

Dacorum Infrastructure Delivery Plan

July 2017

Foreword

The Council recognises that its Infrastructure Delivery Plan is a lengthy technical document detailing many aspects of its infrastructure planning work and bringing together a number of documents forming its infrastructure evidence base. The objective of this document is to provide a more user friendly version of the current Infrastructure Delivery Plan. It aims to present the projects from the Infrastructure Delivery Plan so that they are easily understood by all those living, working and utilising the infrastructure within the area.

The background information to the Infrastructure Delivery Plan remains published on the Councils website and provides information as to how infrastructure providers consider the issue of growth and new infrastructure and how they plan for the delivery of services. The published plan provides a snap shot in time, but the Infrastructure Delivery Plan is a working document and is subject to constant revision. As new policy documents are produced by infrastructure providers the content of the Infrastructure Delivery Plan will be updated to included new projects.

This new version of the Infrastructure Delivery Plan comes in two sections detailing the general standards applied when considering housing growth and providing specific infographics setting out the projects from the Infrastructure Delivery Plan on a settlement basis for key locations within the Borough.

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ACROYNMS

DSIS – Dacorum Strategic Infrastructure Study

InDP - Infrastructure Delivery Plan

LAP – Local Area Play

LEAP – Local Equipped Area of Play

NEAP – Neighbourhood Equipped Area of Play

NSALG – National Society of Allotment and Leisure Gardeners

SLP - Single Local Plan

1.0 Introduction

- 1.1 An audit of the infrastructure required to deliver the Core Strategy was initially presented in the Hertfordshire Infrastructure and Investment Strategy (HIIS) and the Dacorum Strategic Infrastructure Study (DSIS) and these historic documents have formed the basis of the Infrastructure Delivery Plan (InDP) for the Borough. Over recent years the InDP has been updated in order to provide up to date evidence for the Community Infrastructure Levy (CIL) Charging Schedule and its examination and in support of the local plan. Its focus has always been on providing accurate information on the new demands placed upon the Boroughs infrastructure and arising from planned levels of development.
- 1.2 Officers at the Borough Council provided infrastructure providers with the information in the housing programme and asked them to plan for the delivery of 11,320 dwellings over the plan period (2006-2031). This version of the InDP incorporates proposals identified in their responses and their assessment of service requirements arising from growth.

2.0 Infrastructure Standards

- 2.1 The infrastructure requirements identified in the InDP are normally, but not exclusively, derived from a source of national standards relating to the provision of new infrastructure items. These can be set out in planning policy documents, but are more often set out within the legislative frameworks of the those authorities responsible for the delivery of the associated services. A number of these standards have been amended in accordance with the advice of the infrastructure providers since they were initially set out in the DSIS.
- 2.2 The standards quoted are often identified as a spatial or unit of service (eg a GP) requirement per head of population (normally per 1000 people) rather than as requirement relating to the construction of new dwellings. It is therefore necessary to consider how such matters may be translated to requirements emerging from housing sites or proposals which are inevitably presented as a number of new residential units. A summary of the key standards and changes since the DSIS is set out in Table 1.

Table 1 – Comparison of Infrastructure Standards

Infrastructure Type	Standard applied in DSIS	Standard in current policy or advice
Primary Education	1 form of entry (30 pupils per year group or 200 pupils in total) (F/e) per 850 dwellings	1F/e per 500 dwellings
Secondary Education	N/a	1 F/e (30 pupils per year group or 150 pupils in total) per 500 dwellings
GP Provision	1 full time (F/t) GP per 1800 patients	1 F/t GP per 2000 patients
Open Space (Adult/Youth Leisure Space)	1.6 ha per 1000 people	1.6 ha per 1000 people
Child Play Space	0.8 ha per 1000 people	0.8 ha per 1000 people
Allotments	0.35 ha per 1000 people (0.25ha per 1000 cited as NSALG standard)	0.2 ha per 1000 people
Community Space	61 square metres per 1000 people	61 square metres per 1000 people

- 2.3 For the purposes of infrastructure planning the majority of infrastructure providers still base their assessments against a standard of 2.4 people per dwelling. The approach set out in this document considers that the average occupation of new dwellings would be 2.4 persons per unit unless otherwise stated.
- 2.4 Table 2 below sets out how a standard's based approach to infrastructure planning and broadly translate a range of developments between 25 and 2000 dwellings into spatial requirements for new items of infrastructure. Financial contributions may be sought in other cases. Furthermore it goes onto suggest how these infrastructure requirements may be treated in terms of new buildings or provisions.
- 2.5 Policy CS35 of the Core Strategy identifies that all development will be expected to contribute towards the provision of new infrastructure either directly or through the payment of financial contributions. The costs for such works will generally be met through a combination of CIL or S106 and external funding depending on the circumstances and nature of provision.
- 2.6 Table 2 clearly demonstrates that in terms of the delivery of new items of infrastructure it is preferable to plan for the inclusion of larger site within ones development programme where the full need for new buildings can be incorporated. In most instances a critical threshold would appear to be around 1000 new dwellings which is broadly the size of a modest new neighbourhood area or urban expansion.
- 2.7 The Core Strategy does not identify any sites of this scale and magnitude. However, the largest site in the Core Strategy is zero rated for the purposes of CIL in order to deliver its infrastructure needs at appropriate timescales alongside the development of the site. A similar approach to infrastructure may be necessary to ensure the delivery of key infrastructure items in any new sites emerging from the consideration of potential housing sites for inclusion in its Single Local Plan.

Table 2 – Equating Infrastructure Standards to New Homes

	25 Dwellings	50 Dwellings	100 dwellings	500 dwellings	1000 dwellings	2000+ dwellings
Primary Education (2 Form Entry)			0.2 form entry (expansion of school premises)	1 form entry (expansion or new build)	1 x 2 form entry (new primary school)	4 forms of entry+ (new primary school(s) and /or expansions)
Secondary Education (6-10 Form Entry)				1 form entry (school expansion)	2 forms of entry (school expansion)	4 forms of entry+ (consideration to new secondary school)
GP Provision				0.5 x GP (expanded practices)	1 x GP (single practice)	GP Premises
Allotment Provision				0.2		
Play Provision (NEAP, LEAP or LAP	0.06 ha (LEAP)	0.1 ha (NEAP)	0.2 ha (Mixed play areas)	0.8 ha (Mixed play areas)		
Playing Fields or Additional Open Space				1.6 ha		
Community Building				61 m2 (extension to existing premise)	172 m2 (new building)	

3.0 Housing Delivery

3.1 Significant progress is being made to provide housing in the Borough as shown in Figure 1 and 2 below. Progress has been measured against the housing programme data which is higher than the housing target set out in policy CS17 of the Core Strategy as it accounts for the development of 'windfall' (previously unidentified) housing sites. This figure is considered more appropriate when considering infrastructure needs and is used to plan the delivery of infrastructure items.

Figure 1 – Housing Delivery (Hemel Hempstead)

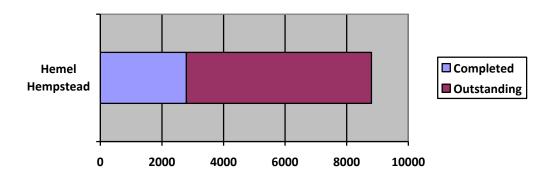
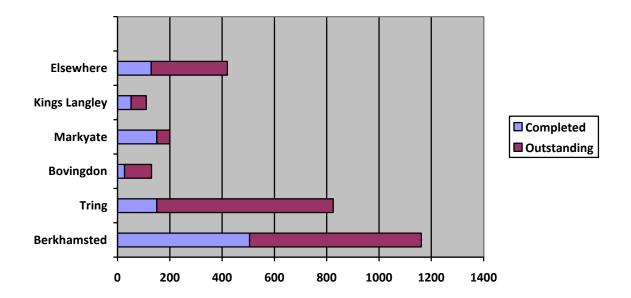


Figure 2 – Housing Delivery (Other Settlements)



4.0 Settlement Summaries

- 4.1 The following sheets provide a summary of the key infrastructure projects identified in the InDP for each of the major towns and villages within the Borough.
- 4.2 The focus is on the headline projects and displaying these consistently for the themes of education, transport, health, open space and utilities. An associated schedule of infrastructure projects follows each graphic setting out those projects in the InDP applicable to each settlement.
- 4.3 There are no fundamental infrastructure issues that would prevent the delivery of housing identified within the Core Strategy.

Hemel Hempstead (Sheet A)

- 4.4 Hemel Hempstead is the focal point for housing growth within the Core Strategy and is therefore shown over multiple map inserts. The town has progress steadily towards the levels of growth anticipated in the housing programme. A number of larger schemes have however commenced since the 1st April 2016 or are anticipated to commence soon providing a significant boost to the supply of housing within the town. The Council forecasts a rise in housing delivery between 2017 and 2021 with the development of key housing sites within the Core Strategy including Marchmont Farm (LA1) and land to the west of Hemel Hempstead (LA3) A number of large housing and commercial schemes are currently under consideration to the east of the town reflected in the emergence and identification of headline infrastructure projects within the locality and the areas prioritisation as a theme for the receipt of CIL funding.
- 4.5 The focus for Hemel Hempstead will be the provision and improvement of transport and education facilities to accommodate the growing population of the town. Large infrastructure projects are being delivered including a programme of play area improvements, a new bus interchange within the town centre and works at key open spaces such as Gadebridge Park, Heath Park and the Water Gardens. Additional works

Berkhamsted (Sheet B)

4.6 The key housing sites within the Core Strategy are in the process of being delivered and as a result of these developments the Borough and County Council have been able to carry out or programme the improvements of numerous key highway junctions within the town. Ashlyns School has been expanded to accommodate additional forms of secondary education and a number of schools have changed function as the town has moved towards a 2 tier education system. Land has been safeguarded on two sites for the provision of additional education facilities. A new library for the town has been delivered. The existing play areas, within DBC ownership have all been subject to or are programmed for upgrades.

Tring (Sheet C)

4.7 The bulk of infrastructure improvements required within the town will run alongside the development of land to the west of Tring (LA5) and will be deliverable from 2021.

Markyate (Sheet D)

4.8 The bulk of the housing identified in the Core Strategy for the village has been delivered including both housing sites at Manor Farm (see DBLP) and Hicks Road (SS2) The primary school has been expanded from 1 f/e to 1.5 f/e to accommodate demands arising from these schemes and a number of infill developments within Markyate. Funding is in place for the Borough Council to deliver open space and play improvements over the financial year (17/18)

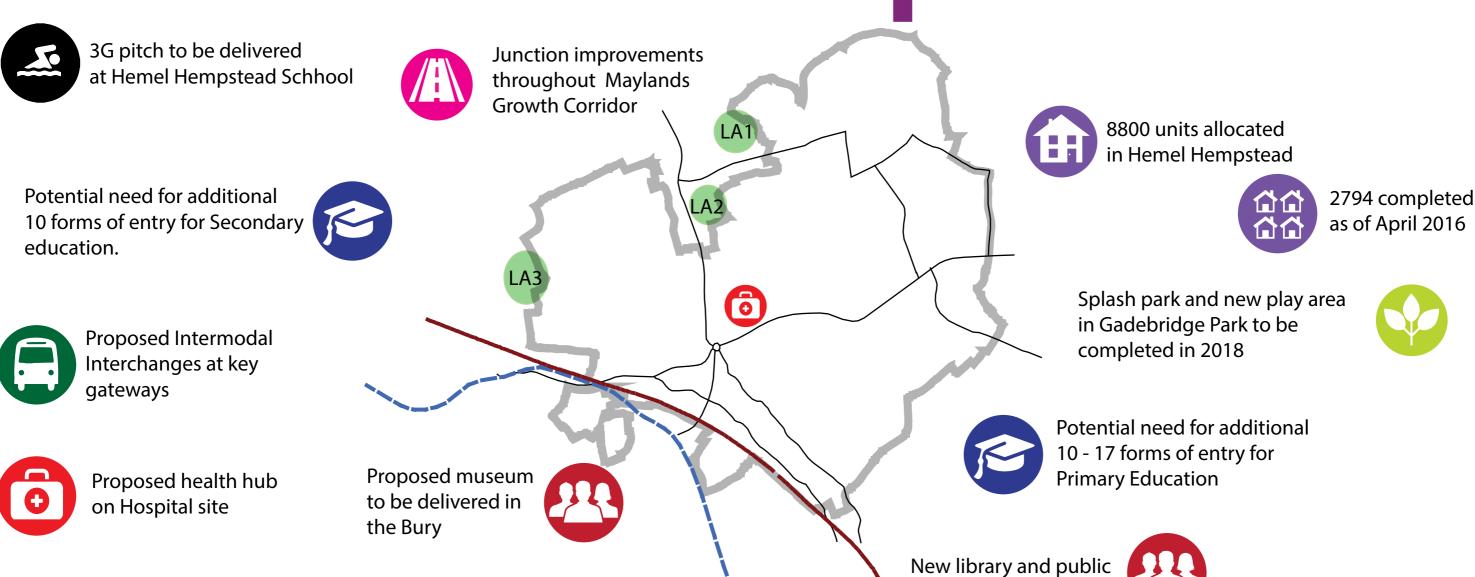
Kings Langley (Sheet E)

4.9 The levels of growth identified for the settlement have a nominal impact on the need for new infrastructure and should be met through the expansion of existing schools and through capacity at local GP premises. The County Council is engaged with Three Rivers District Council over the provision of a school site to accommodate growth within both Abbotts Langley and Kings Langley. The Borough Council undertook a number of improvements to the village play areas during 2015/16.

Bovingdon (Sheet F)

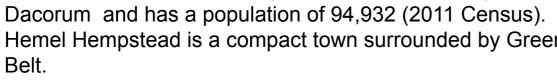
4.10 Around half of the anticipated housing growth identified for the village has already been delivered. A further 60 dwellings will result from the development of housing site LA6 (land at Chesham Road/Molyneaux Road). This proposal will result in improvements to the existing access road to H.M.P The Mount, Bovingdon. It is anticipated that Bovingdon Primary school may require expansion to accommodate this growth. Surgery space within the village is heavily constrained. In addition the cumulative impact of growth at Bovingdon and that in neighbouring Chesham (Chiltern District Council) may result in the need to upgrade Chesham Waste Water Treatment Works.

Hemel Hempstead



Hemel Hempstead

Hemel Hempstead is the largest town in the Borough of Dacorum and has a population of 94,932 (2011 Census). Hemel Hempstead is a compact town surrounded by Green





Waste Water Treatment Works



Health



Community Facilities





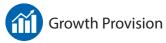


service hub delivered

Programme of playground improvements

in progress accross Hemel Hempstead

Parks and Open Spaces













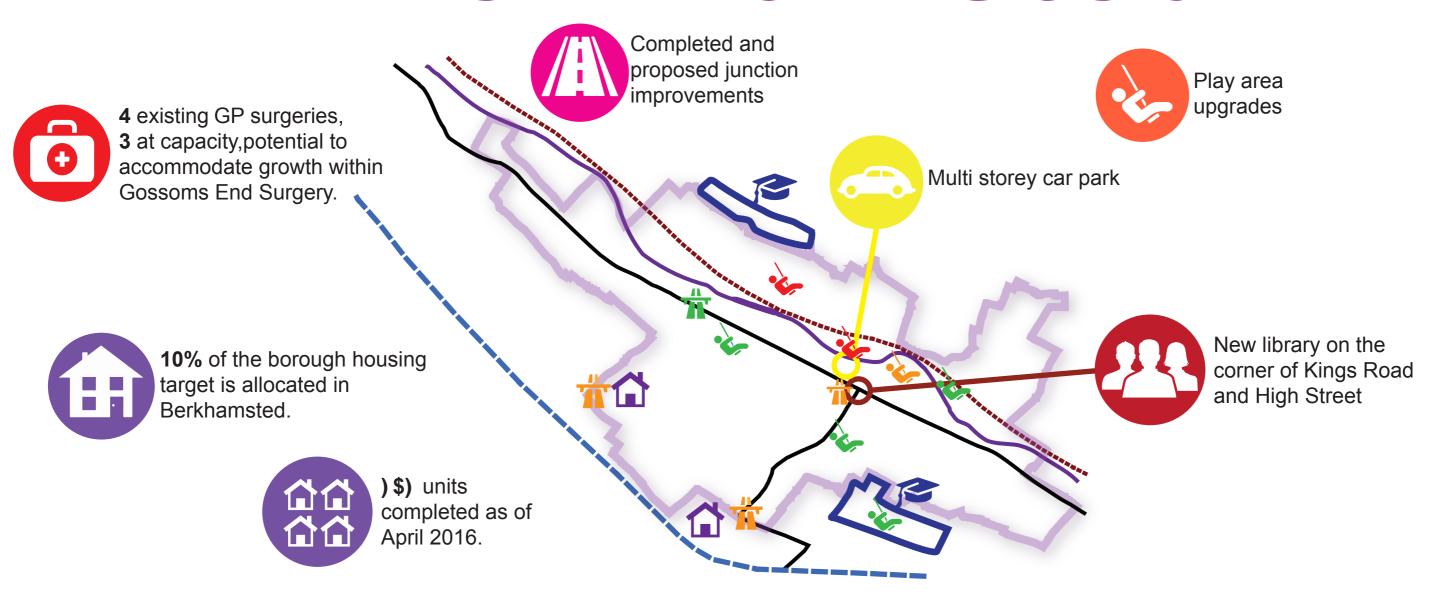
2 new GP surgeries

proposed

Туре	Project	Location	Due Date	Funding
Transport	Central Bus Corridor (Maylands/A414/Town Centre)	Hemel Hempstead	2019	None
Transport	Bus Stop Improvement Programme - Hemel Hempstead	Hemel Hempstead	Unknown	Part Funded
Transport	Hemel Hempstead Bus Service reconfiguration	Hemel Hempstead	2021	None
Transport	Town Centre Pedestrian Improvements	Hemel Hempstead	2019	Part Funded
Transport	Maylands Urban Realm Improvements	Hemel Hempstead	2019	Part Funded
Transport	Pavement Extensions - Leighton Buzzard Road	Hemel Hempstead	2018	Part Funded
Transport	Improve Cycle Access to Employment Areas in Hemel Hempstead	Hemel Hempstead	2018	Part Funded
Transport	Canal Towpath Link - Fishery Lane	Hemel Hempstead	2018	Unknown
Transport	Canal Towpath Link - London Road/Station Road	Hemel Hempstead	2018	Unknown
Transport	Pavement Widening - Queensway	Hemel Hempstead	Unknown	Unknown
Transport	Grand Union Canal towpath improvements - Hemel Hempstead	Hemel Hempstead	2019	Unknown
Transport	Lighting to Magic/Plough Roundabout Underpath	Hemel Hempstead	2020	Part Funded
Transport	Improve 'Magic'/Plough Roundabout to enhance safety of cyclists	Hemel Hempstead	2021	Unknown
Transport	Two Waters to Nash Mills Cycle Route	Hemel Hempstead	2025	Part Funded
Transport	Improvements to National Cycle Route 57 (Chesham to Nicky Line) T17	Hemel Hempstead	2025	Unknown
Transport	Maylands Growth Corridor	Hemel Hempstead		Part Funded
Transport	Redesign site entrance - Jarman Park	Hemel Hempstead	2021	Part Funded
Transport	Redesign junctions - Bourne End slip road	Hemel Hempstead	2021	None
Transport	Redesign junctions - Two Waters	Hemel Hempstead	2025	None
Transport	Redesign junctions - Redbourn Road/Woodhall Farm/Cupid Green	Hemel Hempstead	2025	None
Transport	HGV Park	Hemel Hempstead	2022	None
Transport	Junction improvements to Station Road/London Road	Hemel Hempstead	2021	None
Education	2 Form Entry Primary Provision	Hemel Hempstead	2019	Part Funded
Education	2 Form Entry Primary School	Hemel Hempstead	2019	Part Funded
Education	2 Form Entry Primary School	Hemel Hempstead	2025	Unknown
Education	2 Form Entry Primary School	Hemel Hempstead	2020	Part Funded
Education	2 Form Entry Primary School	Hemel Hempstead	2019	Unknown
Health	Provision of a Health hub at Hemel Hempstead hospital	Hemel Hempstead	2025	Unknown
Health	GP Premises associated with LA3	Hemel Hempstead	2022	Part Funded
Health	GP Premises associated with Spencers Park/East Hemel	Hemel Hempstead	2022	Part Funded
Community	New community centre associated with LA3	Hemel Hempstead	2022	Part Funded

Туре	Project	Location	Due Date	Funding
Community	New community centre associated with Spencers Park	Hemel Hempstead	2022	None
Community	New cemetery for Hemel Hempstead	Hemel Hempstead	2021	Funded
Sport	Changing Facilities at Grovehill Playing Fields	Hemel Hempstead	2021	None
Sport	Replacement pitches at Astley Cooper School	Hemel Hempstead	2022	None
Sport	Improve pitch quality for Leverstock Green Cricket Club	Hemel Hempstead	2020	Unknown
Sport	Improve quality of Baseball Pitches	Hemel Hempstead	2025	None
Sport	Drainage and training pitches for Hemel Hempstead RFC	Hemel Hempstead	2022	None
Sport	Artificial grass pitch for Hemel Hempstead School	Hemel Hempstead	2020	Funded
Play	Grovehill/Woodhall Farm Adventure Playground Upgrade	Hemel Hempstead	2021	Part Funded
Play	Adeyfield Adventure Playground Upgrade	Hemel Hempstead	2021	None
Play	Bennetts End Adventure Playground Upgrade	Hemel Hempstead	2021	None
Play	Chaulden Adventure Playground Upgrade	Hemel Hempstead	2021	Part Funded
Green	Access and Interpretation Boards at Woodhall Wood	Hemel Hempstead	2025	None
Green	Access and Interpretation Boards at High Wood	Hemel Hempstead	2025	None
Green	Access and Interpretation Boards at Howe Grove	Hemel Hempstead	2025	None
Green	Two Waters Urban Park	Hemel Hempstead	2020	Part Funded
Green	Improvements to Gadebridge Park	Hemel Hempstead	2020	Part Funded
Green	Enhance green wedges within Hemel Hempstead	Hemel Hempstead	2030	Unknown
Green	Expansion of Margaret Lloyd Park	Hemel Hempstead	2022	Part Funded
Waste	Relocation or expansion of Hemel Hempstead Waste Recycle Centre	Hemel Hempstead	2022	Unknown
Water	Upgrades to Blackbirds or Maple Lodge Waste Water Treatment Works	Hemel Hempstead	2025	Unknown
Energy	Upgrades to Warners End Substation	Hemel Hempstead	2025	Unknown
Energy	Upgrades to Frogmore Primary Substation	Hemel Hempstead	2025	Unknown

Berkhamsted



Berkhamsted Infrastructure

The town is linear in nature with the main communication routes (road, rail and canal) running along the valley bottom. It has a population of 17,725 (2011 Census) and sits midway between Hemel Hempstead and Tring. The town has good connections to London (40km) and the north via the A41, and has a railway station conveniently located near the town centre.

2 education zones identified. An additional **4** forms of entry needed to meet housing demands.



Potential for upgrades to the sportscentre.



Waste water treatment works recently upgraded but local connection works required.



Waste Water Treatment Works



Health



Education



Community Facilities



Car Parking



Parks and Open Spaces



Growth Provision



1



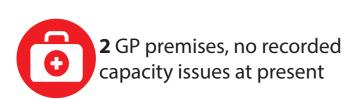


Local Allocation

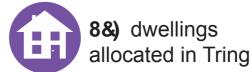




Туре	Project	Location	Due Date	Funding
Transport	Pedestrian Crossing - Greenway	Berkhamsted	2019	Funded
Transport	Legible Town - Berkhamsted	Berkhamsted	Unknown	Unknown
Transport	Canal Towpath Improvements - Berkhamsted	Berkhamsted	Unknown	Part Funded
Transport	Cycle Gateway - Berkhamsted	Berkhamsted	2021	None
Transport	Improvements to Berkhamsted Station/Brownlow Road Underpass	Berkhamsted	2019	None
Transport	Signalisation of Kings Road/Kingshill Way/Shootersway	Berkhamsted	2019	Funded
Transport	Improve operation of High St/Kings Road junction	Berkhamsted	2019	Funded
Transport	Improvements to the New Road Corridor, Northchurch	Berkhamsted	2021	Unknown
Transport	Extension of reduced speed limit to Berkhamsted High St	Berkhamsted	2020	Unknown
Transport	Speed Management - New Road, Northchurch	Berkhamsted	2019	None
Transport	Speed Management - Kings Road, Berkhamsted	Berkhamsted	2019	None
Transport	Speed Management - Northchurch	Berkhamsted	2021	None
Transport	Traffic Calming and 20mph zone - Castle St, Berkhamsted	Berkhamsted	2021	None
Transport	Traffic Calming and 20mph zone - Gravel Path	Berkhamsted	2021	None
Transport	Parking Restrictions - Bridgewater Road, Berkhamsted	Berkhamsted	2019	None
Transport	Parking Improvements - Northchurch Local Centre	Berkhamsted	2021	None
Transport	Berkhamsted MSCP	Berkhamsted	2020	Funded
Education	Expansion of Ashlyns School, Berkhamsted by up to 3 forms entry.	Berkhamsted	2022	Part Funded
Community	New community cenre, Berkhamsted	Berkhamsted		None
Sport	Replacement/Refurbishment of Berkhamsted Sports Centre	Berkhamsted	2030	None
Sport	Improve quality of cricket pitch at The Meadow, Northchurch	Berkhamsted	2020	Unknown
Sport	Improve Tennis Courts at The Meadow, Northchurch	Berkhamsted	2020	Unknown
Energy	Upgrades to Berkhamsted Primary Substation	Berkhamsted	2025	Unknown









Tring Infrastructure

Tring is a small, compact market town in the northwest of the borough with a population of around 11,500. The town is surrounded by the Chilterns Are of Outstanding Natural Beauty. The mainline station and the Grand Union Canal run along the north eastern edge of the town, near to the Tring Reservoirs Site of Scientific Interest (SSSI)



Facilities at Tring Secondary School will need to be extended and additional detached playing fields provided.



Waste Water Treatment Works

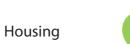


Health

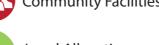
Play Area



Education











Parks and Open Spaces



Growth Provision





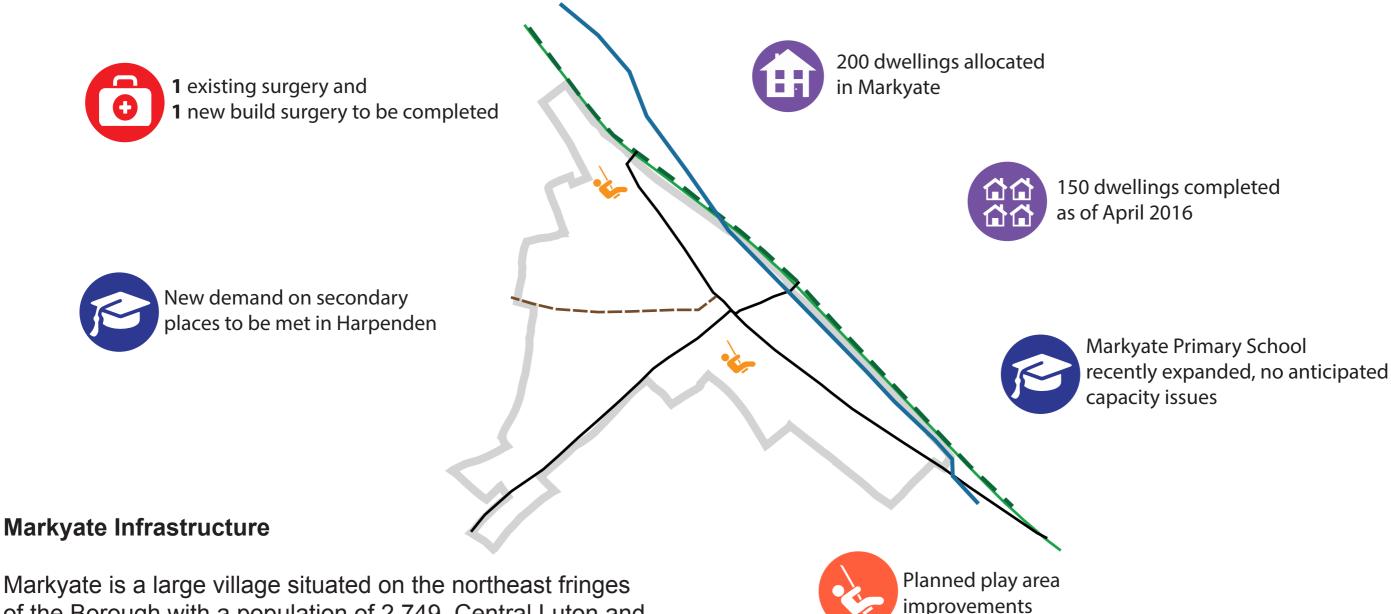
Local Allocation





Туре	Project	Location	Due Date	Funding
Transport	Improvements to public footpath 39	Tring	2019	None
Transport	Improvements to public footpath 41	Tring	2025	None
Transport	London Road to Town Centre Cycle Improvements	Tring	2021	None
Transport	Legible Town - Tring	Tring	Unknown	Unknown
Transport	Canal Towpath Improvements between Tring and Cow Roast	Tring	Unknown	Unknown
Transport	Cycle Gateway - Tring	Tring	2021	None
Transport	Improvements to Tring Station - cycle facilities	Tring	2025	Unknown
Transport	Speed Management - Aylesbury Road	Tring	2020	Unknown
Transport	Speed Management - Brook St, Tring	Tring	2021	None
Transport	Speed Management - Icknield Way, Tring	Tring	2021	None
Transport	Speed Management - Tring Station	Tring	2021	None
Transport	Speed Cushons - Silk Mill Way, Tring	Tring	2021	None
Transport	Parking Restrictions - Cow Lane	Tring	2021	None
Education	Expansion of Tring School and detached playing fields.	Tring	2021	Funded
Community	Expansion of Tring Cemetery	Tring	2025	None
Sport	Replacement/Refurbishment of Tring Sports Centre	Tring	2030	Part Funded
Sport	Improvements to Pendley Sports Centre	Tring	2022	None
Sport	Reconfigured and undertaken quality improvements to sports pitches at Tring School	Tring	2022	None
Sport	Maintain sports courts at Tring Secondary School	Tring	2022	Unknown
Sport	Artificial grass pitch for Tring Secondary School	Tring	2022	None
Green	Designate Dundale Woods as a Local Nature Reserve	Tring	2019	None
Green	Tring Park Enhancements	Tring	2021	Part Funded
Water	Increase sewerage capacity to Tring	Tring	2025	Unknown
Energy	Upgrades to Ilmer Grid Substation	Tring	2025	Unknown

Markyate



Markyate is a large village situated on the northeast fringes of the Borough with a population of 2,749. Central Luton and Dunstable are both approximately 5 miles away, as is Redbourn and Harpenden, given it's location it enjoys a strong relationship with these settlements with many people travelling to here for work, shopping and leisure via the M1 or A5.



Public Transport Facilities



























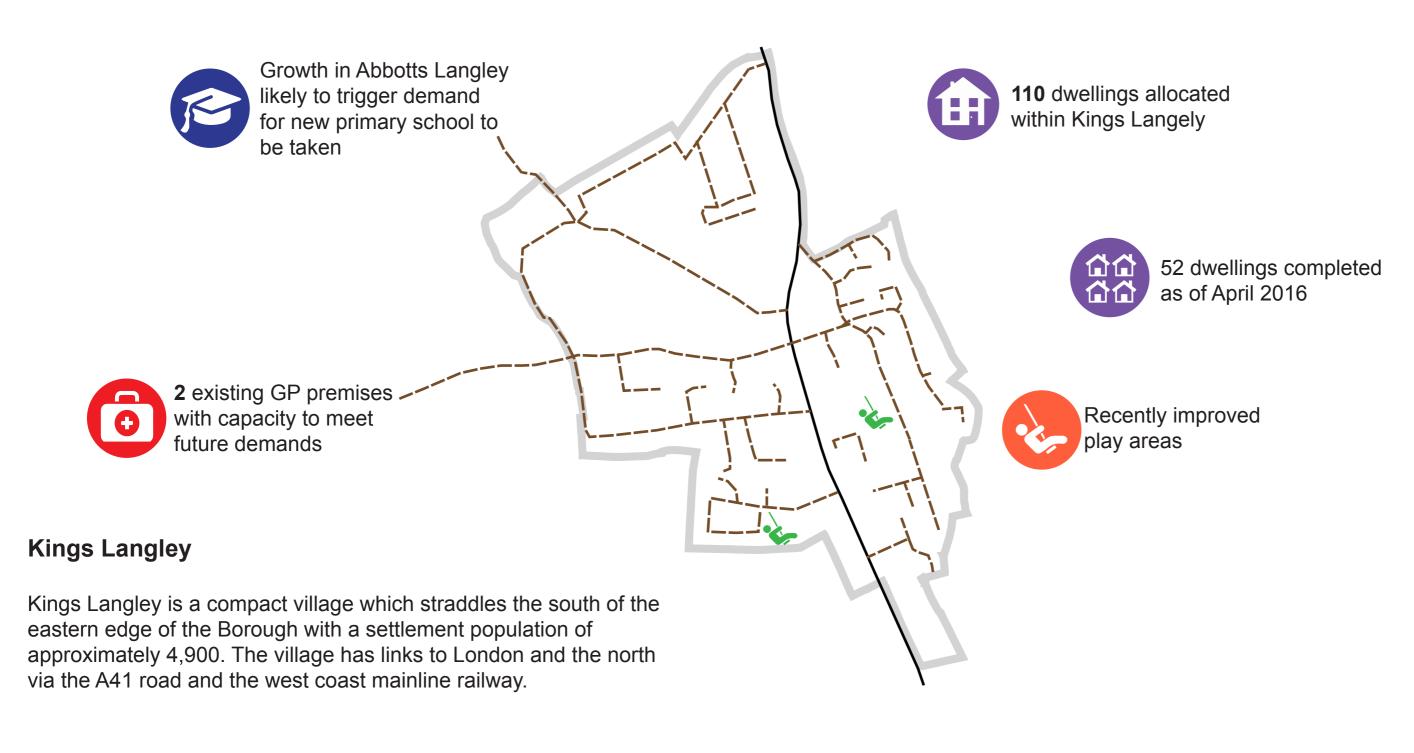








Kings Langley





Waste Water Treatment Works



Health



Education



Community Facilities







Parks and Open Spaces







Housing

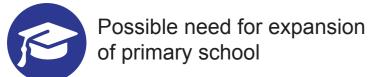


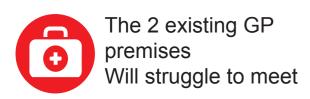
Sports Facilities



Transport Infrastrycture

Bovingdon







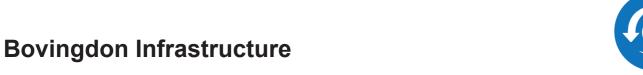
130 dwellings allocated in Bovingdon



27 dwellings completed as of April 2016



Demand for secondary school places to be met by expansion of schools elsewhere.



Bovingdon is a compact village in the south of the Borough with a settlement population of 4,611. Bovingdon village is surrounded by Green Belt farmland and The Mount HMP and the disused airfield to the north west.



Waste Water Treatment Works •



Health



Education





Car Parking



Parks and Open Spaces











Community Facilities



Possible requirement for upgrade

Works to accomodate growth

to Chesham Waste Water Treatment



Туре	Project	Location	Due Date	Funding
Sport	Provide floodlights to Langley Tennis Club courts	Kings Langley	2020	Unknown
Play	Playground refurbishments at Cavendish Road, Markyate	Markyate	2019	Funded
Play	Playgound refurbishments at Peggy's Field, Markyate	Markyate	2019	Funded
Water	Improvements to Bovingdon pumping station	Bovingdon	2030	Unknown

Туре	Project	Location	Due Date	Funding
Transport	Increase Train frequency and capacity	Borough Wide	2019	Unknown
Transport	Increase Track Capacity - West Coast Mainline	Borough Wide	2029	Unknown
Community	266 flexicare places	Borough Wide	2030	Unknown
Play	New playgrounds associated with Strategic Sites and Local Allocations	Borough Wide	2030	Funded
Play	Programme of playground improvements	Borough Wide	2020	Part Funded
Green	Grand Union Canal Improvements	Borough Wide	2025	Unknown
Green	River Valleys Project	Borough Wide	2021	Unknown
Green	Interactive map for Green Hertfordshire	Borough Wide	2021	Part Funded
Telecoms	Connected Counties Programme	Borough Wide	2030	Part Funded
Waste	Local Authority Waste Transfer Station	Borough Wide	2030	Unknown
Water	Localised improvements to sewerage infrastructure	Borough Wide	2030	Unknown
Sport	Improvements to pitches and changing facilties at Little Gaddesden	Countryside	2020	None
Green	Improve Accesslinks between Hemel Hempstead and Ashridge	Countryside	2025	None
Green	Aldbury Nowers Habitat Restoration	Countryside	2025	Unknown
Green	Rural Villages and Green Infrastructure Connections	Countryside	2025	None