett	1.20 million	1.19 million	1.20 million	1.20 million	1.23 million

Table 6 Annual passenger entry and exit statistics for railway stations in Hertsmere

- 4.1.37 For the Midland Main Line Thameslink service, Elstree & Borehamwood (6 tph) has a lower frequency of trains departing for London than other stops in Hertfordshire, such as Harpenden and St Albans (both >10 tph). This is noted as a key issue in HCC’s Rail Strategy, which also identifies a need to increase frequencies to London from Elstree & Borehamwood and Radlett.
- 4.1.38 Rail is an important component of the Hertfordshire transport network, given radial journey patterns into London. This role will only increase given significant congestion on the road network, particularly on key corridors such as the A1(M), M25 and A414, and HCC’s focus on modal shift as a means to mitigate this. However, there remain key issues to be resolved on the rail network – whilst capacity in ‘local’ Thameslink services has recently been boosted, competing long-distance services on the Midland Main Line are more constrained (and forecast to be at 133% of capacity by 2031). Improvements to long distance services could result in a need for compromise, at the expense of any further improvements to local services.

Implications for future growth

- 4.1.39 Due to its locationally-specific existing provision across Hertsmere and the very substantial cost of rail infrastructure improvement, rail infrastructure is unlikely to be able to serve residents of every new development site coming forwards within Hertsmere. However, the benefit of access to rail services does help to emphasise the sustainability of rail-served locations within Hertsmere as a location for development, and this will drive the need to improve access to stations. Furthermore, sustainable connections to the rail services should be made where possible to help reduce the use of the private car.
- 4.1.40 In the long term, it is anticipated that High Speed 2 will indirectly deliver increased capacity for suburban services in Hertfordshire, by reducing the number of main line high speed train paths. This is particularly the case for the West Coast Main Line serving Bushey and Watford (HS2 Phase 1), the Midland Main Line serving Elstree & Borehamwood and Radlett (HS2 Phase 2) and the East Coast Main Line serving Potters Bar (HS2 Phase 2). However, at the time of writing there remains some uncertainty around whether HS2 Phase 2 will be built and hence whether these capacity gains will be realised.
- 4.1.41 St Albans’ now withdrawn Local Plan made reference to a new station on the Midland Main Line (the location of the former Napsbury Halt, close to the A414) in connection with Park Street Garden Village, and its catchment could potentially include the new

settlement. This could be within the remit of Hertsmere's Local Plan to pursue and promote if desired. Initial discussions with Network Rail have indicated that the catchment of the station may be insufficient to support the significant investment and changes to timescales necessary. Furthermore, the new station is not included in the HCC's Rail Strategy and note that any new station would have to be carefully investigated due to its impact on current services.

- 4.1.42 As well as improving the rail service itself, opportunities for improvements to the interchanges at railway stations should also be a key consideration to help facilitate modal shift. This would help to create an improved and more seamless user experience for 'pure' rail passengers, as well as facilitating better journey opportunities for people who could use a combination of active travel and rail modes for their journeys. Improvements could also include sustainable connections to railway stations, high quality interchanges between modes at railway stations and safe and secure cycle parking.

4.1.3 Bus Services

Policy and context

- 4.1.43 Local bus services across most of the UK are generally provided by private operators. The role of Hertfordshire County Council is to help support the provision of high quality bus services and provide passenger information. HCC published an updated Bus Strategy (2011-2031) in January 2015³⁸, setting out the framework of strategic and detailed policies for passenger transport, and the challenges facing bus provision in the county.
- 4.1.44 Following the adoption of a new Local Transport Plan by HCC, the Hertfordshire Intalink Enhanced Partnership also produced the Intalink Bus Strategy in September 2019³⁹. The Intalink Partnership is a group of public transport operators and local authorities working together to improve the passenger experience of services in the county by supporting schemes, including the introduction of multi-operator ticketing products, upgrading bus stops and stations, and better integration of services.
- 4.1.45 The Strategy sets out a number of objectives and actions in order to improve Hertfordshire's bus services, with the vision of creating a more attractive and efficient network. Specific objectives include prioritising bus services in traffic; improving the image of bus travel; upgrading bus infrastructure; closer integration of the bus network; and a smarter use of data and information.
- 4.1.46 The Hertfordshire Travel Survey³³ found that 7.1% of households in Hertsmere used bus services as their main mode of travel – whilst in line with the national average of 7%⁴⁰, this is the highest proportion of any Hertfordshire district with the county average being only 3%. The higher proportion in Hertsmere is considered likely to reflect the relatively high number of London bus services which extend into the borough, which typically operate at higher frequencies and offer lower fares than the commercially operated services wholly within Hertfordshire.

³⁸ <https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/local-transport-plan-live/bus-strategy.pdf>

³⁹ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/intalink-bus-strategy-september-2019.pdf>

⁴⁰ www.nomisweb.co.uk

- 4.1.47 Package 19 of the SCGTP²⁶ includes proposed improvements to increase capacity and the general environment for passengers using Potters Bar Bus Station. These proposals include improved surfacing, new/improved bus shelters, further signage, additional seating and planting. The package also seeks to support and maintain services to north London from the station, including TfL route 313 to Enfield. The SCGTP also states that HCC will seek to maintain or increase existing service provision where feasible from Borehamwood to North London (option of bus routes east – west between settlements) (package 22), including TfL routes 107 to New Barnet and 292 to Edgware, and Uno’s commercially-operated route 615 to Stanmore. Furthermore, the National Bus Strategy has recently been published and HCC are working to understand its implications. Further discussion amongst HBC and HCC is therefore recommended as new opportunities and priorities are likely to emerge.
- 4.1.48 The SWGTP also includes proposed interventions to improve bus services through Bushey. Package 4 includes a proposal to work with bus operators to explore potential reconfiguration of bus services to and through Watford, and south into London (including TfL routes 142 to Brent Cross and 258 to Harrow). Package 8 highlights congestion at Bushey Arches (which lies on the border of Hertsmere) as a constraint. HCC are looking to undertake a study to investigate the movement of traffic on the highway network through Bushey Arches and the nearby network, to identify potential improvements to all modes including bus, cycle and pedestrians.

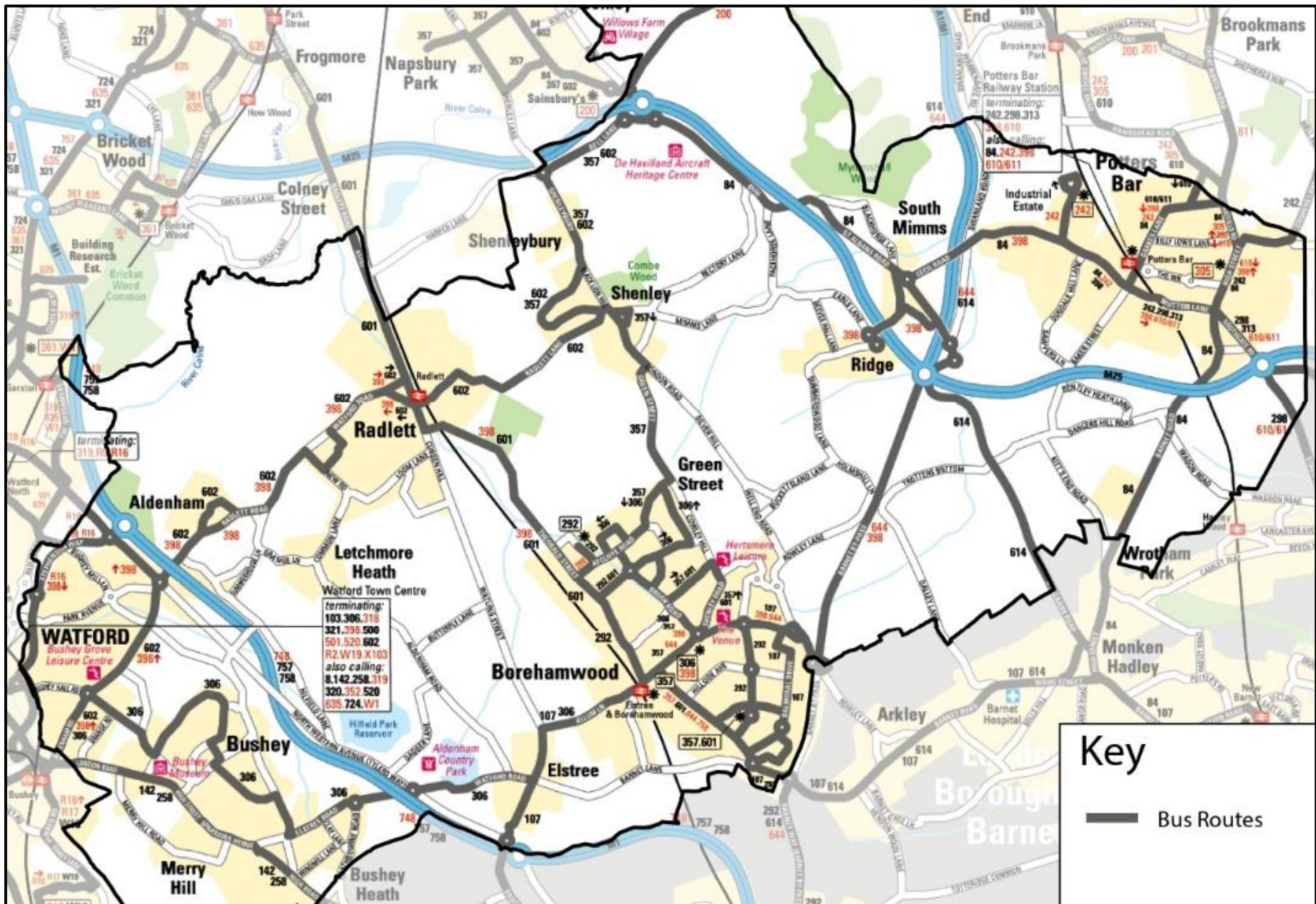


Figure 3 Hertsmere Bus Routes (Black numbers denote services running hourly or more on weekdays, red numbered routes run less frequently)

4.1.49 Longer-term, HCC is pursuing plans to introduce a high-quality east-west public transport system across the county, called HERT (Hertfordshire-Essex Rapid Transit). The exact transport mode of this system is yet to be determined, but appears likely to utilise buses running on fully or partly-dedicated highway. An exact route for the system has not yet been published, but is indicated to run from Hemel Hempstead and Watford east through St Albans, Welwyn Garden City and Hertford towards Harlow and Stansted Airport. This routing means that HERT would not serve existing settlements within Hertsmere, although it may be able to serve a new settlement at Bowmans Cross. HCC is currently progressing the scheme towards a Strategic Outline Business Case in 2022.

Current levels of provision

4.1.50 As shown in Figure 3, the majority of settlements in Hertsmere are served by multiple bus routes. Figure 3 also provides an indication of how regularly services run, with numbers in black denoting services that run at least hourly between 8am and 6pm on weekdays, and numbers in red denoting services that run less often. The borough is served by a variety of services including TfL-controlled services into London services, main inter-urban ‘corridor’ services within Hertfordshire (run by operators such as Metroline and Uno) and more local, less-frequent services between towns and villages. The TfL services only run to/from Potters Bar, Borehamwood and Bushey/Watford, as these settlements are closest to the neighbouring London Boroughs.

4.1.51 Whilst the spatial coverage of bus services within Hertsmere is considered to be relatively comprehensive, there are some notable challenges with service frequency (and hence the overall usefulness of bus transport). For example, the main direct bus service (398, operated by Sullivan Buses) between Potters Bar and Borehamwood – two of the borough’s main towns – has recently had its frequency of service reduced, now only operating once every three hours on weekday daytimes with no Saturday service at all from February 2020⁴¹. As one of only two services that connect the two settlements, this is a significant reduction in connectivity.

Implications for future growth

4.1.52 Bus services are critical to the delivery of sustainable development, because they will often be the main form of public transport connecting new developments with key centres and destinations. The quality and level of bus service provision in a settlement, or the ability for those bus services to be enhanced or extended, should therefore inform site selection decisions. Given the broad picture of reducing demand for bus services across Hertfordshire, the quality and frequency of services is more likely to be a factor limiting growth potential rather than capacity. However, the delivery of new growth close to existing bus services also provides the opportunity to enhance their overall viability and ability to continue to serve other areas.

4.1.53 HCC has suggested that a bus priority feasibility study could be undertaken for Hertsmere, as one has been completed recently for Watford. It was also highlighted that Demand Responsive Transit (DRT) service will shortly be commencing in Watford⁴² and that this could serve parts of Bushey – however, HCC have confirmed that this may be unlikely. DRT is a new type of public transport provision – a hybrid between traditional bus and taxi services, with medium-sized minibus services providing frequent service at lower fares, but to customisable door-to-door routes requiring pre-booking. DRT has been used elsewhere

⁴¹ <https://www.whtimes.co.uk/motoring/potters-bar-bus-route-to-borehamwood-changes-1-6485740>

⁴² <https://watford.moderngov.co.uk/ieDecisionDetails.aspx?AIId=10562>

in the country to support the delivery of new settlements (rather than the provision of traditional bus services), such as at New Lubbethorpe in Leicestershire, a new settlement of 4,250 homes⁴³.

4.1.54 Current proposals in the SCGTP include maintaining and increasing the bus services to north London, and an increase in this service provision could make areas such as Borehamwood a more desirable place to live for commuters that work in London. Increasing connectivity with neighbouring settlements, such as Watford (as mentioned within the SWGTP), will help to provide a more extensive public transport network for residents in the west of Hertsmere. Ultimately, such measures will be essential if the wider aims of HCC's transport policy to limit car use are to be successful.

4.1.4 Active Travel and Cycling Provision

Policy and context

4.1.55 Active travel encompasses a variety of non-motorised transport modes, including walking and cycling. Whilst important for transport purposes, provision also plays a key role in helping, to improve physical and mental health.

4.1.56 The Hertfordshire Active Travel Strategy⁴⁴, published in 2013, sets out how HCC and its partners will identify, deliver and promote interventions to increase the numbers of people walking and cycling in the county.

4.1.57 The Active Travel Strategy identifies four over-arching policy objectives to address key challenges and issues facing Hertfordshire, ensuring that active travel contributes fully to:

- addressing environmental challenges such as improving air quality, and improving the built and natural environment;
- enhancing economic growth by reducing economic costs associated with transport, and the lack of exercise;
- improving public health by increasing physical activity levels and preventing a rise in road casualties; and
- improving quality of life for Hertfordshire communities, improving community safety.

4.1.58 It should be noted that a new active travel strategy is currently being developed by HCC, but has been delayed by the pandemic.

4.1.59 Cycling provision is a key component of promoting active travel due to its ability to compete with car journey times within urban areas. The UK Governments Cycling and Walking Investment Strategy (CWIS)⁴⁵ seeks to promote active travel as the natural choices for short journeys, but also as part of longer journeys.

4.1.60 The CWIS sets the following objectives for 2025:

⁴³ <https://news.arriva.co.uk/news/arrivaclick-brings-sustainable-transport-to-new-development>

⁴⁴ <https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/local-transport-plan-live/active-travel-strategy.pdf>

⁴⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603527/cycling-walking-investment-strategy.pdf

- Double cycling from 0.8 billion stages (the basic unit of travel in the National Travel Survey is a trip, and each change in the form of transport during a trip forms a new stage) in 2013 to 1.6 billion stages in 2025.
- Increase walking activity to 300 stages per person per year in 2025.
- Increase the percentage of children aged 5 to 10 that usually walk to school from 49% in 2014 to 55% in 2025.

4.1.61 Due to the nature of the Growth and Transport Plans and the overarching objectives to increase the active travel provision across the county, the majority of the packages are relevant to this section. The table below provides details of the interventions proposed in both the SCGTP and SWGTP.

Plan	Package	Settlement	Active Travel Interventions
SCGTP	PK17	Potters Bar	Improve the footway alongside the rail line connecting Potters Bar to the Royal Veterinary College and Brookmans Park, by making it suitable for cycling.
SCGTP	PK18	Potters Bar	Improved wayfinding in Potters Bar – particularly between High Street and the town centre, and through to Parkfield open space.
			Marketing and promotion of walking routes in Potters Bar
			Junction improvements at Darkes Lane/The Walk to improve conditions for pedestrians and cyclists
			Improved pedestrian crossings along The Causeway to reduce severance for pedestrians
			Provision of new off-road walking and cycling facilities along Baker Street between the junction with B656 Mutton Lane south of the M25 underpass
			Support Highways England in planned and future cycleway crossings of the M25 to provide better connections into north London
SCGTP	PK20	Elstree & Borehamwood	Promoting cycle connections between Elstree-Composers Way-Centennial Way, Elstree-Borehamwood, and within Borehamwood
			Elstree Way Corridor scheme comprises substantial streetscape improvements and junction reconfigurations which are aimed at improving conditions for pedestrians and cyclists and make it a more inviting corridor for people to spend time in and travel through
SCGTP	PK21	Elstree & Borehamwood	Provide cycle parking at Key Local Destinations, including Borehamwood town centre and train station
			Junction improvements at Station Road junction, to improve conditions for pedestrians and cyclists
			Cycle/walking infrastructure provision between Borehamwood station and Elstree, and between Elstree and the Centennial Park
SCGTP	PK22	Elstree & Borehamwood	Improvements at the Stirling Corner Junction, focused on pedestrians and cyclists, including either a new bridge, or a signal-controlled crossing, over the A1 either north or south of the roundabout
			Work with Harrow Council to identify whether it would be feasible to construct an off-road cycleway along Brockley Hill between the A41 and Stanmore via the Royal Orthopaedic Hospital
			Improved conditions for pedestrians and cyclists at the A1/Rowley Lane junction
SCGTP	PK23	Radlett	Improvements around Radlett station to improve conditions for pedestrians and cyclists, including footways, cycleways, crossings, etc.

Plan	Package	Settlement	Active Travel Interventions
			Increase cycle parking provision at Radlett station
			Marketing and promotion of pedestrian and cycle improvements and cycle parking in Radlett
SWGTP	PK8	Bushey	A study to investigate the movement of traffic on the highway network through Bushey Arches, to identify potential improvements for users, including cyclists and pedestrians

Table 7 Active Travel Interventions from the Growth and Transport Plans

Current levels of provision

4.1.62 Hertsmere is served by a number of separate cycling routes, as part of wider Hertfordshire networks and schemes (such as the Great North Way). Key routes are shown in Figure 5 below. However, these primarily serve a recreational function, and connectivity between settlements is generally reliant on roads without segregated cycling provision.

4.1.63 As highlighted in Table 7 above, there are a number of planned works to improve active travel provision. However, these interventions are mostly localised improvement works. Whilst other strategy documents highlighted above encourage improved cycle and walking networks, there are no further specific interventions identified.

4.1.64 With regard to public rights of way (PROWs), Figure 6 shows that there are a high number of PROWs across Hertsmere, serving the majority of the settlements. In total, within Hertfordshire there is an extensive network of rights of way, with over 5,200 paths totalling more than 3,000km. PROWs could be upgraded where appropriate to provide a comprehensive sustainable connected network across Hertsmere.

Implications for future growth

4.1.65 The existence (or lack) of active travel provision within a settlement is unlikely to be a key factor in determining whether growth can be accommodated within a settlement, but it should still inform site selection decisions when considering infrastructure provision in the settlement as a whole.

4.1.66 The key consideration for this infrastructure type in the context of this study is therefore to ensure new development is designed to promote active travel as a viable alternative to the car, particularly for short-distance journeys. One way to achieve this is to provide suitable policy hooks in the Local Plan, or by securing contributions towards the improvement of active travel schemes across the borough. The Council generally already requires the provision of on-site walking and cycling links for major new developments.

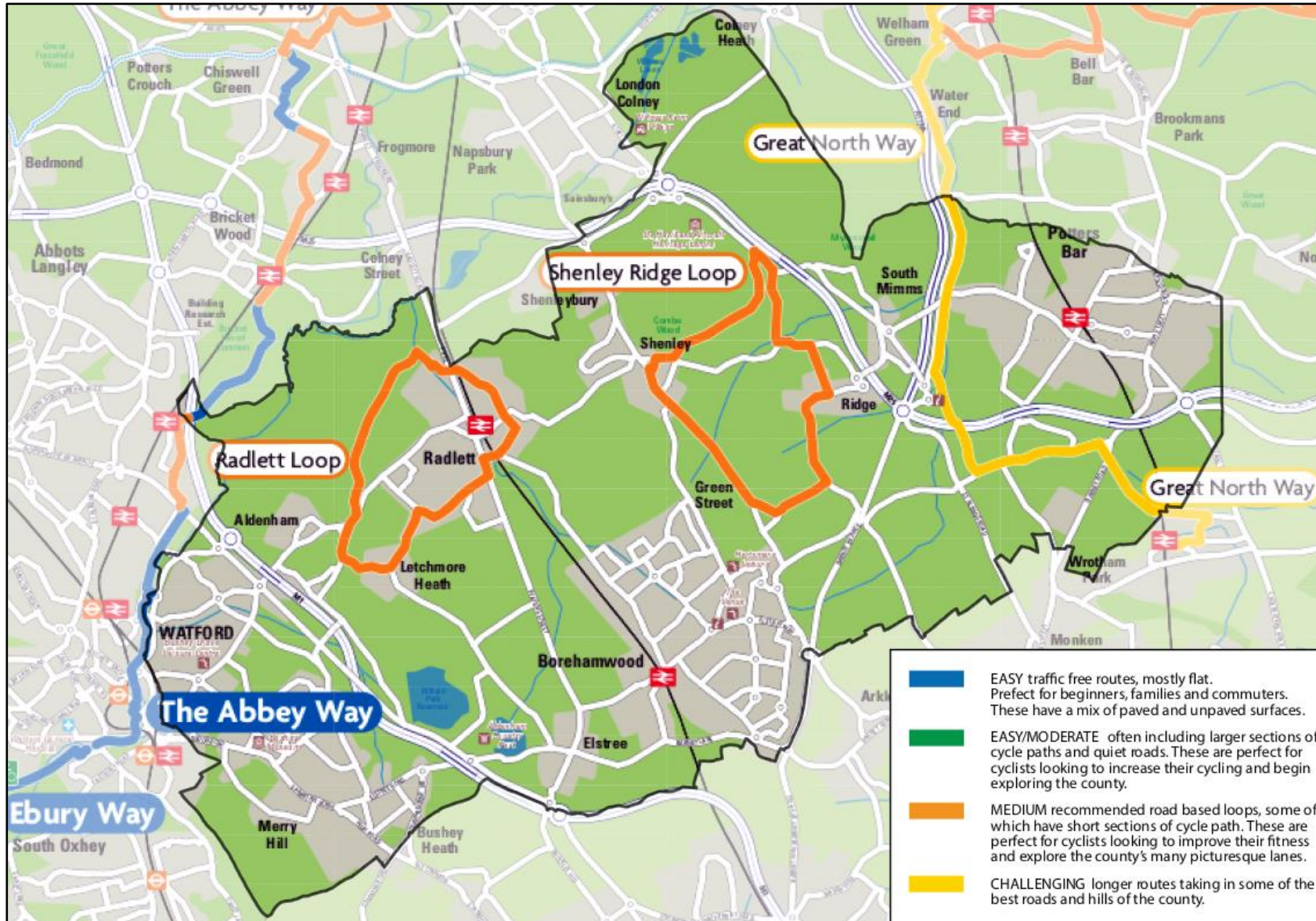


Figure 5 – Strategic off-road cycle routes within and around Hertsmere⁴⁶ (Note: There are no ‘easy/moderate’ routes within the borough)

⁴⁶ <https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/countryside-management-service/a-map-of-hertfordshires-cycle-routes.pdf>

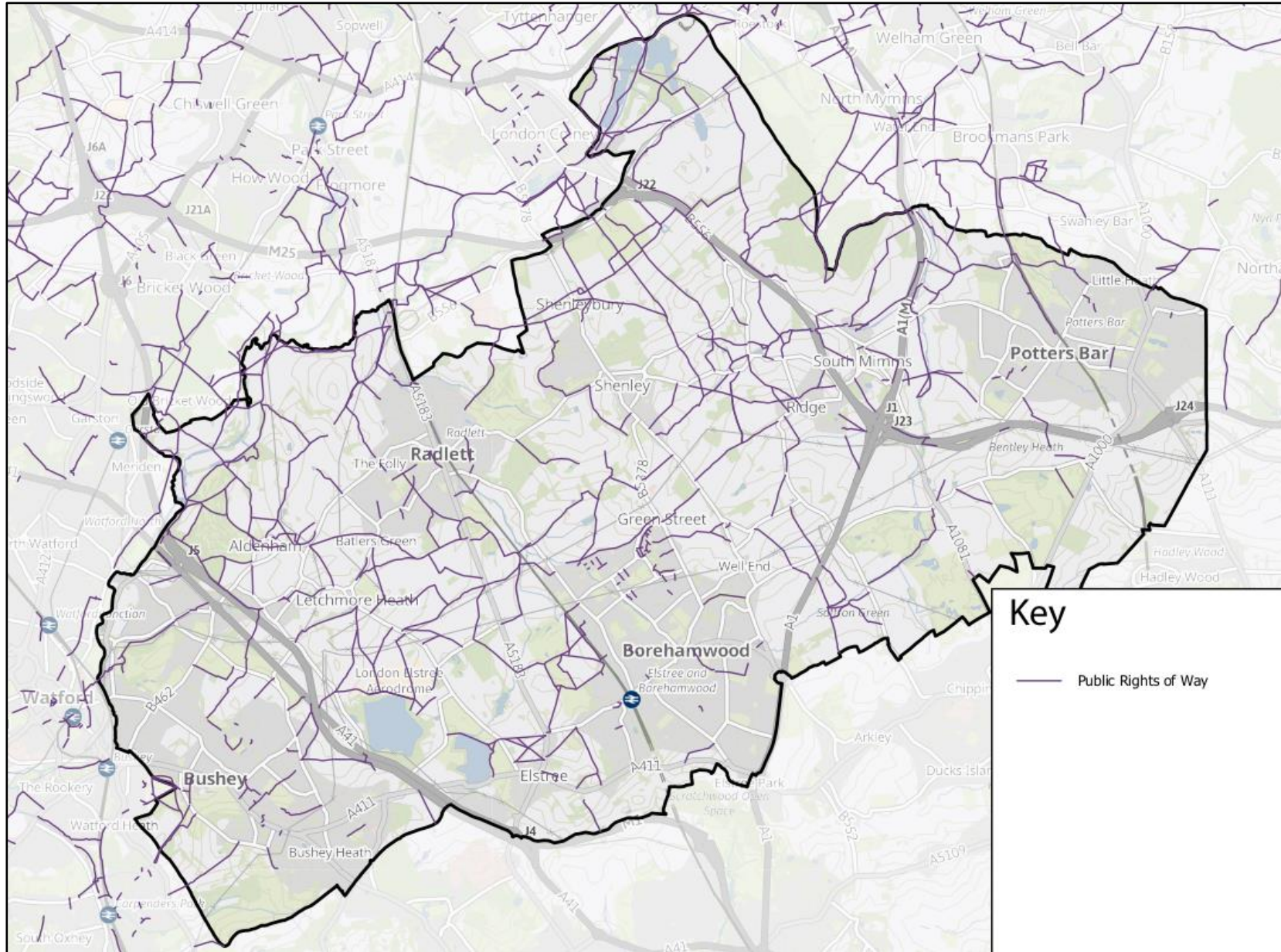


Figure 6 – Public rights of way network within Hertsmere

4.2 Utilities and Environment

4.2.1 This section considers the full spectrum of utility provision within Hertsmere, including digital infrastructure and flood risk management.

4.2.2 This section will consider the following infrastructure types:

- Gas Supply
- Electricity Supply
- Water Supply
- Sewerage
- Flood Management
- Waste Management Facilities
- Broadband and Wired Communications
- Mobile Communications

4.2.1 Gas

Policy and Context

4.2.3 Gas is provided nationally through the National Transmission System (NTS) which is managed by National Grid. Gas is distributed locally by Cadent, who own and manage four of the eight gas distribution networks in the UK, including East of England and North London.

4.2.4 Cadent Gas produce Long Term Development Plans (LTDP) in order to forecast their demand and supply for the next ten years. According to the 2018 LTDP⁴⁷, gas demand forecast shows minimal change over the next ten years. As technology advances, and systems become more energy efficient, there is expected to be a reduction in demand of gas across the UK. Nevertheless, the Cadent LTDP states that gas networks are at the centre of the energy system, providing 85% of UK households with their primary source of heating, whilst also generating 40% of the countries power.

Current levels of provision

4.2.5 Cadent Gas provides universal connections to the gas network across Hertsmere. Cadent are responsible for 'Exit Connections' (new demand for gas) for domestic connections and alterations. In fuel poverty areas, they also provide free or discounted connections to their network (dependant on meeting certain criteria).

4.2.6 Cadent Gas has indicated that there are no strategic-scale constraints within the borough's gas supply network at the present time. However, Cadent Gas has provided information regarding some more localised network connection considerations that will need to be considered in relation to individual development sites. These are set out within Part 2 of the IDP.

⁴⁷ <https://cadentgas.com/nggdwsdev/media/media/reports/futureofgas/Long-term-development-plan-2018.pdf>

Implications for future growth

- 4.2.7 The provision of gas supply infrastructure within new development is critical. Given the general picture of decreasing demand for gas, and indications from Cadent Gas that only local-level interventions in the gas network are likely to be required, we do not anticipate any adverse implications for future growth. Cadent Gas generally caution that when quoting for connections onto the network, capacity is assessed on a first-come first served basis, and so capacity quoted when a development is originally planned may not necessarily be available when a development is complete.
- 4.2.8 The Government's 2017 Clean Growth Strategy⁴⁸ includes plans to phase out the installation of high-carbon forms of fossil fuel heating in new development from the mid-2020s – although at the time of writing, legislation has not yet been introduced to enact this. If enacted, this would mean that new development sites may not require connections to the gas network. However, through our discussions with them, Cadent Gas indicated the potential for the gas network to be converted to a hydrogen network, moving away from fossil fuel usage. The exact approach to gas provision in new development will therefore need to be determined at the point planning applications come forward.

4.2.2 Electricity

Policy and Context

- 4.2.9 The regional distribution network for Hertsmere is UK Power Networks (UKPN), who own and maintain electricity cables and lines across London, the South East and East of England. They are responsible for maintaining and repairing the electricity network, which is then utilised by consumer facing companies who provide or 'sell' the electricity to households.
- 4.2.10 The current UKPN Business Plan covers the period 2015-2023⁴⁹, aligning with the current Office of Gas and Electricity Markets (OFGEM) regulatory price control review period. The Business Plan highlights that UKPN are forecast to spend £15.4 million across four network reinforcement schemes in its Eastern Power Network, within which Hertsmere is situated. The Eastern Power Network (EPN) has its own Business Plan Core Narrative⁵⁰. This lists the key commitments of EPN that they propose to deliver for customers and stakeholders.

Current levels of provision

- 4.2.11 The EPN Business Plan⁵⁰ lists performance commitments for the plan period, including commitments to improving network reliability and availability. This includes reducing the number of unplanned interruptions, protecting substations from flooding and improving the load index of the networks. Currently, the network is outperforming the target number of Load Index 4 and 5 sites, meaning that overall there is existing capacity across Hertsmere.
- 4.2.12 There is a National Grid substation at a site in Elstree, which is currently undergoing a £20 million upgrade. The upgrading of the new substation is a joint project between UKPN and

⁴⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf

⁴⁹ <http://library.ukpowernetworks.co.uk/library/en/RIIO/>

⁵⁰ [http://library.ukpowernetworks.co.uk/library/en/RIIO/Main Business Plan Documents and Annexes/UKPN EPN Core Narrative.pdf](http://library.ukpowernetworks.co.uk/library/en/RIIO/Main_Business_Plan_Documents_and_Annexes/UKPN_EPN_Core_Narrative.pdf)

National Grid, expected to be completed in 2021. In consultation with UKPN, it was noted that much of Hertsmere is fed from two main substations – at Potters Bar and Borehamwood. The Potters Bar substation is near full capacity, and Borehamwood has limited spare capacity. However, a new substation was approved in February 2021 at Hertsmere Industrial Park in Borehamwood.

Implications for future growth

- 4.2.13 The provision of electricity supply infrastructure in new development is an essential part of the development process.
- 4.2.14 In consultation with UKPN in February 2020, details of the potential requirements for the proposed growth across the plan period were established.
- 4.2.15 It is considered that the anticipated levels of development in Elstree Village, Shenley and South Mimms could most likely be catered for in the UKPN general load growth plans for the area. However, it was noted that it is likely that 3-4 new minor substations would be required to cover the new homes in Shenley. A standalone substation could cost around £100,000 - £150,000 plus cable costs required to connect the substation (£350 per metre) and costs to connect the houses (£500-£1,000) per plot. This would be funded by the developer through a connection request to UKPN. More recent discussions have also taken place with UKPN around the implications of the proposed new media quarter in Borehamwood. This is likely to have some significant implications for electricity capacity, explored further in Section 5.4.
- 4.2.16 For the other sites identified, it is considered that a portion could be dealt with in the general load growth plans and installation of new substations for the sites as required, with no primary substation reinforcement. However, to cater for the full growth anticipated across the borough, more significant improvements to the local network will be required. It is understood that Borehamwood's primary substation has a reasonable degree of remaining capacity, but Potters Bar is much closer to capacity – although required upgrades would not necessarily need to be considered on a settlement-specific basis, and demand can be reconfigured around the local network. UKPN have indicated that the likely cost of main substation enhancement to meet anticipated levels of growth would be £1-2million, with a lead-in time of 2-3 years. This would be in addition to minor-substation costs within individual development sites of around £100,000 - £150,000, plus cable costs and connection costs as set out above.
- 4.2.17 The capacity of the electricity network could therefore be a factor in decision making about levels and distribution of growth, with some locations requiring greater levels of additional investment than others. Funding can be secured through developer contributions, but the upgrading of primary substations can take a number of years to plan and construct. It will therefore be important to identify an appropriate programme of housing delivery to align with current capacity and for additional investment to be planned appropriately.
- 4.2.18 Additionally, UKPN highlighted that with a change in direction in government policy regarding electricity there may be further factors to consider. Recent government plans include a ban on selling new petrol, diesel or hybrid cars by 2030 to help with the target of being zero carbon by 2050. This will likely have a significant impact on the electricity network as more electric vehicles will require charging at homes and in the public realm.
- 4.2.19 Decarbonising heat will also play a factor, and a move towards either electric heating or heat pumps used in houses will see a significant uptake in electricity usage. As an example, a 4 bedroom house that currently has a ADMD (After Diversity Maximum Demand) of

2.5kVA will have a demand of 10-12kVA, tripling the demand and triggering any main substation reinforcements at an earlier time than currently anticipated.

4.2.20 Whilst these factors are likely to impact the electricity network, the impacts will be experienced across the borough and the true impacts are currently unknown. However, it is understood through discussions with UKPN, that increases in demands could be balanced out by future technology development and other efficiencies.

4.2.3 Water Supply

Policy and Context

4.2.21 The responsibility of supplying Hertsmere with drinking (potable) falls to Affinity Water as the statutory undertaker, as set out in the Water Industry Act (1991). Affinity Water have three geographically separate supply regions: Central, Southeast and East. Hertsmere falls into Affinity's Central region, which is split into six areas known as 'communities'. Hertsmere is covered by two areas – Colne and Lee.

4.2.22 Affinity Water's strategy for future water supply is set out across the following documents:

Affinity Water Business Plan 2020-2025⁵¹: This plan sets out the key targets for Affinity Water, and sets out the cost of these planned improvements. The plan includes measures to reduce leakages, reduce average consumption, develop innovative demand management options, and invest heavily in the network to maintain the core assets and keep services running 24/7. The Business Plan was initially published in September 2018, but is being reviewed and revised following a review from Ofwat.

Draft Water Resources Management Plan 2020-2080⁵²: This Water Resources Management Plan (WRMP) sets out how Affinity Water plan to deliver a reliable, resilient, efficient and affordable water supply to customers from 2020 to 2080. The WRMP is divided into the supply regions, with proposals included for each region. There are specific proposals to both increase the supply of water and reduce the demand for water for each region. As stated above, Hertsmere falls within the Central region.

4.2.23 The WRMP sets out Affinity Water's overarching proposals to reduce the demand for water, and increase the supply. These proposals include: reducing leakage from around 21% in 2015 to 15% in 2025; providing additional infrastructure to help the movement of water across the region; building a new reservoir in Oxfordshire; continuing to collaborate with neighbouring suppliers to maximise the efficiency of water provision across the wider south east of England; and utilising other transfer solutions such as the Grand Union Canal.

4.2.24 At a more localised level, the majority of local authorities within the county have collaborated to commission a Hertfordshire Water Study. This sets out the potential implications of proposed growth on the water network, and for Hertsmere finds that it will generally not be a constraint on growth. However, whilst the Study has only recently been published, the growth assumptions are from 2017 and for many authorities (including Hertsmere) are now well out-of-date. The strategic policy context has also changed – for example, Affinity Water now needs to reduce abstraction from ecologically-sensitive chalk streams. The findings of the Study are therefore considered to be of limited value for Hertsmere, leaving some uncertainty at the time of writing around water supply issues for the borough.

⁵¹ <https://www.affinitywater.co.uk/corporate/plans/business-plan>

⁵² https://www.affinitywater.co.uk/docs/corporate/plans/water-resources/latest/Draft_Final_Water_Resources_Management_Plan_2019_Published_June_2019.pdf

Current levels of provision

- 4.2.25 Affinity Water's WRMP highlights that the Central region, as a result of planning to reduce abstraction from Chalk catchments and to improve their resilience to drought events, faces a shortfall in supply under drought conditions of 43 million litres per day (Ml/d) by 2025, rising to 256 Ml/d in 2080. The WRMP proposes interventions to tackle this potential shortfall, looking at ways to reduce demand and increase supply.
- 4.2.26 Around 60% of the Central region's water supply comes from groundwater sources, with the remaining 40% abstracted from surface water sources on the River Thames, or imported from neighbouring water companies. Affinity Water plan to increase the supply of water across the region through new strategic supply measures, either by building a new reservoir in Oxfordshire or utilising the Grand Union Canal to transfer water. They will also collaborate closely with neighbouring water companies, as part of a regional strategy for the wider South-East of England.
- 4.2.27 Affinity Water emphasise the importance of demand reduction by reducing leakages and water use per person. They seek to reduce leakages from 21% in 2015 to 15% in 2025, and 11% by 2045. With regard to reducing the consumption of water, Affinity Water propose the following actions:
- Installing more water meters in homes and businesses
 - Providing customers with more regular information on how much water they are using
 - Providing customers with water audits to encourage them to become more water resilient
 - Supporting a national water efficiency campaign
 - Working with retailers to improve water efficiency of businesses

Implications for future growth

- 4.2.28 Given the 'grid-based' nature of supply networks, water infrastructure will have very limited implications for whether future growth can be accommodated in specific locations. Whilst new development sites will evidently need to be connected to the strategic water supply grid, this is required for all developments and does not place any particular constraint on development or any impact upon the wider water supply network.
- 4.2.29 Development will place additional pressure upon the sources of water that feed the strategic grid. Based upon the anticipated development quantum for the new plan period, Affinity Water has estimated water usage of 5.5Ml/day from residential development and 1.8Ml/day from commercial development. However, at the time of writing Affinity Water had not been able to indicate the specific implications on the network from individual development sites. This will need to be explored alongside the Regulation 18 consultation, particularly given the limitations of the existing Hertfordshire Water Study identified above. In anticipation of the need to minimise water consumption, the Council could consider implementing a policy approach which articulates the need for reduced water consumption within new development.
- 4.2.30 Affinity Water has also identified the potential for development sites to intersect with their operational apparatus and equipment, and indicates that no development will be permitted within a specified distance of these assets. Furthermore, several growth locations are located within Environment Agency defined groundwater Source Protection Zones (SPZ) corresponding to multiple Pumping Stations within the supply area. As a minimum Affinity Water, would request planning conditions for development within or near to an SPZ.

4.2.4 Sewerage

Policy and Context

- 4.2.31 The treatment of waste water in the borough is the responsibility of Thames Water as the statutory undertaker as set out in the Water Industry Act (1991). Thames Water services over 15 million people across London and the Thames Valley.
- 4.2.32 The Draft Thames Water Five-year Business Plan⁵³ sets out the vision and objectives of Thames Water. Amongst the strategic priorities in the business plan is to invest in resilient systems and assets. The Business Plan states that the performance of Thames Water's wastewater is above average for wastewater outcomes. They are exploring ways to reduce pollutions by 30%, and reduce internal sewer flooding incidents by 20% by 2024/25.

Current levels of provision

- 4.2.33 The majority of Hertsmere's sewerage drains to Blackbirds Sewage Treatment Works (STW), located west of Radlett. The borough is also served in part by the STWs at Maple Lodge in Rickmansworth, and Rye Meads in East Hertfordshire. Both are known to have significant capacity constraints⁴⁹.
- 4.2.34 In consultation with Thames Water, it was highlighted that the sewerage network is currently performing well, with no major concerns of hydraulic flooding. There are some potential future capacity issues at Maple Lodge STW, given the level of growth proposed across the authority areas which feed into this STW. Reinforcement and capacity improvements may be required depending on the level and location of housing growth.
- 4.2.35 The Thames Water strategy to 2040 is to improve both the capacity and the reliability of the major STWs through targeted investment and taking measures to reduce overall demand. More widespread use of sustainable drainage practice will also be promoted. There are no current plans for major strategic upgrades of the sewerage network in Hertfordshire, but upgrades are likely to be required in AMP7 (covering the period from 1st April 2020 to 31st March 2025).

Implications for future growth

- 4.2.36 The planning and provision of sewerage infrastructure in new development is an essential part of the development process. The nature of the borough's sewerage network – generally flowing to large, regional sewage treatment works – mean that a coordinated and long-term approach to future sewerage provision is required. This is to some extent reflected in the Hertfordshire Water Cycle Study which has been commissioned by the majority of Hertfordshire Local Authorities to consider potential long-term approaches to sewerage provision. However, as set out at 4.2.24 this no longer reflects changes in strategic context and the latest proposed growth quantum and distribution.,
- 4.2.37 Nevertheless, Thames Water has indicated that there are no strategic-scale constraints within the borough's sewerage network at the present time, and that implications for Maple Lodge STW will be able to be addressed as a result of engagement with them (such as the engagement undertaken for this IDP). However, Thames Water has indicated a need for works to connect individual development sites, which are set out within Part 2 of the IDP.

⁵³ <https://corporate.thameswater.co.uk/about-us/our-strategies-and-plans>

It should be noted that the comments provided by Thames Water are indicative, and would be confirmed as connection requests are made by developers.

4.2.38 At present, when there are concerns regarding the capacity of existing sewerage network infrastructure to meet the demands of new development, Thames Water request that the developer demonstrates that capacity exists, or can be made available. This is done through services Thames Water offer, such as flow and pressure checks and network modelling. The developer pays for these services and in some instances may be required to pay for an element of network reinforcement, in accordance with Thames Water's Infrastructure Charge Schedule⁵⁴. This ensures that there is adequate capacity both on and off site to serve the development and that it would not lead to adverse impacts for existing or future users.

4.2.5 Flood Management

Policy and Context

4.2.39 The NPPF sets out the need for development to take full account of flood risk and coastal change, helping to minimise vulnerability and improve resilience (Paragraph 148). It states that plans should take a proactive approach to mitigating and adapting to climate change (Paragraph 149) and inappropriate development in areas at risk of flooding should be avoided (Paragraph 155).

4.2.40 Paragraph 156 of the NPPF requires that strategic policies should be informed by a Strategic Flood Risk Assessment (SFRA). Accordingly, HBC commissioned an SFRA in May 2008 which formed part of the evidence base of the Core Strategy. HBC then commissioned a review and update of the SFRA in 2018⁵⁵.

4.2.41 The Environment Agency (EA) manages flood risk from main rivers, and works with other authorities to manage the risk of flooding and coastal erosion across England. As the Lead Local Flood Authority in Hertfordshire, HCC is responsible for managing local flood risk, including from surface water, ground water and ordinary watercourses. Each organisation is responsible for the provision and maintenance of flood management infrastructure within their respective remits.

4.2.42 The National Flood and Coastal Erosion Risk Management Strategy for England⁵⁶ provides the overarching framework for future action by all risk management authorities to tackle flooding and coastal erosion in England. It should be noted that this strategy is in the process of being updated, and consultation on the new draft was undertaken July 2019. This will be monitored and reviewed if published before this study is completed.

4.2.43 The Hertfordshire Local Flood Risk Management Strategy (LFRMS)⁵⁷ indicates that 3,347 properties in Hertsmere are considered to be at high risk (3.33% AEP) of surface water flooding.

⁵⁴ <https://www.thameswater.co.uk/-/media/Site-Content/Thames-Water/Help-and-Advice/Helpful-literature/Charges-and-tariffs/Infrastructure-Charges-Schedule-2019-20.pdf>

⁵⁵ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/20180604-Hertsmere-Borough-Council-SFRA-L1-Report-Final-v6.pdf>

⁵⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228898/9780108510366.pdf

⁵⁷ <https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/water/flood-risk-management/lfrms-for-hertfordshire-full-report.pdf>

Current levels of provision

4.2.44 Fluvial flood risk in Hertsmere is relatively limited, with areas either side of the following watercourses falling within Flood Zone 3. These are shown on Figure 7 (although the modelling of smaller watercourses prior to development may identify further areas of Flood Zone 3):

- Radlett Brook
- Mimms Hall Brook (beyond the confluence of the Catherine Bourne and Watery Lane)
- River Colne

4.2.45 There are relatively few flood defences alongside rivers in Hertsmere – those that do exist are alongside the River Colne, and a Flood Storage Area upstream off Radlett Brook. Currently there is a scheme run by HCC as the LLFA to determine a solution to reduce flood risk within the Darkes Lane area of Potters Bar.

Implications for future growth

4.2.46 The provision of flood risk management infrastructure – where required – is critical. However, it is not an infrastructure type where capacity within existing networks is typically affected by new development and is therefore unlikely to be a factor in determining the ability of individual settlements to accommodate new growth.

4.2.47 During consultation with the LLFA team at HCC, no specific needs were identified for investment in new flood defences in Hertsmere. As fluvial flood risk is generally quite low across Hertsmere, mitigation should be considered on a case-by-case basis for individual development sites and respond to the conclusions of the Council's separate Strategic Flood Risk Assessment. However, there should be scope for flood risk reduction on strategic sites upstream of the main conurbations.

4.2.48 As noted above, there are 3,347 properties at risk from surface water flooding across Hertsmere and other figures for actual property flooding records quoted in the SFRA such as by Land Drainage (predominantly 'ordinary watercourses and drainage ditches) are quoted as flooding 1176 properties in the past 20 years. New development is likely to increase the risk of surface flood risk, as the extent of built-up areas and the area of impermeable hard surfacing increases, meaning that mitigation measures such as Sustainable Drainage Systems (SuDS) are essential to reduce and manage the surface water flood risk. In addition, climate change predictions indicate that the likelihood and frequency of surface water flooding will increase and this increase in risk must be considered when planning for new development within the borough. A range of sustainable drainage measures will be considered on each site, to ensure that there are no increases of flows from greenfield sites, and run-off from brownfield redevelopment sites

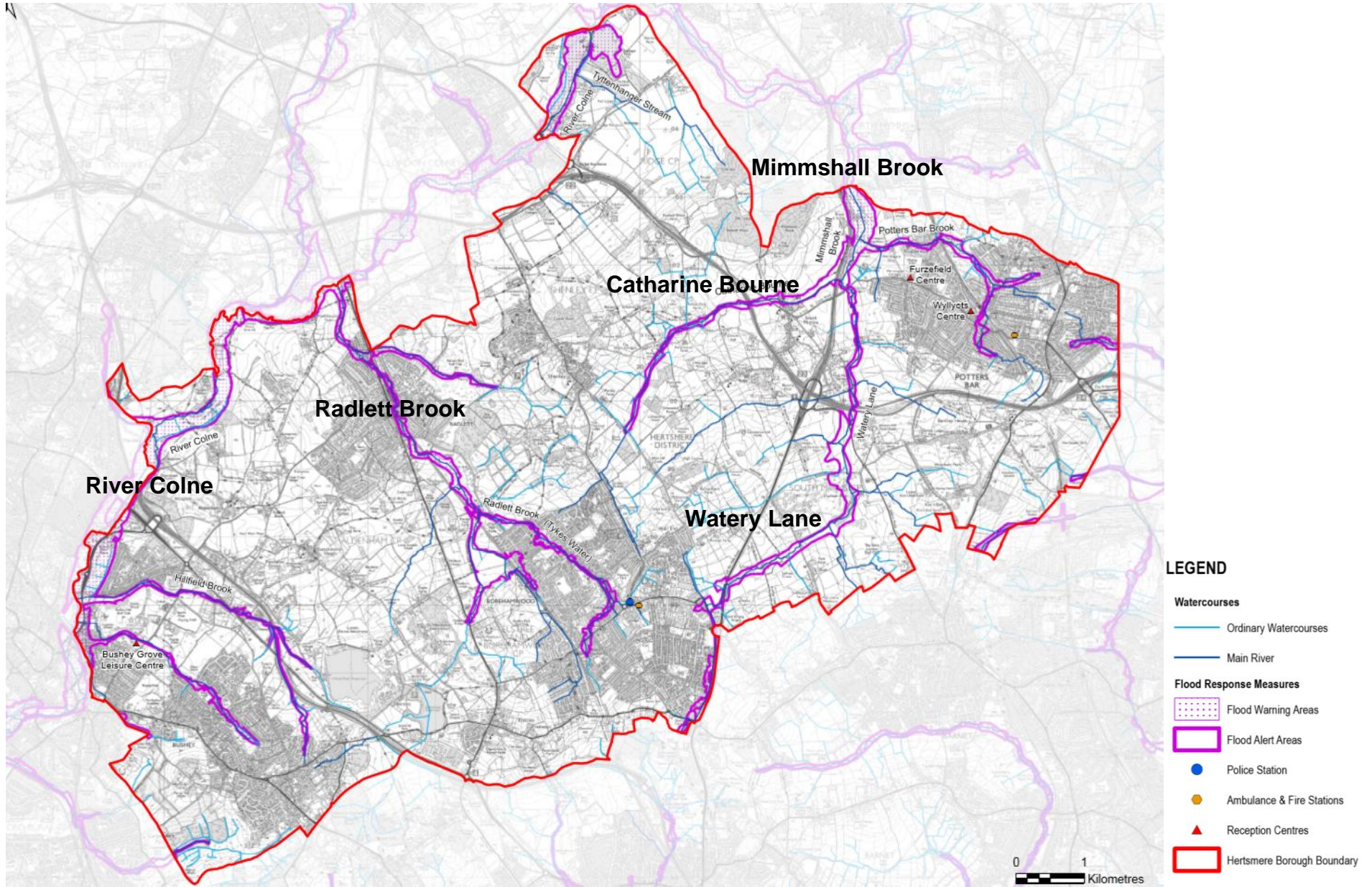


Figure 4 Watercourses and flood warning areas within Hertsmere (AECOM 2018 Hertsmere Strategic Flood Risk Assessment)

will be reduced compared to existing. New development will avoid the fluvial flood plain, and where it is not currently known, site specific modelling will take place prior to new development. As mentioned above, storage areas on larger sites could help existing flooding problems on watercourses flowing through the main settlements. However, from our discussions with the LLFA team at HCC, the extent of surface water flood risk within Hertsmere is not understood to require specific infrastructure responses.

4.2.6 Waste Management Facilities

Policy and Context

4.2.49 HCC acts as both the Waste Planning Authority and the Waste Disposal Authority for Hertfordshire. HBC is the Waste Collection Authority for the borough, and has a statutory responsibility to provide a waste collection service to householders and local businesses.

4.2.50 As the Waste Disposal Authority, HCC is required to perform statutory functions under the Environmental Protection Act 1990. HCC are responsible for the treatment and/or disposal of local authority collected waste arising in the county. They also have a statutory requirement to provide Household Waste Recycling Centres (HWRCs) for residents to deposit their own household waste. The HWRCs in Hertfordshire are managed and operated by AmeyCespa (East) Limited (Amey), on behalf of HCC.

4.2.51 As set out in Section 2.3 the current Hertfordshire Waste Development Framework covers the period from 2011 to 2026, and is compiled of two development plan documents:

- The 2012 Waste Core Strategy & Development Management Policies DPD, provides waste management strategic objectives and policies for Hertfordshire. Appendix A of the Core Strategy includes a 'Key Diagram' map showing broad locations for new facilities; and
- The 2014 Waste Site Allocations DPD identifies sites for waste management facilities.

4.2.52 HCC is currently reviewing the Waste Development Framework. It consulted on a Draft Waste Local Plan⁵⁸ between January and March 2021. At the time of writing it is anticipated that the new Waste Local Plan will be submitted for examination in early 2023, and adopted by early 2024.

4.2.53 HCC have also prepared a Local Authority Collected Waste (LACW) Spatial Strategy⁵⁹, which sets out an assessment of desirable new and improved waste management facilities required in the county over the period to 2031, to better enable the management and disposal of LACW. A Household Waste Recycling Centre Annex⁶⁰ to the LACW Spatial Strategy has also been produced, assessing the suitability of the existing HWRCs for future development and/or expansion.

Current levels of provision

4.2.54 Redwell Wood Farm, located in Ridge, is one of five existing strategic sites which are considered essential to the current and future waste management of local authority collected waste in the county and provide waste management beyond the local areas in

⁵⁸ <https://www.hertfordshire.gov.uk/media-library/documents/waste/waste-local-plan-consultation/hertfordshire-draft-waste-local-plan-january-2021.pdf>

⁵⁹ <https://www.hertfordshire.gov.uk/media-library/documents/waste/spatial-strategy/hertfordshire-county-council-lacw-spatial-strategy-2016.pdf>

⁶⁰ <https://www.hertfordshire.gov.uk/media-library/documents/waste/spatial-strategy/hwrc-annex-to-the-lacw-spatial-strategy-2017.pdf>

which they are located. Redwell Wood Farm now includes a new in-vessel composting facility, allowing organic waste from five of Hertfordshire's districts (including Hertsmere) to be processed. Three of HCC's waste strategic sites (Cumberlow Green Farm, Westmill Quarry/Landfill and Waterdale Waste Transfer Station) have the potential for enhancement and are therefore also listed as Allocated Sites in the Waste Site Allocations document.

- 4.2.55 There are two Household Waste Recycling Centres (HWRCs) in Hertsmere – at Elstree and Potters Bar. In consultation with HCC, it was stated that both HWRCs are at capacity, and it would not be possible to expand or reconfigure the Elstree site. HBC and HCC are therefore jointly working to explore the potential to expand Potters Bar HWRC, onto land to the north and west of the existing Cranbourne Road site which is safeguarded in the existing Local Plan for employment purposes and is therefore an acceptable site to be used as a waste site as per the Waste Local Plan. This site could also potentially contribute to wider waste needs, such as the provision of a Material Recycling Facility (MRF) for local authority collected recycling.
- 4.2.56 All residual waste collected by HBC (as the Waste Collection Authority), and waste collected at the HWRCs in the borough, is directed to Waterdale Waste Transfer Station in Three Rivers, before being distributed to Bletchley Landfill, Buckinghamshire and Energy Recovery Facilities (ERFs) at Ardley in Oxfordshire, Greatmoor in Buckinghamshire and Edmonton in North London.
- 4.2.57 The Waste Core Strategy estimates the additional waste facilities that will be needed by 2021 and 2026. It is expected that there could be a shortfall in capacity of approximately 250,000 tonnes of waste collected by local authorities across Hertfordshire. This would lead to a requirement for additional facilities in the county.
- 4.2.58 With regard to landfill, in 2010/11, approximately 45% of all waste collected by local authorities in Hertfordshire was landfilled. It is recognised that regardless of initiatives to reduce waste and increase recycling, there will always be some residual waste that will need to be treated and disposed of. The Waste Disposal Authority has secured a number of contracts for residual waste for the near future, however, additional capacity will be needed in the county over the Plan period.
- 4.2.59 The 'Key Diagram' map (Appendix A of the Waste Core Strategy) identifies areas of search for organic waste recovery and waste treatment & transfer facilities. The majority of these areas lie outside of Hertsmere, with one area of search for waste treatment & transfer including parts of Bushey.

Implications for future growth

- 4.2.60 The provision of appropriate infrastructure to manage waste is crucial. However, because it is planned on a county-wide basis, levels of existing waste management capacity will not have any bearing on decisions around which settlements are able to accommodate growth.
- 4.2.61 In November 2020 planning permission was granted for a new HWRC in Welwyn Garden City, replacing the current Cole Green HWRC located on the A414 to the east of Welwyn Garden City. Through our discussions with HCC, it is anticipated that this new site would process some household waste from the closest areas of Hertsmere, particularly the vicinity of the new settlement at Bowmans Cross. This could mean that HWRC needs arising from the new settlement will not need to be met on site. Bowmans Cross is also the location of an anaerobic digestion facility, safeguarded by the Waste Development Framework. The developer of the site is considering options to incorporate this facility as part of its emerging masterplan.

4.2.62 The expansion of the Cranbourne Road HWRC in Potters Bar is likely to be required during the plan period, and this should be actively facilitated through policies and a clear designation in the Local Plan to ensure its deliverability. However, this will address existing needs as well as demand arising from new developments.

4.2.7 Digital Communications

Policy and Context

4.2.63 Wired telecommunication services are provided across the UK by a range of internet service providers; however, most residential and business subscribers are served by one of the five major providers – BT, Sky, Virgin Media, TalkTalk and EE. BT Openreach own most of the underlying telecoms infrastructure, including cables and exchanges, which these internet service providers pay usage fees for. Virgin Media maintains its own separate fibre optic cable network.

4.2.64 HCC's Digital Strategy⁶¹ includes four digital themes, including one of supporting citizens to become digital citizens. HCC state that by 2021, they will improve the connectivity to support citizens and local business using 4G / 5G and superfast broadband – with a target of 97% of Hertfordshire premises having superfast broadband.

4.2.65 As the regulator of broadband delivery, Ofcom oversees the delivery of broadband infrastructure. Following the implementation of the Universal Service Obligation at the end of 2019, every homeowner and business in the UK will have the right to request a decent and affordable broadband connection. A decent broadband connection is defined as 10Mbit/s download speed and a 1Mbit/s upload speed.

4.2.66 Following the publication of the Future Telecoms Infrastructure Review in 2018 the government has a stated ambition to be a world leader in 5G, with a target that the majority of the population would be covered by a 5G signal by 2027.⁶² The document outlines the drive to roll out 5G as quickly as possible. Local planning authorities do not set the agenda for the delivery of wireless communications infrastructure as this is a National Government policy area, though through HCC's Digital Strategy there are policies that support the provision of 4G/5G. One of the four themes that is covered in this policy document states that the council will be “supporting citizens to become digital citizens by 2021, they will improve the connectivity to support citizens and local business using 4G / 5G”.

4.2.67 In March 2020, the Government announced that it had entered into an agreement with the four mobile operators to provide grant funding to deliver a ‘Shared Rural Network’. Under the terms of this agreement, each mobile operator has committed to providing good quality data and voice coverage to 88% of the country by June 2024 and 90% by June 2026, subject to certain conditions (including the provision of funding).

4.2.68 Connected Counties was a partnership between Hertfordshire County Council, Hertfordshire's Local Enterprise Partnership, Buckinghamshire County Council, Buckinghamshire Thames Valley Local Enterprise and Openreach, focused upon extending Superfast broadband (24 Mbps and over) to hard-to-reach areas. The programme was undertaken between 2016 and 2020, providing 34,000 new superfast connections.

⁶¹ <https://www.hertfordshire.gov.uk/about-the-council/freedom-of-information-and-council-data/open-data-statistics-about-hertfordshire/what-our-priorities-are-and-how-were-doing/digital-strategy-2017-21.aspx#intro>

⁶² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf

Current levels of provision

4.2.69 As of January 2018, superfast broadband coverage across Hertsmere exceeded the 97% of households target⁶³ in HCC's Digital Strategy, and has since risen to 98%.

4.2.70 As shown on

Figure 5, the majority of larger settlements have ultrafast broadband coverage, with the outlying areas larger settlements and all smaller settlements having superfast broadband coverage. Areas without ultrafast or superfast coverage are all relatively rural, for example in Letchmore Heath. There is also an apparent gap in provision in Bushey, but this the location of the Bushey Hall Golf Club and Police Sports Ground so does not indicate a shortfall in provision.

4.2.71 Mobile phone signal is nearly at full coverage across Hertsmere, with all residents able to receive at least a 4G signal, as shown in *Figure 6* below. With a focus now at a national level on the delivery of 5G connectivity Hertsmere is already ahead of the curve, with Potters Bar and Bushey having 5G coverage through the EE network. EE, BT and Three are rolling out in Watford, Enfield and surrounding areas at the time of writing.

Implications for future growth

4.2.72 The provision of appropriate and future-proofed digital infrastructure within new development is critical. However, it is not an infrastructure type where capacity within existing networks is typically affected by new development and is therefore unlikely to be a factor in determining the ability of individual settlements within the borough to accommodate new growth.

4.2.73 As further development takes place in the borough the capacity of the mobile phone networks will be impacted. However, HBC will have very little control over the service levels that future development will receive, as this is a government policy area – and generally well provided for by the market as a highly-competitive industry. As discussed above, the Government have entered into an agreement with operators to ensure there is greater coverage across rural areas, and this should help to increase the provision in areas of need across Hertsmere.

4.2.74 The key consideration for telecommunications provision in the context of this study is therefore to ensure that new development is fully equipped and future-proofed to provide superfast broadband provision. This will be crucial for areas of development, such as the new settlement at Bowmans Cross, and further expansion of employment areas including new studios, as there will not be any existing infrastructure in place. To achieve this, it is recommended that HBC include a policy in the new Local Plan to ensure that new development is provided with adequate infrastructure for digital communications, as retrofitting the required cabling once development is completed will incur higher costs and cause significant disruption.

⁶³ <https://labs.thinkbroadband.com/local/hertsmere,E14000745>

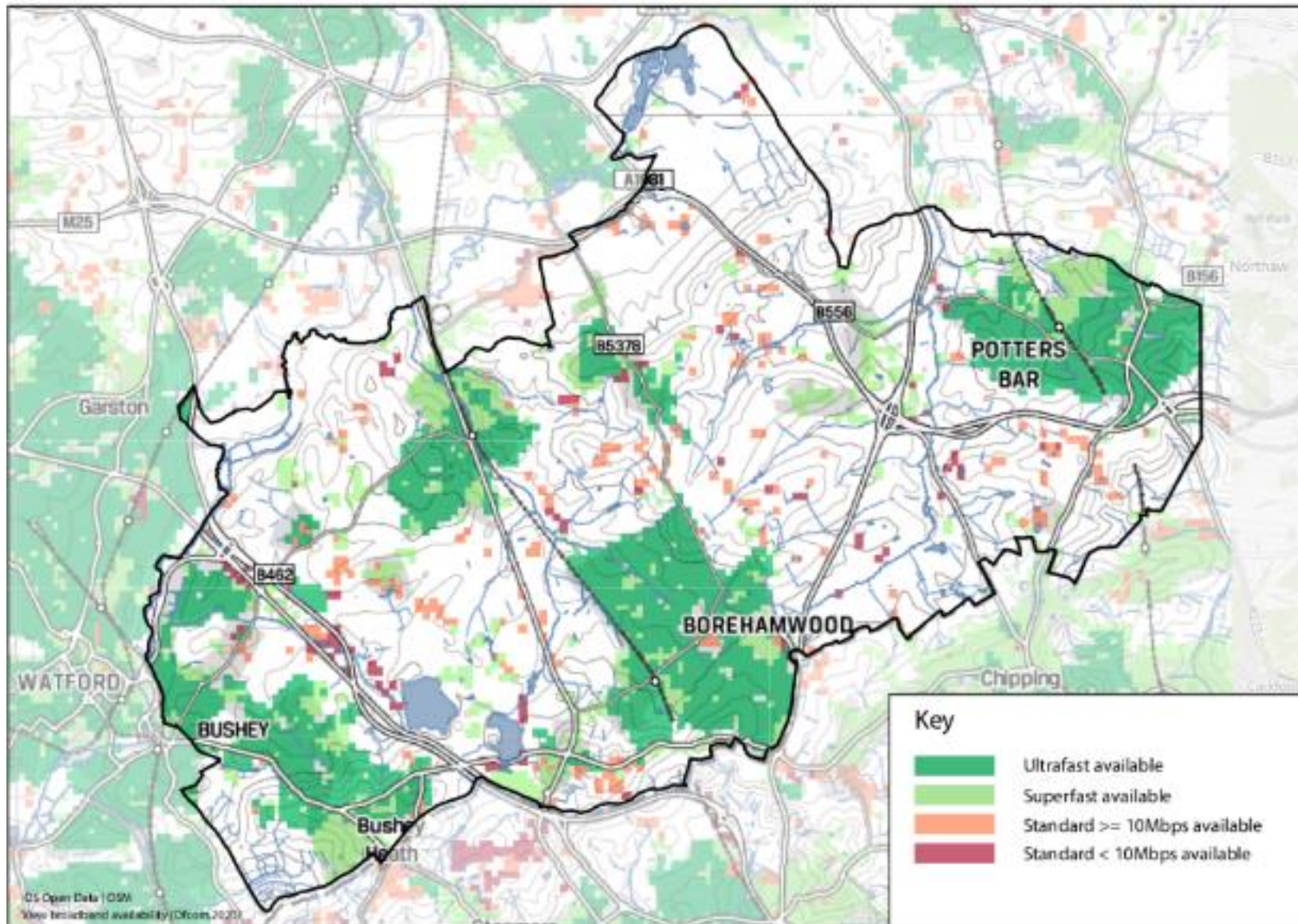


Figure 5 Hertsmere Superfast and Fibre Coverage, Think broadband

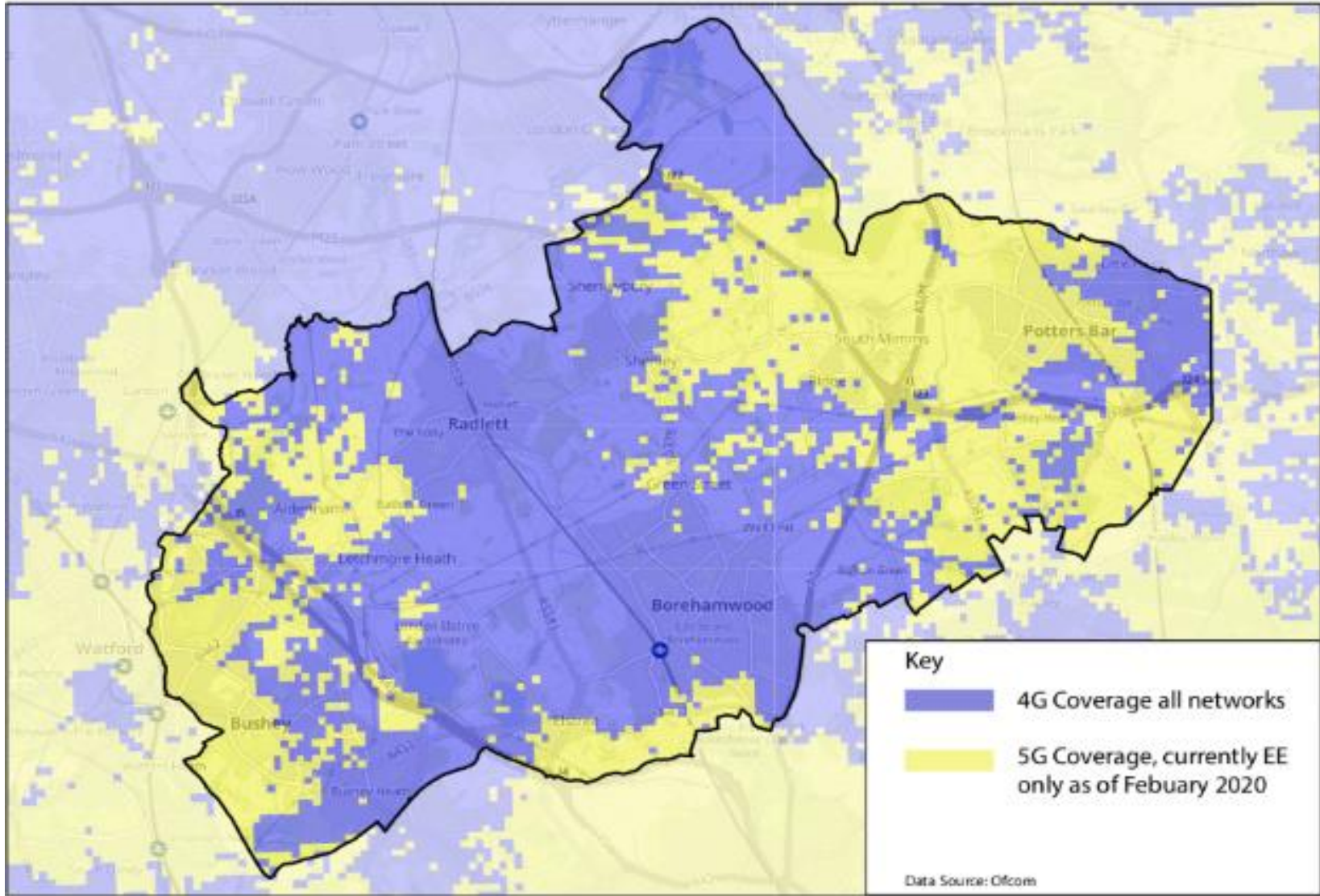


Figure 6 EE mobile communication coverage (4G and EE 5G)

4.3 Education and Social Infrastructure

4.3.1 This chapter will consider eight infrastructure types:

- Primary and Secondary Schools
- Special Educational Needs
- Further and Higher Education
- Early Years Provision
- Libraries
- Cemeteries
- Community Spaces and Halls
- Places of Worship

4.3.1 Primary and secondary schools

Policy and context

4.3.2 HCC is the local education authority and has a statutory duty to secure a sufficient supply of school places in buildings that are fit for purpose and located in a suitable area. HCC also has a part to play in that process – Paragraph 94 of the NPPF requires local authorities to take a proactive, positive and collaborative approach to meeting education requirements – and allowing development that will widen choice in education. The NPPF expects local authorities to give great weight in decision making to the need to create, expand or alter schools – and of relevance to this Infrastructure Delivery Plan, to “*work with school promoters, delivery partners and statutory bodies to identify and resolve key planning issues before applications are submitted*”.

4.3.3 Other recent legislation, notably the Academies Act 2010, has reflected the Government’s desire to develop a more diverse and more locally accountable school system, supported by a wider range of providers than in the past – particularly academy trusts and other organisational sponsors. Academies and free schools operate under a contract with the Secretary of State for Education, rather than being directly maintained and overseen by the local authority. Since the introduction of the Academies Act, approximately 16 schools in the borough have converted to academies.

4.3.4 In their role as local education authority, HCC produce forecasts every summer term to assess the demand for school places in local areas across the county. The forecasts are based on:

- How many primary school pupils are moving on to secondary schools;
- Any trends which have formed over the past few years; and
- Any known committed housing developments

4.3.5 The forecasts are set out in HCC’s Meeting Demand for School Places reports⁶⁴, which provide an overview of each primary and secondary school planning area. The reports identify where shortfalls lie across the county, with recommendations on how to resolve any issues.

⁶⁴ https://www.hertfordshire.gov.uk/services/schools-and-education/at-school/school-planning/school-planning.aspx#DynamicJumpMenuManager_1_Anchor_2

Current levels of provision

4.3.6 Table 8 shows the capacity of each school across the borough, for both Primary (blue) and Secondary (pink). We have not listed independent (private) schools.

School Planning Area	Age Group	Type	Name	Management	Capacity
Borehamwood	Primary (3-11)		Saffron Green Primary School	Local authority	240
	Primary (3-11)		Woodlands Primary School	Local authority	210
	Primary (3-11)		Kenilworth Primary School	Local authority	210
	Primary (3-11)	Faith	St Teresa's Catholic Primary School	Local authority	210
	Primary (3-11)		Parkside Community Primary School	Local authority	420
	Primary (3-11)		Meryfield Community Primary School	Academy	420
	Primary (3-11)		Cowley Hill Primary School	Local authority	406
	Primary (3-11)		Summerswood Primary School	Local authority	450
	Primary (2-11)		Monksmead School	Local authority	240
	Primary (3-11)	Faith	St Nicholas Elstree Primary School	Local authority	210
	Primary (4-11)	Faith	Yavneh Primary School	Academy	420
	Secondary (11-18)	Faith	Yavneh College	Academy	950
	Secondary (11-18)		Hertswood Academy	Academy	1861
Bushey	Primary (3-7)		Merry Hill Infant School	Local authority	180
	Primary (3-11)	Faith	Sacred Heart Catholic Primary School	Local authority	210
	Primary (7-11)		Bushey Manor Junior School	Local authority	240
	Primary (7-11)		Ashfield Junior School	Local authority	240
	Primary (4-11)		Bournehall Primary School	Local authority	240
	Primary (3-11)		Little Reddings Primary School	Academy	480
	Primary (3-11)		Highwood Primary School	Local authority	420
	Primary (4-11)		Hartsbourne Primary School	Academy	210
	Primary (3-11)		Bushey Heath Primary School	Academy	240
	Secondary (11-18)		Bushey Meads School	Academy	1100
	Secondary (11-18)		Queens' School	Academy	1750
Secondary (11-18)		The Bushey Academy	Academy	1350	
Potters Bar	Primary (4-11)	Faith	Pope Paul Rc Primary School	Local authority	210
	Primary (3-11)		Ladbroke JMI School	Local authority	203
	Primary (4-11)		The Wroxham School	Academy	210
	Primary (3-11)		Oakmere Primary School	Local authority	420
	Primary (3-11)		Cranborne Primary School	Local authority	420
	Primary (4-11)	Faith	St Giles C Of E Primary School	Local authority	105
	Secondary (11-18)		Dame Alice Owen's School	Academy	1416
	Secondary (11-18)		Mount Grace School	Academy	1074
Radlett	Primary (3-7)	Faith	St John's (CoE) Infant School	Local authority	180
	Primary (4-11)		Newberries Primary School	Local authority	210
	Primary (7-11)		Fair Field Junior School	Academy	240
	Primary (3-11)	Faith	Hertsmere Jewish Primary School	Academy	420
Shenley	Primary (3-11)	Faith	Clore Shalom School	Academy	210
	Primary (3-11)		Shenley Primary School	Local authority	315

Table 8 Hertsmere Schools

4.3.7 The maps on the following page set out the geographical distribution of existing primary and secondary schools in Hertsmere. All of the borough's major settlements have primary schools, with secondary schools in Bushey, Borehamwood and Potters Bar.

4.3.8 Primary schools in Bushey are currently over capacity, and any growth is likely to require enlargement and/or new schools. Primary schools in Potters Bar are at capacity, and as such any significant growth is similarly likely to require new primary education capacity. It should be noted that HCC's primary school place planning policy requires that school places are provided for pupils within the settlement in which new development takes place. Based on HCC's forecasts; Borehamwood, Radlett and Shenley could each accommodate several hundred homes before new capacity is required. The implications of this are considered in Section 5.2 of this document and in Part 2 of the IDP.

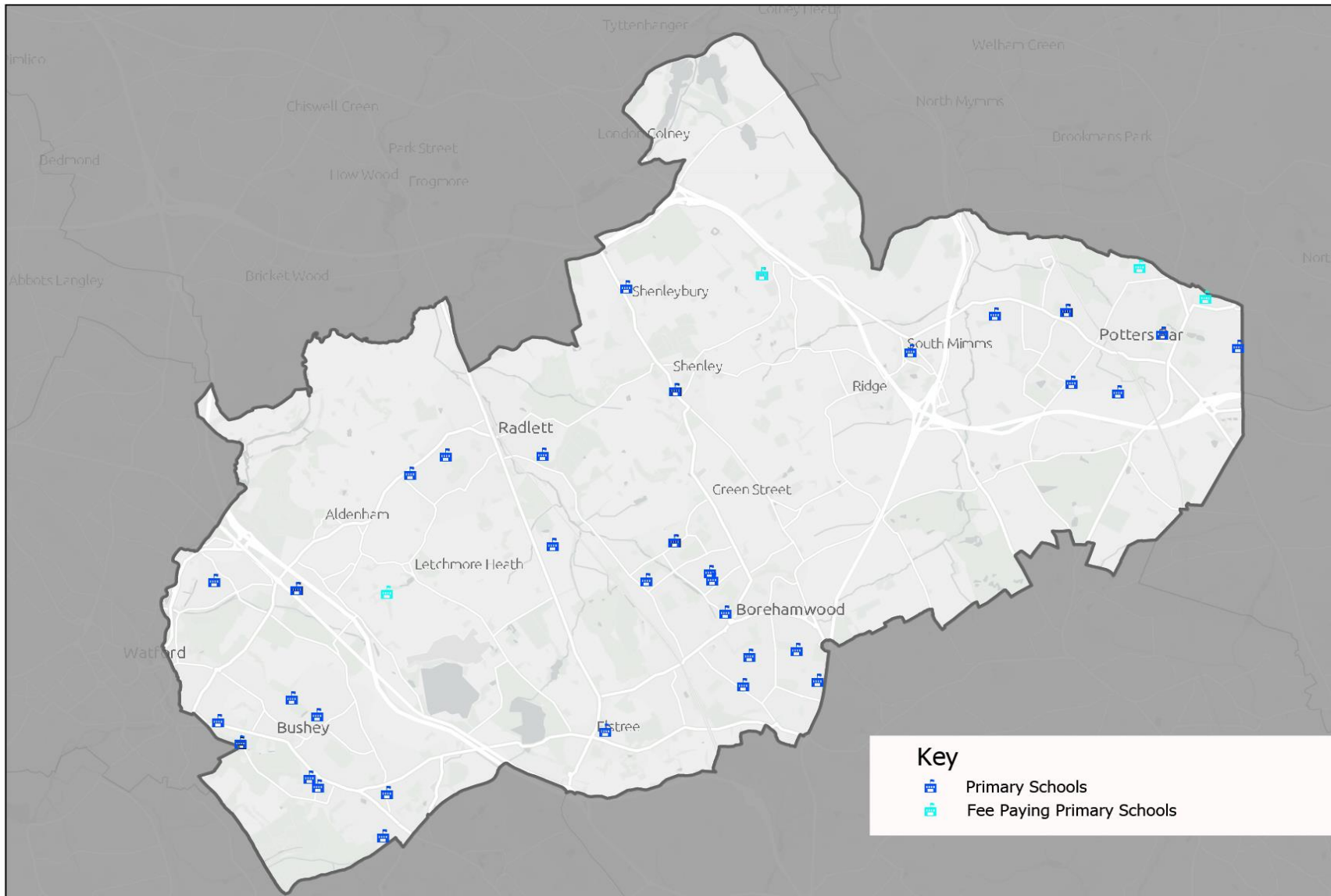


Figure 10 – Primary schools within Hertsmere

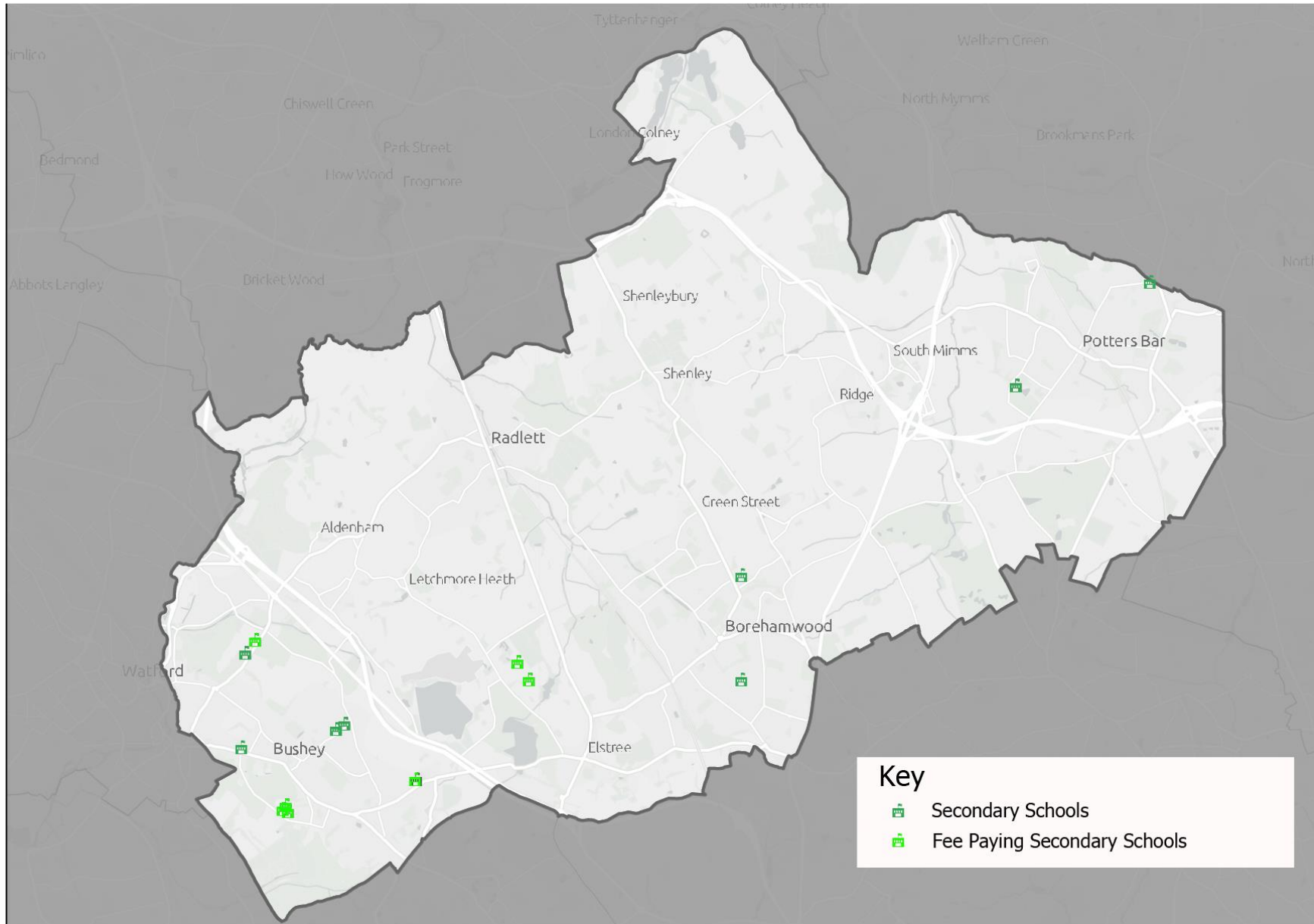


Figure 11 – Secondary schools within Hertsmere

Implications for future growth

4.3.9 The existence (or lack) of school provision within a settlement is likely to be a key factor in determining the quantum of growth that can be accommodated within it. Where capacity is constrained, consideration would be given to the potential to expand schools or the potential to deliver new schools within planned development sites in determining the quantum of growth that would be sustainable at a given settlement. The identification of an appropriate strategy to meet educational needs arising as a result of new development will play a key role in supporting the overall development strategy for the new Local Plan.

School Planning Area	Age Group	Type	Name	Capacity	Actual ⁶⁵	%
Borehamwood	Primary (3-11)		Saffron Green Primary School	240	205	85
	Primary (3-11)		Woodlands Primary School	210	230	109
	Primary (3-11)		Kenilworth Primary School	210	217	103
	Primary (3-11)	Faith	St Teresa's Catholic Primary School	210	230	109
	Primary (3-11)		Parkside Community Primary School	420	324	77
	Primary (3-11)		Meryfield Primary School	420	441	105
	Primary (3-11)		Cowley Hill Primary School	406	439	108
	Primary (3-11)		Summerswood Primary School	450	428	95
	Primary (2-11)		Monksmead School	240	261	108
	Primary (3-11)	Faith	St Nicholas Elstree Primary School	210	163	77
	Primary (4-11)	Faith	Yavneh Primary School	420	241	57
	Secondary (11-18)	Faith	Yavneh College	950	1030	108
	Secondary (11-18)		Hertswood Academy	1861	1222	65
Bushey	Primary (3-7)		Merry Hill Infant School	180	224	124
	Primary (3-11)	Faith	Sacred Heart Catholic Primary School	210	329	156
	Primary (7-11)		Bushey Manor Junior School	240	224	93
	Primary (7-11)		Ashfield Junior School	240	232	96
	Primary (4-11)		Bournehall Primary School	240	240	100
	Primary (3-11)		Little Reddings Primary School	480	309	64
	Primary (3-11)		Highwood Primary School	420	437	104
	Primary (4-11)		Hartsbourne Primary School	210	203	96
	Primary (3-11)		Bushey Heath Primary School	240	273	113
	Secondary (11-18)		Bushey Meads School	1100	1251	113
	Secondary (11-18)		Queens' School	1750	1677	96
Potters Bar	Primary (4-11)	Faith	Pope Paul Rc Primary School	210	211	100
	Primary (3-11)		Ladbroke JMI School	203	232	114
	Primary (4-11)		The Wroxham School	210	236	112
	Primary (3-11)		Oakmere Primary School	420	298	71
	Primary (3-11)		Cranborne Primary School	420	453	107
	Primary (4-11)	Faith	St Giles C Of E Primary School	105	107	102
	Secondary (11-18)		Dame Alice Owen's School	1416	1440	102
	Secondary (11-18)		Mount Grace School	1074	572	53
Radlett	Primary (3-7)	Faith	St John's (CoE) Infant School	180	202	112
	Primary (4-11)		Newberries Primary School	210	201	96
	Primary (7-11)		Fair Field Junior School	240	224	93
	Primary (3-11)	Faith	Hertsmere Jewish Primary School	420	No data	
Shenley	Primary (3-11)	Faith	Clore Shalom School	210	215	102
	Primary (3-11)		Shenley Primary School	315	229	73

Table 9 Hertsmere School Capacity and Enrolment Numbers

(Blue = Primary, Pink = Secondary. Colours in the 'Actual' column show whether schools are over/under capacity)

⁶⁵ Data accessed from Hertfordshire County Council School Directory website:

<https://www.hertfordshire.gov.uk/services/schools-and-education/schools-directory/school-directory.aspx?searchInput=&page=1&resultsPerPage=10&view=list&schoolDistrict=Hertsmere>

4.3.10 Given the difficulties in accurately reflecting cross-boundary pupil flows when assessing the requirements for schools, HCC produces its forecasts based upon needs arising within each school planning area only.

4.3.11 The Meeting Demand for School Places reports⁶⁰, produced by HCC, provides an overview of each school planning area against forecasted population growth. These are based upon levels of growth anticipated at that time within each school planning area by HCC, and therefore do not yet reflect the potential distribution of development in the emerging Local Plan. This will be explored further with HCC in Part 2 of the IDP, in response to the detailed development strategy proposed for allocation in the Local Plan.

Planning Area	Primary Demand	Secondary Demand
Borehamwood (includes Elstree)	The current forecast indicates there will be sufficient places to meet demand.	The forecast indicates a shortage of places, peaking at 3FE in 2025/26. Hertswood School attracts pupils from a wider area, including London. The planned increased capacity of 270 at Hertswood should provide sufficient places for <i>local</i> children.
Bushey	A small shortage of places is forecast in 2020/21 of 0.2 FE. The county council will work with schools to agree temporary arrangements, if needed.	The forecast indicates a shortage of places, peaking at 3.1FE in 2027/28. New provision may be required, and consideration is also being given to the capacity of existing schools to enlarge.
Potters Bar (includes South Mimms)	The current forecast indicates a 0.4 FE shortage of places in 2019/20. HCC will work with schools to agree temporary arrangements, if required.	Current forecasts show sufficient school places until 2026/27, and HCC has indicated that 4FE of pupil yield from new development can be accommodated without school expansion.
Radlett	The current forecast indicates there will be sufficient places to meet demand until 2021/22 (extent of current forecast).	<i>Included in same area as Bushey for secondary school planning.</i>
Shenley	The current forecast indicates there will be sufficient places to meet demand until 2021/22 (extent of current forecast).	<i>No secondary schools.</i>

Table 10 Demand forecast summary

4.3.12 With regard to primary school provision, the majority of school planning areas have sufficient places to meet current levels of future demand, based on natural population growth, with slight shortfalls anticipated in Bushey and Potters Bar.

4.3.13 Whilst currently, most school planning areas have sufficient secondary school provision, forecasts show that the provision will become more constrained. Because secondary school provision is planned across wider school planning areas and catchments (and is therefore less reliant on how the Council chooses to distribute new development), HCC were able to confirm during consultation that four new secondary schools will be required to accommodate the levels of growth anticipated over the new plan period – one in Borehamwood, one in Bushey, and one in the new settlement and an additional reserve site.

4.3.14 In addition to new schools, capacity may be increased by expanding existing schools. However, not all schools have the potential to expand due to site constraints. HBC undertook a desktop assessment of the schools across Hertsmere, as part of the 2018 IDP Baseline Study⁶⁶. The findings of this are repeated below for reference, and show that the majority of existing schools within the borough are considered unable to expand. The provision of new schools, potentially within new development sites, is therefore considered to be a more realistic basis for the provision of new education capacity. The Local Plan

⁶⁶ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/IDP-Stage-1-Baseline-Study.pdf>

will therefore have a key role to play by identifying new sites for schools. New schools are not only provided due to a lack of expansion options; the preferred approach to providing additional capacity will also be informed by placemaking, transport and health considerations, ensuring new communities have access to suitable local provision.

4.3.15 HCC's draft Guide to Developer Contributions¹² states that where there is considered to be insufficient capacity in local schools to cater for development, planning obligations will be sought. These obligations would help to fund the construction of new schools or expand existing school capacity.

4.3.16 A 1:500 ratio (one form of entry per 500 new homes) is assumed for the purposes of the high-level assumptions in Part 1 of the IDP, and this applies to both primary and secondary schools. More refined capacity estimates are set out within Part 2 of the IDP, based upon projections of likely dwelling types upon individual development sites. In terms of cost, the DfE has announced the 2020-21 unit funding rates for the schools, early years and central services Dedicated Schools Grant (DSG) blocks as well as provisional high needs block allocation. The updated DSG states costs for primary and secondary provision of £4,104 and £5,261 per pupil respectively⁶⁷.

Settlement	Age Group	Name	2018 HBC conclusion
Borehamwood	Primary (3-11)	Saffron Green Primary School	No expansion potential
	Primary (3-11)	Woodlands Primary School	No expansion potential
	Primary (3-11)	Kenilworth Primary School	Potential for 1FE expansion with new block on existing car park, subject to reprovision
	Primary (3-11)	St Teresa's Catholic Primary School	No expansion potential
	Primary (3-11)	Parkside Community Primary School	No expansion potential
	Primary (3-11)	Meryfield Primary School	Potential for 1FE expansion
	Primary (3-11)	Cowley Hill Primary School	No expansion potential
	Primary (3-11)	Summerswood Primary School	No expansion potential
	Primary (2-11)	Monksmead School	No expansion potential
	Primary (3-11)	St Nicholas Elstree Primary School	No expansion potential
	Primary (4-11)	Yavneh Primary School	No expansion potential
	Secondary (11-18)	Yavneh College	Unknown potential
Bushey	Secondary (11-18)	Hertswood Academy	Recently expanded. No additional land identified for further expansion
	Primary (3-7)	Merry Hill Infant School	No expansion potential
	Primary (3-11)	Sacred Heart Primary School	Potential for 0.7FE expansion
	Primary (7-11)	Bushey Manor Junior School	Not assessed
	Primary (7-11)	Ashfield Junior School	No expansion potential
	Primary (4-11)	Bournehall Primary School	No expansion potential
	Primary (3-11)	Little Reddings Primary School	No expansion potential
	Primary (3-11)	Highwood Primary School	No expansion potential
	Primary (4-11)	Hartsbourne Primary School	No expansion potential
	Primary (3-11)	Bushey Heath Primary School	No expansion potential
	Secondary (11-18)	Bushey Meads School	Site constrained by Green Belt, but proposed for removal in Local Plan
	Secondary (11-18)	Queens' School	Site constrained by Green Belt
Potters Bar	Secondary (11-18)	The Bushey Academy	Site constrained by Green Belt and conservation area
	Primary (4-11)	Pope Paul Rc Primary School	No expansion potential
	Primary (3-11)	Ladbroke JMI School	No expansion potential
	Primary (4-11)	The Wroxham School	Potential for 1FE expansion
	Primary (3-11)	Oakmere Primary School	Potential for 1FE expansion
	Primary (3-11)	Cranborne Primary School	No expansion potential
	Primary (4-11)	St Giles C Of E Primary School	No expansion potential
Secondary (11-18)	Dame Alice Owen's School	Site constrained by Green Belt	

⁶⁷ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/schools-forum/2019-meetings/november/item-2.1-schools-budget-update-2020-21-november-2019.pdf>

Settlement	Age Group	Name	2018 HBC conclusion
	Secondary (11-18)	Mount Grace School	Potential for IFE expansion, with site constraints including Flood Zone 3 and Tree Preservation Orders
Radlett	Primary (3-7)	St John's (CoE) Infant School	No expansion potential
	Primary (4-11)	Newberries Primary School	No expansion potential within existing site, however, could expand into adjacent development site
	Primary (7-11)	Fair Field Junior School	No expansion potential as infant feeder school cannot expand
	Primary (3-11)	Hertsmere Jewish Primary School	No expansion potential
Shenley	Primary (3-11)	Clore Shalom School	Not assessed
	Primary (3-11)	Shenley Primary School	No expansion potential

Table 11 HBC Assessment of existing school expansion potential

4.3.2 Special Educational Needs

Policy and Context

4.3.17 The Children and Families Act 2014 places a statutory requirement upon HCC as the appropriate body for provision in Hertsmere, to use best endeavours to secure special education provision. This includes the designation of an appropriate member of staff within a state-maintained school or nursey as a Special Education Needs and Disability (SEND) coordinator, responsible for pupils with those needs. The Equalities Act 2010 further requires that schools do not discriminate current or prospective students on grounds of their disability, and seeks to ensure that reasonable adjustments are made by education providers where possible to allow children with disabilities to participate in education.

4.3.18 The Hertfordshire Special Education Needs and Disability Five Year Strategy⁶⁸ states the following strategic objectives:

- All schools, early years settings, colleges and services provide quality provision that meets the needs of children and young people with SEND locally
- Short and long term outcomes for children and young people with SEND are improved and there is evidence of their achievements and progress socially, emotionally and academically
- Communication between the local authority, parents, children and young people, and schools, early years settings, colleges and services is good, engendering trust, confidence, respect and constructive partnership working
- Available resources are managed through a transparent approach that is fair, meets local needs and achieves best value for money
- The local authority works proactively and collaboratively with parents, young people, schools, early years settings, colleges and other partners using co- production to improve service planning, design, delivery and review.

4.3.19 In July 2018, the Department for Education launched a 'Joint special and Alternative Provision (AP) free schools' scheme. Local authorities were encouraged to submit their case for a new special or AP free school. HCC has identified the need for additional

⁶⁸ <https://www.hertfordshire.gov.uk/microsites/local-offer/media-library/documents/policies-and-procedures/send-strategy-2018-2023.pdf>

special school places to meet a gap in local provision and submitted a bid for a new special free school.

4.3.20 The Government announced that HCC was one of 39 successful local authority bids, with HCC then inviting applications from proposer groups during the next stage in the process to establish a Special Free School (Academy) through a competition.

4.3.21 It was announced in July 2020 that the winning school, James Marks Academy, will be located in Hemel Hempstead and is planned to open in September 2022.

Current levels of provision

4.3.22 There are currently three schools in the borough with SEND provision (Figure 12):

- Meadow Wood Primary School in Bushey provides a highly individual curriculum for primary age students who have physical and neurological impairments.
- Summerswood Primary School in Borehamwood, which includes a SEND unit.
- Falconer School in Bushey, which provides secondary education for students with social, emotional and mental health needs.
- Bushey Meads School in Bushey, which includes a SEND unit.



Figure 7 Hertsmere Special Educational Needs school provision

Implications for future growth

4.3.23 Given the wide area over which SEND students are catered for, the existence (or lack) of SEND school provision within a settlement is unlikely to be a key factor in determining the quantum of growth that can be accommodated within it. The key consideration regarding

SEND school provision is therefore to ensure that demands arising from new development are met.

- 4.3.24 In December 2020, HCC announced plans for four Specialist Resource Provisions (SRPs) in secondary schools, each for up to 20 pupils; and eight SRPs in primary schools, each for up to 12 pupils; providing a total of 176 places across the county. Progress has been made in identifying provision for secondary aged pupils, however further work is needed to accommodate the required primary provision. Therefore, the proposals are to proceed on a phased basis, with phase one being the implementation of the four SRPs at secondary schools, including Bushey Meads School in Bushey⁶⁹.
- 4.3.24 With regard to funding, the high needs (SEND) allocation has increased by £16m between 2019-20 and 2020-21 and stands at £130m. Though it should be noted that DfE officials have indicated that the scale of increase in the high needs block in 2020-21 should be regarded as exceptional and local authorities should not expect similar increases in future years⁶⁷.

4.3.3 Further and Higher Education

Policy and Context

- 4.3.25 Further education provision encompasses all post-school education, outside of the higher education (universities) sector. Whilst often typically thought-of as education for the 16-19 year age group, further education provision also encompasses adult and lifelong learning. It includes a diverse range of specialist, vocational and lifelong learning, from essential core skills through to highly complex technical skills. Provision is the responsibility of the Department for Education, although HCC has a local role in terms of adult education provision.
- 4.3.26 In 2015, the Government announced a rolling programme of local area reviews, covering all general further education and sixth form colleges in England. These were particularly targeted at ensuring the financial stability of colleges in the long term, their efficient operation, and ability to meet future needs (both of students themselves and employers). The review for Hertfordshire⁷⁰, published in 2017, seeks to put colleges on a stronger financial footing whilst also enabling them to better meet the economic and education needs of students and employers for the long term.
- 4.3.27 Higher education relates specifically to universities and other organisations that provide education to degree level and above. Herts AHEAD (Accessing Higher Education and Academic Development) is a collaboration between organisations in Hertfordshire that are interested in promoting access to higher and further education, including all the providers in the county. These organisations include the Hertfordshire LEP, the University of Hertfordshire and Oaklands College.
- 4.3.28 The Hertfordshire LEP is also working to increase apprenticeship opportunities across the county, offering alternatives to higher education for young adults aged 16-24.

⁶⁹ <https://www.hertfordshire.gov.uk/microsites/local-offer/education-support/education-options/increasing-specialist-provision-and-school-places-in-hertfordshire.aspx>

⁷⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/635241/Hertfordshire_Area_Review_Report_FINAL.pdf

Current levels of provision

- 4.3.29 Further education in Hertsmere is provided mostly at secondary schools across the borough, and Oaklands College recently opened in Borehamwood with a teaching space on Elstree Way⁷¹. Courses offered at this new facility will include English for speakers of other languages, business and construction. Other provision also includes Barnet and Southgate College in Barnet who run a PASE academy (a sports and education programme) in partnership with Borehamwood Football Club.
- 4.3.30 There are also a number of facilities in neighbouring districts/boroughs of Hertfordshire which are used by Hertsmere residents; including West Herts College in Watford, Hertford Regional College in Broxbourne and additional Oaklands College campuses in St Albans and Welwyn Garden City.
- 4.3.31 The current provision of higher education in Hertsmere consists of the Elstree Screen Arts in Borehamwood. Additionally, the University of Hertfordshire is located in Welwyn Hatfield and is one of the larger universities in the country, with approximately 25,000 students. Its vision is to be internationally renowned as the UK's leading business-facing university: all courses are underpinned by industry insight and 80% are accredited by professional bodies. The Royal Veterinary College is also located in Welwyn Hatfield and is the UK's oldest and largest veterinary school.

Implications for future growth

- 4.3.32 Because standalone further and higher education is delivered across a much wider area than individual settlements, the existence (or lack) of further education provision within a settlement is unlikely to be a key factor in determining whether or not growth can be accommodated. It could still inform site selection decisions when considering infrastructure provision in a settlement as a whole.
- 4.3.33 The key consideration for further and higher education provision in the context of this study is therefore to ensure that service demands arising from new development are met. This is likely to be achieved through the improvement of existing organisations and facilities, given the large size of colleges and the limited prospect that entirely new provision could be supported by new development.

4.3.4 Early Years Provision

Policy and Context

- 4.3.34 The funding for early years education is provided by central government through the Free Early Education (FEE) funding. This provides funding for all three and four year olds from the start of the next term set by the DfE following the child's third birthday. The FEE provides up to 30 hours of flexible provision per week over 38 weeks of the year. There is also some provision for children at two years old to receive 15 hours of flexible provision per week over 38 weeks of the year. This provision is subject to parents/guardians meeting certain criteria.

⁷¹ <https://www.oaklands.ac.uk/news-events/news/detail/2019/11/07/oaklands-college-launch-in-borehamwood>

- 4.3.35 Delivery of early years education provision can be through a range of providers including nurseries, pre-schools, nursery classes, nursery schools and child-minders – and all can be covered by FEE funding. These schemes were set up to achieve two broad outcomes: to improve social and educational outcomes for children; and to make childcare more affordable, enabling parents to work or increase their working hours.
- 4.3.36 HCC's role is to secure free places for all children in Hertfordshire meeting the eligibility criteria. As part of this, HCC will put in place arrangements to ensure that all providers offering free places meet the regulations set by central government and in turn receive the appropriate funding for these places, according to the national funding formula. HCC will also regularly check the eligibility of children accessing two year old free early education and 30 hours free childcare to ensure they remain eligible, and inform providers of any changes.

Current levels of provision

- 4.3.37 Early years provision in Hertsmere is delivered through private, voluntary and independent sector providers – there is no local authority-maintained early years provision within Hertsmere.
- 4.3.38 Figure 8 below sets out the geographical distribution of the day nurseries across the borough. There is a total of 20 registered day nurseries in Hertsmere, with provision in most of the major settlements. It is noticeable that there is a lack of provision of day nurseries in the South Mimms/Ridge area, and to the south of Bushey Heath.
- 4.3.39 As reported in the Hertfordshire Childcare Sufficiency Report 2019⁷², new early years provision is planned for Borehamwood, utilising the available support grants; including the childcare sufficiency grant and developer contributions grant. This new provision will increase places across all free early education and childcare schemes, offering parents a choice of provider in this area.
- 4.3.40 It should be noted that in addition to the day nurseries, there are additional registered childcare providers such as breakfast clubs, childminders, pre-schools and schools with nursery classes. This brings the total of Ofsted registered providers to 219. There is also the provision of Children's centres including the Borehamwood and Elstree Children's Centre in Borehamwood; Bushey Mill Family Centre in Bushey; Shenley Family Centre in Shenley; PB1 Family Centre in Potters Bar; and the Reddings Family Centre in Bushey.
- 4.3.41 Existing and potential new providers looking to open new provision in the county will be supported to search for appropriate venues in Borehamwood to increase capacity, particularly for two year olds.

⁷² https://fsc-hertscc.tfemagazine.co.uk/assets/1/hertfordshire_childcare_sufficiency_report.pdf

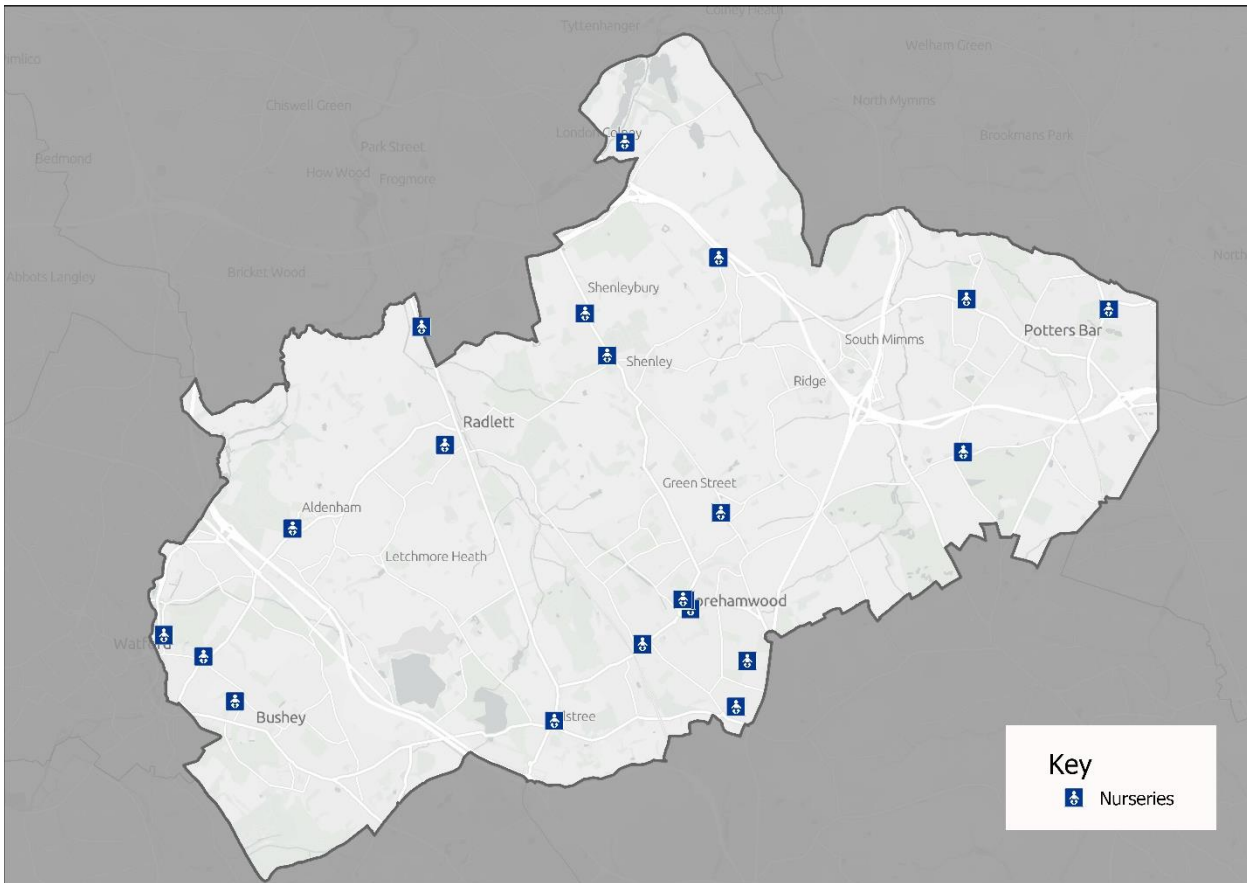


Figure 8 Locations of Day Nurseries in Hertsmere

Implications for future growth

4.3.42 The provision of early years education/care is typically bespoke and lifestyle-oriented – some residents may require early years provision close to home, whereas others may prefer having such provision close to their workplace. It is also of a much smaller scale than other forms of education provision, and therefore the existence (or lack) of early years provision within a settlement is very unlikely to be a factor in determining whether or not growth can be accommodated within it.

4.3.43 The key consideration for early years provision in the context of this study is therefore to ensure that service demands arising from new development are met. This could be provided either through the expansion of existing facilities, or entire new facilities.

4.3.5 Libraries

Policy and Context

4.3.44 In accordance with the Public Libraries and Museums Act 1964, HCC is the body with a statutory responsibility for the provision of a comprehensive and efficient library service in Hertsmere. In addition to the ‘traditional’ library function of lending books, contemporary library service provision includes other media and e-downloads – as well as the provision of physical venue spaces for community use.

4.3.45 Inspiring Libraries is HCC’s ongoing strategy for the Library Service up to 2024⁷³. The strategy sets out the vision and direction for the service over a ten-year period and provides a framework for future decisions about service priorities. The strategy includes the following aims:

- Promoting the library as a local access point for other services, whilst providing spaces for a wide range of events and activities organised and run by local residents
- Creating a sense of involvement and participation in local communities and developing the library as a viable community hub
- Supporting residents to take advantage of the opportunities provided by digital innovation
- Support small businesses and offer 24/7 access to resources, acting as a gateway to more specialised information, advice and guidance services
- Ensuring all citizens have free and equal access to books, e-books and other reading resources
- Supporting improved wellbeing by providing easy access to information and advice

4.3.46 It should be noted that in April 2020, HCC transferred the operation of the county’s libraries to Libraries for Life. This is a charitable ‘Public Service Mutual’ organisation created by HCC, able to undertake external fundraising and reduce the cost to the public purse of providing library services.

Current levels of provision

4.3.47 There are four libraries currently in Hertsmere – in Bushey, Borehamwood, Potters Bar and Radlett. The opening hours for the libraries vary slightly, from 33 to 38 hours per week, and each library is open on Saturdays.

Implications for future growth

4.3.48 Library services are provided at a relatively wide scale, and therefore the existence (or lack) of library service provision within a settlement will not be a factor in determining the location of planned growth within the borough.

4.3.49 In consultation with HCC, it was considered that no new library facilities would be required to cater for planned growth, including no new library in the new settlement. However, should it be desired, it may be possible to provide some library services through a wider integrated community hub at Bowmans Cross. Oakmere Library in Potters Bar was also identified as requiring upgrades and potential relocation to a new site. This may need to be facilitated by the Local Plan. However, HCC has identified Oakmere Library as a priority library for re-provision in Potters Bar as part of its Inspiring Libraries strategy and are actively seeking opportunities to achieve this and are open to exploring new ways of delivering the service in Potters Bar.

⁷³ <https://www.hertfordshire.gov.uk/media-library/documents/libraries/libraries-strategy-2014-2024.pdf>

4.3.6 Cemeteries and Churchyards

Policy and Context

- 4.3.50 This section analyses cemeteries and churchyards, including disused churchyards and other burial grounds. Such spaces provide somewhere for quiet contemplation, burial of the dead, wildlife conservation and promotion of biodiversity.
- 4.3.51 There is no statutory duty for HBC or any other body to provide burial space, however, authorities have legal powers to do so, and have legal duties and responsibilities to maintain existing cemeteries in good condition. There are other burial grounds available, i.e. churchyards, which are under the remit of the Church of England and subject to ecclesiastical legislation. The private sector can also play a role in the provision of bereavement services, typically through the provision of crematoria.
- 4.3.52 As burial sites have finite capacity, there is a continuous demand for more space. The Site Allocations and Development Management Policies Plan does not include any allocations for further burial facilities. However, the NPPF identifies churchyards and burial grounds as potentially acceptable uses within the Green Belt (paragraph 146).
- 4.3.53 As part of the Local Plan Evidence Base, HBC commissioned Knight, Kavanagh and Page (KKP) to undertake an Open Space Assessment⁷⁴, with the report published in July 2019. The study looks into the current provision of various sites, including cemeteries. The report also covers open space (parks and gardens, natural greenspace, etc.), which is detailed in Section 0 of this report. KKP also published an Open Space Standards Paper⁷⁵ (July 2019), which provides recommendations for future provision.

Current levels of provision

- 4.3.54 There are 11 cemeteries and churchyards identified within the borough, with a total area of 27.30ha. Bushey Jewish Cemetery, at 16.2ha, provides a large proportion of the total area and has recently been extended. Every individual cemetery has a finite capacity and therefore there is expected to be continuous future demand for more space.

Analysis Area	Number of sites	Size (ha)
Aldenham & Shenley	5	3.93
Elstree & Borehamwood	3	3.87
Bushey	2	18.07
Potters Bar	1	1.43
Hertsmere	11	27.30

Table 12 Cemeteries and churchyards in Hertsmere

- 4.3.55 As can be seen in Figure 14, only five of the eleven cemeteries are open to taking further burials. This shows that the provision is constrained, and further burial grounds will be required in future.
- 4.3.56 Of the cemeteries taking burials, it is understood that Allum Lane Cemetery will reach capacity in 2-3 years, highlighting the need for further provision. The HBC Open Space

⁷⁴ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Hertsmere-Open-Space-Assessment-Report.pdf>

⁷⁵ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Hertsmere-Standards-Paper.pdf>

Study indicates that there are no set standards for cemeteries, and that provision should be driven by the requirement for burial demand and capacity⁷¹.

Implications for future growth

4.3.57 Whilst as noted above there is no legal or statutory duty on the Council to ensure provision, which can be the responsibility of a number of providers, they are clearly of high importance. Given the nature of the use of this infrastructure type and broader geographical basis of usage, the existence (or lack) of cemetery and burial ground provision within a settlement is very unlikely to be a key factor in determining the location of planned growth. It is also noted that no standards are set for cemeteries. The need for additional cemetery provision should be driven by the requirement for burial demand and capacity.

4.3.58 Whilst there are no sites allocated for additional burial facilities in the current Local Plan, the provision of new facilities is potentially an acceptable use within the Green Belt⁷⁶. This means that there is less restriction on where cemeteries and burial grounds can be located, although there are clear efficiency gains to be achieved from extending existing provision rather than seeking new stand-alone provision. Given the identified need for expansion of cemetery provision, HBC has indicated that the new Local Plan is likely to include an allocation for the extension of the Allum Lane site.

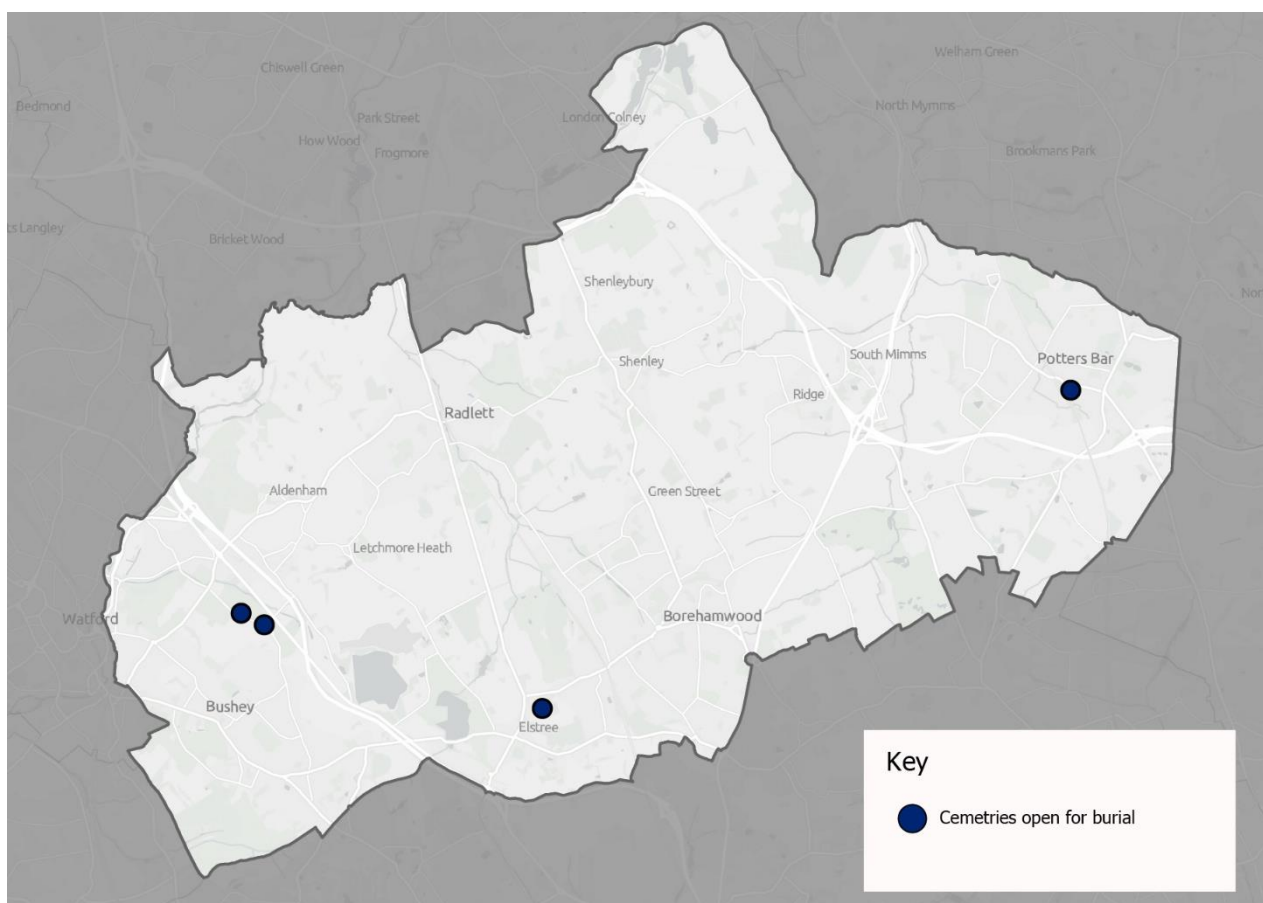


Figure 9 Hertsmere Cemeteries Open for Burial

⁷⁶ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Hertsmere-Open-Space-Study-Oct-2011.pdf>

4.3.7 Community Spaces and Halls

Policy and Context

4.3.59 Community spaces, including youth facilities, provide opportunities for young people to develop their personal and social skills. Paragraph 20 of the NPPF states that during the preparation of evidence bases and strategic policies for a Local Plan, Local Planning Authorities are required to make sufficient provision (in line with the presumption in favour of sustainable development) for community facilities.

4.3.60 The Government's Statutory Guidance for Local Authorities to Improve Young People's Well-being⁷⁷ states that local authorities are responsible for securing a local offer that is sufficient to meet local needs and improve young people's well-being and personal and social development.

4.3.61 Policy CS19 of the current Hertsmere Local Plan Core Strategy states that proposals for the provision or dual use of key community facilities will be supported.

Current levels of provision

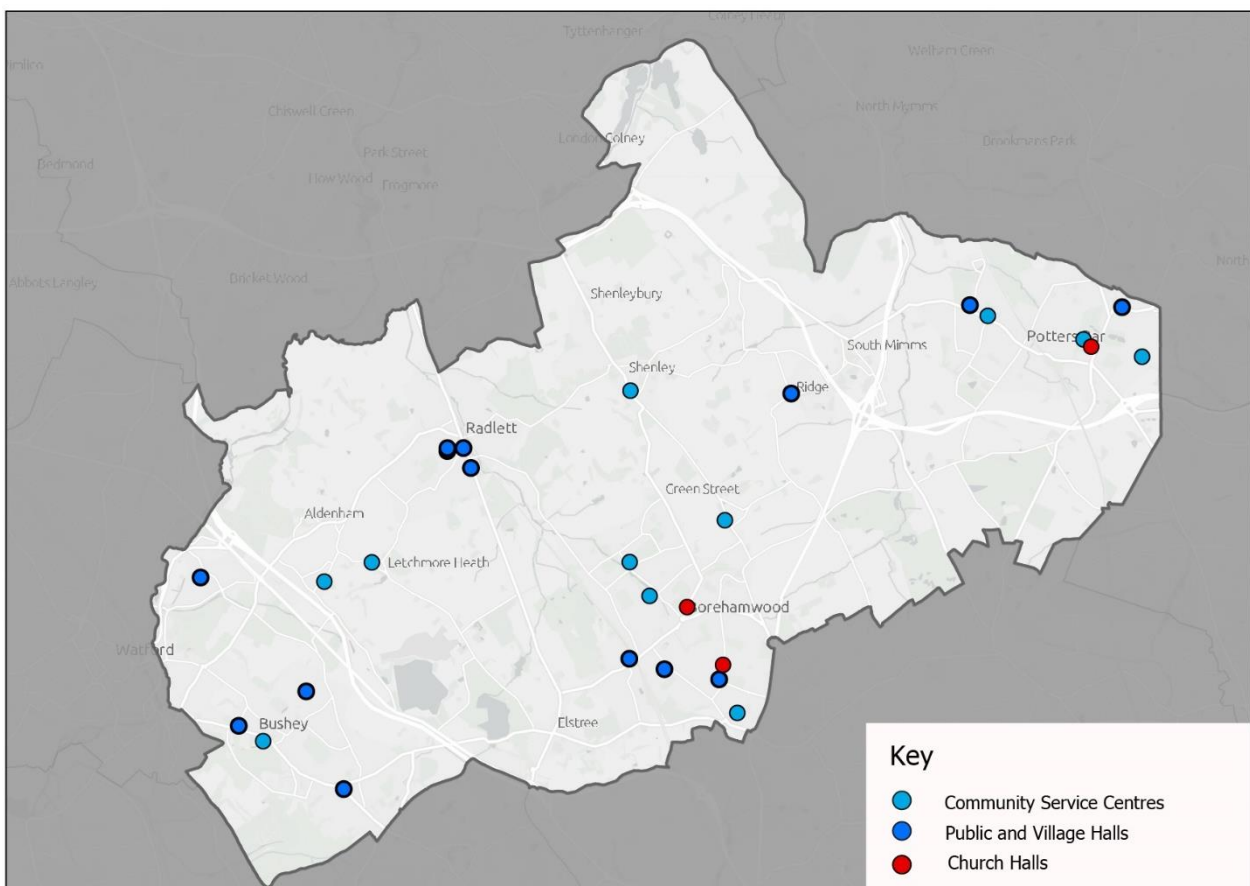


Figure 10 Hertsmere Community Facilities

4.3.62 Figure 10 above shows the location of the community facilities across the Borough, with most settlements served by multiple facilities.

⁷⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/756983/Statutory_Guidance_for_Local_Authorities_on_Services_and_Activities_to_Improve_Young_People_s_Well-being.pdf

- 4.3.63 The community facilities are owned and operated by a number of different organisations. Six of the facilities area operated by HBC directly, with a further three operated by InspireAll (formerly Hertsmere Leisure). The remaining centres owned by the council are leased to tenants who run the centres on behalf of HBC, with further privately-owned facilities across the borough.
- 4.3.64 Many of these community facilities are multi-use, such as the Community Hub at 96 Shenley Road in Borehamwood, which also houses Borehamwood Library.

Implications for future growth

- 4.3.65 It is important to ensure that existing community spaces are maintained, and improved where necessary, to provide adequate facilities for the community to use for social, cultural or recreational activities. However, the existence (or lack) of community hall provision within a settlement is very unlikely to be a key factor in determining the location of planned growth.
- 4.3.66 As there is generally a good existing level of provision across all of the borough's settlements, there is not considered to be a clear need for new facilities to be provided in connection with new developments around them. However, this would depend on the degree to which any particular settlement was increased in size by new development – community halls in Shenley and South Mimms, in which there is only a single community hall at present, could be more significantly affected in proportional terms. A more detailed study of the quality and type of community facilities provided throughout the borough may also help to provide evidence to support more targeted improvements in particular locations.
- 4.3.67 Irrespective, given its isolated location at present, it is anticipated that the new settlement will require community hall provision within it in order to meet the needs of its residents. It is recommended that the new Local Plan accommodates for this.

4.3.8 Places of Worship

Policy and Context

- 4.3.68 The NPPF recognises places of worship as contributing to health and well-being (paragraph 92). It also states that planning policies and decisions should enable the retention and development of accessible local services and community facilities, such as places of worship, to support a prosperous rural economy (paragraph 83).
- 4.3.69 Hertsmere has a diverse range of faith communities. The Hertsmere Faith Community Needs Assessment⁷⁸ established that there are ten significant types of faith in the borough and seventy individual faith groups. This includes a particularly notable Jewish population, at 14.3% of the total borough population compared to a national average of 0.5%. Whilst smaller in absolute size, the borough's Hindu population is also significantly above the national average (3.2% vs. 1.5%).

Current levels of provision

- 4.3.70 There are over 30 recognised places of worship in the borough, serving a variety of faiths and religions as indicated above. Places of worship are managed by the individual faith

⁷⁸ <https://www.hertsmere.gov.uk/Documents/11-Your-Council/Equality--Diversity/Faith-Community-Needs-Assessment.pdf>

groups, and in most cases owned by the respective religious organisations. There are some instances of faith groups leasing or renting rooms in community halls/other buildings.

Implications for future growth

4.3.71 Because the provision of places of worship is the responsibility of religious groups based upon their own needs, the provision of places of worship will not form a basis on which to determine whether particular settlements within Hertsmere are able to accommodate growth. Nevertheless, their provision is important in providing for healthy, balanced communities.

4.3.72 The Council's Needs Assessment sets out details of questionnaire responses from June 2012, which showed that there was a lack of provision of some facilities in the borough. This included a lack of dedicated mosque provision in Borehamwood meaning that the community had to meet across a number of locations. Since the Needs Assessment was undertaken it is understood that Borehamwood Islamic Society – Serving the community of Elstree & Borehamwood site has recently opened in Borehamwood (Maxwell Park), and the Council has advised that there are no known needs for bespoke places of worship amongst the borough's faith communities at this time. However, the Local Plan should offer the flexibility to provide for any needs that do arise – this could include the provision of shared community spaces that can provide sufficient facilities for worship, such as in the new settlement. Alternatively, any new accommodation for faith communities should be made available for the wider community as well.

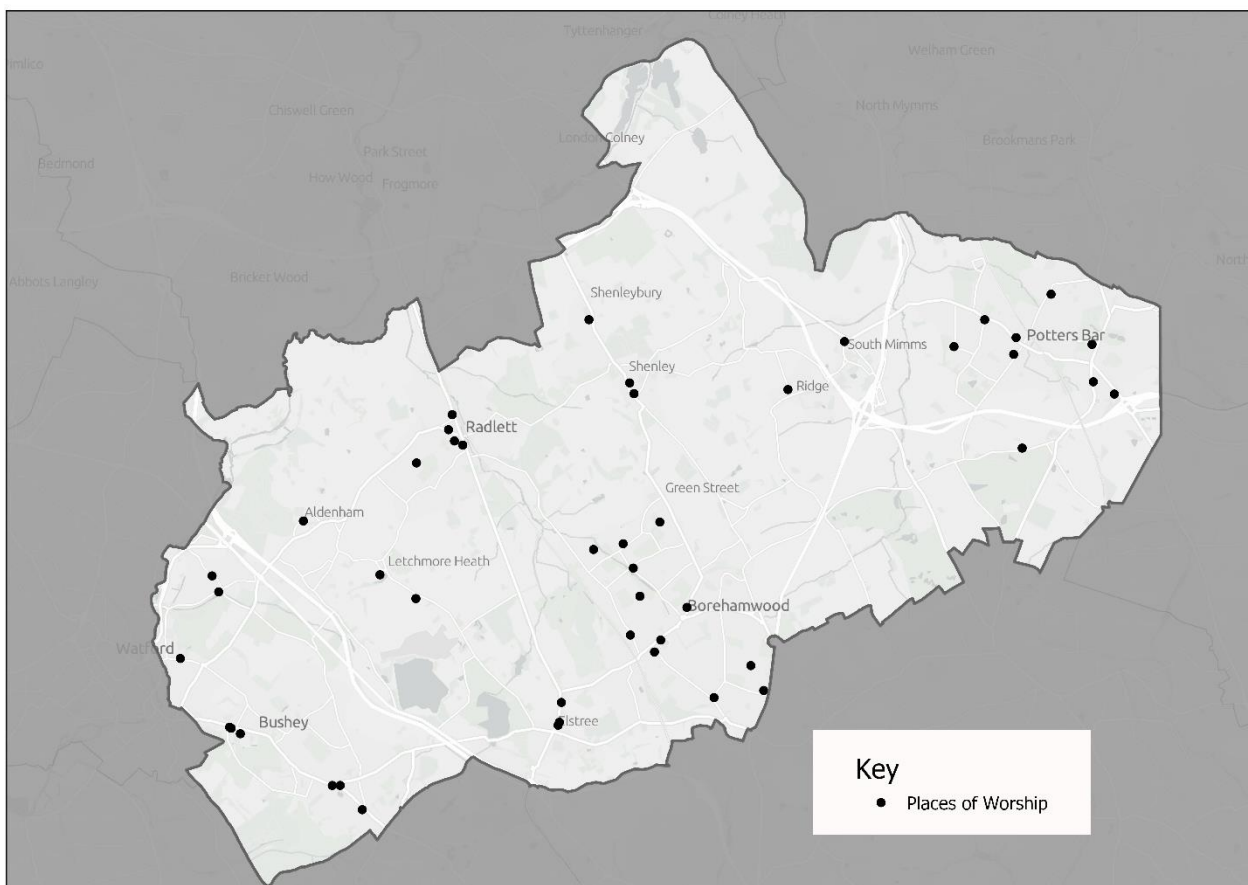


Figure 11 Hertsmere Places of Worship

4.4 Healthcare and Emergency Service Infrastructure

4.4.1 This section will consider the following healthcare and emergency service infrastructure types:

- Primary Healthcare
- Secondary Healthcare
- Social and Care Services
- Ambulance Services
- Police Services
- Fire Services

4.4.1 Primary healthcare

Policy and Context

4.4.2 Primary healthcare encompasses all day-to-day healthcare, and is generally the first port of call for an individual's healthcare needs. It principally encompasses GP and nurse provision at health surgeries. Primary healthcare provision also includes other frontline services such as pharmacists, opticians and dentists – however, because these are provided on a commercial basis in response to demand they are not covered within this Infrastructure Delivery Plan.

4.4.3 Hertsmere is served by the Herts Valley Clinical Commissioning Group which also covers Dacorum, St Albans, Three Rivers and Watford. The responsibility of the CCGs and their relationship with other governance structures is set out below:

- **Clinical Commissioning Groups** are responsible for commissioning the majority of healthcare services, including hospital care, community health services, rehabilitation services, mental health services and others.
- **NHS England** is responsible for supporting the development of the CCGs, and ensuring that they are fit for purpose. NHS England is also responsible for the provision of highly specialised services and for commissioning the contracts for a number of more centralised healthcare services.
- **Upper-tier and unitary local authorities** (i.e. Hertfordshire County Council) are now responsible for public health and wellbeing, to achieve lifestyle enhancements and behavioural change within the local community.

4.4.4 The strategic direction for primary healthcare is set out in the following documents:

4.4.5 NHS Long Term Plan 2019⁷⁹: The new Long Term Plan continues in the same vein as the General Practice Forward View, recognising the need to improve the financial sustainability of the NHS and transforming it for the future. It includes a number of key themes:

- Ensuring that patients receive joined up care in the right setting, with measures such as online GP appointments to reduce the demand on healthcare staff and physical premises;
- A greater focus on preventing illness rather than curing it, including targeting inequalities;
- Addressing modern healthcare priorities; including cancer, diabetes and mental health;

⁷⁹ <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan-june-2019.pdf>

- Tackling workforce pressure and better supporting staff;
- Upgrading the technology and digital capability of the NHS.

4.4.6 At a local level, the Herts Valley CCG's strategic direction is set out across the following:

4.4.7 Hertfordshire Health and Wellbeing Strategy 2016-2020⁸⁰: The Herts Valley CCG is a member of Hertfordshire's Health and Wellbeing Board. This Board brings together representatives from the NHS, public health, adult social care and children's services and Healthwatch Hertfordshire, to plan how best to meet the needs of Hertfordshire's population and tackle local health inequalities.

4.4.8 The strategy has been developed by the Board and is divided into four sections, each relating to one of the four major life stages identified:

- Starting well – focusing on babies and very young children, covering the ages of 0-5 years and including maternity
- Developing well – focussing on children and young people between the ages of 6-25 years
- Living & working well – covering working age adults
- Ageing well – a focus on older people, aged 65 years and above

4.4.9 Herts Valley CCG's Primary Care Implementation Plan 2016-2021⁸¹ considers the role of GPs as well as other providers like community pharmacy in delivering a more personalised and proactive model of care that builds our out-of-hospital services and helps deliver the objectives of *Your Care, Your Future* – the CCG's overarching plan to improve the health services across the area. The Implementation Plan sets out a model for primary care, with which there are a number of interventions that aim to help deliver the model. These interventions include:

- **Proactive, coordinated care:** anticipating rather than reacting to need and being accountable for overseeing care, particularly patients with long-term conditions.
- **Holistic, person-centred care:** addressing physical health, mental health and social care needs in the round and making shared decisions with patients and carers.
- **Fast, responsive access:** giving patients the confidence that they will get the right support at the right time, including much greater use of telephone, email and video consultations.
- **Health-promoting care:** intervening early to keep patients healthy and ensure timely diagnosis of illness, engaging differently with communities to improve health outcomes and reduce inequalities.
- **Consistently high quality care:** removing unwarranted variation in effectiveness, patient experience and safety in order to reduce inequalities and achieve faster uptake of the latest knowledge about best practice⁸².

Current levels of provision

4.4.10 Herts Valleys CCG covers an area with 55 GP Practices across 4 localities covering a population size of circa 661,000; Dacorum, Hertsmere, St Albans and Harpenden and

⁸⁰ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/partnerships/health-and-wellbeing-board/hertfordshire-health-and-wellbeing-strategy-2016---2020.pdf>

⁸¹ https://hertsvalleysccg.nhs.uk/application/files/2415/3960/0934/PCImplementation_Plan_final2.pdf

⁸² <https://www.hertsmere.gov.uk/Documents/05-Health--Wellbeing/Health/Health-and-wellbeing-strategy-2018-22.pdf>

Watford and Three Rivers. The number of GP Practices has reduced over the last few years through practice mergers and the closure of a practice in Dacorum.

- 4.4.11 Since 1 October 2019, the CCG has delivered additional GP and nurse appointments (extended access) in the evenings and at weekends. These services are delivered from existing GP Practices and also the Hemel Hospital Site; further utilising the existing premises infrastructure.
- 4.4.12 The CCG commissions a number of services from general practice in addition to their “core” general medical services which are all delivered at practice level from within their premises.
- 4.4.13 The NHS Long Term Plan sets out a requirement for practices to form Primary Care Networks (PCNs), to help to provide ‘critical mass’ in service provision and hence greater efficiencies. NHS England have agreed an Enhanced Service to support the formation of PCNs, additional workforce and service delivery models for the next 5 years and CCGs were required to approve all PCNs within their geographical boundary by 30 June 2019. In Herts Valleys CCG there are 16 PCNs across the four localities; each covering a population of between circa 30,000 and 76,000 patients. Five of the PCNs include surgeries within Hertsmere, as detailed in Table 13.
- 4.4.14 PCNs are expected to deliver services at scale for their registered population, whilst working collaboratively with acute, community, voluntary and social care services in order to ensure an integrated approach to patient care. This is placing increasing pressure and demand on local GP practices as more services are brought out of a secondary healthcare setting and into the community. This means that, even where some capacity exists in existing surgeries, it is likely to be taken up as a result of these shifts.

PCN Name	Practices in PCN
Hertsmere Five	<ul style="list-style-type: none"> • Red House Surgery (including branches in Shenley and Park Street*) • Grove Medical Centre, Borehamwood • Fairbrook Medical Centre, Borehamwood • Schopwick Surgery, Elstree (including branch in Bushey) • Little Bushey Surgery
Manor View Pathfinder	<ul style="list-style-type: none"> • Manor View Practice, Bushey (incl. Callowland Surgery Branch, Watford*) • Pathfinder Practice*, Watford • South Oxhey Surgery
Potters Bar Network	<ul style="list-style-type: none"> • Parkfield Medical Centre, Potters Bar • Highview Medical Centre, Potters Bar • Annandale House Surgery, Potters Bar
Attenborough and Tudor Surgery	<ul style="list-style-type: none"> • Attenborough Surgery, Bushey (including branches in Holywell* and Carpenders Park*) • Tudor Surgery*, Watford
Alliance Dacorum	<ul style="list-style-type: none"> • Coleridge Medical Centre, Hemel Hempstead* • Grovehill Medical Centre, Hemel Hempstead* • Colney Medical Centre, London Colney* • Theobald Medical Centre, Borehamwood

Table 13 Primary Care Networks in Hertsmere

- 4.4.15 It should be noted that several GP surgeries (or their branches) belonging to Hertsmere Locality PCNs are actually located outside the HBC boundary (those marked with asterisk * in the table above). This reflects the geographies and catchments in which the PCNs operate, which do not align with local authority boundaries. However, given that those other surgeries do predominantly serve residents in their immediate vicinity, we have, for

the purposes of capacity assessment in Hertsmere, excluded these practices or their branches.

4.4.16 There are 11 GP practices (13 surgery buildings) in Hertsmere. The majority of this provision is in Borehamwood, Bushey and Potters Bar. All of the practices meet a good standard as assessed by the CQC (Care Quality Commission), with one practice being rated outstanding. Whilst there will inevitably be varying experiences depending on patients' individual needs and circumstances, this is a useful proxy indicator and suggests that all of the borough's surgeries operate relatively effectively.

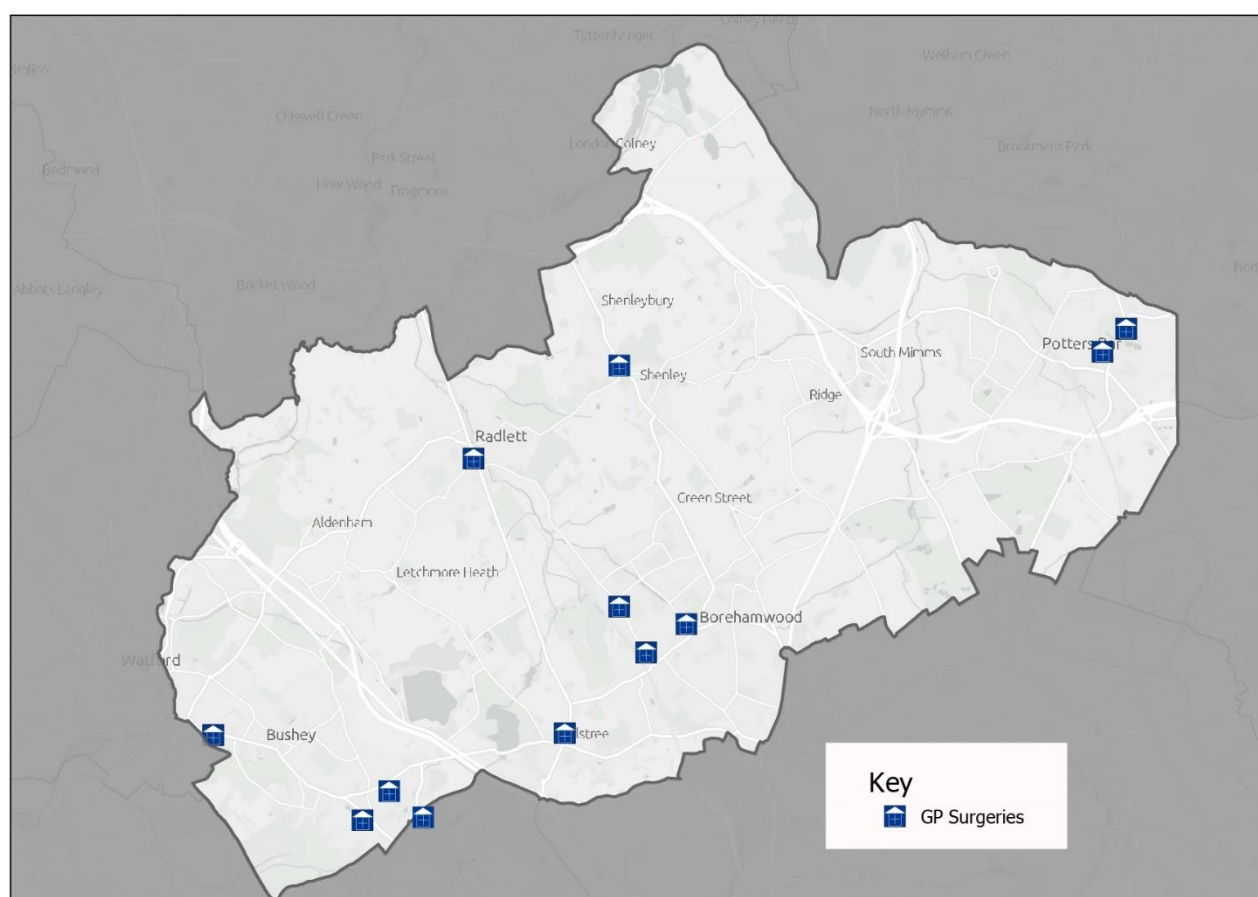


Figure 12 Hertsmere GP Surgeries

4.4.17 There are no nationally-mandated standards by which the capacities of GP surgeries are measured. The Herts Valleys CCG uses a metric of registered patients per m² of surgery net internal area (ppm²). The CCG has cautioned that this is not a definitive metric, as the true capacity can alter due to differing layouts of surgeries (e.g. how much space is actually usable), but has stated that it typically plans for 18ppm² as an ideal operating level. Currently the average capacity of surgeries across Hertsmere is at 22ppm², indicating a shortfall of provision. Table 14 below shows the constraints by surgery, relative to the 18ppm² standard.

4.4.18 Each settlement in the Borough is experiencing a shortfall of capacity, with all but one surgery experiencing capacity issues. Currently, searches are being undertaken to find appropriate sites in the existing settlements.

4.4.19 Overall, there is a physical capacity shortfall of 21,381 patient places across the borough, based on the CCG's ideal 18ppm². At almost 20% of the borough's population, this is considered to be significant. It is important to note that the 18ppm² standard is notional,

and all surgeries continue to provide effective healthcare (demonstrated by their CQC ratings). The CCG has indicated that there are sufficient numbers of GPs and practices to serve the existing population. However, the figures below demonstrate that the existing local primary healthcare provision is at best finely balanced.

Surgery Name	Settlement	Patients registered per doctor	Number of patient places above or below CCG's ideal 18ppm ² standard	
			Per surgery	Per settlement
Fairbrook Medical Centre	Borehamwood	1,820	-5,876	-7,458
Theobald Medical Centre	Borehamwood	1,554	1,044	
Grove Medical Centre	Borehamwood	3,379	-2,626	
Schopwick Surgery	Elstree	1,335	-48	-48
Parkfield Medical Centre	Potters Bar	2,091	-1,210	-2,808
Highview Medical Centre	Potters Bar	861	-695	
Annandale House Surgery	Potters Bar	2,748	-903	
Red House Surgery	Radlett	1,817	-6,085	-6,085
Gateways Surgery	Shenley	1,817	-1,663	-1,663
Bushey Surgery	Bushey	1,335	-958	-3,319
Little Bushey Surgery	Bushey	2,092	-1,416	
Manor View Practice	Bushey	1,519	-78	
Attenborough Surgery	Bushey	2,441	-867	

Table 14 Hertsmere GP Capacity levels

Implications for future growth

4.4.20 The existence (or lack) of primary healthcare is considered to be a factor which should determine the suitability of a settlement for growth, and the quantum of growth which the settlement can accommodate, without significant investment in additional capacity.

4.4.21 As stated above, the CCG consider that the existing picture of GP services provision across the borough is sufficient at the present time, but nevertheless finely balanced. Across a number of the strategies listed above, there is a desire to provide joint, whole-system services. This approach allows for further care to be provided in a single place, and could help to overcome any shortcomings in the primary healthcare service offered to residents.

4.4.22 The Herts Valley CCG has adopted the following method for calculating the premises capital impact in relation to General Medical Services (based on 1,000 dwelling example), current as of September 2020:

1,000 dwellings x 2.4 (commonly accepted occupancy factor) = 2,400 new patients

2,400 / 2,000 = 1.2 GPs (based on ratio of 2,000 patients per GP and 199m² as set out in the NHS England "Premises Principles of Best Practice Part 1 Procurement & Development")

1.2 x 199m² = 238.8 m² additional space required

238.8 x £5,410 (build costs including land, fit out and fees) = £1,291,908

*£1,291,908 / 1,000 = £1,291.98 ~ **£1,290 per dwelling***

4.4.23 It should be noted that above costs are based on a single GP practice, however, all GP surgeries vary in size. In circumstances where investments are made in larger buildings,

economies of scale can reduce the overall impact per unit as there will be some common and shared areas. Therefore, as mentioned above, for the purposes of long term planning, the CCG has adopted an alternative calculation based on 18 patients per m², which still has regard to national GMS space guidelines but also considers opportunities for economies of scale.

- 4.4.24 In consultation with the CCG, it was confirmed that there are concerns regarding the provision of primary care in some areas of Hertsmere. Additional primary healthcare provision is likely to be required to support anticipated levels of growth in Bushey, Borehamwood, and Radlett. For Bushey, the CCG stated that finding sites for new provision was proving difficult – the solution will need to be explored further as part of the Local Plan process.
- 4.4.25 In Borehamwood, two potential sites had previously been identified. The site adjacent to the Hertsmere Civic Offices is no longer being considered, with the adjacent site on the Elstree Way Corridor now being the preferred solution – although a site has yet to be secured. The CCG are in favour of creating multi-functional hub type facilities, to enable not only GPs to work within them but also mental health providers, acute care providers and district providers.
- 4.4.26 The Herts Valley CCG had noted that a new surgery (expanding an existing practice) was being built in London Colney to help with the constrained GP provision, and has now opened. The surgery has been constructed with significant spare capacity in order to future-proof it, and therefore caters for approximately a third of the residents at the new settlement – i.e. those from its early phases of development. A new health facility will be required on site to meet the needs of the remainder of the new settlement’s residents.
- 4.4.27 Given the limited capacity that GP surgeries have across the borough, it will be important that the distribution of development set out in the Local Plan is accompanied by a robust approach to planning for primary healthcare needs – both in terms of their location and size, as well as their delivery and funding. Housing growth can be an opportunity to help fund and deliver new and improved facilities.

4.4.2 Secondary Healthcare

Policy and Context

- 4.4.28 Secondary healthcare encompasses more specialist healthcare provision, with patients generally referred into secondary healthcare from an initial contact with a primary healthcare professional. By virtue of its specialised nature, secondary healthcare is generally provided on a more centralised basis. NHS Trusts – such as those responsible for running and managing individual hospitals, or the Hertfordshire Partnership NHS Trust which is responsible for providing mental health, community health and sexual health services across the county.
- 4.4.29 Much of the policy and context relevant to primary healthcare is equally relevant to current trends in secondary healthcare – notably the NHS Long Term Plan, which aims to ensure that patients are able to obtain treatment at the most appropriate level. In particular, it is seeking to relieve pressure on emergency hospital care by:

- Embedding a new Clinical Assessment Service within NHS 111, ambulance dispatch and GP out-of-hours services from 2019/20, to ensure that patients are better directed to the most appropriate destination for treatment;
- Provision of consistent levels of out-of-hospital emergency care nationwide by 2020, reducing the numbers of patients who need to attend hospital for treatment;
- Implementing new diagnostic and treatment practices, increasing the number of patients in hospitals who can be treated and discharged within the same day rather than being admitted to a hospital ward;
- Improving integration with social care providers, allowing patients requiring further care to leave the hospital environment more quickly.

4.4.30 Outside of the NHS, private healthcare providers also have a role in the delivery of secondary healthcare – and are a sector which has been thriving in the context of increasing hospital waiting times.

4.4.31 The West Hertfordshire Hospital NHS Trust was formed in April 2000 following the merger of St Albans and Hemel Hempstead NHS Trust, and Mount Vernon and Watford NHS Trust. It provides acute healthcare services to residents of West Hertfordshire, as well as a range of more specialist services to a wider population. Its three hospitals are located in Hemel Hempstead, St Albans and Watford.

Current levels of provision

4.4.32 The West Hertfordshire Hospitals NHS Trust operates three hospitals in West Hertfordshire providing the following services to the population of Hertsmerre:

- Hemel Hempstead Hospital - provides a number of services including urgent care, endoscopy, diagnostics and outpatient clinics. A small number of intermediate care beds are provided on the site as part of the community service.
- St Albans City hospital - provides elective surgery, with a minor injuries unit, an outpatients department, cancer and diagnostic services.

Watford General Hospital - provides emergency care, with accident and emergency, inpatient services, an acute admissions unit and women's and children's services, as well as a full range of outpatient and clinical support services.

(The West Hertfordshire Hospitals NHS Trust also manages day surgery cases at Potters Bar Community Hospital in Potters Bar which is an outpost of the Moorfield Eye Hospital).

4.4.33 The Care Quality Commission 2019 assessment report of the West Hertfordshire Hospitals NHS Trust⁸³ gave the overall rating for the trust of 'requires improvement'. The report identified a number of areas for improvement, and highlighted that the trust has a large backlog of maintenance and critical infrastructure improvements that are required.

4.4.34 For 2017/18, the NHS trust's maintenance backlog at £413 per square metre is higher than the national median of £186, and the Critical Infrastructure Risk at £181 per square metre is above the median of £94. The NHS trust acknowledged that strategic spending decisions

⁸³<https://www.cqc.org.uk/sites/default/files/20190221%20WHHT%20Combined%20rating%20and%20Use%20of%20Resources%20report%20%28FINAL%29.pdf>

meant that historically its estate was maintained on a reactive basis, which led to the build-up of a backlog, and that most of the estate is aged and beyond operational life.

- 4.4.35 This presents constraints in modernisation and reconfiguration of service provision. The backlog is being managed through a risk-based process of prioritisation. The report states that there is a business case being developed for a major reconfiguration and improvement of the NHS trust's estate.
- 4.4.36 Located to the south of Hertsmere, Barnet Hospital is part of the Royal Free London NHS Foundation Trust group offering a wide range of acute medical services including paediatrics, dermatology, gynaecology and orthopaedics among others. It is one of three hospitals operated by the Royal Free London NHS Foundation Trust, and serves as an option for many residents across the borough.
- 4.4.37 A Care Quality Commission in January 2019⁸⁴ found that overall, the NHS Trust, and Barnet Hospital, required improvement. The main reasons for this rating were a lack of training for staff in key skills, patient safety processes and systems were not deemed effective enough, a lack of sufficient staff numbers for services, a lack of prompt access to services when required.

Implications for future growth

- 4.4.38 Because of the county-wide and regional basis on which secondary healthcare services are provided, levels of capacity within existing provision will not form a basis on which to determine whether particular settlements within Hertsmere are able to accommodate growth.
- 4.4.39 Whilst there are well-understood challenges with secondary healthcare provision nationally, the residents of new homes within Hertsmere are reasonably likely to already live within the same hospital catchment area. The basis on which to justify contributions from developers towards secondary healthcare is therefore not always clear, and any requests for contributions should therefore be appraised on a case-by-case basis.
- 4.4.40 Central Government is funding a £590m investment to transform local secondary healthcare provision between now and 2025⁸⁵. This includes:
- The redevelopment of Watford Hospital, with a large new clinical block to replace nearly all of the existing clinical facilities on the site (a planning application has now been submitted to Watford Borough Council);
 - A new purpose-built urgent treatment and diagnostics centre at Hemel Hempstead Hospital;
 - Overhauled facilities at St Albans Hospital.

⁸⁴ https://www.cqc.org.uk/sites/default/files/new_reports/AAAJ0284.pdf

⁸⁵ <https://www.bbc.co.uk/news/uk-england-beds-bucks-herts-54373885>

4.4.3 Social and Care Services

Policy and Context

4.4.41 Adult social care provision exists to provide practical and emotional support to people in need, and allow them to continue to live an active life. There are typically three types of provision:

- Sheltered or supported housing, which provides residents with a community environment and some degree of assistance (such as wardens and community alarm access) but otherwise allows them to continue to live an independent life;
- Extra care housing which provides a more comprehensive level of on-site care and facilities such as a restaurant and hairdresser, but in which residents still live in self-contained flats or apartments;
- Care homes in which residents are provided with a higher degree of care for their day-to-day needs, in a more clinical environment with a relatively low level of independence.

4.4.42 HCC has a statutory responsibility to plan for and commission adult social care within Hertfordshire.

4.4.43 HCC published an Adult Care Services Strategy Map⁸⁶ which provides links to the various legislation, strategies and key drives of its adult care services. The Adult Care Services Three Year Plan (2018 – 2021)⁸⁷ provides an overview of HCC's vision and objectives for social care across the county, highlighting ambitions to improve in four areas:

- Information and advice – people rely on good information and advice to get help at the right time.
- Connected communities – recognising that there is a need to build strong and resilient communities.
- Valuing independence – helping people to get back on track after illness and support disabled people to be independent
- Caring well – developing services that are personalised, high quality and keep people safe and resilient

4.4.44 HCC have also provided a 15-year Plan⁸⁸ which sets out the long-term strategy and has informed the Three Year Plan.

4.4.45 HBC published a Health and Wellbeing Strategy 2018 - 2022⁷⁷: The purpose of this strategy is to set out the vision for health and wellbeing in Hertsmere, with a focus on improving health and wellbeing so that individuals and communities are able to live healthier lives. Priorities include:

- Promoting healthy weight and increase physical activity
- Improving mental health and emotional wellbeing
- Supporting the reduction of smoking, drug and alcohol misuse

⁸⁶ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/data-and-information/adult-care-services-strategy-map.pdf>

⁸⁷ <https://www.hertfordshire.gov.uk/media-library/documents/adult-social-services/acs-3-year-plan.pdf>

⁸⁸ <https://www.hertfordshire.gov.uk/Media-library/Documents/Adult-social-services/ACS-15-year-direction-2018-2033.pdf>

- Enhancing the natural environment and increase use of green space

Current levels of provision

4.4.46 The following adult care services are provided across Hertsmere:

Care homes offering accommodation and assistance with personal care, nursing care, and other support services. There are currently 30 registered care homes in Hertsmere⁸⁹.

Housing with care provides more independence than care homes, but more support than housing with support. Residents live in their own flat, with care available 24 hours a day. There are two flexicare schemes in Hertsmere:

- Fountain Court in Borehamwood – comprising 45 flats
- Bushey Flexicare in Bushey – 3 different flat complexes, comprising a total of 89 flats.

There are also sites operated by charities within the borough, including:

- Delrow Community in Patchetts Green
- Cecil Rosen Court in Bushey

Housing with support (sheltered housing) is typically provided by housing associations, consisting of flats and bungalows that are designated for those aged over 50. Some schemes have communal areas where activities such as coffee mornings are held. Personal care and support is not provided, but many properties will have an emergency pull cord system. These are provided in a wide array of locations throughout the borough.

Implications for future growth

4.4.47 By its nature, adult social care must be provided in line with new development to meet demand. This service is planned for and provided on a county-wide scale, or by charities on a more ad hoc basis. Levels of capacity within existing provision will not form a basis on which to determine whether settlements within Hertsmere are able to accommodate growth.

4.4.48 The South West Herts Local Housing Needs Assessment⁹⁰ has established levels of need for future growth in care provision within Hertsmere, as set out in Table 15. It should be noted that this covers a 2020-2036 timeframe for consistency across all South West Herts authorities, which differs slightly from the plan period. To ensure this provision, we recommend that the Local Plan sets out clear policy requirements and/or site allocations for new social care provision within the borough. Part 2 of the IDP reflects the amount of care provision which HBC proposes to allocate as such in the Local Plan.

Provision type	Current supply (2018)	2020 demand	Current shortfall	Additional demand to 2036	Shortfall to 2036
Care homes	1,039	916	-104	561	457
Housing with care	247	292	45	175	220
Housing with support	1,032	1,196	164	717	881

Table 15 Social care requirements in Hertsmere 2020-2036

⁸⁹ https://www.carehome.co.uk/care_search_results.cfm/searchunitary/Hertsmere

⁹⁰ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/LHNA-Sept-2020-PDF-8.52Mb.pdf>

4.4.49 To ensure provision for people with disabilities, the Local Housing Needs Assessment recommends that all new homes are built to comply with M4(2) Building Regulations standards for accessible and adaptable dwellings. It also recommends that – subject to viability and suitability – the Council adopts policies to seek 5% provision of open market and 10% provision of affordable dwellings to M4(3) Building Regulations standards for wheelchair accessible dwellings.

4.4.4 Ambulance Services

Policy and Context

4.4.50 Ambulance services within Hertsmere are provided by the East of England Ambulance Service NHS Trust (EEAST). EEAST provide accident and emergency transport services in Bedfordshire, Hertfordshire, Essex, Norfolk, Suffolk and Cambridgeshire. They also provide non-emergency patient transfer services. EEAST employs more than 4,000 staff members and includes over 1,500 volunteers⁹¹.

4.4.51 National policy direction for ambulance services is set out in the new NHS Long Term Plan, which recognises current challenges in ambulance resourcing brought about by delays at hospitals in handing over patients. In 2018/19 EEAST lost an average of 5,000 hours per month to handover delays⁹², equating to around 208 ambulance shifts a year.

4.4.52 In common with its emphasis for other parts of the health system, the Long Term Plan is also seeking to ensure that paramedics are less reliant on hospitals to treat their patients, with care undertaken in other settings wherever possible. This will be facilitated through national capital investment in ambulance vehicles.

4.4.53 EEAST consulted on a draft Corporate Strategy towards the end of 2019, with a view to publishing the final strategy in April 2020. The draft Corporate Strategy⁹³ sets out the priorities for the EEAST have set for the next two years. Underpinning these priorities is a Trust Recovery Plan, which is yet to be compiled, and they include a priority to develop the infrastructure (including Digital, Estates and Fleet) to ensure that the service is fit for the future and supports the delivery of the strategic aims and long term plan vision.

Current levels of provision

4.4.54 EEAST has one station within Hertsmere, which is situated in the centre of Borehamwood.

4.4.55 The Care Quality Commission (CQC) undertook an inspection of EEAST in 2019, and found that overall the service “Requires Improvement”. The accompanying report⁹⁴ stated that the services did not have enough staff to care for patients and keep them safe despite a recent focus on recruitment and retention.

4.4.56 In the EEAST Annual Report 2018/19, many of the services performance indicators do not currently meet national standards. The report highlights a number of improvements that can be made to reach national standards:

- Recruitment and growth of the clinical workforce;
- Delivery of the building better rotas project, designed to improve the ratio of double staffed ambulances over conventional fast response cars;

⁹¹ <https://www.eeastamb.nhs.uk/about-us/>

⁹² <https://www.eeastamb.nhs.uk/Governance/reports/EEAST%20-%20Annual%20Report%202018-19.pdf>

⁹³ <https://www.eeastamb.nhs.uk/about-us/our-corporate-strategy.htm>

⁹⁴ <https://www.cqc.org.uk/provider/RYC/inspection-summary#overall>

- Improved productivity of the vehicles to increase the number of patients that the trust is able to see with the resources that are available.

4.4.57 The draft EEAST Corporate Strategy highlights a need to further develop infrastructure. Whilst there are no specific details or interventions included in the strategy, this indicates that the trust acknowledge that improvements are required.

Implications for future growth

4.4.58 Because of the regional basis on which ambulance services are provided, levels of capacity within existing provision will not form a basis on which to determine whether particular settlements within Hertsmere are able to accommodate growth.

4.4.59 As indicated in the draft EEAST Corporate Strategy, improvements to the ambulance service infrastructure are required, and these could potentially be funded through development brought forward throughout the plan period. However, there are not understood to be any specific requirements within Hertsmere at the present time.

4.4.5 Police Services

Policy and Context

4.4.60 Policing for Hertsmere is provided by the Hertfordshire Constabulary, under the direction of the Police and Crime Commissioner (PCC) for Hertfordshire. Key priorities for the PCC are set out in The Community Safety and Criminal Justice Plan for Hertfordshire 2019 – 2024⁹⁵. The plan focuses on protecting local policing, and increasing officer numbers. Locally, the Hertsmere Community Safety Partnership (CSP) is a strategic partnership, working to reduce crime and offending in accordance with the Crime and Disorder Act, 1988, Police Reform and Social Responsibility Act, 2011 and the Anti-social Behaviour, Crime and Policing Act 2014.

4.4.61 The Hertsmere CSP comprises representatives from borough and county councils, as well as the Herts Valley CCG and other community groups. The Hertsmere CSP has developed a Partnership Plan⁹⁶ which highlights the priorities for the plan period:

- To create safer environments by tackling crime and anti-social behaviour
- To reduce harm caused by drugs and alcohol
- To build community confidence and increase feelings of safety

Current levels of provision

4.4.62 The main base for policing of the Hertsmere Community Safety Partnership (CSP) is a combined Intervention and Safer Neighbourhood Team base located within the Civic Offices of Hertsmere Borough Council in Borehamwood. This is supported by ‘drop in’ offices located in Bushey and Potters Bar. Furthermore, the CSP is reliant on force wide resources such as the Force Control Room, Custody provision (located in Hatfield and Stevenage), and the Major Crime Unit.

4.4.63 In consultation with the Hertfordshire Constabulary, it was noted that due to limited existing police service accommodation within the borough, any significant uplift in police

⁹⁵ <https://www.hertscommissioner.org/fluidcms/files/files/pdf/Police-and-Crime-Plan/109614-Herts-Con-Everybodys-Business-v2.pdf>

⁹⁶ <https://www.hertsmere.gov.uk/Documents/03-Community/Community-Safety/CSP-partnership-plan-2016-2020-FINAL.pdf>

officer numbers will result in a need to identify additional accommodation. Despite this, there are no current plans to provide additional policing in Hertsmere.

Implications for future growth

- 4.4.64 Because of the county-wide basis on which police services are provided, levels of capacity within existing provision will not form a basis on which to determine whether particular settlements within Hertsmere are able to accommodate growth.
- 4.4.65 During consultation with the Hertfordshire Constabulary, it was highlighted that due to the limited accommodation within the CSP, any significant uplift in police officer numbers will result in a need to identify additional accommodation.
- 4.4.66 Assuming a growth of circa 13,000 homes will generate a population of approximately 30,000 residents, an additional 41 officers and 17 police support staff (58 total staff) will be required. Hertfordshire Constabulary noted that there is insufficient accommodation within the existing Hertsmere Civic Office Police Station to accommodate an increase in officer numbers of this scale. Using the average floor space per FTE, Hertfordshire Constabulary have estimated that the planned level of growth would require an additional 673m² of accommodation. This could either be accommodated by expanding the existing Hertsmere Civic Office Police Station in Borehamwood, or by building a new facility.
- 4.4.67 There are instances across Hertfordshire of funding for new police services coming through S106 agreements, such as a police post built at East Herts College in Turnford.

4.4.6 Fire Services

Policy and Context

- 4.4.68 The Hertfordshire Fire and Rescue Service (HFRS) is the provider of fire and rescue services for Hertfordshire, and is part of the Community Protection Directorate of HCC.
- 4.4.69 The Fire and Rescue Service National Framework⁹⁷ sets out priorities that all fire services must undertake, including understanding foreseeable risk; making provision for fire prevention; collaboration with other emergency services and partner organisations; ensuring accountability to communities; and develop and maintaining a workforce that is professional, resilient, skilled, flexible and diverse.
- 4.4.70 The Hertfordshire FRS Integrated Risk Management Plan (IRMP)⁹⁸ sets out the plans to develop the service from 2019-2023. This plan includes seven proposals for the service, including actively seeking opportunities to relocate fire resources to the most appropriate locations in order to reflect changes in demography, demand and infrastructure growth.

Current levels of provision

- 4.4.71 There are currently two fire stations in Hertsmere, in Borehamwood and Potters Bar, with a further 27 across Hertfordshire. There are nearby stations in St Albans, Garston and Watford which also serve parts of Hertsmere.
- 4.4.72 Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) conduct annual inspections of services across the UK. The 2018/19 inspection of

⁹⁷ <https://www.gov.uk/government/publications/fire-and-rescue-national-framework-for-england--2>

⁹⁸ <https://www.hertfordshire.gov.uk/services/fire-and-rescue/about-the-fire-service/community-protection-directorate-corporate-plan-2013-18.aspx>

Hertfordshire FRS⁹⁹ found that the service ‘requires improvement’ in each of the three categories (effectiveness, efficiency, and people). It is understood that this rating is in part due to the fact that the Hertfordshire FRS IRMP required updating, which has subsequently been published.

4.4.73 The inspection showed that the proportion of firefighters in Hertfordshire (0.5 firefighters per 1,000 population) is marginally below the national average (0.6), as of March 2018.

Implications for future growth

4.4.74 Because of the country-wide basis on which fire services are provided, levels of capacity within existing provision will not form a basis on which to determine whether particular settlements within Hertsmere are able to accommodate growth.

4.4.75 Whilst the HMICFRS inspection of HFRS concluded that the service required improvement, there is no indication that the improvement requirements include new infrastructure. However, it is understood that HFRS is considering the potential to relocate Potters Bar Fire Station.. The delivery of this could potentially be facilitated through the Local Plan, for which further engagement with HFRS by the Council would be required – it is understood that a location in the vicinity of South Mimms (to provide easy access to the M25 and A1(M) is likely to be preferred.

⁹⁹ <https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/hertfordshire-fire-and-rescue-service-report-2018-19.pdf>

4.5 Leisure and Green Infrastructure

4.5.1 This section considers all forms of open space and recreation within Hertsmere. These forms of infrastructure are highly valued and play a key role in the borough's sense of place and identity and promoting the health and wellbeing of the borough's residents.

4.5.2 This section will consider the following open space and recreation infrastructure types:

- Formal Parks and Gardens;
- Natural Green Space;
- Provision for Children and Young People;
- Indoor Sports Provision;
- Outdoor Sports Provision;
- Allotments.

4.5.3 At a national level, the NPPF seeks to promote healthy and safe communities. Paragraph 92 states:

'to provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should plan positively for the provision and use of shared spaces, community facilities (...sports venues, open space, cultural buildings...) and other local services to enhance the sustainability of communities and residential environments'

4.5.4 This proves the important role that open space and recreation can contribute in fostering a sense of community and place throughout HBC. The NPPF provides protection to open space and recreational uses in Paragraph 97, outlining that:

'Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:

- *An assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or*
- *The loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or*
- *The development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use'*

4.5.5 The HBC Core Strategy reinforces this priority through Policy CS15 (Promoting recreational access to open spaces and the countryside) which states that HBC will:

'work with its partners and relevant agencies to safeguard, enhance and facilitate access to parks, open spaces, rural visitor attractions and to the wider local countryside.'

4.5.1 Formal Parks and Gardens

Policy and Context

4.5.6 This section analyses formal parks and gardens throughout the Borough, covering district and urban parks and formal gardens, which provide accessible high-quality opportunities for informal recreation and community events.

- 4.5.7 HBC have produced a number of management plans and greenspace action plans for their parks and open spaces¹⁰⁰, which are used to identify future aims and objectives including maintenance standards and improvements.
- 4.5.8 As part of the Local Plan Evidence Base, HBC commissioned KKP to undertake an Open Space Assessment⁷⁴, with the report published in July 2019. The report identifies standards for the provision of parks and gardens, provided by Fields in Trust (FIT), with the guideline quantity standard of 0.80ha per 1,000 population.
- 4.5.9 KKP also published an Open Space Standards Paper⁷⁵ (July 2019), which provides additional information on open spaces in Hertsmere, and provides recommendations for future provision.

Current levels of provision

- 4.5.10 Within the Borough there are a variety of types of formal parks and gardens. The KKP Open Space Assessment identifies nine in total, as shown in Table 16 below.

Analysis area	Number	Size (ha)	Current provision (ha per 1,000 population)
Aldenham & Shenley	2	10.34	0.68
Elstree & Borehamwood	2	75.31	1.94
Bushey	3	9.63	0.36
Potters Bar	2	14.19	0.62
Hertsmere	9	109.47	1.05

Table 16 Hertsmere Parks and Gardens

- 4.5.11 Across the borough, the current provision of Parks and Gardens is 1.05ha per 1,000 residents, which exceeds the FIT standard of 0.80ha.
- 4.5.12 However, provision is concentrated in Elstree & Borehamwood, predominantly due to Aldenham Country Park (68ha), shown in Figure 13 (reference 151).
- 4.5.13 As can be seen, the more densely populated areas of Elstree & Borehamwood fall outside of the catchment area of the Aldenham Country Park, meaning that it is only easily accessible via car. Omitting Aldenham Country Park from the figures significantly reduces the provision rate for both the Elstree & Borehamwood Analysis Area (0.17 hectares per 1,000 residents), and Hertsmere as a whole (0.39 hectares per 1,000 residents). This highlights that at an area level, there are shortfalls in formal park and garden provision for much of Hertsmere. However, the KKP Open Space Standards Paper indicates that the ‘gaps’ in provision, where the more densely populated areas of Hertsmere are not within the parks and gardens 710m catchment areas, are nevertheless relatively well served by other informal open space such as Kenilworth Park in Borehamwood.
- 4.5.14 The KKP Open Space Assessment report includes an assessment of quality for parks and gardens, stating that all park and gardens across Hertsmere score above the threshold for quality and are well maintained attractive sites, offering a range of amenities and facilities. Six of the nine parks in Hertsmere are Green Flag Award sites, adding value to the parks.

¹⁰⁰ <https://www.hertsmere.gov.uk/Parks-and-Leisure/Parks--Open-Spaces/Improving-our-parks/Management-plans-and-park-leaflets.aspx>

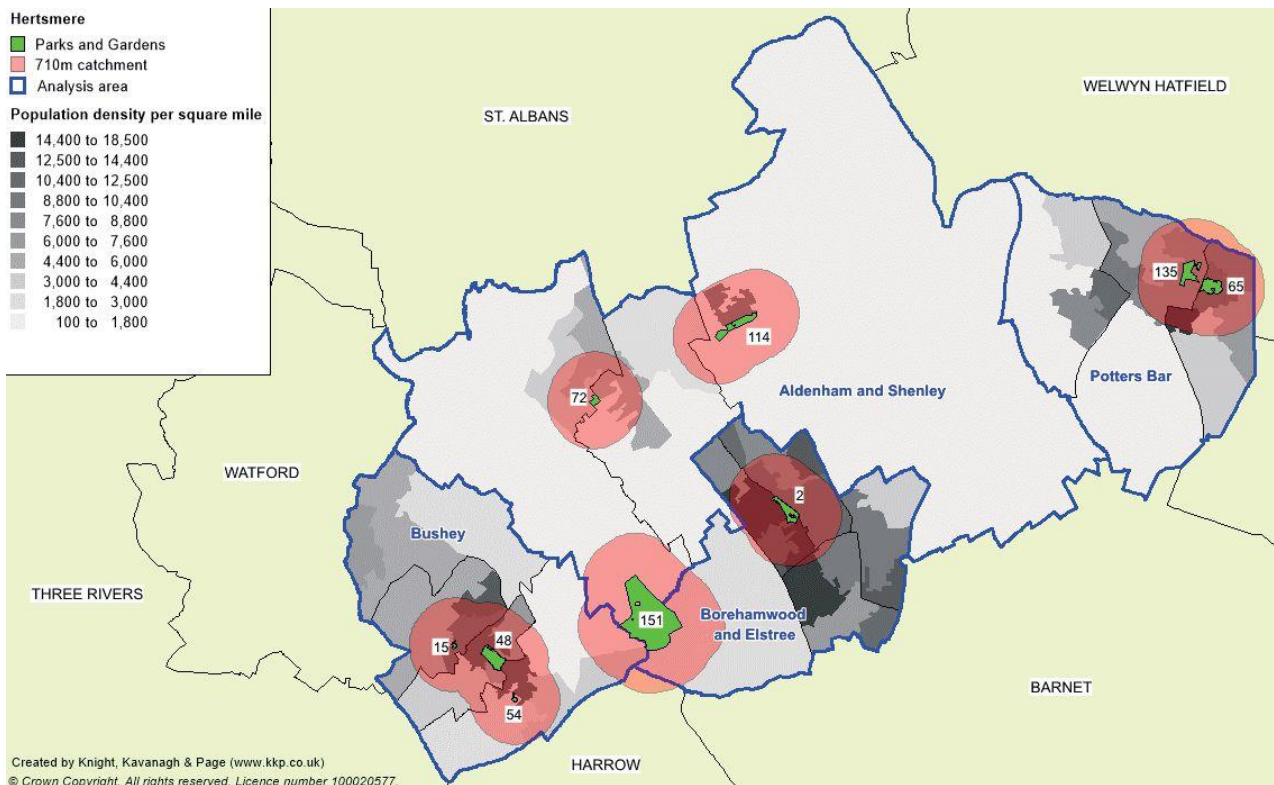


Figure 13: Hertsmere Parks and Gardens (extract from KKP Open Space Assessment 2019)

Implications for future growth

4.5.15 Overall, the quality of the existing parks and gardens is of a good standard. However, given the lack of access for a large proportion of Hertsmere’s residents, further park and garden provision would be required in order to meet the FIT standard at an area level. As noted above, the KKP study indicates that more informal open space provision partly helps to overcome this shortfall. However, it also notes the value of the multipurpose offer and facilities within formal parks and gardens and benefits of these being integrated into people’s day-to-day lives. Opportunities for new and improved formal park and garden provision should therefore be encouraged through new development.

4.5.16 The KKP Open Space Standards Paper sets thresholds for triggering the need for ‘on-site’ provision from new developments. It states that if the provision of parks and gardens required to serve new development (calculated using the FIT standard of 0.8ha per 1,000 residents) falls below 2ha total, it should be provided off-site. Therefore, any development that increases population by more than 2,500 (typically around 1,000 dwellings) would need to include on-site park and garden provision.

4.5.2 Natural Green Space

Policy and Context

4.5.17 This section covers publicly accessible woodlands, urban forestry, scrub, grasslands (for example down lands, commons, meadows), wetlands, open and running water and wastelands. These sites are important for wildlife conservation, biodiversity, for environmental and education awareness, and providing accessible open spaces for people

to engage with nature. Policy CS15 in the Hertsmere Core Strategy 2013 sets out the Council’s commitment to promote access to open spaces and the countryside.

4.5.18 The FIT quantity standard for natural and semi-natural greenspace is 1.80 hectares per 1,000 population, and this standard has been used to calculate the provision within the KKP Open Space Assessment.

Current levels of provision

4.5.19 The KKP Open Space Assessment identifies this open space typology as ‘Natural and semi-natural open space’ and identifies 22 sites across Hertsmere totalling 81.41ha, as shown in Table 17 below. The largest semi-natural greenspace site is Parkfields (including Allum Lane Spinney) at 20ha, accounting for 25% of the total provision across Hertsmere.

Area	Area (ha)	Number	Hectares per thousand population
Aldenham & Shenley	10.23	8	0.67
Elstree & Borehamwood	39.59	5	1.02
Bushey	22.01	7	0.82
Potters Bar	9.57	2	0.42
Hertsmere	81.41	22	0.78

Table 15 Natural and Semi-natural Green Space provision in Hertsmere

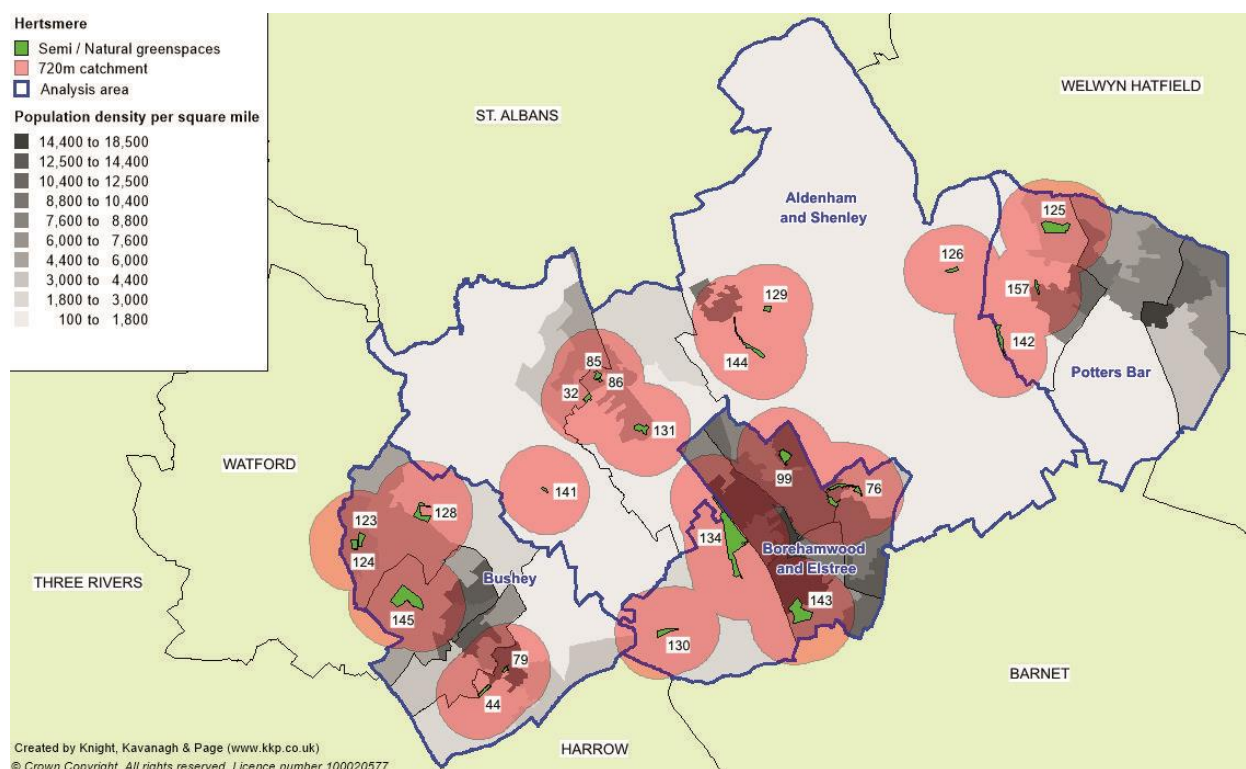


Figure 14: Hertsmere Semi/Natural Greenspaces (extract from KKP Open Space Assessment 2019)

4.5.20 Each of the analysis areas fall short of the FIT standard of 1.80ha per thousand population, showing a considerable shortfall of natural and semi-natural greenspace provision across Hertsmere.

4.5.21 Figure 14 shows the catchment area of each of the natural and semi-natural greenspaces in Hertsmere, calculated using the FIT recommended accessibility standard of 720m. As can

be seen, the more densely populated areas of Potters Bar and Bushey do not fall within these catchment areas, showing a lack of accessibility for a significant proportion of residents. However, proximity to natural green space is generally within the FIT threshold for residents of Borehamwood.

4.5.22 The KKP Open Space Assessment provides details of the quality of each site, stating that 6 of the 22 sites (27%) rate below the threshold set for quality. All sites scoring below the threshold for quality tend to be devoid of basic ancillary features such as benches and bins. However, it should be noted that due to the nature of this type of green infrastructure, this could reflect the more natural habitat-oriented nature of some sites.

Implications for future growth

4.5.23 Overall, the provision of natural open space in Hertsmere falls short of the FIT standard of 1.80ha per 1,000 residents. To meet this standard, there would need to be a further 106ha in total across the borough – or just over 1 square km. The catchment areas shown in *Figure 14* indicate that the areas most in need of natural open space are Potters Bar (particularly the eastern side), south-east Borehamwood and south-east Bushey. New development in the vicinity of these areas could help to address these deficits in provision.

4.5.24 The KKP Open Space Standards Paper calculates the thresholds for triggering the need for ‘on-site’ provision from new developments. It is considered that if the provision of natural and semi-natural greenspaces required due to new development (calculated using the FIT standard of 1.80ha per 1,000 residents) falls below 0.4ha total, it should be provided off-site. Therefore, any development that increases population by more than 222 (or around 100 new dwellings) would need to include on-site natural green space provision.

4.5.25 As Hertsmere is a CIL charging authority any future growth within the Borough would result in funding potentially being made available for the protection and enhancement of Natural Green Space through its inclusion in Hertsmere’s Infrastructure Funding Statement. Section 106 can also be used to secure funding if development is zero CIL rated, or not liable for CIL. This funding will help to maintain the quality of provision within the borough and where possible enhance it.

4.5.3 Provision for Children and Young People

Policy and Context

4.5.26 This typology includes areas designated primarily for play and social interaction involving children and young people, such as equipped play spaces, ball courts and skateboard areas.

4.5.27 There are three categories of provision, as promoted by FIT¹⁰¹:

- Local Areas for Play (LAPs) – aimed at very young children;
- Local Equipped Area for Play (LEAPs) – aimed at children who can go out to play independently; and
- Neighbourhood Equipped Area for Play (NEAPs) – aimed at older children and young people.

¹⁰¹ <http://www.fieldsintrust.org/Upload/file/guidance/Guidance-for-Outdoor-Sport-and-Play-England-Apr18.pdf>

4.5.28 There are no set national standards for the provision of children’s play space, though the FIT standards are widely considered to an acceptable basis for assessment and policy formulation, and formed the basis of the KKP Open Space Assessment. The FIT recommended standard of provision is 0.25 hectares of play space per 1,000 population.

Current levels of provision

4.5.29 There is a total of 53 sites in Hertsmere identified as provision for children and young people, totalling 5ha. Half of these sites are located in Elstree & Borehamwood.

Analysis area	Number	Size(ha)	Current provision (ha per 1,000 population)
Aldenham & Shenley	12	1.63	0.11
Elstree & Borehamwood	27	2.41	0.06
Bushey	8	1.04	0.04
Potters Bar	6	0.72	0.03
Hertsmere	53	5.80	0.06

Table 18 Hertsmere's Provision for Children and Young People

4.5.30 The current level of provision within the district is substantially less than the FIT standard (0.25ha) with an average provision through the borough of just 0.06ha per 1,000 population. The highest-level of provision is in Aldenham & Shenley, although this is still less than 50% of the FIT standard.

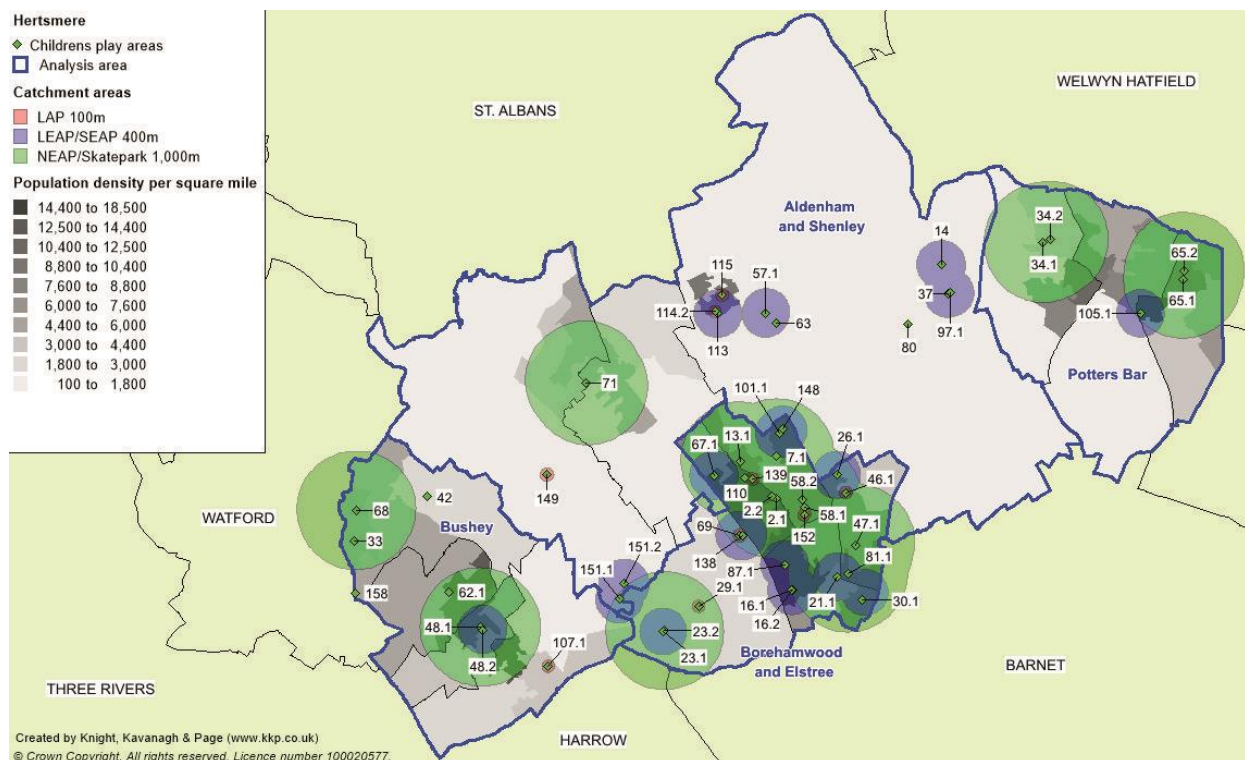


Figure 15: Hertsmere Children’s Play Areas (extract from KKP Open Space Study 2019)

Implications for future growth

4.5.31 Though the provision for children and young people falls significantly below the FIT standard, most of the more populated areas of Hertsmere have access to at least one play area. The most noticeable gaps are in central Bushey and areas of Potters Bar. Other settlements, such as Radlett and Borehamwood, fall mostly within catchment areas for play

spaces, though it should be noted that the number of play spaces does not serve the current population. In order for the provision across Hertsmere to achieve the FIT standard, an additional 19.8ha of LAPs, LEAPs and NEAPs (based on the current population).

4.5.32 The KKP Open Space Standards Paper provides indicative ‘triggers’ for the provision of play spaces required on-site, rather than contributions to provision off-site:

- Any development that increases population by 40 or more (approximately 15-20 dwellings), requires an on-site LAP.
- Any development that increases population by 160 (approximately 60-70 dwellings) or more, requires an on-site LEAP.
- Any development that increases population by 400 (approximately 150 dwellings) or more, requires an on-site NEAP, or equivalent.

4.5.33 These standards should be considered in the development of new sites, as this would lead to a requirement for numerous new play spaces.

4.5.4 Indoor Sports Provision

Policy and Context

4.5.34 The provision of indoor sporting facilities is not a statutory service that local authorities are required to provide, though it is clear from the wording of the NPPF that provision must still be ensured through the plan-making process for sports and leisure facilities:

“8. Promoting healthy and safe communities :c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.”

4.5.35 To be able to deliver this requirement it is important to establish what current provision is available in the Borough and how any future growth will impact access to current provision.

4.5.36 HBC commissioned KKP to undertake a Leisure Facilities Needs Assessment (LFNA) (May 2019)¹⁰², for the period 2018-2036. The report provides recommendations which are drawn from an Indoor Facilities Needs Assessment (IFNA)¹⁰³ undertaken by KKP for Hertsmere, Three Rivers and Dacorum.

4.5.37 For the purposes of this infrastructure baseline capacity study, we will only be assessing sports halls and swimming pools in detail, though it should be noted that the LFNA and IFNA cover a number of additional facilities, and we have extracted any key shortfalls in these in our analysis.

¹⁰² <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Final-Hertsmere-Strategy.pdf>

¹⁰³ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/3-003-1819-Hertsmere-Indoor-Needs-Assessment-v2.pdf>

Current levels of provision

4.5.38 There are 29 sports halls across 20 sites in Hertsmere, as shown in *Figure 16* below. 11 of the sports halls are located on school sites, which generally means that there are limitations to the accessibility of these facilities, especially during the day. Residents of Borehamwood do not have day access to a sports hall, as the four sites shown are all located on educational sites.

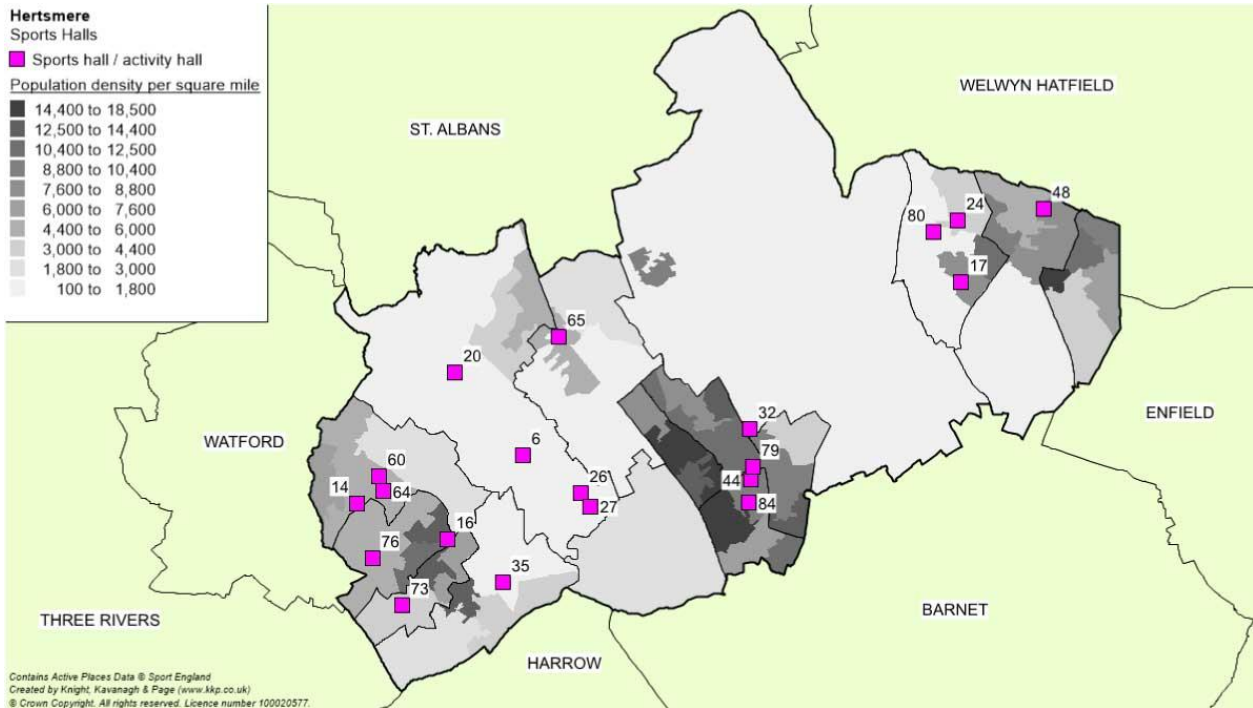


Figure 16 All identified sports halls in Hertsmere (KKP Indoor Needs Assessment 2019)

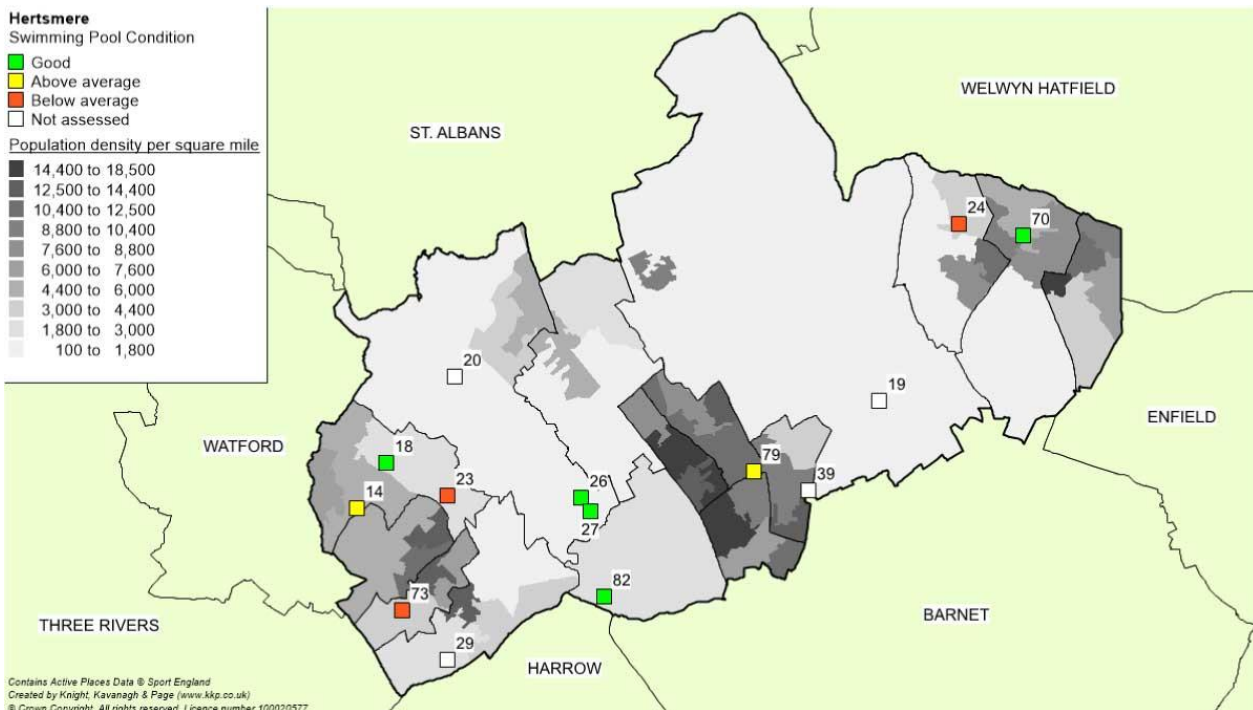


Figure 17 All Hertsmere swimming pools by condition (KKP Indoor Needs Assessment 2019)

4.5.39 There are 18 swimming pools in Hertsmere, located across 14 sites. *Figure 17* shows the location of the swimming pools, indicating their quality. Unmet demand is relatively low, though the KKP LFNA identifies a hotspot of unmet demand within Borehamwood. This is understood to be the equivalent of a small learner pool and suggests that there is no requirement for further pool provision in Borehamwood at this time.

4.5.40 On review of the KKP Leisure Facility Strategy it is clear that there are some indoor leisure provisions that are in need of additional capacity. One example of this is the possible future need of a dedicated gymnastics centre. What is also clear is that there is need for investment in the swimming facilities in borough that have been identified as being below average in the KKP report. In order to ensure the efficient provision of indoor sports infrastructure, it would also be beneficial to ensure that facilities in any new schools linked to new development sites provide some form of community access, helping to increase provision through the borough.

Implications for future growth

4.5.41 The KKP LFNA found that the current level of sports hall provision is adequate for the existing population, with spare capacity at present. There are also a number of methods to deal with future demand beyond the current capacity that could be explored if required, including entering into community usage agreements with sports hall operators on educational and private sites.

4.5.42 As indicated above, whilst there is a small unmet demand for a swimming pool in Borehamwood, this does not present a significant shortfall of provision. As a result, the KKP study does not explicitly recommend a need for a new swimming pool to be provided. However, it does identify specific issues with the quality of provision at Furzefield Leisure Centre in Potters Bar.

Facility Type/Details	Area (m2)	Capital Cost (£)
Affordable Sports Halls		
1 Court (18m x 10m)	382	725,000
2 Court (18m x 17m)	515	825,000
4 Court (34.5m x 20m)	1,532	2,410,000
5 Court (40.6m x 21.35m)	1,722	2,610,000
6 Court (34.5m x 27m)	1,773	2,645,000
8 Court (40m x 34.5m)	2,240	3,345,000
10 Court (40.6m x 42.7m)	2,725	3,975,000
12 Court (60m x 34.5m)	3,064	4,380,000
Affordable Community Swimming Pools		
25m Pool 4 Lane (25m x 8.5m)	1,084	3,755,000
25m Pool 5 Lane (25m x 10.5m)	1,344	4,545,000
25m Pool 6 Lane (25m x 12.5m)	1,543	4,935,000
25m Pool 6 Lane (25m x 12.5) plus secondary pool (13m x 7m)	1,850	5,880,000
25m Pool 8 Lane (25m x 17m)	1,878	5,945,000
25m Pool 8 Lane (25m x 17m) plus secondary pool (17m x 7m)	2,226	6,825,000

Table 19 Indicated costs for new facilities

- 4.5.43 The KKP study identifies a potential unmet need for gymnastics provision. Whilst this could be accommodated through expansions to existing leisure facilities in the borough, the study recommends consideration as to whether a dedicated gymnastics centre could be provided.
- 4.5.44 The indicative costs in Table 19 are taken from the KKP LFNA, and shows the indicative capital costs of providing new facilities. These costs will be used to calculate the funding requirements to meet the indoor sport requirements through the Plan period, should a need arise.

4.5.5 Outdoor Sports Provision

Policy and context

- 4.5.45 It is clear from the wording of the National Planning Policy Framework that playing fields should be protected. If a playing pitch is proposed to be disposed one of three criteria above need to be met. Paragraph 74 of the Framework states: ‘Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:
- An assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
 - The loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
 - The development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.
- 4.5.46 The protection afforded to playing fields by way of paragraph 74 of the NPPF shows a clear commitment from Government that Local Planning Authorities should protect where possible playing pitches and where not possible look to replace that provision elsewhere.

Current levels of provision

- 4.5.47 It is clear from the KKP Playing Pitch Strategy and Action Plan 2019¹⁰⁴ that there is an overall good supply of playing pitches within Hertsmere. However, there are some challenges for particular sport and pitch types:
- 3G pitches – Based upon the number of existing sports teams, sufficient capacity exists within the Aldenham/Shenley and Elstree/Borehamwood analysis areas. However, there is a shortfall of three 3G pitches within Bushey, and one 3G pitch within Potters Bar.
 - Football – There are current and future shortfalls across youth 11v11, youth 9v9 and mini 7v7 pitch formats with spare capacity showing on adult and mini 5v5 pitches.
 - Cricket – There is spare capacity at peak time (Saturday) within most analysis areas, but the pitches in Elstree/Borehamwood are considered to be overplayed.

¹⁰⁴ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Hertsmere-PPS-Strategy-Action-Plan-FINAL-V3.pdf>

- Athletics – Although no dedicated athletics facilities exist within the borough, no demand is expressed for the creation of such provision. Facilities within neighbouring authority areas are considered close enough to absorb any demand.
- Tennis – There is generally a sufficient supply of courts around the borough. Whilst those at Radlett Lawn Tennis & Squash Club have been identified as over-played, planning permission exists to install floodlights on several of these courts which should alleviate this concern.
- Golf – The quality and quantity of courses throughout the borough is considered to be good, and falling demand has resulted in recent golf club closures in Bushey and Potters Bar. The diversity of services offered by clubs is identified as a potential area for improvement, with potential for more informal FootGolf or pitch and putt course.

Implications for future growth

4.5.48 Any future growth within the Borough will have to look to address the current deficits in the provision of outdoor sports pitches. Currently, the main deficits are football pitches, particularly those for youth, and 3G pitches in Potters Bar and Bushey. A number of sites have the potential to accommodate further pitches if required.

4.5.49 Table 20 shows sites which have been identified in the KKP Playing Pitch Strategy, and could help to increase the capacity of accessible football pitches across Hertsmere. An additional 10 match equivalent sessions could be provided without the need for entirely new facilities.

Site name	Current pitches	Site potential	Additional capacity created (match equivalent sessions)
Aycliffe Sports Ground	1 x adult	2 x adult	1
		1 x youth 9x9	1
		1 x mini 7x7	1
Meadow Park	1 x adult	2 x adult	1
Tempsford Park	1 x adult	1 x adult	1
		1 x youth 9v9	1
		3 x mini 7x7	3
Kenilworth	-	1 x youth 11v11	1
Total			10

Table 20 Potential additional football pitches at existing sites

4.5.50 In addition, there are a number existing facilities across the borough that are not accessible to the public, due to them being located at either schools or private gyms.

4.5.51 For example, the KKP Playing Pitch Strategy found that there is a total of 173 grass football pitches within Hertsmere across 52 sites, of which only 82 pitches are available for community use across 27 sites. Securing community use agreements may help to increase the levels of provision across the borough.

4.5.52 As HBC is a CIL charging authority, funding for the creation of new provision or the expansion of existing provision will be possible through its inclusion on Hertsmere's Infrastructure Funding Statement. Development of 5 or less dwellings may still be required to make Section 106 contribution to make the development acceptable. It is also clear that any future development proposed on existing playing pitches will be resisted by Sports England without adequate replacements being provided.

4.5.6 Allotments

Policy and Context

4.5.53 The provision of allotments provides the opportunity for those people who wish to do so to grow their own produce. This helps to promote the long-term aims of sustainability, health and social inclusion. Allotment provision may include shared ‘urban farms’, but excludes the growing of produce in private gardens. The provision of allotments has a number of benefits:

- Giving people the option to access fresh and local produce;
- Providing opportunities to grow food organically;
- Allowing people to know if chemicals are being used;
- Encouraging more active lifestyles;
- Assisting with the weekly finances;
- Helping children to learn about the environment; and
- Reducing transportation of food products.

4.5.54 The provision of allotments is as statutory service that the local authority must provide under the 1908 Small Holdings and Allotments Act. The provision of allotments is also provided for and protected within planning policy ‘CS19 Key community facilities and CS18 Access to services’ through the Hertsmere Local Plan (2012-2027).

4.5.55 The National Society of Allotment and Leisure Gardeners (NSALG) suggests a national standard of 20 allotments per 1,000 households (20 per 2,000 people based on two people per house or one per 100 people). This equates to 0.25 hectares per 1,000 residents based on an average plot-size of 250 square metres (0.025 hectares per plot).

Current levels of provision

4.5.56 There is a total of 13 allotment sites across Hertsmere, totalling 18.66ha. As can be seen in Table 21, the current average provision of allotments in Hertsmere is 0.18ha per 1,000 residents. This is 0.07ha below the NSALG recommended standard, equating to a shortfall of 7.3ha across the borough. The majority of this shortfall is in the Elstree & Borehamwood analysis area, which only has 0.09ha of allotments per 1,000 residents, which equates to a shortfall of 16.6ha.

Area	Number of sites	Size (ha)	Current provision (ha per 1,000 population)
Aldenham & Shenley	4	4.35	0.28
Elstree & Borehamwood	3	3.65	0.09
Bushey	3	5.82	0.22
Potters Bar	3	4.84	0.21
Hertsmere	13	18.66	0.18

Table 21 Allotment provision in Hertsmere

4.5.57 The KKP Open Space Assessment provides further details of the allotments, and assesses the quality, stating that half of the allotments in Hertsmere fall below the quality standard and are identified as having in general poorer maintenance levels and fewer features.

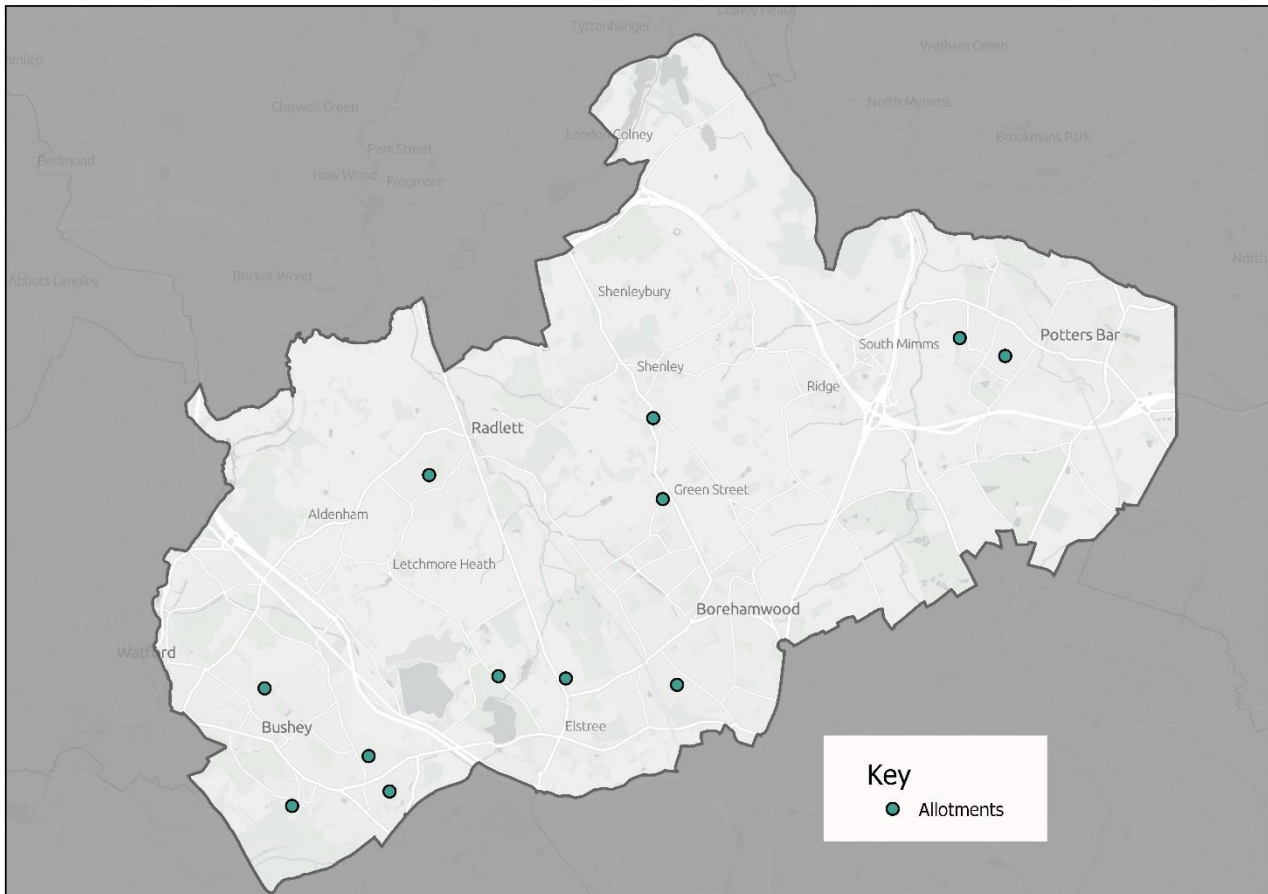


Figure 18 Allotments within Hertsmere

Implications for future growth

4.5.58 All the major settlements in Hertsmere have access to allotments, but it is clear that there is a shortfall in capacity, particularly in Borehamwood.

4.5.59 In addition to the existing shortfall, the KKP Open Space Standards Paper calculates the thresholds for triggering the need for ‘on-site’ provision from new developments. It is considered that if the provision of allotments required due to new development (calculated using the FIT standard of 0.25ha per 1,000 residents) falls below 0.4ha total, it should be provided off-site. Therefore, any development that increases population by more than 1,600 would need to include on-site allotment provision.

4.5.60 With provision within the borough already being below the NSALG guidelines it will be crucial to secure additional allotment land either through S106 agreements or through developers providing provision on site.

5 Baseline Infrastructure Capacity Findings

5.1 Boroughwide Baseline Infrastructure Capacity Summary

5.1.1 The previous chapter of this report has set out the policy and context, baseline levels of provision and implications for future growth across five infrastructure categories and 30 individual infrastructure types.

5.1.2 Based upon the Implications for Future Growth conclusions throughout Chapter 4, we have sought to categorise each infrastructure type into one of four categories. This will help to inform the Council's selection of sites to progress into the next stage of the Local Plan and Part 2 of the IDP:

- Linked to location of growth, and constrained
- Could affect location of growth, but not significantly constrained
- Will not affect location of growth, but constrained
- Will not affect location of growth, and not significantly constrained

Infrastructure Type	Relevance to growth conclusions
Highways	Linked to location of growth, and constrained
Rail	Linked to location of growth, and constrained
Bus	Could affect location of growth, but not significantly constrained
Active travel	Will not affect location of growth, but constrained
Gas supply	Could affect location of growth, but not significantly constrained
Electricity supply	Linked to location of growth, and constrained
Water supply	Could affect location of growth, but not significantly constrained
Sewerage	Could affect location of growth, but not significantly constrained
Flood management	Could affect location of growth, but not significantly constrained
Waste management	Will not affect location of growth, but constrained
Digital infrastructure	Will not affect location of growth, and not significantly constrained
Primary and secondary schools	Linked to location of growth, and constrained
Special educational needs	Will not affect location of growth, but constrained
Further education	Will not affect location of growth, and not significantly constrained
Libraries	Will not affect location of growth, and not significantly constrained
Cemeteries	Will not affect location of growth, but constrained
Community spaces and halls	Will not affect location of growth, and not significantly constrained
Places of worship	Will not affect location of growth, and not significantly constrained
Primary healthcare	Linked to location of growth, and constrained
Secondary healthcare	Will not affect location of growth, but constrained
Social and care services	Will not affect location of growth, but constrained
Ambulance services	Will not affect location of growth, and not significantly constrained
Police services	Will not affect location of growth, but constrained
Fire and rescue services	Will not affect location of growth, but constrained
Formal parks and gardens	Will not affect location of growth, but constrained
Natural green space	Will not affect location of growth, but constrained
Provision for children and young people	Will not affect location of growth, but constrained
Indoor sports provision	Will not affect location of growth, and not significantly constrained
Outdoor sports provision	Will not affect location of growth, but constrained
Allotments	Will not affect location of growth, and not significantly constrained

Table 22 Growth implications for the IDP, by infrastructure type

- 5.1.3 Of these infrastructure types, there are five areas where our discussions with infrastructure providers and neighbouring local authorities have drawn out particular challenges in terms of meeting future demand at a strategic, boroughwide level. Details of how these issues and challenges will be addressed are provided in part 2 of the IDP:
- 5.1.4 **Transport** – Whilst increased highway traffic levels are anticipated throughout the plan period, Hertfordshire County Council does not anticipate a need for significant highway capacity improvements within Hertsmere. HCC’s Strategic Growth and Transport Plans are focussed on achieving modal shift, primarily through bus service improvements and the provision of better infrastructure for active travel. Whilst this is a positive approach and would bring significant sustainability benefits, it will not be easy to achieve against a backdrop of issues such as declining public funding support for bus services. New development within Hertsmere will need to be located in the most sustainable locations, or in locations which can be made sustainable through appropriate infrastructure provision, and appropriate resourcing and attention to delivery will be needed from responsible authorities to ensure that this strategy is achievable. Individual schemes will additionally need to fund interventions linked to additional demand they create.
- 5.1.5 **Electricity supply** – There are varying degrees of constraint within the borough’s electricity supply network, and new development in most locations will need to be supported by new localised substation improvements. However, more strategic-level improvements will also be required – UK Power Networks has indicated a need for to enhance the capacity of Potters Bar’s main substation to accommodate future needs. However, this would not necessarily solely serve Potters Bar, and would need to be planned for having regard to all planned development and costs attributed equitably.
- 5.1.6 **Water supply** – There are known issues with water stress and over-abstraction within Hertfordshire, particularly from ecologically-sensitive chalk streams. Given the age of the Hertfordshire Water Study, at the time of writing these are not fully understood. The implications of the most recent growth quantum for authorities across Hertfordshire are also not yet fully modelled. It therefore remains difficult to conclude on the implications of growth on water supply, and this will be a focus for ongoing plan-making in the short term.
- 5.1.7 **Schools** – Hertfordshire County Council (as the local education authority) has indicated that four new secondary schools will be needed within Hertsmere to support growth throughout the plan period – one in Borehamwood, one in Bushey, and at least one (with a reserve site for a second if needed) in the new settlement. These will serve needs arising across the borough as part of a wider adjustment of catchments between existing secondary schools, and therefore need to be approached on a comprehensive basis. Given challenges identified by HCC in finding suitable sites for all types of school within Hertsmere (both primary and secondary), the Local Plan will need to assist in identifying locations and allocating land.
- 5.1.8 **Primary healthcare** – Whilst all of the borough’s existing general practice surgeries have been graded by the Care Quality Commission as providing a ‘good’ standard of care, all but one already exceed the Herts Valleys Clinical Commissioning Group’s ‘ideal’ standard for the numbers of patients served and are therefore constrained. The CCG has indicated a need for additional/expanded primary healthcare provision in Borehamwood, Bushey and Radlett, plus longer-term provision as part of the new settlement.
- 5.1.9 **Green infrastructure** – The Open Space Assessment recently undertaken for the Council by KKP has indicated that there are deficits in existing levels of provision for most types of green infrastructure, across most of the borough’s settlements. Achieving the required

levels of green infrastructure provision is not something which new development can address on its own, but it may be necessary for the Local Plan process to consider means by which allocated sites can help to provide for needs beyond those which directly arise within those sites themselves.

5.1.10 However, despite these challenges, there are no infrastructure types for which our discussions with infrastructure providers have indicated a fundamental inability to accommodate the likely levels of growth anticipated over the new plan period to 2037/38. Whilst varying degrees of infrastructure improvement and investment will be needed to mitigate the impacts of development, and some rural locations where growth will need to be capped due to an inability to expand school provision on existing sites, at a high level these are considered to be feasible and deliverable.

Local Plan policy recommendations

5.1.11 For all infrastructure types it will be important to ensure that the emerging Local Plan includes suitable policy ‘hooks’ to ensure that the Council has means available to ensure the provision of that infrastructure – and that necessary contributions to help to provide and fund it can be secured as far as possible.

5.1.12 The following have been identified as desirable policy requirements for the Local Plan:

- Suitable provision in site and/or settlement-specific policies for relevant interventions set out in the infrastructure longlist in Chapter 6. This should include necessary wording to allow for provision on a holistic basis where needs arise across several sites;
- Policy text to direct windfall growth to the most sustainable locations in terms of public transport and active travel provision, to help support HCC’s wider modal shift agenda and minimise the need for the use of a car;
- Explicit support for the provision of a new railway station at Napsbury Halt in St Albans District, should that emerge as a desirable and deliverable solution;
- Requirements to minimise water usage in new development, particularly given ongoing uncertainties around water network capacity and over-abstraction of water from ecologically-sensitive watercourses.
- Policy text to require the provision of superfast broadband infrastructure in all new development, with reference to a ‘dig once’ approach to utility provision to ensure that cabling does not need to be retrofitted later at a significant cost;
- Explicit requirements in policy for the per-capita levels of green infrastructure provision from the 2019 KKP Report as set out in Section 4.5, subject to a view being reached that these can be justified.

5.2 Settlement-Level Infrastructure Requirements

5.2.1 This section sets out specific infrastructure constraints and requirements which will be relevant when determining the ability of each of the borough’s settlements to accommodate future growth. This is based on the analysis elsewhere in this report, and the broad potential quantum of growth within each settlement provided by the Council (set out in Table 2 on page 20).

5.2.2 It is evident that some settlements have more significant infrastructure requirements than others. However, this does not necessarily mean that growth in those settlements will be more difficult to deliver than for settlements with fewer requirements – for example, the requirements for secondary schools reflect HCC’s view on the settlements where these would best be located. There are also generally fewer infrastructure requirements in the borough’s smallest settlements, reflecting the lower levels of growth anticipated within them.

5.2.1 Elstree & Borehamwood

- **Bus** – The South Central Growth and Transport Plan includes a package of measures to improve the provision and attractiveness of bus services within and to Borehamwood, particularly towards North London.
- **Active travel** – The South Central Growth and Transport Plan includes two packages of measures, to improve the attractiveness of walking and cycling within Borehamwood – particularly along the Elstree Way Corridor.
- **Primary education** – The levels of housing growth potentially anticipated in Borehamwood (2,155 dwellings) would equate a need for between 4-5 forms of primary school entry. The exact approach to meeting new pupil demand is established within Part 2 of the IDP – but based upon this scale of growth, expansions to existing schools or the provision of more than one new school is likely to be required.
- **Secondary education** – Based upon the potential distribution of development around the borough, HCC has indicated a need for a new secondary school within Borehamwood. The exact approach to meeting new pupil demand is established within Part 2 of the IDP.
- **Primary healthcare** – Based upon the potential distribution of development around the borough, the Herts Valleys CCG has indicated a need for a new/expanded healthcare facility within Borehamwood. The CCG has agreed the case to relocate the Schopwick surgery from Elstree Village to a site on the edge of Elstree and Borehamwood (subject to planning permission).
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Borehamwood, which the Local Plan will need to help address.

5.2.2 Elstree Village

Elstree Village is closely linked in infrastructure terms with the neighbouring town of Elstree & Borehamwood.

- **Primary education** – Through discussions between HBC and HCC, general housing (i.e. excluding specialist provision for older people) growth in Elstree has been set at a level of 95 dwellings. This reflects the available capacity of St Nicholas School, and principle that primary-age pupils should not travel to other settlements for school. St Nicholas School is relatively small and on a constrained site, meaning that expansion would be challenging.
- **Primary healthcare** – The CCG have agreed the case to relocate the Schopwick surgery from Elstree Village to a site on the edge of Elstree and Borehamwood (subject to planning permission).

- **Cemeteries** – Allum Lane Cemetery, on the north-eastern edge of the village, is understood to require expansion within the next 2-3 years. The Local Plan could help to facilitate this process.
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Elstree Village, which the Local Plan will need to help address.

5.2.3 Bushey

- **Bus** – The South Central Growth and Transport Plan includes a package of measures to improve the provision and attractiveness of bus services within and to Bushey, particularly towards Watford and North London.
- **Active travel** – The South Central Growth and Transport Plan includes a package of measures to improve the attractiveness of cycling links through Bushey.
- **Primary education** – Primary education provision within Bushey is already constrained, and HCC has indicated a need for temporary arrangements to address existing under-capacity. The level of housing growth potentially anticipated in Bushey (2,340 dwellings) would equate a need for between 5-6 forms of primary school entry. Given the existing constraint, this scale of growth is likely to necessitate the provision of at least two new schools – potentially in addition to the expansion of existing schools.
- **Secondary education** – Based upon the potential distribution of development around the borough, HCC has indicated a need for a new secondary school within Bushey. The exact approach to meeting new pupil demand is established within Part 2 of the IDP.
- **Primary healthcare** – Based upon the potential distribution of development around the borough, the Herts Valleys CCG has indicated a need for a new general practice surgery within Bushey – most likely through the relocation and expansion of Little Bushey Surgery. The CCG has indicated that the Local Plan may need to allocate land for this within a new development site.
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Bushey, which the Local Plan will need to help address.

5.2.4 Potters Bar

- **Bus** – The South Central Growth and Transport Plan includes a package of measures to improve the provision and attractiveness of bus services within and to Potters Bar.
- **Active travel** – The South Central Growth and Transport Plan includes two packages of measures, to improve the attractiveness of cycling links north into Welwyn Hatfield and south to North London.
- **Electricity supply** – UK Power Networks has indicated a need for capacity enhancement works to Potters Bar’s primary substation – although this is required on the basis of indicated levels of growth across the borough, and will facilitate a ‘rebalancing’ of capacity across the local electricity network.
- **Waste management** – HCC has indicated a need to expand or relocate Cranbourne Road Household Waste and Recycling Centre in the north-west of the town – although again,

this will help to serve demand arising across a much wider area than just Potters Bar itself. The Local Plan could help to facilitate this process.

- **Primary education** – The level of housing growth potentially anticipated in Potters Bar (1,750 dwellings) would equate a need for around 4 forms of primary school entry. The exact approach to meeting new pupil demand is established within Part 2 of the IDP – but based upon this scale of growth, expansions to existing schools or the provision of entirely new schools is likely to be required.
- **Primary healthcare** – It is understood that the two existing surgeries in Potters Bar retain some spare capacity for new patients. The CCG has advised that any longer term new provision for the area should be made as part of the new settlement at Bowmans Cross, rather than in Potters Bar itself.
- **Libraries** – Whilst HCC does not anticipate a need for new library capacity within the plan period, it has identified that Oakmere Library within Potters Bar requires significant refurbishment or relocation. The Local Plan could help to facilitate this process.
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Potters Bar, which the Local Plan will need to help address.

5.2.5 Radlett

- **Rail and active travel** – The South Central Growth and Transport Plan includes a package of measures to improve the viability of access to Radlett Railway Station by cycling.
- **Primary education** – The level of housing growth potentially anticipated in Radlett (760 dwellings) would equate a need for at least 2 forms of primary school entry. The exact approach to meeting new pupil demand is established within Part 2 of the IDP – but based upon this scale of growth, expansions to existing schools and/or the provision of an entirely new school is likely to be required.
- **Primary healthcare** – Based upon the potential distribution of development around the borough, the Herts Valleys CCG has indicated a need for a new general practice surgery within Radlett, which could be accommodated through the relocation/expansion of the existing Red House Surgery.
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Radlett, which the Local Plan will need to help address.

5.2.6 Shenley

- **Primary education** – The levels of housing growth potentially anticipated in Shenley (290 dwellings) would equate a need for 0.5-1 forms of primary school entry. The exact approach to meeting new pupil demand is established within Part 2 of the IDP. Shenley Primary School is on a relatively constrained site, meaning that expansion may be challenging.
- **Primary education** – Through discussions between HBC and HCC, general housing (i.e. excluding specialist provision for older people) growth in Shenley has been set at a level of 190 dwellings. This reflects the available capacity of Shenley Primary School, and principle that primary-age pupils should not travel to other settlements for school. Shenley

Primary School is relatively small and on a constrained site, meaning that expansion would be challenging.

- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across Shenley, which the Local Plan will need to help address.

5.2.7 South Mimms

- **Primary education** – The levels of housing growth potentially anticipated in South Mimms (225 dwellings) would equate a need for around half a form of entry. St Giles Primary School within the village is relatively small, but is understood to have capacity to expand. The exact approach to meeting new pupil demand is established within Part 2 of the IDP.
- **Green infrastructure** – There are broad deficits in various types of green infrastructure provision across South Mimms, which the Local Plan will need to help address.
- **Fire and rescue** – The South Mimms area is understood to be the preferred location for any relocated or consolidated fire station within Hertsmere, given its easy access to the M25 and A1(M).

5.3 Infrastructure Considerations for a New Settlement

5.3.1 The new Local Plan is likely to include the provision of a new settlement, at Bowmans Cross in the north of the borough. Bowmans Cross will be located to the east of M25 J22, roughly equidistant between Potters Bar, St Albans and Hatfield. Its eventual dwelling capacity of up to 6,000 new homes (based on current indications) would equate to a population of around 15,000.

5.3.2 In order for Bowmans Cross to become a genuinely sustainable location for new development, it is important that it is supported by as much infrastructure as possible on site. This will ensure that residents do not need to travel to other nearby centres for their day-to-day needs. It will also be crucial to ensure the appropriate phasing of infrastructure, given the period of time necessary to build out a new settlement of this size – the Council has indicated that only around 2,400 of the potential total of 6,000 new dwellings are likely to be built within the plan period to 2037/38.

Transport

5.3.3 The new settlement will be separate from existing settlements, and therefore needs to provide for the full array of transport infrastructure types.

- **Highways** – Whilst HCC’s broad transport strategy is to achieve a modal shift away from car usage, it will nevertheless be important to ensure the provision of suitable highway accessibility into the new settlement. Based upon discussions between HBC and the promoter of the new settlement, it is understood that the primary means of access will be from Coursers Road (linked to J22 of the M25), with a secondary access at the south of the site onto the B556. Very initial discussions have taken place between the Council and Highways England in relation to the impacts of the new settlement on the M25. The extent of potential impact will continue to be explored through the Local Plan process, however, it is understood that no new junctions are likely to be agreed onto the M25.

- **Rail** – The closest railway stations to the new settlement are Brookmans Park and Welham Green, around 3km to the east. However, these are situated beyond the A1(M) and North Mymms Park, a Grade 1 listed historic park and garden, meaning that access to them is unlikely to be feasible. To the west, the Midland Main Line is around 3km distant at Napsbury – whilst there is no current station in this location, the now-withdrawn St Albans Local Plan proposed one to help accommodate strategic development sites in the vicinity. If this can be progressed, it would also be able to serve Bowmans Cross.
- **Bus** – Metro line Route 84 between Barnet/Potters Bar and St Albans is the only bus route currently serving the vicinity of the new settlement and passes M25 J22. Subject to the provision of appropriate through-routing, this could potentially be diverted through Bowmans Cross to provide public transport links. There are other bus routes that operate within the vicinity of the site including 357, 602, 305, 200, 303, 312, 230. Some of these are operated at a low frequency but could have the potential to be improved / diverted through the site. Further discussions with bus operators will be required throughout the development of the site. Bowmans Cross is also a short distance to the south of the A414, which has a possibility to be served by ‘mass rapid transit’ (high-quality, bus services) between Hatfield and St Albans as part of HCC’s A414 Corridor Strategy. Subject to the provision of appropriate linkages, these mass rapid transit services could serve Bowmans Cross. As an accompaniment to ‘formal’ bus services, particularly during the early stages of the site’s build-out, flexible demand-responsive transit (DRT) services should also be considered.
- **Active travel** – The new settlement should be provided with comprehensive high-quality, off-road internal networks for active travel in order to minimise the need to use a car to travel around the site. These networks should also provide linkages to nearby settlements, and existing strategic and local active travel routes.

Utilities and Environment

5.3.4 The large size and comprehensive nature of a new 6,000 home settlement would allow all on site utility needs to be fully addressed from the outset. This could potentially include more significant infrastructure such as combined heat and power solutions (using the existing anaerobic digestion facility already located on the site) and new primary electricity substations, also helping to ensure that existing constraints on these networks around the borough are not exacerbated by the new settlement.

Education and Social Infrastructure

5.3.5 The new settlement will need to provide for the majority of educational and social infrastructure needs within the size. Because of the wider geographical basis on which they are provided, we do not consider it likely that further education or cemetery provision will be necessary on site.

- **Primary education** – Because of the localised nature of primary education provision, and distance to existing schools within nearby settlements, it is anticipated that all primary school demand will be met within the new settlement. An eventual total of around 6,000 new dwellings would equate to 12 forms of primary school entry – HCC has indicated a preference for these to form four separate 3 form entry schools. The 2,400 estimated dwellings within the plan period equate to around six forms of primary school entry, meaning that two of these schools need to be constructed within the plan period.

- **Secondary education** – Similarly to primary schools, the total of around 6,000 new dwellings equate to 12 forms of secondary school entry. A 12 form entry secondary school is considered to be too large. Accordingly, a secondary school of around 10 forms of entry is envisaged, as part of the wider approach to planning secondary education across the borough, with further needs potentially being accommodated through a reserve school site.
- **Special educational needs** – As set out at 4.3.24 above, HCC has indicated a need for new Specialist Resource Provision for special educational needs. No indication has yet been made by HCC of specific locations to meet this need, but it is conceivable that the large size of Bowmans Cross and its central location within Hertfordshire would make it a suitable location. This should continue to be explored as part of the Local Plan process.
- **Community facilities, libraries and places of worship** – The provision of these facilities will be crucial in creating a cohesive, sustainable community – potentially in a co-located manner. There are no specific requirements for the provision of these facilities, but sufficient allowance should be made for these to be provided, funded and managed as part of the planning of the new community.

Healthcare and emergency service infrastructure

5.3.6 Most healthcare and emergency service infrastructure (such as hospitals and police stations) is planned and provided for on a wider geographical basis than an individual settlement. Most of these infrastructure types are therefore not relevant to Bowmans Cross, although by virtue of its size the new settlement could potentially be a location for them. Nevertheless, two of these infrastructure types will be required within the new settlement:

- **Primary healthcare** – The Herts Valleys CCG has indicated that a new general practice surgery will be needed to serve the new settlement. However, a single surgery may not be large enough to serve the whole of the new settlement – it will take a number of years of the site’s build-out before there are a sufficient number of new homes within the site to make a surgery viable. Accordingly, the CCG anticipates that all of the patient demand arising in the 2020s will be accommodated in the new surgery in London Colney which has now opened.
- **Social and care services** – To ensure the creation of a balanced sustainable community, and also to help address wider needs, the new settlement should include some provision for social and care services. The exact quantum of type of provision should be determined through the Local Plan process.

Green infrastructure

5.3.7 To ensure the creation of a healthy, attractive and successful new community, Bowmans Cross will need to incorporate the full complement of green infrastructure types. By virtue of its distance from other settlements it will only need to accommodate needs based upon on the quantum of homes within the new settlement itself.

- **Formal parks and gardens** – The KKP report sets out a standard of 0.80ha of provision for 1,000 residents. Based upon an average of 2.34 residents per household, the 6,000 total dwellings within the new settlement would result in a need for 11.52ha of formal park and garden provision.
- **Natural green space** – The KKP report sets out a standard of 1.80ha of provision for 1,000 residents. Based upon an average of 2.4 residents per household, the 6,000 total

dwellings within the new settlement would result in a need for 25.92ha of natural green space provision.

- **Provision for children and young people** – The KKP report sets out a standard of 0.25ha of provision for 1,000 residents. Based upon an average of 2.4 residents per household, the 6,000 total dwellings within the new settlement would result in a need for 3.6ha of formal park and garden provision.
- **Indoor and outdoor sports provision** – The KKP report does not set out specific standards for indoor and outdoor sports provision. Levels of provision within the new settlement should therefore respond to a wider sports strategy for the site.
- **Allotments** – Based upon the National Society of Allotment and Leisure Gardeners standard of 20 allotments per 1,000 dwellings, 120 allotments will be needed for the 6,000 dwellings in the new settlement.

5.4 Infrastructure considerations for new media quarter

5.4.1 In response to the Council's Call for Employment sites in early 2021¹⁰⁵, a proposal has emerged for a major new media quarter site between Rowley Lane and the A1 to the east of Borehamwood. This site is likely to be proposed for allocation in the Local Plan. The new studios would be of a significant size and international significance¹⁰⁶, comprising just under 200,000sqm of film studio floorspace (studio stages, workshops, offices and ancillary facilities), in addition to a hotel and a creative media college.

5.4.2 In order for a media quarter in this location to become a genuinely sustainable location for new development, it is important that it is fully supported by the infrastructure required, and well-integrated into other development proposals in Borehamwood with full consideration of cumulative impacts.

5.4.3 As a commercial site without any residential development, the development of a new media quarter will only have implications for some of the infrastructure types considered within the IDP. These have been considered as far as possible through targeted discussions with infrastructure providers in summer 2021, as well as our own analysis. For each of these infrastructure types, we have established the following implications:

- **Transport** – To ensure a sustainable pattern of access to the site and reduce the impacts on the A1 and other local roads, it is essential that an access strategy is pursued focussed on providing easy access to Borehamwood Railway Station. However, the station is situated around a 30-minute walk (1.5 miles) from the closest part of the site, meaning that employees and visitors are unlikely to routinely walk between the two. The provision of comprehensive bus and cycle routes are therefore likely to be required, as part of a wider package of measures. At the time of writing in August 2021, Hertsmere Borough Council was preparing to commission further transport strategy and sustainable transport study. This will identify the specific interventions necessary to support the allocation of the site whilst achieving modal shift. These will need to be set out within the Regulation 19 publication Local Plan, with its accompanying iteration of the IDP focussing on how these would be funded and delivered.

¹⁰⁵ <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/Local-Plan/New-Local-Plan/Call-for-sites-and-HELAA.aspx>

¹⁰⁶ <https://www.whtimes.co.uk/things-to-do/hertswood-studios-plans-for-borehamwood-hertsmere-7870030>

- **Electricity supply** – UK Power Networks (UKPN) has indicated that the scale of the development would result in significant electrical demands. The nearest substation to the site is situated on Rowley Lane – however, once other committed development is factored it is understood that this substation has no capacity to accommodate the demand from the studios and has no capacity to expand. UKPN’s identified solution is to establish a new primary substation connected to an existing bulk supply point in Barnet, with cabling routed from that location to the studios site. It is understood from UKPN that these works would cost the developer approximately £5-10 million. Given the scale of the works there would be a relatively long lead-in time from the point at which the developer made a connection request to the new supply capacity becoming available for use, likely to be around five years. This would have implications for how quickly the studios are able to be developed.
- **Gas supply** – As noted elsewhere in this report, high-level modelling by Cadent Gas shows that there is generally capacity within the borough’s strategic-level gas network to accommodate new demand. However, the gas demand from the studios site would be significant, and at the time of writing Cadent Gas had not been able to provide a response on whether this could be accommodated and what level of mitigation might be required. It is anticipated that these detailed comments will follow by the time of the Regulation 18 consultation on the Local Plan, allowing them to be reflected in future iterations of the IDP and inform the preparation of the Regulation 19 publication Local Plan.
- **Water supply** – As noted elsewhere in this report, there remain some uncertainties around future water supply capacity in Hertsmere. It is anticipated that detailed comments on the studios (as well as all other sites) will follow by the time of the Regulation 18 consultation on the Local Plan, allowing them to be reflected in future iterations of the IDP and inform the preparation of the Regulation 19 publication Local Plan.
- **Sewerage** – The sewerage demands of the media quarter are estimated to be relatively modest compared to other utilities. Accordingly, Thames Water has indicated that the implications would be relatively modest within the period of its current Asset Management Plan to 2025, and will be factored into its internal capacity planning tool for the period beyond this.

Appendix 1 - Bibliography

The following bibliography provides a comprehensive list of all documents referenced throughout the Infrastructure Delivery Plan. It is broken down by the chapter and section of the document within which they are referenced.

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