

INFRASTRUCTURE DELIVERY PLAN (IDP) UPDATE REPORT 2020



Date of drafting – 28 August 2020

The information contained in this document is based on the best available data, and is correct at the date of publication. The Infrastructure Delivery Plan (IDP) provides an overview of current infrastructure needs; it does not establish a hierarchy of future investment decisions by either the Council or other infrastructure delivery agencies.

The projections and infrastructure proposals may change over time, and the IDP will be updated periodically to incorporate such changes in line with new information and updated investment programmes

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1. INTRODUCTION

1.1 Bromley's Infrastructure Delivery Plan (IDP) sets out what infrastructure is required to support planned growth identified in the Local Plan. The Council, its partners and other stakeholders will use the document to ensure that the appropriate infrastructure is in place as growth is delivered. This document reviews and outlines the infrastructure needed to support the growth and objectives reflected in the Local Plan.

1.2 The infrastructure identified in the IDP, should be deliverable within the Plan period (2016-31) and includes details of where funding for this infrastructure will be sourced (where known). In cases where a gap is found between the identified infrastructure cost and the likely available funding to pay for infrastructure, this will be used to support the development of a Borough Community Infrastructure Levy (CIL), which can be charged on new development in Bromley and used to provide the items which are needed to support growth. However, there is likely to be many post-COVID impacts on infrastructure plans and delivery, but at this stage we do not know how significant they will be, and priority of projects might change but any infrastructure funded through CIL will align with updated priorities.

1.3 The IDP will be reviewed on a regular basis, and this is the first update, it will be treated as a 'live' document that will evolve over time as development potential is realised. It will also be used to inform decisions on infrastructure delivery, for example the allocation of CIL receipts to projects. The IDP can also be used as supporting evidence in bids for external funding and to support proposals for specific sites to be protected for use as schools or other infrastructure required throughout the plan period.

Background and Structure

1.4 The IDP looks at each infrastructure category that may be affected by growth over the next 15 years. To identify where there will be a need for new infrastructure and funding, the following has been assessed for each type:

- Existing infrastructure
- Future demand (from growth)
- Infrastructure costs (where applicable)
- Potential Funding sources

1.5 By reviewing the existing infrastructure and any existing deficit ('current shortfall'), the phasing of infrastructure delivery in the borough and how vital the infrastructure is to support growth can be assessed. Where an infrastructure deficit is found, the area can be prioritised for delivery in the early phases of the Local Plan, to support any further growth in the borough and confirm funding streams available to do so. This may have implications upon the funding available to deliver future infrastructure projects.

Infrastructure Delivery Plan Schedule

1.6 The Infrastructure Delivery Plan Schedule for the Borough over the Local Plan period of 2016-2031 is summarised in this document at Appendix 1, and is also part of the Local Plan (Appendix 10.13), and forms part of the Community Infrastructure Levy (CIL) evidence base. The schedule outlines the infrastructure, the relevance to the local plan with appropriate policy reference, rationale, funding arrangements and delivery details including who is responsible for delivery. The

timescales set out for the delivery of infrastructure are not definitive, and keeping the IDP updated will be essential. The IDP does not prioritise what funding should be allocated for infrastructure, and inclusion of a scheme does not guarantee that it will be delivered. Future iterations of the IDP schedule table will include more detailed information when available.

1.7 The criteria for projects listed in the IDP are:

- The infrastructure element contributes to the delivery of one or more of the Local Plan objectives; and
- The infrastructure element is required to address the demographic change, and requirements brought about by future development, and are not purely to address existing deficiency.

The Council's current approach to seeking developer contributions towards infrastructure provision is set out in Policy 125 in the Local Plan 2019, and the Planning Obligations Supplementary Planning Document (currently under review subject to adoption of the Council CIL Charging Schedule).

Reviewing and monitoring the IDP

1.8 Infrastructure requirements will change over the Plan period, (according to Council priorities) and the subsequent impacts post-COVID, of the planned growth as it occurs. This process will be managed by the governance structure which is put in place to manage infrastructure delivery and in line with the review process for the Borough's CIL. Progress in delivering infrastructure will be recorded through the council's Monitoring Reports. The required monitoring obligations will be complied with as set out in the CIL Regulations and National Planning Framework require all planning authorities to publish their contributions data on a regular basis and in an agreed format.

Supporting evidence for a Community Infrastructure Levy

1.9 Alongside the Viability evidence, the IDP provides part of the evidence base for the development of a borough CIL. To establish a CIL, it must be shown that there is a funding gap between the infrastructure needed and the funding available to deliver this infrastructure. Where this is established to be the case, funding can then be secured through a levy on development which must be set in accordance with the CIL regulations 2010 as amended. CIL can be spent on infrastructure to support development. The information presented here is seen as demonstrating a significant enough funding gap to justify an acceptable rate of CIL for the London Borough of Bromley.

Evidence base

1.10 Having identified the extent of the predicted growth for the Borough, the next step is to assess the required infrastructure provision. Engaging with infrastructure and service providers, both internal and external stakeholders, has made it possible to collate information either in person, or email, or from strategies, service plans, documents and reports.

1.11 The evidence base used to develop the Local Plan 2019, the Infrastructure Delivery Plan and subsequent CIL development must be consistent in content and this has been acknowledged throughout the IDP process.

1.12 Local and national standards for infrastructure provision are compiled by the government or particular organisations. Where appropriate, these have been used to establish levels of infrastructure which should be in place now and in the future. In other cases, the infrastructure identified will deliver specific elements of the emerging Local Plan vision for Bromley.

1.13 The infrastructure needs identified in this document are a snapshot of what is required at the time of preparing the respective evidence bases. While these assumptions have been justified, it is the case that the needs in Bromley may change and will be subject to regular review. The impact of economic conditions will be significant on the scale, timing and deliverability of the infrastructure at a time of significant constraints on public expenditure, with fewer resources available for infrastructure and other provision needed to support the growth identified.

Policy Context

1.14 National, regional and local plans and policies provide guidance for evaluating infrastructure requirements.

National Policy and Guidance

1.15. The Planning Act 2008 Part II (Section 216) defines infrastructure as including:

- Road and other transport facilities
- Flood defences
- Schools and other educational facilities
- Medical facilities
- Sporting and recreational facilities
- Open spaces,

1.16 Affordable housing was also originally included in the definition – however this was amended by the Localism Act 2011 and Reg 63 of the 2010 CIL Regulations. The Council has specific policies that set out the amount and types of affordable housing sought as part of the planning process which are updated in the Local Plan and are therefore not addressed further in this document.

1.17 This list is not exhaustive and therefore can include the other elements of infrastructure such as utility services.

1.18 The National Planning Policy Framework (NPPF) was first published in March 2012 setting out the government's planning policies for England and how these are expected to be applied. A revised NPPF was published in July 2018 and revised again and published in February 2019.

1.19 The NPPF states that the planning system should be genuinely plan-led and provide a framework for addressing housing needs and other economic, social and environmental priorities. Paragraph 7 and 8 makes clear the purpose of the planning system is to achieve sustainable development and to do this the planning system has to pursue the three overarching objectives; economic, social and environmental. The social objective is relevant to infrastructure and states: 'To support strong, vibrant and healthy communities...by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing.'

1.20 The NPPF (paragraph 92) expects Local Planning Authorities' planning policies and decisions to provide the social, recreational and cultural facilities and services the community needs by planning positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments. It is expected that we should take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community and guard against the unnecessary loss of valued facilities and services.

1.21 Paragraph 96 states that planning policies should be based on robust and up-to-date assessments of the needs for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision.

Planning Practice Guidance

1.22 The National Planning Practice Guidance sits alongside the NPPF and provides further advice and guidance on how the framework and policies should be applied.

1.23 The guidance recognises that the Local Plan needs to pay careful attention to identifying what infrastructure is required and how it can be funded and brought forward. The plan should also be positive and realistic about what can be achieved and when. The guidance recommends early work with infrastructure providers and assessment of 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. The Local Plan should also take account of the need for strategic infrastructure.

1.24 The guidance also states that: 'the government recommends that when preparing a plan, strategic policy-making authorities use available evidence of infrastructure requirements to prepare an Infrastructure Funding Statement. This should set out the anticipated funding from developer contributions, and the choices local authorities have made about how these contributions will be used. At the next iteration of the Local Plan of the At examination this can be used to demonstrate the delivery of infrastructure throughout the plan-period.'

1.25 The guidance recommends that authorities consider the impact of policies on development viability so that the contributions expected from development do not undermine delivery of the plan. The Viability evidence produced for the Local Plan 2019 has been updated and is used to support the development of the Local Bromley CIL.

London Policy Context

1.26 The London Plan (2016) (which consolidated all the alterations to the London Plan since 2011), is the overall strategic plan for London setting out an integrated economic, environmental, transport and social framework for the development of London. The London Plan sets out the framework for the development and use of land in London linking necessary improvements to infrastructure (especially transport) setting out proposals for implementation, coordination and resourcing. The London plan deals with things of strategic importance setting the policy context within

which boroughs should set out their detailed local planning policies. The plan sets out a spatial vision followed by various topic-based chapters including housing and social infrastructure. The plan sets housing targets for London Boroughs. The annual average housing supply monitoring target for Bromley is 641 per year for the 2015-2025 period

1.27. The London Mayor consulted on the draft New London Plan between December 2017 and March 2018. An Examination in Public on the draft plan was held between January and May 2019. This London Plan has yet to be adopted but the annual housing supply figure target is increased from 641 for Bromley and is listed as 774 therefore a new 7,740 ten year housing target.

London Infrastructure Plan

1.28. The London Infrastructure Plan 2050 was published by the GLA in 2014 and updated in 2015. It is the first ever attempt to identify, prioritise and cost London's future infrastructure requirements to 2050. There are a number of focus areas for the Plan in its early years as follows:

- Energy Infrastructure – developing a London energy plan and zero carbon modelling; reducing overall energy demand by improving building stock and the energy performance of new buildings; ensuring a reliable low carbon and effective energy system; and securing investment in infrastructure ahead of need.
- Waste and recycling – designing out waste; keeping materials in use at their highest level for as long as possible; and minimising environmental impact.
- Water management – water supply, water resource and wastewater; flood risk; drainage; water pollution issues
- Green Infrastructure – changing from seeing individual green spaces as a liability towards seeing green infrastructure as a strategic asset that is just as important as other infrastructure like railways, roads, pipes and cables.
- Digital Connectivity - developing a package of measures to boost digital connectivity across the capital and tackle London's areas of poor connectivity including appointing a troubleshooting not spot team; Bringing mobile connectivity to the London Underground; Making connectivity a key part of the London Plan; Providing connectivity guidance to Boroughs.

The Mayor's Transport Strategy

1.29. The Mayor's Transport Strategy was published in 2018 after a significant consultation process. It states that London's continuing economic success relies upon reducing Londoner's dependency on cars in favour of increased walking, cycling and public transport use and sets a central aim for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041. The transport strategy also has a Healthy Streets approach which aims to put human health and wellbeing at the heart of planning for London.

1.30. Each London Borough is required to produce its own Transport Strategy which sets out how it plans to implement the Mayor's Transport Strategy at the borough level and is the means by which each Borough gains funding from TfL, through the Local Implementation Plan (LIP) and other non-formula funding allocations, for the next 3 years to implement their respective transport programmes.

Bromley's Transport Strategy

1.31. This document is Bromley's transport strategy for the next three years and is the Local Implementation Plan (LIP) of the Mayor of London's wider transport objectives for London as set out in the Mayor's Transport Strategy (MTS).

1.32. In the context of a growing city, Bromley's population is predicted to increase by almost 30,000 by 2032. This level of population growth will present challenges for the Borough's transport networks, to ensure that residents can still move about safely and efficiently to access employment, education, health provision, retail and leisure opportunities. Providing an efficient transport network has a central role in ensuring the quality of life in Bromley and promoting economic growth across the Borough.

1.33. If this growth in demand for travel were to be accompanied by an equal growth in-car use, congestion and traffic would get worse, with slower journeys for residents and businesses and air quality will deteriorate. To accommodate this increase in demand requires us to make the most efficient use of the capacity we have on our transport networks, through the use of space-efficient modes. Essentially this means that high quality, attractive alternatives to car travel need to be developed to provide genuine transport choice and to avoid gridlock in the more built-up parts of the Borough. We need to focus on the most efficient use of the available capacity and encourage residents to choose the most appropriate mode for their particular journey, thereby enhancing the Borough's quality of life, health and local economy; these high level objectives are set out in "Building a Better Bromley".

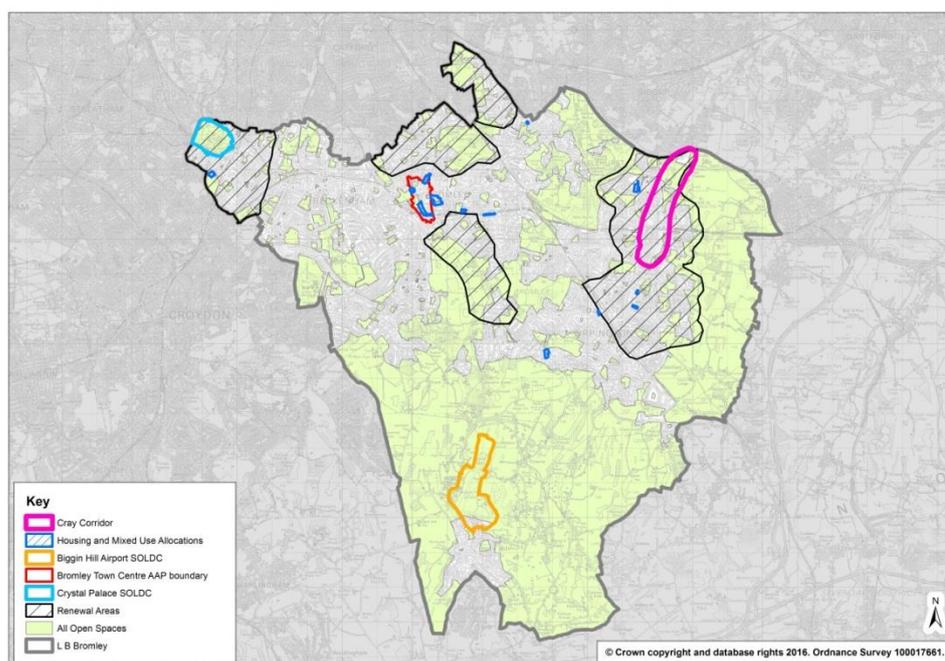
1.34. Transport has a key role to play in delivering these objectives, for example by providing attractive walking and cycling infrastructure, residents will be able to undertake exercise as part of their everyday routine, such as travelling to the station, improving their health and reducing the chance of disease, thereby supporting independence and promoting a healthy Bromley. Similarly, whilst the Borough does not have the same air quality problems as inner and central London, the Council will work to maintain and improve its air quality in a targeted way that supports the ambition for a Quality Environment and Healthy Bromley.

Bromley's Local Plan adopted 2019

1.35. The London Borough of Bromley's Local Plan sets out the Spatial Strategy for sustainable growth in the borough to 2031. The Spatial Strategy identifies locations for strategic development and in broad terms the location for growth, areas with significant opportunities for change and enhancement, as well as areas where protection and more constrained development is anticipated, they are:-

- Bromley Town Centre – a focus for sustainable growth of retail, office, homes, and leisure and cultural activities.
- Cray Business Corridor - the main industrial and business area within the Borough, providing accommodation for a full range of businesses, and improving the offer for modern business. Biggin Hill SOLDC a cluster of businesses focused on aviation and high tech related industries.
- Crystal Palace SOLDC. Protect and enhance the quality and character of all Bromley's Places.
- Protect and enhance the Borough's varied open spaces and natural environment. Improvement of Renewal Areas.
- Maintain and enhance the network of town centres, local centres and neighbourhood parades

Figure 1. LB Bromley Spatial Strategy Map



Source: London Borough of Bromley 2016

1.36 The infrastructure needs that arise from this growth will form the basis for the Infrastructure Delivery Plan (IDP). In general the recommended sites included in the Local Plan for new development (Appendix 10.2) are in areas already well served by infrastructure provision, it is important that the specific site allocations in the Local Plan are supported by the necessary infrastructure to ensure sustainable development takes place. Some of this will be site specific and will be identified within individual allocations, but, in other cases, growth in general will need to be supported by additional physical, social and green infrastructure to cater for the additional population and provide services and facilities. Local Plan Policies require developers to provide the necessary infrastructure for their proposals.

1.37. The overarching planning obligations Policy 125 'Delivery and Implementation of the Local Plan states that: *The Council will work with partners to deliver the vision, objectives and policies of this Local Plan:*

- *Requiring development to provide for the infrastructure, facilities, amenities and other planning benefits that are necessary to support and serve it;*
- *Working with relevant providers and developers to ensure necessary infrastructure is secured and delivered in time to support Bromley's consolidated growth and development and provide facilities for the borough's communities;*
- *Using planning obligations where appropriate alongside other suitable funding mechanisms to support the delivery of infrastructure, facilities and services to meet needs generated by development and to mitigate the impact of development;*
- *Working with neighbouring boroughs to co-ordinate delivery across boundaries;*

Community Infrastructure Levy (CIL)

1.38 The Planning Act 2008 contained enabling legislation for the charging of a Community Infrastructure Levy (CIL) which was then prescribed in detail in the CIL Regulations 2010 (which has seen subsequent amendments). The regulations authorise local planning authorities to charge a levy on most types of new development in their area for the purpose of securing funding for local infrastructure.

1.39 Changes to government legislation over the years have modified how infrastructure planning is undertaken and has strengthened the link between the Local Plan and the delivery of infrastructure. CIL guidance sets out how infrastructure planning should be carried out to inform the CIL process and the direct relationship that this should have to the infrastructure assessment which ‘underpins the relevant plan’. This guidance also clarifies the link which is required between the infrastructure identified at the planning stage and that which is funded through the CIL once adopted.

1.40. In April 2012, the Mayor of London implemented a charging schedule (MCIL1) across 33 London Boroughs in order to generate a £300m London-wide contribution towards the funding of Crossrail. In London there are three ‘charging bands’, of which Bromley’s is in ‘Zone 2’, which means that all development liable to CIL was charged at a rate of £35 per sq. Metre.

1.41. Following on from MCIL1, on 1 April 2019 the Mayor adopted MCIL2 for the purpose of funding Crossrail 2; a proposed new railway serving London and the wider South East. MCIL2 supersedes MCIL1 and will be used to contribute to £4.5 billion of funding for Crossrail 2 (or other transport infrastructure projects in the event that Crossrail 2 does not go ahead). Bromley is again a Band 2 authority, and the MCIL2 charge is £60 per sq. metre.

1.42. The viability evidence used to assess the appropriate local CIL rate to be charged in the Borough of Bromley takes into account the Mayoral CIL rate of £60 per sq. metre. The proposed local rate put forward at Draft Charging Schedule stage, alongside the updated Mayoral CIL 2 rate will be carefully considered and viability tested to support the Local Plan before Examination, and Adoption.

1.43. For certain developments coming forward there will still be requirements for planning obligations to be secured via Section 106 Agreements to ensure acceptable development. A Planning Obligations Supplementary Planning Document (SPD) was adopted in 2010 which sets out when specific planning obligations may be sought from developments; this SPD will be revised following adoption of the local CIL charge.

Demographic Change in Bromley and Population Projections

1.44 The population estimates show that the Borough’s growth is projected to continue in over the Local Plan period in accordance with the GLA’s population projections¹.

¹ GLA 2019-based long-term trend-based population projections (using 15 year migration scenario) Available: <https://data.london.gov.uk/dataset/gla-population-projections-custom-age-tables?q=long%20term%20migration%20scenario%20>

Table 1.1: Bromley's Population

Estimated Population	London Borough of Bromley
Census Data 2001	295,532
Census Data 2011	309,392
GLA Population 2016	327,400
GLA Projected Population 2019	336,600
GLA Projected Population 2031	370,400
Change (%) over Plan Period (2019-2031)	10.04%

1. 45. Based upon the findings of the 2011 census, both the GLA and the Ministry of Housing, Communities and Local Government (MHCLG) have produced revised population projections. The 2011 census highlighted that previous GLA predictions had underestimated growth in London which has been attributed to an issue in calculating net in-migration. The revised projections have been used in the Local Plan and to inform the Infrastructure Delivery Plan (IDP). The limitations of past GLA projections highlight the uncertainty in estimating population growth. The data included in the table above should be read with the understanding that whilst it is possible to review past trends, it is not possible to accurately predict future demographic trends.

Table 1.2: Bromley Population Projections by Ward²

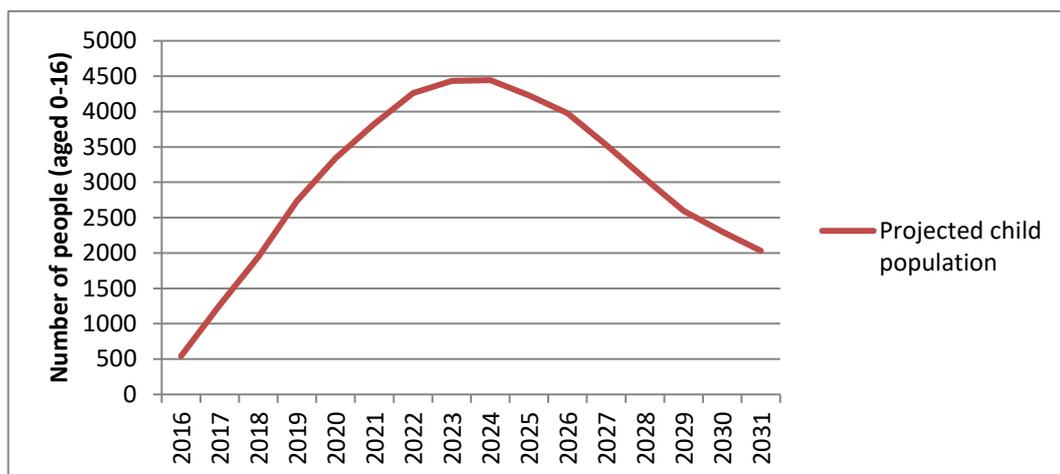
Ward	2016	2019	2031	% Change 2019-2031
Bickley	16,000	16,350	17,800	+8.86%
Biggin Hill	10,550	10,850	10,600	-2.30%
Bromley Common & Keston	17,600	17,900	17,450	-2.51%
Bromley Town	18,750	19,600	26,100	+33.16%
Chelsfield & Pratts Bottom	15,050	15,350	15,900	+3.58%
Chislehurst	16,500	16,900	17,000	+0.59%
Clock House	16,600	16,850	17,800	+5.64%
Copers Cope	16,400	16,850	17,600	+4.45%
Cray Valley East	16,350	16,600	17,000	+2.41%
Cray Valley West	17,300	17,550	18,600	+5.98%
Crystal Palace	13,300	13,550	14,300	+5.35%
Darwin	5,500	5,550	5,450	-1.80%
Farnborough & Crofton	14,900	15,250	15,950	+4.59%
Hayes & Coney Hall	16,400	16,700	18,050	+8.08%
Kelsey & Eden Park	16,550	16,900	19,300	+14.20%
Mottingham & Chislehurst North	10,500	10,600	10,400	-1.89%
Orpington	15,450	15,750	17,200	+9.21%
Penge & Cator	18,050	18,350	19,250	+4.90%
Petts Wood & Knoll	14,200	14,550	17,200	+18.21%
Plaistow & Sundridge	16,100	16,550	17,400	+5.32%
Shortlands	10,250	10,450	10,800	+3.49%
West Wickham	15,150	15,250	17,100	+12.13%
Total	327,450	334,250	358,250	+7.18%

² GLA 2019-based ward housing led population projections (2019) Available: <https://data.london.gov.uk/dataset/gla-population-projections-custom-age-tables>

Child Yield

1.46. The number of children (0-16) projected to live in the Borough in the following graph is also estimated using the GLA Population Projection figures. It is predicted that the number of children will increase dramatically until 2024 and then begin to decrease. The large increase in numbers of children from the baseline figure in 2016 to the end of the plan period in 2031 can be seen below. As before, these forecasts are an estimate and should be read with the understanding that they are likely to be inaccurate. These predictions will impact upon the need for further educational infrastructure.

Figure 1.1: Additional Number of Children per year from 2016 Baseline³



Employment

1.47. The London Plan 2016 includes a forecast of growth in Employment for Bromley - from 118,000 in 2011 to 134,000 in 2036 (13.6%). Bromley's Local Plan identifies the Cray Business Corridor, Bromley Town Centre, and Biggin Hill SOLDC to be the main areas of growth. However, the network of town centres and business areas will continue to play an important role.

1.48. The Local Plan evidence base identifies a significant requirement for office space, driven by business services and financial services, as well as growth in employment in utilities, wholesale, retail and transport/storage. The following gross additional increase in land uses is planned to take place in Bromley Town Centre:

- B1 Business: 7,000sqm
- A1 Retail: 42,000sqm
- A3/A4/A5 Food and Drink: 7,500sqm
- Hotel Beds: 350sqm
- Leisure: 4,000sqm
- Community: 3,500sqm

³ GLA Population Projections for London Borough of Bromley (2019)

Housing

1.49. The London Plan 2016 requires Bromley to provide a minimum of 641 new homes per annum from 2015-2025. Based on these figures, a minimum total of 6,413 new homes need to be planned for over a 10 year period. However if the Draft London Plan is adopted the figure will be as 774 therefore there will be a new 7,740 ten year housing target.

1.50. A significant proportion of the housing anticipated in Bromley over the next 15 years will be delivered through the site allocations in Bromley's Local Plan. The Council identified 13 allocated sites in the Borough which would be suitable for residential and/or mixed-use development (Local Plan 2019, Appendix 10.2). There are also estates⁴ and areas of the Borough which would benefit from regeneration, and this would be an opportunity to increase density of housing, as well as to improve community facilities as schools, libraries and leisure centres. Over half of the Borough's area is open countryside protected by the designation of Green Belt and the pattern of existing development in the borough is predominately scattered across the northern part of the borough and is focused around the main population centres. Additional housing sites will be brought forward during this timeframe; however their location is yet to be determined.

⁴ LB Bromley Housing Strategy 2019-29

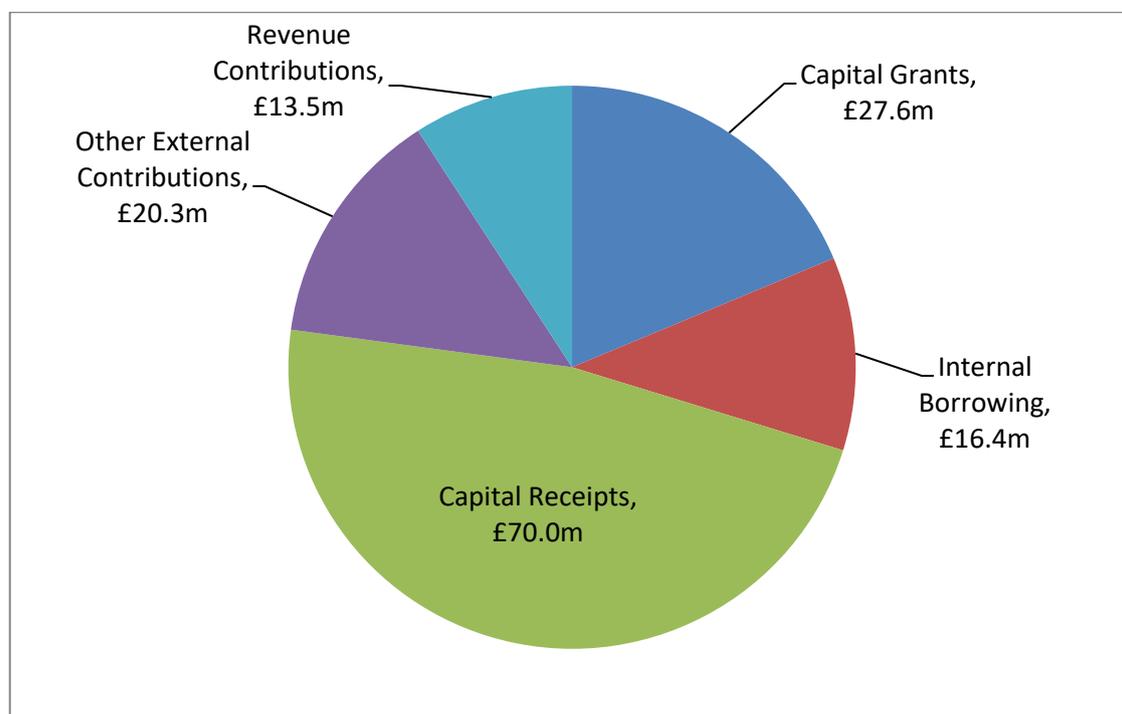
2. INFRASTRUCTURE FUNDING SOURCES

2.1 When assessing the deliverability and costs of infrastructure items, existing funding sources must be taken into consideration. Infrastructure can be funded through a variety of different mechanisms. Whilst some infrastructure projects may be funded from current and forecast contributions, others may require a complex mix of funding streams. Some funding streams are often only confirmed in the shorter term, some are subject to funding bids and others will continue to evolve. Exploring a range of funding opportunities is vital and this section sets out some of the key sources of funding available.

Council Capital Programme

2.2 Funding for key projects, including infrastructure, is available through the Capital Programme. In the current four year period (to 2023/24) the programme totals £147.8m. The key capital projects and associated funding are shown below.

Fig 2.1 Capital Programme Funding sources



Funding Source	Proportion
Capital Grants	19%
Other External Contributions	14%
Capital Receipts	47%
Revenue Contributions	9%
Internal Borrowing	11%

2.3 Capital Bids for new schemes are submitted by departments annually as part of an Annual Capital Programme Review. Successful bids are included in the Programme following consideration of a detailed business case and feasibility study where relevant funding sources, as well as any ongoing revenue implications, will be identified. All capital schemes are subject to a post-completion review within one year of completion.

Council Investment Fund and Growth Fund

2.4 To help support the achievement of sustainable savings and income, the Council has set aside funding in the Investment Fund earmarked reserve to contribute towards the Council's economic development and investment opportunities. To date, total funding of £84.50m has been placed in the Investment Fund earmarked reserve and £39.2m placed in the Growth Fund earmarked reserve.

2.5 To date, schemes totalling £119m have been approved (£92.3m on the Investment Fund and £26.5m on the Growth Fund), and the uncommitted balances as at the end of June 2020 stand at £12.5m for the Investment Fund and £12.7m for the Growth Fund.

Community Infrastructure Levy

2.6 The Community Infrastructure Levy (CIL) Regulations were introduced to enable planning authorities to set a charge for new development in their area and use the funds to help deliver supporting infrastructure. To introduce a CIL, authorities are required to demonstrate an infrastructure funding gap and consider the potential effects (taken as a whole) of the imposition of CIL on the economic viability of development across its area. Authorities are required to produce an annual Infrastructure Funding Statement which will set out how CIL is to be used, and in particular identifying the balance between use of CIL and S106. This provides clarity about what developers are required to pay for and through which route.

2.7 In addition to the Mayor of London's Community Infrastructure Levy (CIL), the Council is in the process of developing a local CIL. The preliminary draft charging schedule document was the first consultation in this process. All the responses submitted during the consultation will be used to refine the viability evidence and the proposed CIL rates, as well as informing the draft charging schedule. A second consultation is expected to take place during 2020/21.

Section 106 Contributions

2.8 A planning obligation made under Section 106 of the Town and Country Planning Act 1990 may require developer contribution towards infrastructure to mitigate the impacts of a development proposal. This is an existing mechanism to secure contributions towards infrastructure delivery.

2.9 A Section 106 agreement is negotiated at the point of a planning application and becomes a signed legal agreement between the Council and the developer. Contributions are subject to the conditions set out in the legal agreement.

2.10 Any contribution should meet all the statutory tests set out in the CIL Regulations 2010 (Regulation 122 (2)):-

A planning obligation may only constitute a reason for granting planning permission for the development if the obligation is -

- (a) Necessary to make the development acceptable in planning terms;
- (b) Directly related to the development; and
- (c) Fairly and reasonably related in scale and kind to the development.

New Homes Bonus (NHB)

2.11. In 2011 the Government committed to provide a ‘bonus’ for new homes by match funding the additional council tax for new home and empty properties brought back into use, with an additional amount for new affordable homes, for a period of six years. The payment to the Council for 2020/21 was £1,612,358.60. Funding has reduced significantly over the years and it is understood that the current Government is committed to reform the New Homes and is reviewing the future of the scheme.

Business Rates

2.12 Under the Business Rates Retention arrangements introduced from 1st April 2013, authorities keep a proportion of business rates paid locally. The Council previously retained a 30% share of local business rates with 50% retained by the Government and 20% retained by the GLA. This was changed in 2018/19 to reflect the 100% devolution to London as part of the London Business Rate Pilot Pool.

2.13. The above change will provide an opportunity to generate additional income through the uplift in business rates arising from economic growth as the Council will retain a higher share. The Council will also carry the downside risks, such as the impact of rating appeals. However, generating additional business rate income will become more critical as core grant funding will be phased out. The Council’s investment in growth and economic development will contribute towards increased business rate income.

2.14 The total annual business rates collected is approximately £93m. Income received from business rates is not ring-fenced and provides funding for the delivery of the Council’s core services.

Business Rate Supplement (BRS)

2.15 Local Authorities can place a supplement on business rates and retain the proceeds for investment in the economic development of an area. The Council does not currently have a BRS scheme in place, but the Mayor of London introduced a BRS levy to contribute towards the cost of the Crossrail project.

2.16 Some examples of other funding sources are shown in Table 2.2.

Table 2.2 Funding Sources examples.

Joint Ventures and Public/Private Delivery Vehicles	Provides a partnership approach to the delivery of infrastructure services and projects.
Tax Increment Financing (TIF)	TIF involves re-investing a proportion of future business rate income from an area back into infrastructure and related development.
Prudential Borrowing	A local authority can utilise powers under the Prudential Code to borrow to finance infrastructure or development needs.
Single Local Growth Fund	A single funding pot to support growth

	for which Local Enterprise Partnership (LEP) areas can bid.
Heritage Lottery Fund	Supports projects across the UK aimed at helping people explore, enjoy and protect our heritage.
Big Lottery Fund	Provides funding for community groups and projects that improve health, education and the environment.
Business Improvement District	A Business Improvement District (BID) is a business led and business funded scheme to improve a defined commercial area, such as a town centre or industrial estate through additional services or new initiatives.

3. TRANSPORT

Definition

3.1 Transport infrastructure involves more than providing extra capacity on the road and public transport network, it is also about improving accessibility for all residents including by foot, bicycle and interchange between travel modes, especially in areas of growth. Ensuring transport infrastructure is adequate to support growth in the borough is a key part of the Infrastructure Delivery Plan and its implementation. However, in accordance with the aims and objectives of the Mayor's Transport Strategy and the Borough's Transport Strategy, increases in transport capacity are only acceptable if they are for sustainable modes of transport, not solely for the private car.

Existing Infrastructure provision

3.2 The transport network in the London Borough of Bromley (LBB) is the responsibility of a number of organisations.

3.3 Transport for London (TfL) is responsible for the Transport for London Road Network (TLRN) and its subsequent maintenance, the Borough's 'Red Routes' and Bus Network. The Department for Transport and Network Rail are responsible for the rail infrastructure of all mainlines in the Borough. Southeastern Railways operate rail services on the Bromley North Line, Hayes Line, Chatham Main Line, and South Eastern Main Line. Govia Thameslink Railway (GTR) are responsible for Thameslink services primarily on the South Eastern Main and Southern (part of GTR) for services on the Crystal Palace line. London Overground, part of TfL, are responsible for services on the East London Line. Tram services are the responsibility of London Trams, which is also part of TfL. Please note that operators are subject to change and may be affected by any future rail devolution. Bromley Council is responsible for all remaining roads within the Borough's boundary.

3.4 Whilst the Borough does not have the same air quality problems as inner and central London, the Council aims to maintain and improve its air quality in a targeted way. In 2007 the Council declared an Air Quality Management Area ⁵(AQMA) which covers the north and North West of the Borough in response to predicted exceedances in nitrogen dioxide levels. Subsequent air quality monitoring for nitrogen dioxide, published in the Council's Annual Status Reports, has shown that anticipated reductions in roadside pollution levels have fallen at a slower rate than originally anticipated. The Council's Air Quality Action Plan 2020-25 currently out on public consultation (June 2020) proposes that a key action is to improve walking and cycling infrastructure and to promote the use of greener routes such as the National Cycle network. There are over 100 miles of cycle routes across the borough, located both off road and in quieter residential areas. There are also 12 designated cycle routes. The transport networks within Bromley broadly reflect the Borough's geography, with more densely developed areas having increased levels of access to public transport when compared with the borough's more rural sectors. Bromley's Third Local Implementation Plan 2019 (LIP) ⁶outlines the existing transport provision at various geographical scales (see Table 3.1).

⁵ Draft Air Quality Action Plan (AQAP) 2020-2025

⁶ Local Implementation Plan 2019

3.5 The preparation of a LIP is a statutory requirement by the Greater London Authority (GLA) on London boroughs and outlines the Borough's proposals for implementing the Mayor's Transport Strategy.

Table 3.1 Bromley's Transport Geography

Level	Key transport connections	Stations/stops interchanges
London-Wide	<p>Rail: South Eastern, Govia Thameslink Railway</p> <p>Road: A21</p> <p>Rail Termini: London Bridge, Cannon Street, Charing Cross, London Victoria, Waterloo East, Blackfriars, and Lewisham (for Docklands Light Railway (DLR)).</p>	
Sub-Region South (adjacent to East and Central Sub regions)	<p>TLRN: A21, A232, A20</p> <p>Major Borough Roads: A222, A224, A232, A234, A2015</p> <p>Bus Corridors: A21, A222</p> <p>Cycling Corridors: 5 London Cycle Network (LCN)+ Routes and 14 established borough cycling routes</p> <p>Major Walking Routes: London Loop, Green Chain and the Capital Ring, along with 9 borough-defined healthy walks.</p>	<p>Railway Stations: 26 in total</p> <p>Bus Interchange: Bromley North, Orpington Station, Elmers End</p> <p>Train/Tram Interchange: Beckenham Junction, Elmers End</p> <p>Freight Distribution Centres: None</p>
Local	<p>Roads and streets: 43 miles/ 70km of principal roads, 458 miles/ 737 km of local roads and 12 miles/ 20km of Transport for London roads.</p> <p>Bus Routes: 61 routes service the borough</p> <p>Cycling: 100 miles/ 150km of cycle ways across the borough</p> <p>Walking: 870 miles/1400km of footway</p>	<p>Bus Stops Total: 1040 within the borough</p> <p>Bus Stops with Proposed Countdown Signs from 2012: 74</p> <p>No. of Rail/Tram Stations with Cycle Parking: 25</p> <p>No. of Rail/Tram Stations with full or partial mobility impaired access: Full: 8 Partial: 9 None: 11⁷</p>

Source: London Borough of Bromley 2020

3.6 There are 26 national rail stations and 5 Tramlink stops in the borough. Bromley South and Orpington are the busiest national rail stations.

⁷ Bromley's Second Local Implementation Plan October 2013

Current Shortfall

Rail

3.7 London Bridge station has reopened after substantial changes as part of the Thameslink improvements. This has increased capacity through central London. The introduction of Class 700 rolling stock and a new service timetable for Thameslink services has seen an improvement in capacity and frequency since 2018. South Eastern services have remained the same since the introduction of their franchise.

Bus

3.8 Bus wait times have continued to increase on some routes, largely as a result of congestion. The bus is a key mode for the South sub-region, as the South continues to grow there is a need to ensure that appropriate measures are taken to maintain attractive and reliable bus services.⁸

3.9 Bus Mode Share in the sub-region has continued to increase faster than any other sub-region. TfL will continue to plan, monitor and manage the bus network and make any changes to meet demand. Current bus-standing facilities in Bromley Town Centre (particularly around Bromley North station and also in Simpson's Road near Bromley South station) are at capacity and limit the opportunity to terminate services within the town centre. There also remain only two direct bus services between Biggin Hill and Bromley Town Centre and no direct high frequency services between Biggin Hill and New Addington. The 314 bus service between New Addington and Eltham via Bromley town centre has been improved in frequency.

Roads

3.10 Traffic congestion on part of the road network; namely the A21, A24, A222 and A232 can be particularly bad during weekday morning peak periods. A study undertaken by SKM Colin Buchanan (June 2010) identified a number of pinch points on the road network that contributed to traffic congestion issues. This report formed the basis of congestion relief schemes funded through the Local Implementation Plan (LIP). Outstanding LIP schemes awaiting implementation include:

- A21 Masons Hill, between Kentish Way
- Keston Mark (A232 Croydon Road and the A233 Westerham Road)
- A21/ Oakley Road (TLRN)

3.11 The planning status of these schemes varies, although the responsibility for planning and implementing those schemes on the TLRN lies with TfL. However, funding the schemes could be a joint responsibility between TfL and LBB, particularly where the traffic congestion impact is on a principle road.

3.12 The latest survey (2015/16) identified 7.2% of the principal road network in Bromley to be in need of maintenance, based on a DVI (detailed visual inspection). The DVI surveys are undertaken each year by LB Hammersmith & Fulham on behalf of all London boroughs, to ensure consistency across the capital. The cost of the surveys is met by TfL, as the results are used to allocate principal road maintenance

⁸ South London Sub-regional Transport Plan 2016 update

funding. Planned works for principal roads are funded by TfL through the LIP process.

Future Demand

Rail

3.13 According to the 2011 Census, travel by train was the second most popular method of travel to work by Borough residents, with 32.7 per cent of Bromley residents travelling to work by train. An additional 3.5 per cent travelled by Underground, Metro, Light rail or Tram (Tramlink serving Beckenham Junction and Elmers End).

3.14 The introduction of Class 700 rolling stock and a new service timetable for Thameslink services has seen an improvement in capacity and frequency for services calling at Ravensbourne, Shortlands, Bromley South, and Bickley. The Sevenoaks/Orpington, Bromley South/Blackfriars Thameslink service via the Catford loop has been increased to 4 trains an hour on weekdays.

3.15 The Orpington – Bromley South – Victoria Southeastern service increased to 4 trains per hour off-peak in 2006 when the Eurostar services which used this line transferred to the high speed line via Ashford International. The additional capacity allowed Southeastern to increase frequency between Orpington and Victoria and no further increases are currently planned.

3.16 Possible further options for lengthening trains are being reviewed and developed by a Network Rail team working on the forthcoming Kent Route Study. The Route Study is a 30-year strategy document for the route looking forward to 2044 and then identifying priorities for the next funding period; Control Period 6 (2019-2024).

3.17 The Kent Route Study will also look at the land implications, depot and stabling facilities across the Kent route. This will establish where depots or stabling facilities may need to be provided going forward or where the existing stabling facilities may need to be enlarged to accommodate larger trains.

3.18 Internal Network Rail processes have identified that Bromley South and Beckenham Junction stations will require enhancements to accommodate forecast growth at these locations. A high level review of the areas of development and growth, put forward by LB Bromley, have established a potential need for enhancements at Anerley and Crystal Palace stations to accommodate forecast growth. This will remain subject to review and potentially require a station capacity assessment to be undertaken to gain current day baseline information for the purposes of modelling the impact of forecast growth.

3.19 TfL has an aspiration to increase the frequency of Overground services by 2 trains per hour to Crystal Palace (shorter term) and West Croydon (longer term). For the latter, serving Penge West and Anerley, grade separation of Gloucester Road junction between Norwood Junction and West Croydon is likely to be necessary.

3.20 The Borough currently lacks a direct rail link to Canary Wharf; it is therefore a Council aspiration to have the Docklands Light Railway (DLR) extended to Bromley North. Whilst this is currently unfunded, it is felt that this project would derive significant benefits for the Borough.

3.21 A Bakerloo Line extension into Bromley has been discussed, and after assessing a number of options, TfL has decided to focus on an extension from Elephant & Castle to Lewisham via the Old Kent Road as a first phase. Beyond 2030, subject to further work a future phase could see the line being extended to Hayes via Eden Park and/or to Bromley Town Centre from Beckenham Junction at costs in the region of £3bn. The Council will continue to consider the wider benefits and community concerns of the proposal.

3.22 TfL are proposing a new partnership with the Department for Transport (DfT) that will work with local authorities and train operators to provide strategic direction to the specification and management of rail passenger services across London and the South East. TfL are also proposing to complete the transfer of responsibility from the DfT to TfL for inner suburban rail services that operate mostly or wholly within Greater London.

3.23 This suburban devolution proposal is looking at a new metro system (Metroisation) for south London. The devolution proposals could include an increase in capacity of services which call at stations in the borough from 2021. TfL have advised that, this could include continued lengthening of all inner suburban services running via Bromley South (to 10 car) and Grove Park (to 12 car). Following that, higher frequency inner suburban services via both Bromley South and Grove Park through Metroisation could be enabled by technological improvements, more efficient use of existing infrastructure and targeted infrastructure schemes.

Bus

3.24 Bus priority opportunities are being monitored and are implemented where possible. Current priorities in Bromley include the retention and improvement of the facility at Bromley North.

3.25 TfL requested inclusion of enhanced bus infrastructure in Bromley Town Centre, There is no cost of this work and it depends on the impact arising from the scheme at Bromley North and associated improvements at Lewisham and Croydon. However, the potential developer of the Bromley North site would be expected to include this re-provision within the scheme proposal. Any associated costs can be updated in due course.

Trams

3.26 Passenger numbers are expected to reach nearly 60 million by 2030. 'Trams 2030' is TfL's proposed 15-year plan to accommodate growing demand, improve reliability and support the regeneration of numerous town centres. It includes the Wimbledon line enhancement programme and the current proposals including major upgrades and expansions to the network. In order to support future capacity increases, new and expanded maintenance facilities are needed. TfL are exploring additional facilities at Elmers End with a joint estimated cost of £39m for stabling and platform facilities. TfL is looking to significantly enhance frequency and capacity on the Beckenham Junction Line, with additional trams and line upgrade, which has a project cost of £28m.

Walking, Cycling, and Roads

3.27 TfL is transforming conditions for all road users and pedestrians with initiatives such as the Roads Modernisation programme, an integrated approach to the way London is changing and growing, which looks to create better places, better

cycling and pedestrian routes and safer streets. Strategic analysis is available within the Sub-regional Transport Plan⁹, giving an indication of the high level transport requirements within LB Bromley. An example of this is the funding, through the LIP, of the Crofton Road pedestrian and cycle route, in Orpington, a distance of approximately 1.4km, which will also result in significant tree planting, additional greenspace and areas of sustainable drainage.

3.28 TfL's study has identified a number of improvements that are feasible that could reduce delays and congestion for users accessing Bromley town centre, helping to retain Bromley's status as a key shopping destination. Essential to this is improving capacity for pedestrians, cycles and buses.

3.29 The Council is working with TfL on measures to improve the A21 in the area. A wider study via a revised modelling exercise will suggest improvements that are proposed, including around some of the Bromley Town Centre junctions on the A21.

3.30 Measures will also be taken to improve accessibility to Biggin Hill in light of the proposed London Plan designation of Biggin Hill as a Strategic Outer London Development Centre (SOLDC) and includes a scheme at A233/A232, Keston Mark.¹⁰

3.31 On a site by site basis, TfL assesses the impact of development proposals on the network and in conjunction with London Plan policy. Where mitigation is necessary, TfL works with the Council and GLA to secure this in line with statutory tests. Much of this strategic analysis will be available within the Sub-regional Transport Plan which will give an indication of the high level transport requirements within LBB, based on current analysis.

The London Borough of Bromley will continue to work with TfL to address traffic congestion issues through the Local Implementation Plan (LIP).

Table 3.3 Transport Infrastructure costs where known/applicable

Aim	Infrastructure	Cost	Delivered by
Rail	Shoulder peak lengthening, additional fast services, 12 car outers and additional fast services, grade separation at Herne Hill	Unknown	Network Rail/TfL/ LIP/Planning Obligations s106/CIL or TBC
	Further train lengthening on the Sydenham line	Unknown	
	Petts Wood/St Mary Cray/Chislehurst or Elmstead Wood and Penge West – provision of step-free access	£15m	
Trams	Additional capacity on Elmers End Tramlink branch – construction/second platform at Elmers End plus Stabling facilities	£39m	
	Additional capacity Beckenham Junction	£28m	
	Extension of Tramlink from Beckenham Junction to Bromley town centre*	£100m*	
	Extension of Tramlink to Crystal Palace*	£200m	
DLR	DLR extension from Lewisham to Bromley North Station*	£800m*	
Bakerloo line extension	Bakerloo Line southern extension – which remains an option*	£3bn*	
Buses	Measures to reduce journey times -	Unknown	S106 planning obligations/TfL /

⁹ South London, Sub-regional Transport Plan 2016 update TfL

¹⁰ Planning for growth in Bromley – Biggin Hill Study Final Report February 2015

	Bromley and Canary Wharf/Croydon		TBC
	Improvements between Biggin Hill, Bromley and Orpington, orbital and express services across the Borough	Unknown	
Cycling and walking	Cycle hubs at various stations	£480k	TfL/ South Eastern/ LB Bromley, neighbouring boroughs
	Quietway cycle routes	£12m+	
	Petts Wood Bridge Cycle replacement	£1.3m	
	TfL cycle safety review of junctions – A21	Unknown	
	Cycle Superhighway (CS6) – Extension of Route 6 (Penge to City via Elephant & Castle*)	Unknown	
Roads	A21 – Road capacity and junction improvements at various points	£21m	TfL/LIP + Planning obligations s106/ s278/CIL
	Keston Mark (A233/A232 Junction improvements)	Unknown	
	Chislehurst congestion relief scheme	Unknown	
	A222 – Congestion relief scheme*	£450k	
	A234 Corridor study	£40k	
	Oakley Road	£1m	
Rail Bridges	Orpington and Shortlands	£20m +	Network Rail/ TfL/ LIP
Total potential minimum costs		£4,238,270,000	

Note: *Not on current TfL's business plan but remain listed in Appendix 1 of this IDP and Draft Local Plan Bromley 2016-31 Appendix 10.13.
Source: London Borough of Bromley 2020

Funding Sources

3.32 The costs for many of the transport items will be shared responsibility of a number of external organisations, including Transport for London, and Network Rail. Many of these projects have unknown costs at present as they are aspirational or in the early stages of development. Network Rail station enhancements would require funding from the Local Authority through Section 106 or Community Infrastructure Levy (CIL) funding.

3.33 Locally the need for physical transport improvements will be determined on a site specific basis. Costs cannot be accurately predicted in advance and will have to be calculated in the context of individual planning development applications. Site specific improvements would therefore be secured by s106 or s278 legal agreements.

3.34 The remaining road improvement schemes identified by SKM Colin Buchanan (2010)¹¹ will be delivered through LIP funding. Where improvement schemes are on roads owned by the London Borough of Bromley, funding would be a joint responsibility between TfL and the council.

Infrastructure Costs

3.35 Depending on the particular project(s), there are varying cycles for investment planning. In general, TfL funded or part funded projects are aligned to the TfL business plan. Although intended for five years, Business Plans are refreshed on a regular basis and are linked to wider funding settlements and arrangements. However, post-COVID impacts could affect infrastructure provision and priority projects might change but any infrastructure funded through CIL will align with updated priorities through new LIP/transport strategy and any mayoral/national policy and guidance

¹¹ SKM Colin Buchanan – Transport Study2010 + Bromley First Infrastructure Delivery Plan – July 2012

4. UTILITIES

Definition

4.1 The term 'utilities' is given to a group of services that includes electricity, gas, water and sewage, and broadband, that are supplied for the use of the public by a company(s).

4.2 Electricity, gas, water and sewage infrastructure must have or be able to have sufficient capacity to accommodate all new development within the borough. Various providers are responsible for the delivery of these services. Electricity and gas are supplied by a range of private companies through the National Grid infrastructure. In the London Borough of Bromley, these services are provided by UK Power Networks (UKPN) and Southern Gas Networks (SGN). UKPN are responsible for the local electrical distribution network including overhead transmission lines, underground cables and electricity substations. SGN are responsible for the local gas distribution network. The distribution of water to individual premises and local sewage infrastructure is the responsibility of Thames Water. Digital connectivity is a necessity for residents, local businesses and public services, with access to reliable, high speed broadband and mobile networks being directly linked to economic growth and prosperity.

Existing Infrastructure provision

UK Power Networks

4.3 Electricity is provided through a transmission and distribution network. The transmission network provides electricity on a strategic level throughout the country and is owned and managed by National Grid. Within LBB, there is a 400kv overhead cable route from Rowden substation in Bromley town centre to Northfleet substation in Dartford.¹² There is also an underground cable from Beddington substation in Sutton to Shinglewell substation in Gravesham.

4.4 The distribution network provides electricity on a local level and within LBB is owned and maintained by UK Power Networks. LBB is supplied by the Beddington to Hurst 132kv cable which distributes electricity supply to local substations via the Bromley Grid 33kv route. There are local main substations at Bromley (Bromley Grid 33kv), Bromley South, Chislehurst, Orpington and Petts Wood (Orpington).

Southern Gas Network

4.5 Gas is provided through a transmission and distribution network. The transmission network provides gas on a strategic level throughout the country and is owned and managed by National Grid. Within LBB, National Grid has no gas transmissions assets located within the administrative area.

4.6 The distribution network provides gas on a local level. Within LBB, this network is owned and maintained by Southern Gas Networks. Southern Gas Networks are statutorily obligated to develop and maintain an efficient and economical pipe-line system for the conveyance of gas in accordance with the Gas Act 1986.

¹² NETS Seven Year Statement; 2011

4.7 SGN have decommissioned the mains and plant equipment from the former Bromley gas holder site at Holmesdale Road, Bickley, and this site is a Local Plan site allocation¹³.

Thames Water

4.8 It is the statutory duty of Thames Water PLC under the Water Industry Act 1991 to develop and maintain an efficient and economical system of water supply within its area and to provide, improve and extend public sewers as to ensure that areas continue to be effectually drained. Thames Water currently supplies Bromley as part of its wider coverage of London and the Thames Valley.

4.9 Thames Water PLC is responsible for the management of Public Sewers (surface water) and Public foul Sewers within the borough. Planned upgrades to Long Reach Sewage Treatment Works (STWs) which serves the London Borough of Bromley and surrounding boroughs were delivered in December 2012. This improvement has provided additional treatment to improve effluent quality to meet Thames Tideway water quality standards¹⁴.

Broadband services

4.10 Digital connectivity in London has been a priority for the Mayor of London since 2017. Digital connectivity rates in the borough are measured in relation to access to three different types of broadband:

- Superfast: with download speeds of at least 24 megabits per second
- Ultrafast with download speeds of over 100 megabits per second
- Full-fibre download speeds of over 1 gigabit per second

4.11. The table below sets out digital connectivity in the Borough. This data is provided by the Mayor of London; source data is collected by Ofcom.

Availability of broadband			
Area	Superfast %	Ultrafast%	Full Fibre%
London average	94.8	72.1	13.4
Bromley Borough average	97.3	81.2	0.8
Bickey	98.3	78.3	0
Biggin Hill	94.1	74	0.4
Bromley Common and Keston	97.6	78.7	0
Bromley Town	90.9	71.4	1
Chelsfield and Pratts Bottom	92.8	68.7	0
Chislehurst	93.2	68.4	0.2
Clock House	99.2	88.3	0
Copers Cope	99.1	75.5	0.7
Cray Valley East	92	50.6	0
Cray Valley West	97.6	63.2	0
Crystal Palace	94.1	79.7	2.2
Darwin	54	19.4	0.5
Farnborough and Crofton	96.2	84.9	1.7

¹³ Local Plan adopted 2019

¹⁴ Environment Agency response June 2016

Hayes and Coney Hall	96.9	71.4	1
Kelsey and Eden Park	96.5	75.8	0
Mottingham / Chislehurst North	99.5	94.1	0
Orpington	96.7	85.3	1.2
Penge and Cator	96.1	78.9	0.7
Petts Wood and Knoll	99.4	96.1	0
Plaistow and Sundridge	99.1	87.9	0
Shortlands	99.8	65.4	0
West Wickham	98.3	71.6	0

4.12 Generally the Borough has good coverage of superfast and ultrafast broadband, with some exceptions largely in more rural areas.

Current Shortfall

UK Power Networks

4.13 There are no specific shortfalls identified in the London Borough of Bromley for electricity. However the London's energy networks will need to support the transition to net zero. London's energy networks are already responsible for supplying infrastructure to 25% of the UK's electric vehicle charge points and the Mayor has made further installation of rapid charge points a priority¹⁵.

Southern Gas Network

4.14 SGN do not envisage a requirement for significant infrastructure reinforcement on SGN Medium Pressure (MP) or Intermediate Pressure (IP) systems, however they cannot discount the possibility of some localised requirements where connections are made to SGN Low Pressure (LP) systems.

Thames Water

4.15 Thames Water is currently undertaking a series of strategic infrastructure improvement projects across London, but there are no specific shortfalls identified in the London Borough of Bromley. Thames Water generally considers infrastructure shortfalls on a case by case basis. Where there are concerns with regards to capacity for an individual application, Grampian Style conditions will be requested as appropriate to ensure that there is no detrimental impact to the existing network as a result of the new development.

Broadband services

4.16 To ensure that the Borough is ready for future demand and in support of Local Plan Policy 80, the Council proposes that gigabit capable connectivity is prioritised in Bromley Town, Biggin Hill, Cray Valley West and Cray Valley East wards – these are areas in the Local Plan identified as strategic priority areas for economic growth. And that improved broadband connectivity is sought for Chislehurst, Cray Valley West, Chelsfield and Pratts Bottom, and Darwin.

¹⁵ London First 'Utilities and digital, the planning system, commercial property and housebuilding' June 2020

Future Demand

UK Power Networks

4.17 The impact of new development on the National Electricity Transmission System (NETS) within the South Eastern boundary has been identified as a possible driver towards the NETS reaching its thermal capacity¹⁶. The National Grid will ensure that as interconnector capacity increases over time, measures will be taken to increase capacity to ensure the transmission route can sustain the growth in requirement.

Southern Gas Networks

4.18 SGN use computer modelling techniques to assess committed demands on gas networks. These models are built to compensate for potential growth which is obtained from developers and local authority Local Plan information. Should any reinforcement be required above predicted growth, SGN would deal with this on an individual basis under the Gas Transporter Licence. Funding for investment planning regulated by Ofgem and provision is subject to review every 8 years. There is no significant planned investment into gas infrastructure within Bromley.

Thames Water

4.19 The planning cycle for investment in service delivery is 5 years; a process considered by Asset Management Plans (AMPs). There are no significant planned changes to infrastructure in the current AMPs or next AMPs period. Generally speaking, network capacity constraints and requirements for upgrades will depend on the location, scale and timing of development together with that of other development within the same catchment. Thames Water relies heavily on the planning system to ensure infrastructure upgrades are provided ahead of development, either through local phasing and Local Plan policies, or the use of Grampian style conditions attached to planning permissions¹⁷.

4.20 Thames Water use Local Authority housing and employment growth figures and census data to help project likely increases in sewage flows to its Sewage Treatment Works (STWs). Thames Water also takes into consideration a range of other factors, including data on wastewater flows entering the STW.

4.21 Thames Water's infrastructure investment is aggregated across its operational area and then financed for example through loans, and recovered by charges made to customers across that operational area. Customer bills are set by OfWAT through the business plan process. In some cases, developer contributions for local upgrades also help to fund infrastructure, where required.

Broadband services

4.22 Central government have a target to deliver gigabit capable broadband nationwide by 2025; this will be delivered primarily through private investment with some funding being made available to support areas which are not commercially

¹⁶ National Grid - Electricity Ten Year Statement November 2015 - <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=44084>

¹⁷ Thames Water/Savills response April 2016

viable. The Council intends to be pro-active in facilitating the current and future demands of people and businesses in the Borough.

4.23 Rural areas of the borough are still reliant upon ADSL broadband services due to the lack of fibre infrastructure available in some areas. However as a solution, BT Openreach Intend to roll-out full-fibre in key areas in Bromley, notably Farnborough, Biggin Hill and Orpington. The Council is also scoping a 'Digital Infrastructure' project with infrastructure providers – focusing on deployment based on the Council's Local Plan strategic growth areas, as well as areas that have been identified as having significant 'not spots' (low levels of connectivity that would substantially benefit from digital infrastructure improvements).. The project is still being developed but would seek 5G cell deployment and full fibre upgrades to public assets. The upgrades to full-fibre could receive funds through the Strategic Investment Fund (SIF) from the Mayor of London scheme 'Connected London'.

Infrastructure Costs

4.24 There are no infrastructure costs identified for utility provision in the Borough apart from Digital infrastructure where there may be a possible requirement¹⁸ to pursue monies through the Community Infrastructure Levy potentially for 5G cell network deployment.

¹⁸ Approach to Digital Infrastructure LB Bromley Executive report 1st April 2020

5. EDUCATION

Definition

5.1 Local authorities have a statutory duty under the Education Act 1944 to secure sufficient education places, up to 18 years, within their areas. The Academies Act (2010) changed the approach to educational provision and encourages the conversion of schools to academies (outside Local Authority control) establishment of new academy 'Free Schools'. The majority of Bromley schools have converted to academies. With regard to new school provision the Education Act 2011 set two routes for the delivery of new Free schools: Government funded whereby founding groups, including parents, education charities and religious groups, submit applications to the Department for Education on the basis of parental demand to meet local need, or the 'presumption route' whereby the Local Authority funds the new school and runs a competition to choose a provider.

5.2 Local authorities are also required to secure availability of at least 570 hours of free child early education provision over a minimum of 38 weeks for each child aged between 3 to 4 and some 2 year olds, over a 12 month period¹⁹. This is usually known as '15 hours funding' as it works out at 15 hours per week when spread over the school year (38 weeks). Additionally since 2017 some 3 and 4 year olds have been entitled to another 570 hours of extended funded early education and childcare making it 1,140 hours in total, this is usually known as 30 hours funding.

Existing Infrastructure Provision

5.3 The development of the Bromley Local Plan coincided with the growth in demand for educational provision. The various Local Plan consultation stages were developed alongside the Council's Schools Development Plans, with both documents reflecting and addressing the projected needs. The Adopted Local Plan 2019 section 3.3 sets out the planning approach to meeting the need and includes 'Education Site Allocations' in Appendix 10.4. A number of education developments on these allocated sites have now come to fruition, whilst others continue to offer potential to address the projected future needs.

5.4 The most recently published Childcare Sufficiency Ward Data (2017) indicates that in 2016 there were 7,076 childcare places available across 127 preschools and 59 day nurseries. Additionally early years places were provided by 522 childminders.

5.5 The Borough has 77 primary schools (including some separate infant and junior schools) and 18 secondary schools which offer mixed or single sex education and vary in size. In addition the Borough has 3 pupil referral units (PRUs) and 19 independent schools.

5.6 Provision for primary places has been increasing significantly and steadily since 2009 with the number of Reception year pupils increasing from 3,442 in 2010 to 3,995 in 2019. The total primary school population increased from 22,983 to 26,989 over the same period, indicating an increase in admissions outside the main school transfer points and an overall increase in the number of pupils in the primary

¹⁹ Early education and childcare - Statutory guidance for local authorities; Department for Education, September 2014

¹⁹ https://www.bromley.gov.uk/downloads/file/2841/childcare_sufficiency_ward_data_2017

phase. Whereas growth has been mostly focussed on the primary sector, growth in school rolls over the next 5 years will be concentrated in the secondary sector.

5.7 The 2019 School Census data advises that of the resident population, 92.6% of primary pupils and 78.1% of secondary pupils both live and attend school in Bromley. Although a significant number of local residents are educated in other boroughs Bromley is a net importer of pupils at both primary and secondary age,

5.8 Later years of 'school aged' education (Further Education up to 18 yrs – Key Stage 5) may also be provided in college settings. Bromley College of Further Education (Bromley & Orpington Campuses) merged with Greenwich Community College and Bexley College in 2026 to form London South East Colleges (LSEC). LSEC offers both Further Education and Higher Education, being a partner college with the University of Greenwich.

5.9 Meeting the growth in the need for Special Educational Needs (SEN) places also remains an increasing challenge for Bromley and most local authorities. Bromley has 4 special schools, however, significant provision is made out of borough. Between 2014 and 2018 the number of Bromley pupils with an Education Health and Care Plan (EHCP) receiving day provision out of borough (both independent and maintained) increased. Over the same period the use of out of borough boarding provision (both independent and mainstream) decreased.

Current Shortfall

Early Years

5.10 The Childcare Sufficiency Report 2017 indicated concerns at the time about the capacity and sustainability of childcare provision following the introduction of 30 hours childcare in September 2017.

5.11 Live births in Bromley peaked at 4,251 in 2016, dipping to 4,197 live births in 2018, (children who will now be / approaching 2 years of age). Live births are projected to remain around these levels for the next decade.

5.12 The COVID pandemic has reduced the demand for childcare. In the autumn it may be possible to draw conclusions about the extent to places are taken up again, given changes in employment, working arrangements.

School Provision

5.13 The Council and its Free School partners have added over 6,500 new permanent school places opening 4 primary and 2 secondary Free Schools. There are currently 56,762 pupils in Bromley Schools with 27,820 pupils in maintained primary schools, 22,854 in maintained secondary schools, 705 pupils in maintained special schools and 5,286 in independent schools with the growth in the school age population set to continue until the late 2020s.

Primary Schools

5.14 The number of Reception places available at a borough-wide level is currently sufficient to meet projected need although there are areas which fall short of Council's aim of maintaining a surplus of 5% to support choice. School rolls in Key Stage 2 (KS2 - junior) classes in some areas are close to capacity, and therefore,

whilst schools can admit over 30 children to KS2 classes the capacity to meet demand for in-year admissions is reduced.

5.15 These projected trends will need to be carefully monitored through the Schools Development Plan, which assesses need across the Borough in 9 separate 'Education Planning Areas' (EPAs).

Secondary Schools

5.16 Secondary school need is less localised as secondary-aged children are able to travel further distances on their own and therefore the Borough is treated as a single planning area for secondary education. However, there are limits to travel distances with the Council assessing "reasonable travelling distance", in light of The DfE "Home to school travel and transport guidance - Statutory guidance for local authorities (July 2014), when offering places.

5.17 The growth trend experienced in the primary sector moved through to the secondary sector which exceeded capacity in 2015. The pressure was addressed through expansions to existing schools e.g. Bishop Justus, permanently expanded from 180 to 240, and the opening of 2 new secondary Free Schools

- Eden Park High School Elmers End (240 pupils)
- Bullers Wood School for Boys, Chislehurst Road (180 place intake)

5.18 Whilst the need is currently met, rolls are anticipated to continue to increase and secondary growth will be the key mainstream need going forward.

Further Education

5.19 There is pressure for places and the Bromley campus of LSEC is currently oversubscribed with young people for general learning provision. The construction and engineering offerings are at full capacity and LSEC is exploring other ways in which this provision can be expanded sub regionally given the demand for skills labour in London. LSEC has been aware of a skills and training deficit for a range of industries which it is working to address and offer increased specialism at level three and above across all sites in response to labour market shortages and growth industries.

5.20 In recent years LSEC have invested heavily in Hospitality, Catering and Enterprise Careers College in Orpington. This is viewed as a growth area for skills and employment across London.

Special Educational Need

5.21 Bromley has a greater proportion of pupils with an Education Health and Care Plan (EHCP) than regional or national comparators. There are specific pressures for placements for pupils with an EHCP and the Council is working with local schools, trusts and the DfE to bring proposals forward to increase capacity and improve provision where necessary.

5.22 In 2014, mainstream school was the most common setting for pupils with an EHCP but this is no longer the case with more children receiving their education and support in a special school.

5.23 Rolls increased at Riverside and Glebe which increased their secondary Autistic Spectrum Disorder (ASD) capacity by 1FE and 2 FE respectively. Bromley Beacon Academy expanded to take pupils in KS2 and KS5 and became co-educational. However, whilst special school capacity has increased, the newly created capacity is expected to be filled over the next few years.

Future Demand

5.24 The 2019 Local Plan education policies (which reflect the National Planning Policy Framework and the London Plan) state that the Council will ensure provision of an appropriate range of educational facilities, and allocates sites. The overall strategy in both 'Secondary and Primary Development Plans' has involved a combination of 'bulge' classes, permanent expansion of existing provision and new schools in line with Local Plan policies.

5.25 In addition to specific Local Plan education site allocations, Policy 27 defines all sites with permitted use for education purposes, including the sites of schools, colleges and purpose built day nurseries, as 'Education Land' and protects them for education purposes until 2031 (Local Plan period) - providing scope to meet future need.

Early Years Provision

5.26 The Council had been collecting data to update the Childcare Sufficiency Report (2017), however, post Covid-19, this information may not be a reliable indication of future demand which will be the subject to assessment later in the autumn term.

5.27 This data may help to identify the necessity or not for further provision, for example the conversion of the former children and family centre into a nursery granted permission at Marion Vine Primary School.

Primary Schools

5.28 Wards are grouped into 9 Planning Areas for the purposes of primary school place planning. There are planning areas where further pressure is expected before 2030.

- Planning Area 1 - Penge, Anerley & Crystal Palace (Clock House Ward, Crystal Palace Ward, Penge and Cator Ward) Projections indicate rolls will fall, however, projections fluctuate and will need to be closely watched and assessed through the Schools Development Plans
- Planning Area 2 - Beckenham (Copers Cope Ward, Kelsey and Eden Park Ward). This Planning Area has experienced a considerable growth in pupil numbers concentrated on Copers Cope ward, although the 2019 projections predict that need in Area 2 will remain relatively stable with the Council maintaining a surplus close to 5% of reception places in most years. Redevelopment at Marian Vian Primary School to permanently accommodate the two bulge classes (already admitted) has planning permission.
- Planning Area 3 - Hayes and West Wickham (Hayes and Coney Hall

Ward, Shortlands Ward) In this Planning Area projections indicate that the number of pupils in reception will be greater than the number of places available from 2026 and therefore school rolls in planning area 3 will have to be reviewed in future years to ascertain if the capacity needs to be increased.

- Planning Area 4 - Central Bromley (Bickley Ward, Bromley Town Ward, Plaistow and Sundridge Ward). The projections indicate that demand will outstrip capacity in future years for reception places but by less than a single form of entry. This need and the capacity in surrounding planning areas will be kept under review but could potentially be addressed through the introduction of another bulge class.
- Planning Area 5 - Bromley Common, Keston and Farnborough (Bromley Common and Keston Ward, Farnborough and Crofton Ward, Petts Wood and Knoll Ward). Throughout the last decade there has consistently been less than the desired 5% of surplus places and the 2019 GLA School Roll Projections indicate pupil numbers in reception are forecast to increase. Additional places can be accommodated at Trinity CE Primary by opening a third reception class, but close monitoring will be required as adding an extra class only delivers a 1% surplus by 2030.
- Planning Area 6 - Chislehurst and Mottingham (Chislehurst Ward, Chislehurst North and Mottingham Ward). Additional pressure is not projected in this Planning Area and school organisation will be kept under review, with particular reference to the potential for surplus primary schools places.
- Planning Area 7 – Cray Valley (Cray Valley East, Cray Valley West) Currently there is slightly less than a 5% surplus in reception places, the Council's planning target. The 2019 GLA School Roll Projections predicts that reception year rolls will increase leading to a shortage of places from 2029 and a limited surplus (below the 5% target) from 2024.
- Planning Area 8 – Orpington (Chelsfield and Pratts Bottom Ward, Orpington Ward). The projections suggest that there will be sufficient Reception year places in this Planning Area throughout the plan period, although less than the Council's target of 5%.
- Planning Area 9 - Biggin Hill (Biggin Hill Ward, Darwin Ward) The GLA projections forecast a gradual increase in the need for reception school places, although there are sufficient local places to meet demand to 2030.

Secondary Schools

5.29 The secondary sector is expected to be the focus of mainstream growth. Year 7 School rolls are expected to be 4,082 in 2022/23, with a need for 4,286 places (to provide the Council's target of 5% surplus places). The greatest demand for secondary school places is in the North West part of the borough.

5.30 The Department for Education have given approval for a new secondary Free School (Harris Kent House) to meet increasing need in Bromley and Lewisham. Providing this secondary mainstream Free School is delivered, the Council is projected to have satisfied secondary need up to 2030. Note - If Harris Kent House is unable to open in temporary accommodation to meet the increasing need whilst

the new school is delivered, the Council will need to deliver additional temporary capacity in the secondary sector.

Specialist Educational Facilities

5.31 The Local Plan 2019 notes the need for additional requirements over the plan period for a range of specialist educational facilities.

5.32 Recent growth in demand for children with EHCPs has been mainly in KS1 and KS2, however, growth will be concentrated amongst the secondary cohort in future years.

5.33 There are currently proposals to enhance Specialist Educational Facilities on two sites allocated for Education in the Bromley Local Plan.

- Rebuild of Marjorie McClure Special School, currently located at Hawkwood Lane, Chislehurst
- A new Special Education Needs (SEN) school

Further Education

5.34 LSEC is working strategically with Biggin Hill Airport and the London Borough of Bromley to address the needs of Aviation and Aeronautical industries. LSEC have recently obtained planning permission to provide an Aerospace and Technology College LATC at London Biggin Hill Airport (LBHA) providing STEM education, skills and training. In particular it will provide pathways to professional qualifications to progress aeronautical careers as mechanical, electronic service engineers and technicians.

Infrastructure Costs

5.35 The Council receives Basic Need Capital grant from the DfE to support the delivery of sufficient school places, with a total of £70.9m so far allocated for 2011-2018. Table 5.4 below includes the Basic Need Capital grant available inclusive of contributions from DfE Capital Maintenance grant and funds allocation within the Council's capital programme for the reconfiguration of special schools²⁰.

Table 5.4 Basic Need Capital grant available

2011-12 allocation	£4,496,771
Autumn 2011 exceptional in-year allocation	£1,277,936
2012-13 allocation	£2,404,519
Spring 2012 exceptional in-year allocation	£1,590,436
2013-15 allocation	£9,968,079
2015-16 allocation	£20,635,153
2016-17 allocation	£21,666,911
2017-18 allocation	£8,837,573
Contribution from DfE Capital Maintenance Grant underspend	£1,200,000
Transfer from Reconfiguration of Special Schools Scheme	£113,000
Total allocation to date:	£72,190,378

Source: London Borough of Bromley 2016

²⁰ Basic Need Programme – Executive March 2016

5.36 There are risks to the education programme. This includes the availability of funding from the Department of Education (DfE) in terms of Basic Need Capital Grant, as each Free School reduces the number of additional places required and funding the council receives. Furthermore, most schools in the borough have converted to academy status (or are in the process of doing so) and as such the council has received very little DfE capital maintenance grant. Bromley is currently limited in its ability to top up budgets using capital maintenance grants. The council has not allocated reserves or used prudential borrowing to support the creation of additional places²¹.

Table 5.5 Infrastructure costs based on future need for places

Type of provision	Number of places	Estimated numbers of form of Entry	Average Build cost per place over all schemes	Total cost over Plan Period
Primary & Secondary	561	18.7	£16,909	£26,733,129
	1020	34		
SEN	Unknown	Unknown	£10,765	Unknown

Source: London Borough of Bromley 2016

5.37 The recent price index that informed the figures above is recent and does not include the early years of the programme when costs were generally much lower. The delivery of school places has now entered a phase where more expensive schemes are being delivered as the easier options have already been completed.

Funding Sources

5.38 The Council receives Basic Need Capital grant and Capital Maintenance grant from the Department for Education (DfE) to support the delivery of sufficient school places. Within the Basic Need Capital programme are contributions from other capital funding programmes including Seed Challenge, Access Initiative and Suitability, along with Section 106 contributions. Free schools, however, are funded centrally through the Education Funding Agency. This funding is allocated to established free schools for both revenue and capital purposes. With the adoption of a local CIL, it is envisaged that S106 payments will be assumed to be provided by the CIL payment, however a s106 requirement may be required, such as where the development results in the loss of school capacity.

Table 5.6 Education Funding Gap

Funded through the Basic Need School Expansion Programme	Total cost	Funding Secured	Funding Gap
	£141,654,000	£85,535,000	£56,119,000

Source: London Borough of Bromley 2016

²¹ Basic Need Programme – Executive March 2016

6. HEALTH

Definition

6.1 The definition of health as formulated by the World Health Organisation in 1948 is that *“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”*.

6.2 Health and Wellbeing Boards are part of the NHS reforms laid out in the Health and Social Care Act 2012. Health and Wellbeing Boards act as a forum where key leaders from the health and care system work together to improve the health and wellbeing of their local population and reduce health inequalities. They oversee the commissioning of most local health services such as GP surgeries, pharmacies, NHS dentists and opticians and hospital care.

6.3 The Health and Wellbeing Board is collaboration between Bromley Council and various partner agencies whose role is to understand their local community's needs, agree priorities and encourage commissioners to work in a more joined up way. This should result in patients and the public experiencing a more joined-up provision of services from the NHS and local councils in the future²².

6.4 Health services in Bromley are planned and funded through the newly established NHS South East London Clinical Commissioning Group (CCG) which is a NHS organisation led by GPs with involvement from other healthcare professionals. It covers Bromley along with Bexley, Greenwich, Lambeth, Lewisham and Southwark boroughs. The CCG works closely with its partners to set out the strategic context, drivers and vision for the development of the estate infrastructure that will underpin the delivery and transformation of health care in the Borough.

Existing Infrastructure Provision

6.5 Current facilities in Bromley are composed of 43 member GP practices operating across 46 sites and covering a registered population of approx. 351,000 people. The average patient list size for the borough is 7,800, with individual lists ranging from just over 2,000 to almost 20,000 patients. Bromley has a single GP federation covering the borough, Bromley GP Alliance Ltd, of which 41 GP practices are shareholding members.

6.6 There are currently two practices within Beckenham Beacon, and one practice in the Orpington Health and Wellbeing Centre, with a further practice expected to go into the Bromley Health and Wellbeing Centre (planned to open in 2021/22). Although not Health and Wellbeing Centres in the sense of also housing other community, diagnostic and acute services, there are also two practices located within each of the purpose built Crown Medical Centre (in Bromley Common) and Oaks Park Medical Centre (in Penge).

6.7 There are 15 GP practices or branches located in premises that were purpose built for this use. Some of these were purpose built some time ago within restricted footprints of land, so expansion has been difficult. A few have been built in more recent years using London estates funding, including significant re-building of Broomwood Surgery and the Links Mottingham site.

²² <http://cds.bromley.gov.uk/mgCommitteeDetails.aspx?ID=617>

6.8 The most common type of GP premises in Bromley borough is converted housing with 21 sites being converted from a former residential use. The quality of these premises is highly variable. Some have been extended upwards or outwards and refurbished to a high quality standard using either London estates funding or GP partner investment. Other premises have not been maintained well and can be considered not 'fit for purpose' as modern medical premises. This includes concerns over Disability Discrimination Act (DDA) compliance, standard room size requirements, Infection Prevention and Control compliance and futureproofing for potential list size expansion

6.9 There are three GP practices located in premises built for commercial use (e.g. shops, banks). The variability, quality and concerns with these premises are similar to those in converted houses.

6.10 Our newest Care homes practice is located within the main GP Alliance Headquarters on the same site as Beckenham Beacon.

6.11 There are three main health service providers with presence within the borough. These are;

- King's College Hospital NHS Foundation Trust (KCH) – Provides acute services from Princess Royal University Hospital and Orpington Hospital in the borough and some outpatient services from Beckenham Beacon.
- Bromley Health Care (Bromley Healthcare CIC) – a community investment company and provider of general community services.
- Oxleas NHS Foundation Trust (Oxleas) – mental health provider and provides some community health services for the borough and other parts of South London.

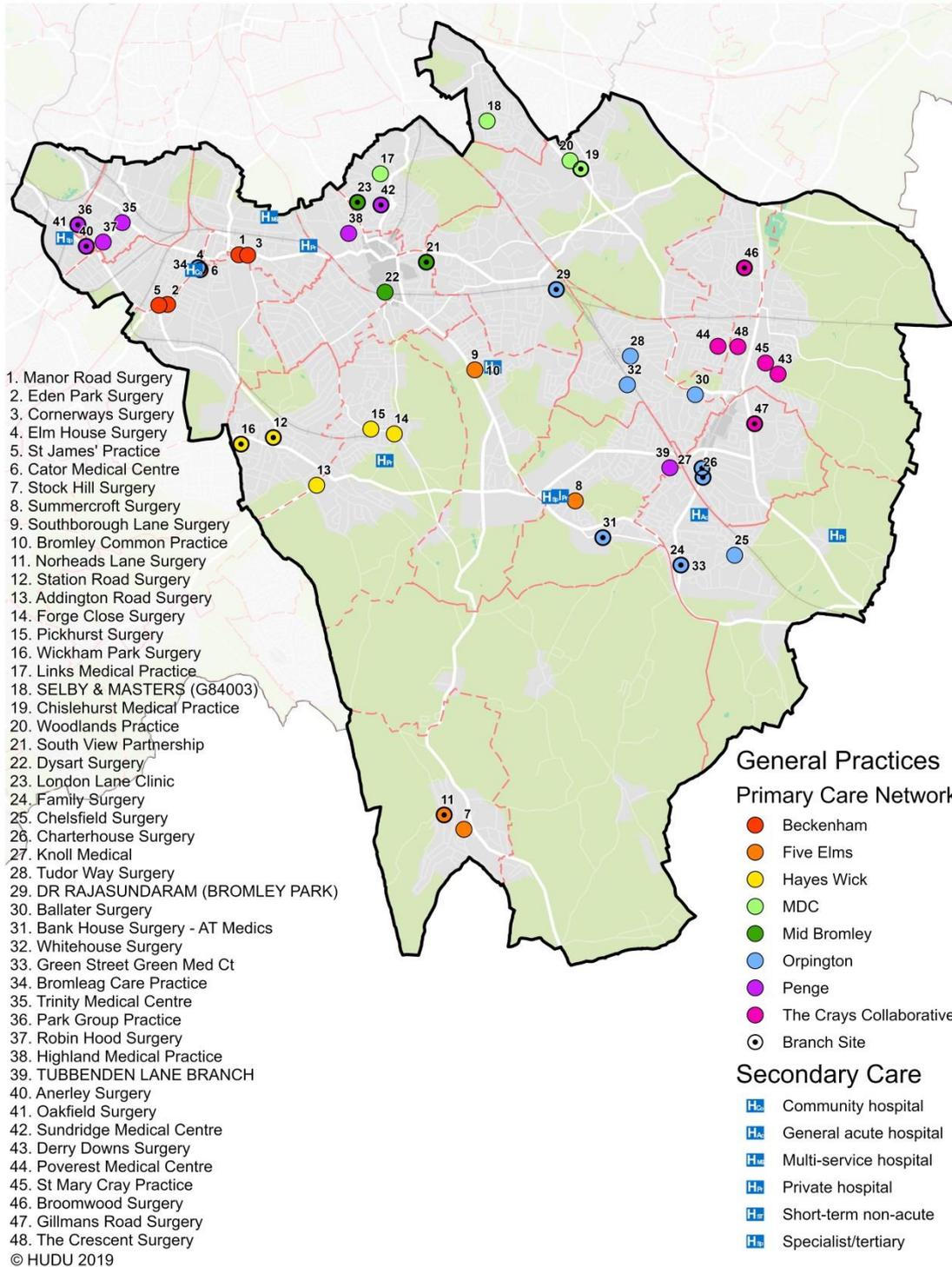
There is also a range of community Clinics across the Borough currently occupied by Bromley Healthcare CIC who provides our Community Services.

6.12 Map of the GP Estate in Bromley

Bromley General Practices by PCN with Secondary Care HUDU | December 2019



London Healthy Urban Development Unit



Current Shortfall

6.13 The majority of GP practices are located in the North and Centre of the borough. The south of the borough has an aging population and is very sparsely populated in large areas. Public transport in the south is limited and patients can be reliant on cars and other private transport to access health services.

6.14 There is also a growing issue within the town centre of Bromley. The new Health & Wellbeing Centre is needed for the Health services to be able to cope with new developments and increase in population.

6.15 Since January 2019, three sites have closed in the borough. These were Cross Hall Surgery in St Mary Cray, the Highland Medical Practice site at Tubbenden Lane in Orpington, and Trinity Medical Centre in Penge.

Future Demand

6.16 Bromley has the largest population of the South East London boroughs and covers the largest geographical area of the London boroughs. Bromley also has amongst the largest population of older people, especially in the 75+ age categories, of the London boroughs. Although Bromley is an affluent borough with a notably older and less ethnically diverse population than other parts of London, there are growing numbers of young families, increasing ethnic and cultural diversity and pockets of acute deprivation, in particular, in the far north west and north east of the borough. The Bromley JSNA provides a comprehensive insight into the health and care needs of Bromley residents

6.17 Population density in a given location is a key driver in any investment decisions where the aim is to benefit the greatest number of people by deployment of scarce resources. The demand on health services in the London Borough of Bromley will be predominately driven by an ageing population. This will require services to work flexibly and at scale, to co-locate and integrate services and to maximise the efficiency of current estate. This is particularly the case where there is significant population growth, namely Bromley Town Centre.

6.18 The proportion of older people in Bromley (aged 65 and over) is expected to increase gradually from 17% of the population in 2017 to 18% by 2022 and 21% by 2032. The pattern of population change in the different age groups is variable between wards; Biggin Hill in particular is experiencing a large rise in the proportion of over 75s.

6.19 People are living longer, but many live with long term conditions, such as diabetes, heart disease, high blood pressure and mental illness. The technical advances in diagnostics and treatments mean that the costs of providing care are rising faster than inflation each year.

6.20 In South East London we have a long history of working together. Our partnership working with local authorities and providers of health services is delivered through the 'Our Healthier South East London' strategic partnership, which is known as an integrated care system (ICS). This collaborative approach resulted in us becoming the first ICS in London.

6.21 Bromley has a solid foundation of integrated working, introducing a Multi-specialty Community Provider model in 2016. Known locally as Integrated Care

Networks (ICNs), this approach has embedded more effective and efficient care for the most vulnerable patients who require multiple agencies to provide and coordinate their care, including social care and the voluntary sector alongside health partners, and has also seen a new frailty pathway established. Bromley were part of the South East London 'Aspirant Integrated Care System' programme, selected in 2018 by NHS England as a vanguard for integrated working. Within the SEL programme, Bromley is a particular geography of focus for intensively supporting integrated care as a 'system of systems'.

6.22 Integrated Care Networks (ICNs) are still being improved to support everyone across south East London. These involve primary, community, mental health and social care colleagues working together and drawing on others from across health, wider community services like housing and schools, and voluntary sectors. ICNs will focus on a number of agreed priority initiatives, such as improving access to community based services and preventative services that proactively manage patients, addressing inequalities, promoting self-management and the development of strong and confident communities.

6.23 To support this work, there will be a few large hub sites in the borough that can house a range of health, social care and other services. The CCG has identified potential hub locations at:

- Beckenham Beacon
- Orpington Health & Wellbeing Centre
- Bromley Health & Wellbeing Centre (town centre) – Still in development
- Oaks Park Medical Centre – further capacity on an additional floor in development

6.24 In addition, there will be a number of other buildings housing primary care and other services that may form part of the ICN for that part of the borough.

Examples of these could include:

- Orpington Hospital
- Phoenix Centre
- Princess Royal University Hospital (PRUH)
- Oaks Park health Centre, Penge

6.25 The CCG is reviewing its localities to understand how the demand on services in certain Wards will be accommodated either by the current health estate, other public sector estate or by new health infrastructure.

Infrastructure Costs

6.26 The NHS set up the Healthy Urban Development Unit (HUDU) to coordinate spatial planning and health care provision across London. The HUDU model is designed to assess the impact of individual planning applications. The model calculates revenue and capital financial contributions. The capital cost of providing the required space; and the revenue costs of running the necessary services before mainstream NHS funding takes account of the new population. The Council currently seeks the capital element only to provide/enhance the physical space for healthcare

6.27 As a guide using the predicted population growth in Bromley based upon GLA Population Projections (2018 housing led) the HUDU model identifies capital costs of over approximately £41m over the 15 year period 2020/21 – 2035/36.

Table 6.1 Health Capital Costs

Capital Costs	
Acute	23,019,794
Mental Healthcare	633,183
Intermediate care	3,935,854
Primary Healthcare	13,527,271
Total	£41,116,097

Source: LB Bromley

6.28 NHS England is facing a financial challenge in many areas. Across all the six CCG boroughs in South East London, the overall spend on adult social care is just over £576m with further cost pressures of £132m by 2020/2021. The boroughs need to contain cost pressures and make budget reductions in their adult social care. Councils are working to transform services with health sector partners (source: South East London Sustainability and Transformation Plan²³ October 2016).

Funding Sources

6.29 Section 106 financial contributions are currently required by developers for major schemes and used to help fund community infrastructure such as additional health facilities. However, with the adoption of a local CIL, it is envisaged that S106 payments will be assumed to be provided by the CIL payment however there may be some circumstances where this will be pursued via S106 – such as where the development involves the loss of an existing facility.

6.30 The NHS England's Estates and Technology Transformation Fund (ETTF) (previously the Primary Care Infrastructure Fund) is a multi-million pound programme to accelerate the development of infrastructure to enable the improvement and expansion of joined-up out of hospital care for patients. This is part of additional NHS funding announced by the government in 2014 to enable the direction of travel set out in the NHS Five Year Forward View²⁴.

6.31 In 2016, NHS Bromley CCG put forward a bid for a new build premises for the Bromley Health and Wellbeing Centre. £3m was agreed from the ETTF fund towards the project.

6.32 In Summer 2018 NHS Bromley CCG submitted a further bid for Wave 4 Capital Funding for additional funding towards the new Bromley Health and Wellbeing Centre. This was approved bringing the total funding to £12m. Please note that this funding is subject to further due diligence and approval.

6.33 Last year (2019), funded via Wave 4 Capital along with section 106 contributions, the space at Beckenham Beacon underwent a huge transformation. On the first floor, where there once was office space, this has now been turned into more fit for purpose clinical space to accommodate a range of mental health services. The scheme enabled an improved mix of services to be delivered from facilities designed and equipped to deal with the ongoing healthcare needs of the local population.

²³ South East London: Sustainability and Transformation Plan Oct 2016

²⁴ <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>

7. OPEN SPACE

7.1 Open space is defined in the Town and Country Planning Act 1990 as land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground. The greater proportion of the Borough comprises of over 50% open space of some description, varying from very small formal and informal urban open spaces and parks of great importance and highly valued to local communities (especially to those living in the more densely developed areas of the borough), to natural countryside and farmland. Planning policies act to protect open space.

7.2 Playgrounds and sports facilities are dealt with separately in this document under the Community Facilities section. This is in accordance with the Mayor of London's 'Play and Informal Recreation SPG' which offers indicative guidance to London boroughs for calculating play space and should be used in addition to other standards for 'Open Space'.

Existing Infrastructure Provision

Designation	Area Ha
Green Belt	7,660.2
Green Chain (South East London Green Chain), also designated as MOL	428.3
Kent Downs Area of Outstanding Natural Beauty	290.3
Local Green Space	120.1
Local Nature Reserves	410.6
Metropolitan Open Land	667.9
Urban Open Space	631.6

7.3 The Borough has just over 9000 hectares of Green Belt or Metropolitan Open Land (MOL), 120 miles of public rights of way, and over 2,900 acres of council-owned parks and open space. It is estimated that there is about 4 hectares of publicly accessible open space per 1000 of the population.

7.4 Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it and are therefore equally important for both conservation and recreation. There are five designated Local Nature Reserves (LNR) in LB Bromley: -

Jubilee Country Park (near Petts Wood)
Scadbury Park, Chislehurst
High Elms Country Park (south of Farnborough).
Darrick & Newstead Woods
Hayes Common, Keston Common, Ravensbourne Open Space & Padmall Wood (Combined)

7.5 Management plans have been prepared for each of these sites. These provide a framework for the work carried out by the rangers, conservation volunteers and Friends Groups and ensures that different habitats, their characteristic species – including those like Stag Beetles, Glow Worms, Butterflies, Great Crested Newts and Skylark for which there are action plans in the Bromley Biodiversity Plan or London

Biodiversity Partnership Plan²⁵ – are taken into account, whilst ensuring that each reserve provides an accessible green space for local people.

7.6 The South East London Green Chain walk comprises a 40 mile network of footpaths through a number of open spaces in a variety of ownerships, and largely in recreational use, these are accessible to the public, and extend in a virtually continuous arc from the Thames, through the London Boroughs of Bexley, Greenwich, Lewisham, Southwark and Bromley. The London Plan states that “Green Chains are important to London’s open space network, recreation and biodiversity²⁶.”

7.7 London Borough of Bromley coordinates the management and maintenance of parks across the borough through commissioned contractors, in conjunction with ‘friends’ groups based at specific sites across the Borough²⁷.

7.8 There are 60 Local Parks in LB Bromley totalling 524 hectares, and an additional 25 Natural and Semi Natural (NSN) open spaces (459 hectares) which function as parks.

7.9 The London Plan Policy 7.18 Protecting Open Space and Addressing Deficiency, categorises public open space as shown in the following table, London Borough of Bromley data has been added on right hand side column:-

Table 7.1 Public Open Space Categorisation

Open Space categorisation	Size Guide-line	Distances from homes	Number in LB Bromley
Metropolitan Parks Large areas of open space that provide a similar range of benefits to Regional Parks and offer a combination of facilities at a sub-regional level, are readily accessible by public transport and are managed to meet best practice quality standards.	60 hectares	3.2 kilometres	7
District Parks Large areas of open space that provide a landscape setting with a variety of natural features providing a wide range of activities, including outdoor sports facilities and playing fields, children’s play for different age groups and informal recreation pursuits.	20 hectares	1.2 kilometres	15
Local Parks and Open Spaces Providing for court games, children’s play, sitting out areas and nature conservation areas.	2 hectares	400 metres - 10 minute walk time	60
Small Open Spaces Gardens, sitting out areas, children’s play spaces or other areas of a specialist nature, including nature conservation areas.	Under 2 hectares	Less than 400 metres	41
Pocket Parks Small areas of open space that provide natural surfaces and shaded areas for informal play and passive recreation that sometimes have seating and play equipment.	Under 0.4	Less than 400 metres	15

²⁵ <http://www.gigl.org.uk/londons-biodiversity-action-plan/>

²⁶ London Plan para 7.56 and Policy 7.17, and Local Plan Policy 54

²⁷ http://www.bromley.gov.uk/directory/4/parks_in_bromley

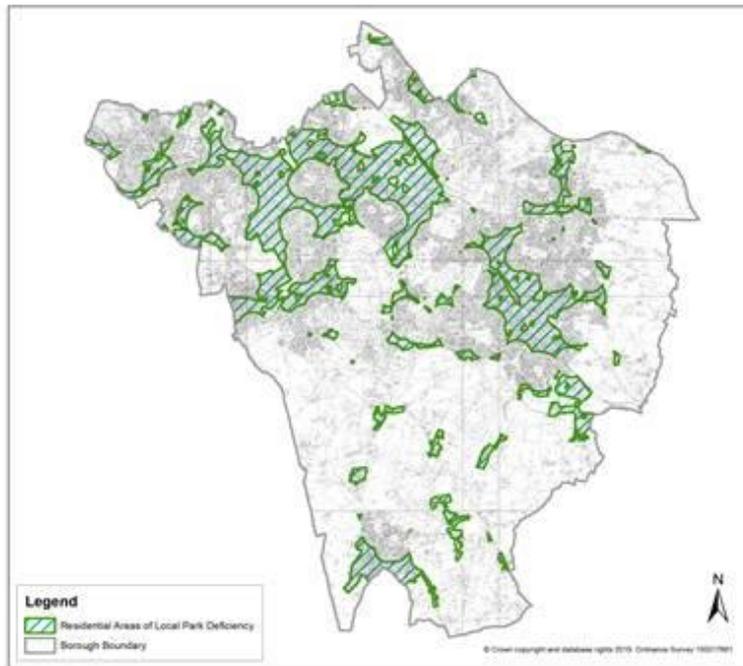
<p>Linear Open Spaces Open spaces and towpaths alongside the Thames, canals and other waterways; paths, disused railways; nature conservation areas; and other routes that provide opportunities for informal recreation. Often characterised by features or attractive areas which are not fully accessible to the public but contribute to the enjoyment of the space.</p>	Variable	Wherever feasible	-
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Source GLA 2016

Current Shortfall

7.10 There is currently sufficient per capita provision of public open space within the borough, relative to similar local authority areas and the national standard²⁸. Shortfalls have been identified in access to existing public open space and vary by borough location. Figure 7.1 below highlights in green, the areas of the borough which are further than 400m (10 minute walk) to a local park or open space. The assessment of the quality of the Metropolitan, District and Local Parks across the Borough, undertaken as part of the Local Plan evidence base, shows provision to the west is largely high quality, but the provision to the east of the Borough is in greater need of improvement.

Figure 7.1 Local Open Space Deficiency 2020



Source: London Borough of Bromley data 2020

²⁸ Planning and Design for Outdoor Sport and Play (formerly the Six Acre Standard); Fields in Trust (formerly the National Playing Fields Association) 2008. [LBB = 2.14 ha per 1,000 population]

Table 7.2 Quantitative need – Amenity Green Space

Year	Population	Current provision (hectares)	Provision (hectares per 1000)	Quantity standard (hectares per 1000)	Overall hectares needed (shortfall)
2016*	321,680	45.49	0.141	0.16	-5.98
2030*	323,505	45.49	0.141	0.16	-6.27

*Based on GLA 2015 round SHLAA population projections

Future Demand

7.11 When the quantity standard is applied across the Borough, it demonstrates that while current provision is almost sufficient to meet demand, population growth will generate higher shortfalls if amenity green spaces are not provided as part of new development.

7.12 Any new projects that are connected to open space are often delivered alongside transport schemes (walking and cycling) or related to leisure activities (see also the 'Community facilities' chapter).

7.13 The intensification of use of the open space generally will also put pressure on the resources for maintenance and upgrade of that space. The amount of publically-owned open space is unlikely to be increased as the Council is not in a position to take ownership of additional space. The Council and its partners will therefore invest in improving and maintaining the quality of existing space.

7.14 There is however the potential to expand privately owned public open space as development potential is realised and sites are built out, particularly in areas where there is an identified deficiency in open space (Figure 7.1).

Infrastructure Costs

7.15 Costs for upgrading playground facilities are obtained on a case by case basis; these may be for replacement or maintenance costs or for where an area has a deficit of play facilities.

Funding Sources

7.16 On a site by site basis, Section 106 contributions have been a source of funding towards schemes for open space improvements or management plans and this practice is likely to continue, given that open space contributions are sought in lieu of lack of on-site open space provision.

8. COMMUNITY FACILITIES

Definition

8.1 Community facilities make an essential contribution to the health, wellbeing, development and education of individuals living and working in the Borough. There is substantial health benefits associated with access to community and leisure facilities, including not just physical health, but also better mental health, through increased social interaction. The National Planning Framework highlights the important role of planning in facilitating social interaction and creating healthy, inclusive communities.

Existing Infrastructure Provision

8.2 A range of different services and facilities are provided for leisure and cultural purposes by the council, whilst the great majority are provided by the third sector, through Places of Worship and private sports clubs.

8.3 Public facilities include leisure centres, swimming pools, sport pitches, libraries, play spaces and community halls. Some leisure and cultural facilities in the London Borough of Bromley are managed through contracts with external service providers.

8.4 Currently, facilities in the Borough include:

- 14 libraries (collections from the former Bromley Museum in Orpington are now displayed at the Central Library Bromley)
- 13 public leisure centres including swimming pools
- 8 cemeteries (6 managed by the council)
- 26 sports halls
- 52 allotment sites (almost 30,000 plots)
- 67 playgrounds
- 21 Outdoor Sports Facilities
- 3 Theatres (Churchill Theatre, Bromley Little Theatre, Beckenham Theatre)
- 5 cinemas (Beckenham, Crystal Palace, Orpington, Bromley South and Bromley North)
- 4 Museums (Bromley Central Library & Biggin Hill Memorial Museum, Museum at Crystal Palace (Charitable Trust) and Bethlem Museum of the Mind)
- Crofton Roman Villa (managed by Kent Archaeological Rescue Unit)

8.5 The 52 allotment sites are supported by the independent Bromley Allotment and Leisure Garden Federation (BALGF). and the Bromley Leisure Gardens and Allotments Consultative Panel which includes Councillors, parks management contractors and members of BALGF ²⁹. There are almost 30,000 plots in Bromley (private and public), and there were waiting lists for plots at the majority of sites prior to this year when there has nationally been an increased interest in food growing.

²⁹ <https://www.bromleyparks.co.uk/our-services/allotments/>

Sport facilities , Play and fitness

8.6 Sport England (Active Places Power) 2016 confirms that the London Borough of Bromley has a total of 465 pitches. Table 8.1 shows the breakdown of public and private grass pitches.

8.7 The Borough has 67 playgrounds for children, most of which are located within one quarter mile from their homes. For teenagers, there are six dedicated skateboard facilities, ten Multi-Use Games areas and a dedicated BMX facility in Mottingham Woods. There are also two paddling pools along with one boating pool for family recreation. Additionally there are two Council Outdoor Gyms at Tugmutton Common and Betts Park.

Table 8.1 Sport England 2016 breakdown of all grass pitches both public and private.

Type	Number of pitches
Cricket	59
Full sized Football	162
Hockey	6
Junior Football	90
Junior Rugby League	1
Junior Rugby Union	7
American Football	1
Mini Soccer	56
Rounders	26
Senior Rugby Union	57
TOTAL	465

Source- Sport England 2016

Table 8.2 Other sports facilities in the London Borough of Bromley*:

Facility Type	No. of pitches	Information	Recommended accessibility (km)
Pitches –all types	465	Including over 285 <u>full</u> size grass pitches	720m (15 min walk) to grass pitches and tennis courts
Tennis Courts	197	This includes 7 indoor and 190 outdoor.	
Bowling Greens ³⁰	21	Current provision is equivalent to 0.06 greens per 1,000 of the population.	15 minute drive to synthetic turf pitches, athletics tracks, bowling greens and netball courts
Synthetic Turf Pitches	49	No breakdown between full-size and 5 a-side pitches	
Synthetic Athletics Tracks	2	Both public	
Golf Courses	9 Eighteen hole and 4 Nine hole Public and Private and Commercial	This includes two par three courses and 3 driving ranges providing 94 bays. Provision is significantly above the regional average.	8km (30 min drive) to golf courses

³⁰ <https://www.bowlsengland.com>

	courses,		
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Source: Sport England and LB Bromley data 2016 .

Libraries and Community facilities

8.7 Bromley currently operates a network of 14 Libraries (currently managed by Greenwich Leisure Limited). The Home Library Service operates in partnership with Royal Voluntary Service (RVS). The Historic Collections Library is also located within Bromley Central Library.

Burial grounds

8.8 The London Plan states that boroughs should ensure provision is made for London's burial needs, including the needs of those groups for whom burial is the only option. Provision should be based on the principle of proximity to local communities and reflect the different requirements for types of provision. The London Plan Social Infrastructure³¹ SPG (May 2015) notes that decisions made about what happens to remains are often influenced by a persons' faith; this can vary significantly by faith. Consequently, this has implications for the amount of land each local authority will need to provide for burials. There are eight cemeteries in Bromley with varying degrees of availability (and one already at capacity – Plaistow Cemetery). Of the six managed by the Council contractors most have only limited availability, however there is capacity at Biggin Hill and St Mark Cray. There is capacity at Beckenham Cemetery and Crematorium and substantial capacity the relatively new Kemnal Park Cemetery and Memorial Garden.

Current Shortfall

Sports facilities, Play and fitness

8.9 Geographical variations in provision across the borough broadly reflect the varying development density characteristics. of the Borough. An audit of open space facilities is being undertaken and will be used to inform future reviews of the IDP.

8.10 The London Plan Social Infrastructure SPG states that "*Many children do not have adequate access to play areas and some existing provision across London is not fit for purpose*"³². The benchmark standard recommends a minimum of 10sq/m of dedicated play space per child. In Bromley, there are distinct areas in the borough where there is a deficiency of play space facilities – see Figure 8.1 diagram.

Libraries and Community facilities

8.11 Some Council owned facilities have been functioning in aging buildings, and offer the potential for enhanced development on their sites. For example, Chislehurst and St Paul's Cray libraries have been the subject of planning proposals (application and allocation respectively) to optimise their sites, to reprovide new community facilities and develop new residential units.

Burial grounds

³¹ London Plan Social Infrastructure (May 2015)

³² Mayor of London SPG; Shaping Neighbourhood: Play and Informal Recreation 2012

8.12 Bromley is a borough of all faiths and none; an audit was undertaken by the GLA in 2011 of Burial Provision³³. The audit report considered that Bromley was, at the time one of five London boroughs with 10-20 years supply of burial space. (2021 – 2031). The privately owned Kemnal Park Cemetery subsequently opened in 2013 on a 55 acre site significantly increasing the availability of burial space.

Future Demand

Sports facilities, Play and fitness

8.13 The promotion of health and wellbeing of those living and working in the Borough is a strategic aim for the Borough. Engaging with providers and agencies to ensure the provision, enhancement and retention of a wide range of facilities for sports is crucial means of improving quality of life.

8.14 The Bromley Local Plan encourages the dual use of educational facilities. The development of Free Schools will also lead to additional community facilities (available outside school hours) including for example facilities which will become available at the new Eden Park High School, Beckenham. Educational facilities can help to meet the demand for additional sports provision & other community uses (e.g. the use of school halls by faith groups).

8.15 Where there are deficits of play facilities in the Borough (see map at Figure 8.1 below) or where there are facilities that may require upgrading or maintenance of playground equipment, then these will be reviewed in the light of the impact of schemes that arise over the life of the plan.

Libraries and Community facilities

8.16 The Bromley Local Plan includes policies which seek to protect and enhance sites and buildings providing community facilities. This is particularly important as the demand for housing pushes up land values and rents

8.17 As highlighted above the dual use of educational facilities can also help to meet the demand for other community uses (e.g. the use of school buildings by community organisations, including faith groups) .

8.18 There is also a move towards the ‘social prescribing’ - where healthcare professionals are able to refer patients to local, non-clinical services to meet their wellbeing needs. The success of such schemes will be dependent upon what is available locally.

Infrastructure Costs

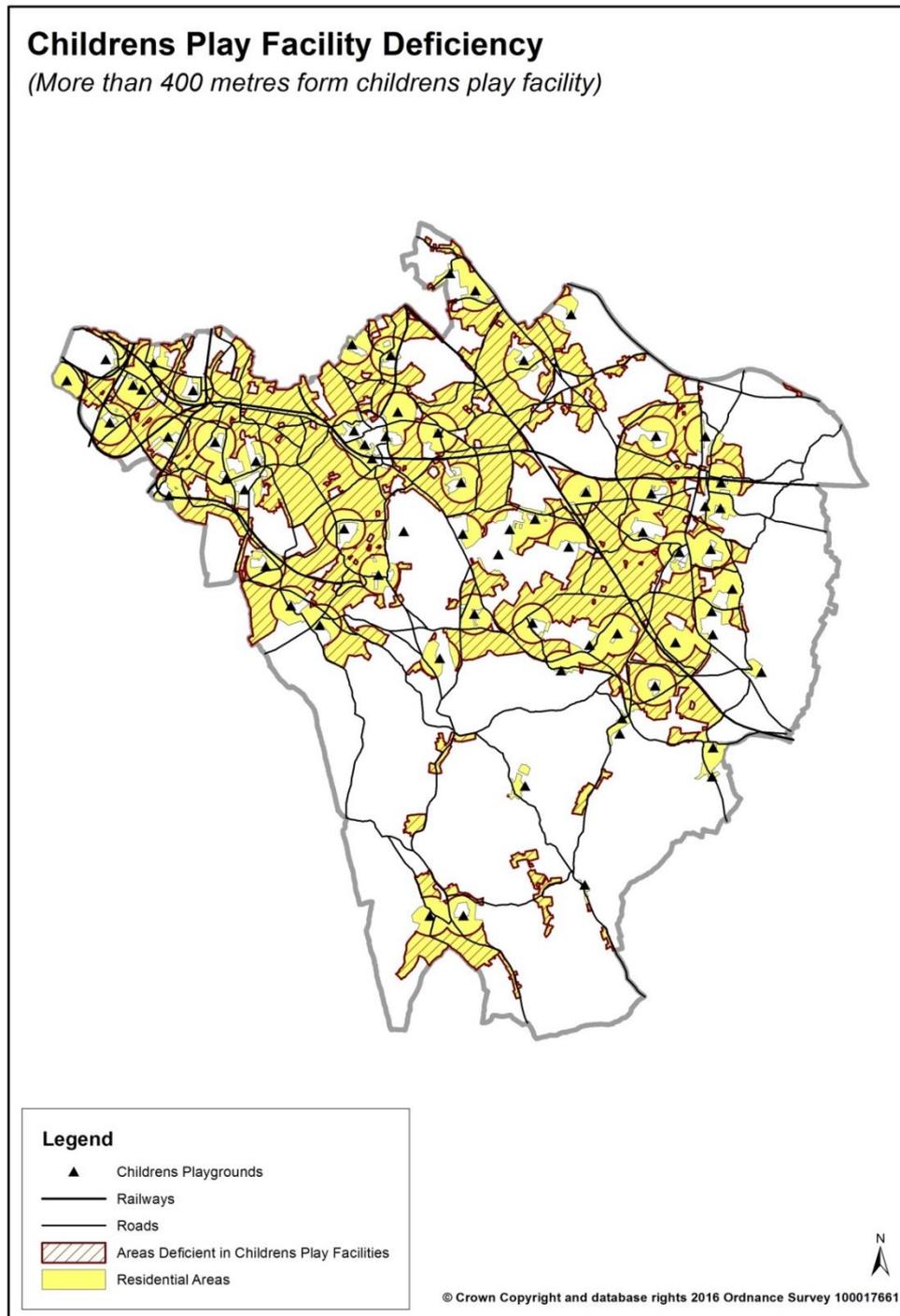
8.19 Costs for upgrading playground facilities are obtained on a case by case basis; these may be for replacement or maintenance costs or for where an area has a deficit of play facilities.

³³ <https://www.london.gov.uk/file/5284> Rugg, J. and Pleace, N. (2011) *An Audit of London Burial Provision*. London: GLA

Funding Sources

8.20 Enhancements to facilities and contributions towards the above infrastructure historically have been provided through redevelopment and / or sourced from S106 agreements. In future, with the proposed adoption of CIL, it is considered that S106 will be used to cover shortfalls in on-site requirements (where relevant) or where the development results in the loss of existing facilities; the CIL payment will assume the majority of previous S106 contributions.

Figure 8.1. Map of Children's Play Facility Deficiency



Source London Borough of Bromley 2016

9. HERITAGE ASSETS

Definition

9.1 The NPPF encourages the conservation of *heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations*³⁴. A heritage asset can be a landscape, place, building, monument or feature that has been identified as having special architectural or historic interest. Heritage assets in the borough range from nationally and locally listed building to ancient monuments and sites, and include Conservation Areas.

Existing Heritage Provision

9.2 At present, borough heritage provision includes:

- 9 Scheduled monuments
- 28 Areas of Archaeological Significance
- 621 Statutory listed and 2153 locally listed buildings
- 45 Conservation Areas
- 5 Registered Historic Parks and Gardens

9.3 Historic England maintain the Heritage at Risk (HAR), which includes all listed buildings, places of worship, monuments, parks and gardens, conservation areas, plus other heritage categories which are assessed as being vulnerable through poor condition and or vacancy. The HAR Register 2018 lists 23 sites within the Borough that have been determined as being at risk.

9.4 Whilst heritage assets may be in varying states of repair, they should be both maintained and protected by their respective owners. The Council encourages the protection of heritage assets, therefore maintaining the contribution that they make to our culture and quality of life. When a heritage asset undergoes neglect or inappropriate alterations, the Council has a number of tools and powers available to help remedy the situation, including the planning and legal systems. This may involve ongoing and ad hoc actions by the Council towards the owner(s) of historic assets, for example in the assessment of planning applications, provision of advice to owners, maintenance of the public realm and enforcement action to cease or remedy inappropriate alterations.

9.5 Over the Local plan period 2017-31 there will be projects which the Council identifies that aim to proactively improve heritage assets. These include Crystal Palace Park.

Crystal Palace Park

9.6 Crystal Palace Park is a Grade II* historic registered park and garden designed by Sir Joseph Paxton. The 200 acre park was created between 1853 and 1855 with spectacular water features, a grand terrace to house the 1851 Crystal Palace relocated from Hyde Park (burnt down in 1936), a central axis and models of pre-historic monsters/dinosaurs that are Grade I listed. The site was designed to impress, educate, entertain and inspire and was an international attraction. The

³⁴ NPPF para 17

iconic dinosaurs were the Victorians' answer to Jurassic Park. Sculptor and fossil expert Benjamin Waterhouse Hawkins and founder of the Natural History Museum Richard Owen erected the model dinosaurs when the park first opened. They were the first artistic representations of dinosaurs of their size and have been enjoyed for over a century. In the 1960s sporting significance gave additional heritage interest and the National Recreation Centre is Grade II* listed.

9.7 However, this is a large and complex park with the 19th and 20th century legacies competing with each other³⁵. Many of the built features associated with the original 'Crystal Palace' are now in a deteriorating condition. Crystal Palace Park was added to the London HAR in 2009, however, in 2018³⁶ the listing was changed to improving. The grade II listed terraces; the railings along Crystal Palace Parade and the pedestrian subway are also at risk. The park is now owned and managed by the London Borough of Bromley together with the Greater London Authority (GLA).

Infrastructure Costs

9.8 The owner (whether private or public) of a Heritage asset is liable for costs associated with that HAR assets, these will relate to their condition and potential use.

Crystal Palace Park

9.9 Recent projects already undertaken at Crystal Palace Park were funded by the Council and the Mayor of London who committed a total of £2.4 million capital to initially improve the park, in line with the Sustainable Regeneration Plan drawn up by consultants, and with the Heritage Lottery Fund (HLF) also contributing.

Funding Sources

9.10 In January 2020, the Regeneration Plan for Crystal Palace Park was submitted for outline planning permission. A decision on the application is anticipated for November 2020 and once permission is received, the plan will be delivered in two key phases over around five years.

9.11 The Regeneration Plan is a £40 million, comprehensive scheme that brings forward physical regeneration works, as well as a new form of governance for the park and a sustainable business model. The scheme will reinvigorate the park as a contemporary and historic showcase in tune with Sir Joseph Paxton's original vision. It will develop the park's local and regional identity, re-establish its national and international significance, and provide community benefits through significantly enhances facilities, and better connections with the local economy.

9.12 The plan is largely funded by the sale of two sites for development sites on the periphery of the park. Other funding will be sought from grant giving bodies including the National Lottery Heritage Fund, the National Lottery Community Fund, and Historic England.

³⁵ Historic England Crystal Palace Park Case Study Oct 2015

³⁶ Heritage at Risk (HAR) 2018

10 PUBLIC REALM

Definition

10.1 The public realm in the context of this IDP section consists of streets, squares, hard and soft landscaping between buildings. It is where public activity takes place; where people walk, drive, and cycle, meet and interact. The public realm plays a vital role in the connectivity and legibility of a place and an attractive, efficient and good quality public realm can help facilitate regeneration and growth in an area. The public realm is an important aspect of any development and ensures that the development is integrated into and enhances the existing character and use of the area.

Existing Provision

10.2 The Council will seek to identify there is a demonstrable need for significant improvements to the public spaces in and around development sites, town centres and local parades. In line with the priorities of 'Building A Better Bromley', the Council will actively seek to implement and/or promote public realm improvement strategies and programmes within these areas with the objective of encouraging inward investment, improving the vibrancy and vitality of town centres and local parades and uplifting the quality of the physical environments around development sites. Projects will be commissioned subject to the availability of funding which may be sourced from developer contributions, Transport for London implementation programmes, central government funding schemes for e.g. New Homes Bonus Fund or internally funded by the Borough through its Growth Fund.

10.3 Project work streams would include:

- Improved public spaces that support community use, local events and markets
- New and or replacement high quality contemporary paving
- Kerbside and carriageway improvements
- Upgraded pedestrian and street lighting
- New and improvement street furniture
- New and/or replacement public and street trees and planters
- Wayfinding improvements which include the implementation of 'Legible London' signs, heritage plaques, welcoming signage and murals
- The lighting of strategic building and points of interest in town centres
- Shop front improvement programmes

Current Projects

10.4 Projects that have been identified and are currently underway include public realm improvement schemes for:

- Bromley Town Centre High Street (£3.1m),
- Beckenham Town Centre (£4.4m),
- Penge Town Centre (£1.1m),
- Orpington Walnuts Shopping Area (£850K).

10.5 The planned improvements for *Bromley High Street* were driven by the successful Bromley North Village Improvement Scheme which was based on a policy

of the Bromley Town Centre Area Action Plan³⁷ and jointly funded by the Council, TfL and the Mayor of London. It was always envisioned that a further stage of the programme would involve improvements to the central High Street area and uplift in the public realm would support various forthcoming development opportunities planned for the town centre. This scheme is currently funded by the Council with contributions to be pooled from major developments coming forward in the town centre.

10.6 In *Beckenham Town Centre*, it was identified that the High Street lacks coherence and legibility with tired and outdated public realm that also lacked connectivity between its main destinations and public spaces. The High Street was perceived to be undergoing economic pressure and decline linked to falling pedestrian footfall, particularly during the daytime which was accentuated by the substantial loss of office floor space. Based on this, the Council made a successful bid to TfL to undertake a Major Improvement Scheme that would attract inward investment into the day and night time economy and improve community safety, amenity, legibility and coherence of the public realm to increase footfall and cycling and the waiting experience of bus passengers.

10.7 *Penge Town Centre* was also suffering from similar issues in terms of lacking coherence, legibility and connectivity between its major rail stations and public spaces. The two town squares suffered from poor quality public realm and the pavement on the High Street is dated and tired. The New Homes Bonus Top slice Fund has provided the Council with the opportunity by means of funding to address this and a major programme of improvements is underway.

10.8 The New Homes Bonus Top Slice Fund along with the Mayor's High Street Fund and Section 106 contributions are also being used to fund major improvements to the Walnuts Shopping area in *Orpington Town Centre* which has recently seen an uplift in vibrancy in terms of the opening of a 7 screen multiplex cinema, a 61 bed hotel and a future high quality 83 unit residential development. The quality of the public realm which was dated and impractical needed to be upgraded to match the high quality development and anticipated increased vibrancy of the area.

Future Demand

10.9 Economic growth is a priority for the Borough and it is envisioned that future growth comprising of increases in the retail offer, employment workspaces and residential developments in the town centres would in turn increase pressures on the physical environment. Public realm improvements would be a necessary means to minimise, eliminate or mitigate against the negative impacts of these pressures and such mitigation may be required to cover aspects such as quality and durability of the public realm, access and connectivity, community safety and other matters integral to improving the quality of the environment for users and residents of these areas. As future work streams for growth are identified, it is anticipated that there may be future public realm improvement projects required to meet this need, subject to the availability of funding through the channels discussed above.

10.10 It is appropriate that the CIL or S106 planning obligations for public realm improvements are sought from developments within town centres in order to address the localised impacts of introducing new residents and visitors to an area. It is necessary and reasonable for all new development coming forward within a town

³⁷ Bromley Town Centre Area Action Plan adopted 2010

centre locality to contribute towards public realm improvements that go beyond a specific site boundary.

Infrastructure Costs

10.11 It is anticipated through the analysis of expenditure on previous and current projects (and factoring increases in the costs of materials and labour) the yearly cost of future public realm projects borough wide would be in the region of £2m per annum. Over the Local Plan period 2016-2031, this funding will be required to maintain and/or update the public realm in Town Centres. To date, the Council is planning a £4.1m upgrade to the public realm of Bromley High Street which is included in the wider regeneration strategy for Bromley town centre and as part of an ongoing process; the Council will be identifying future potential projects in locations in Bromley, Beckenham, Orpington, Penge, West Wickham and Crystal Palace town centres (details of these projects will be provided in future iterations of the IDP Schedule). This strategy is in line with the Council priorities of supporting 'Vibrant and Thriving Town Centres' and providing a 'Quality Environment'.

Funding Sources

10.12 Most schemes have previously been funded either internally or through external sources, such as the New Homes Bonus, Outer London Fund, High Street Fund, and supplemented by developer contributions through the S106 process. To date, this has been an efficient method of funding delivery of these schemes particularly where there has been a certainty of a timely delivery of these projects. In light of reduced funding being made available from Central Government and funding pressures from other Council priorities, it is likely that funding for public realm projects relating to the enhancement of the appearance, safety and security of the general public realm, particularly in Town Centres,

10.13 It is also expected that provision be made to allow s106 obligations to continue to be a source of funding for public realm improvements provided within a development site or in the project being undertaken in the vicinity of the development to mitigate against the negative impacts of the development. Projects of wider significance may be funded via CIL

11. EMERGENCY SERVICES

Definition

11.1 Emergency services in Bromley consist of the Metropolitan Police (MPS), the London Fire Brigade, and the London Ambulance Service. The Metropolitan Police and the London Fire and Rescue Service both have divisions within Bromley, whereas the London Ambulance Service functions as part of a London-wide NHS trust.

Existing Infrastructure Provision

Metropolitan Police

11.2 Bromley's main deployment base is Bromley Police Station, located in Bromley High Street. The majority of staff, including all of the Emergency Response Teams, investigative teams, with custody facilities based there. In addition, Dedicated Ward Officers (DWO) and Police Community Support Officers are based in Safer Neighbourhood bases in various locations including St Mary Cray, Biggin Hill, West Wickham and Beckenham. The Metropolitan Police Service (MPS) sets the number of officers that are deployed within each of the Borough Command Units in London.

Fire and Rescue Service

11.3 The statutory responsibility for the operation of the London Fire Brigade lies with the London Fire Commissioner role, which replaced the London Fire and Emergency Planning Authority in April 2018. The London Fire Commissioner is responsible for providing London's fire and rescue service with the London Mayor setting the commissioners budget. There are four fire stations in the borough; Bromley Town Centre, Beckenham, Biggin Hill and Orpington. The fire service operates across boundaries and sends its resources to the nearest emergency irrespective of borough.

Ambulance Service

11.4 The 999 service provided is purchased by Clinical Commissioning Groups, and performance is monitored by NHS England. The London accident and emergency service is split into three operational areas; west, east and south with 70 Ambulance Stations. There are three ambulance stations in the borough, at Crown Lane Bromley, Beckenham Road Beckenham, and Chipperfield Road St Pauls Cray³⁸. The Ambulance Service main role is to respond to emergency 999 calls, providing medical care to patients across the capital, 24-hours a day, 365 days a year. Other services offered include providing pre-arranged patient transport and finding hospital beds. Working alongside the police and the fire and rescue service, are prepared for dealing with large-scale or major incidents in the capital.

³⁸ <http://www.londonambulance.nhs.uk/> accessed July 2020

Current Shortfall

Metropolitan Police

11.5 Crime is a key issue for local people across London and developers have been showing interest in incorporating DWOs within their schemes. In addition, for large schemes referable to the Mayor, the MPS will liaise with developers to arrange on site delivery of Dedicated Ward Offices (DWO). A DWO is a 24/7 base of operation for officers of the MPS. It is not a public facing office, but rather a location typically used by officers at the beginning and the end of their shifts which can be situated in a 'back of house location'. The MPS would pay a 'peppercorn' rent for the space in addition to service charges. The MPS currently police over 600 wards across Greater London, DWOs are integral to these efforts. The MPS requires 24/7 access to all DWOs for operational purposes. The MPS have identified the following locations (in the London Borough of Bromley) that are in particular need of DWO coverage:

- 1) Kelsey and Eden Park Ward;
- 2) Biggin Hill Ward;
- 3) Cray Valley West Ward;
- 4) Cray Valley East Ward;
- 5) Petts Wood and Knoll Ward;
- 6) Orpington Ward;
- 7) Farnborough and Crofton Ward;
- 8) Chelsfield and Pratts Bottom Ward;
- 9) Darwin Ward;
- 10) Bromley Common and Keston Ward;
- 11) Hayes and Coney Hill Ward;
- 12) West Wickham Ward;
- 13) Bickley Ward;
- 14) Chislehurst Ward;
- 15) Plaistow and Sundridge Ward;
- 16) Copers Cope Ward; and
- 17) Clock House Ward.

Fire and Rescue Service

11.6. LFC's Asset Management Plan lists Biggin Hill and Bromley Fire stations as requiring improvement.

Ambulance Service

11.7 Target response times are set by the government and the service is measured against these annual performance targets as well as other standards of service. In January 2020 the Ambulance Service was rated 'Good' by the CQC following an inspection our services and leadership in September 2019.

Future Demand

Metropolitan Police

11.8 The growth in homes, offices and other uses within the Borough will significantly increase the need for policing and the cost for associated infrastructure. The MPS have set out a range of policing infrastructure they require and are seeking funding through s106 or CIL where possible. This includes staff set up costs, vehicles, Mobile IT and automatic number plate recognition cameras to detect crime

related vehicle movements. The MPS is currently preparing a calculation formula to enable the collection of financial contributions.³⁹

Fire and Rescue Service

11.9 Standard of service is linked to response times and does not directly correlate with expected growth patterns. Although increased levels of development are likely to increase the number of incidents the fire service must respond to. The most recent London Safety Plan does not highlight any foreseeable infrastructure demands arising from forecasted growth in the borough over the Plan period. However as mentioned above Biggin Hill and Bromley Fire Stations are priorities for improvement, requiring replacement/refurbishment.

Infrastructure Costs

11.10 Metropolitan Police, the MPS is currently preparing a calculation formula to enable the collection of financial contributions from developers for potential s106 funding for policing infrastructure associated with DWO's. The Fire and Rescue Service has requested that 'fire-fighting' facilities be added to the Borough's draft IDP schedule of projects, in order that they can be considered for funding/part funding by CIL; however there are no indications of costs to date.⁴⁰

³⁹ Advised by Lambert Smith Hampton acting on behalf of the MPS, 3 March 2020.

⁴⁰ Advised by Dron & Wright acting on behalf of LFC. 4 March 2020

12. ENERGY AND LOW CARBON

Definition

12.1 Minimising energy consumption and supplying power from sustainable sources is a key aim within the London Plan, as established by the energy hierarchy⁴¹. It is intended that this will help mitigate the impacts of climate change. One such method is through Decentralised energy; a term not widely understood, but broadly refers to energy that is generated off the main grid, including micro-renewables, heating and cooling⁴². The changes required to achieve sustainable development will have implications upon existing infrastructure and require new developments to utilise energy networks and in some cases, provide new energy sources. Applicants for planning permission are required to set out how any proposals will apply the following energy hierarchy:

- Be lean: use less energy
- Be clean: supply energy efficiently
- Be green: use renewable energy

Existing Infrastructure Provision

12.2 Reducing energy consumption can be achieved with efficient building design and operation and therefore has infrastructure implications. This will be delivered through the Local Plan policies and national building regulations. Existing buildings in the borough will already have a range of efficiencies built in, depending on the policies and regulations they were subject to at the time of planning and construction.

12.3 Creating Decentralised Energy (DE) networks is a relatively new approach to the sustainable delivery of energy and therefore examples of existing infrastructure are limited. There is a Combined Heat and Power (CHP) plant at The Walnuts in Orpington, first built in the 1980s to supply heat via a high/medium-temperature hot water district-heating system. Subject to the replacement of the current aging CHP plant, surrounding premises could (as currently happens) be supplied heat as part of a larger and expanding energy network.

Current Shortfall

12.4 The majority of buildings in the borough are likely to fall short of current standards for energy efficiency. This is especially the case for a large proportion of public buildings which are likely to be older stock. This is largely to do with recent policy placing emphasis upon the issue of climate change mitigation which has had significant impact upon the design and management of buildings.

12.5 A comprehensive DE network does not currently exist within the borough. The Arup (2012) Heat Mapping Study⁴³ of the London Borough of Bromley shows that the building proximity and heat demands potential opportunities for district heat networks, outside of Bromley Town Centre are limited.

12.6 The Arup study goes on to state that this does not mean that there are no opportunities in the borough to achieve the wider aims of decentralised energy

⁴¹ The London Plan 2011; London's Response to Climate Change.

⁴² <https://www.carbontrust.com/news/2013/01/decentralised-energy-powering-a-sustainable-future/>

⁴³ Arup Heat Mapping Study 2012 - <https://data.london.gov.uk/dataset/london-heat-map>

schemes, namely; decarbonisation of the energy supply, resulting in reduced fuel poverty and increased security of supply⁴⁴.

Future Demand

12.7 Standards for new buildings in the borough are set out in the emerging Local Plan and follow a stepped approach towards zero-carbon development, whereby targets for carbon emissions gradually increase up until 2031 in accordance with the London Plan. The emerging Local Plan also explains how carbon reductions should be met on site where feasible and allows for any shortfalls to be met off site where exceptional circumstances exist.

12.8 The Heat Mapping⁴⁵ exercise has identified opportunities for a heat network within Bromley Town Centre. This opportunity cluster contains a few potential large heat loads, such as Bromley Civic Centre amongst other large sites. This cluster could also be considered as a wide catchment area within which smaller potential heat network(s) may exist, and if built over time may connect together to make a bigger network. Potential new developments also exist in the area that have been identified in the Bromley Town Centre Area Action Plan.

12.9 At this stage, taking forward the Bromley Town Centre cluster would require additional feasibility investigation work to establish an understanding of other potential loads in the cluster area.

12.10 The borough can largely be characterised as:

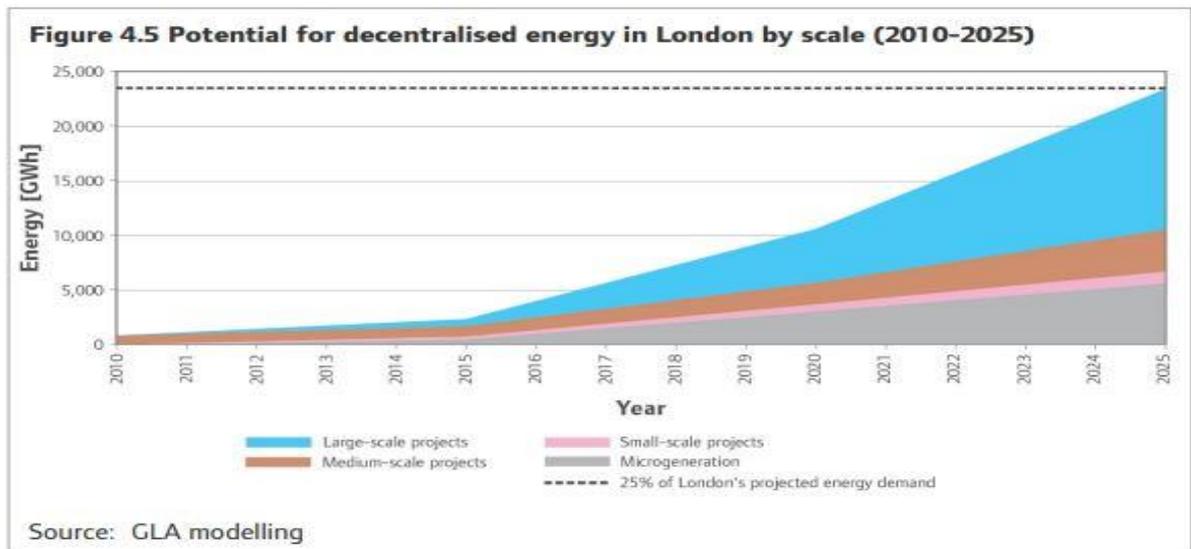
- A suburban region with energy loads relatively sparsely spread
- Few large publically owned energy loads (government offices, hospitals, prisons)
- Few large energy sources (e.g. waste treatment plants, industrial processes, power plants)

12.11 The appropriate options for decentralised energy would therefore be focused on taking a more building level technical approach rather than a district level technical approach.

⁴⁴ Mayor of London – London Heat Map +, Heat Mapping Study – London Borough of Bromley

⁴⁵ Mayor of London – London Heat Map +, Heat Mapping Study – London Borough of Bromley

Figure 12.1 Potential for decentralised energy in London by scale (2010-2025)



Source: (GLA Modelling) Mayor of London. Delivering London's Energy Future, October 2011

Infrastructure Costs

12.12 Improvements to the energy and low carbon infrastructure within the borough will predominantly be provided through new development with costs being absorbed as part of wider development financing.

12.13 Capital costs of London-wide piping to multiple heat generators would exceed £100 million as costed by the Mayor of London's Delivering London's Energy Future⁴⁶ 2011. Local costs have not been identified for developing a section of this network within the London Borough of Bromley.

Funding Sources

12.14 Section 106 agreements, including monies from a local carbon offsetting fund, will be key for delivering such infrastructure on development sites. CHP and other energy and low carbon infrastructure units can be delivered in this way, as well as the connection to energy centres. It is important that developments that intend to connect to a wider heat network are designed to accommodate the necessary infrastructure to facilitate this, even if the completion of the development precedes the completion of the heat network.

⁴⁶ https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Energy-future-oct11.pdf

13. WASTE AND RECYCLING

Definition

13.1 The collection of domestic waste and recyclable materials is a statutory duty for local authorities under the Environmental Protection Act 1990. The waste and Recycling Regulations 2015 and the London Environment Strategy set out the types of recyclable materials that the London Borough of Bromley is required at a minimum to provide a separate recycling collection from its households.. The London Borough of Bromley provides the following waste and recycling collection schemes:

- Every other week non-recyclable refuse contained in black sacks;
- Every other week black box for paper and card;
- Every other week green box for plastics, glass and cans;
- Weekly outdoor caddy for food waste, and
- Subscription-based green garden waste collection.

13.2 Facilities for waste disposal are planned sub-regionally, through the emerging South London Boroughs Joint Waste Apportionment Technical Paper. The technical paper is directed by waste management policies detailed in the London Plan, protecting existing sites and allocating new sites to meet the waste needs of the borough.

Existing Infrastructure Provision

13.3 Waste collection and disposal services are operated by a contractor, Veolia ES UK Limited, following the award of the Waste Collection and Waste Disposal contracts in November 2018. The eight year contracts commenced on 1 April 2019 with an option to extend for a further eight years.

13.4 There are two council owned recycling and waste transfer centres in the London Borough of Bromley, located at Churchfields Road in the west of the Borough, and Waldo Road which is to the north but central area, near the main town centre. Waldo Road is the largest with an average annual throughput of 128,500 tonnes⁴⁷. Churchfields Road has a capacity average annual throughput of 21,000 tonnes.

13.5 Waldo Road and Churchfields Road are council run refuse and recycling facilities, incorporating a Household Reuse and Recycling Centre, a Waste Transfer Station, and a depot area providing a base for the operation of local authority waste collection and disposal activities. Waldo Road also features vehicle repair facilities⁴⁸.

13.6 There is also Swanley recycling centre on Cookham Road, an open composting facility that is currently run by Biogen. Located in the Green Belt, it received planning permission in 2012 for an anaerobic digester plant which was supported by the council with a view to it being used for managing household waste⁴⁹.

13.7 Waste destinations as of 2018/19 were as follows; Recycling 22%; Composting 20%; Waste to energy 31%; Landfill 27%.

⁴⁷ Average annual throughput based on three years 2016/17 to 2018/19

⁴⁸ Development Control Committee Report – July 2016

⁴⁹ Development Control Committee Report – July 2016

13.8 144,233 tonnes of local authority collected waste was collected in 2018/19 and the household recycling rate was 50%.. The table below breaks down collected waste and waste received at Household Waste Recycling Centres (HWRC).

Table 13.1: 2018/19 Tonnages

Material	Tonnes
Refuse - RDF production	19297.56
Refuse - Landfill	19139.28
Refuse - Energy from Waste	44999.92
Asbestos	50.94
Plasterboard	63.52
Glass from bottle banks	561.54
Kerbside Plastics & Cans & Glass	12826.9
Hard Plastics	7.64
Kerbside Paper	12686.44
Oil	18.84
Cooking oil	1.84
Iron	940.24
Bric a Brac	594.08
Garden waste	17404.24
WEEE	613.838
Gas Bottles	2.02
Tyres	2.96
Fridges	278.34
Inert	0
Shoes	8.24
Wood	3502.26
Cardboard	61.02
Detritus (green waste)	1513.75
Ink cartridges	0.42
Food Waste	9272.47
Mattresses	276.62
Books	105.08
Paint	3.26
Total Waste	144233.3

Current Shortfall

13.9 The Borough's recycling and waste transfer centres are not at capacity and both have a licensed annual throughput that exceeds the actual recycling tonnage averaged over the last three years.

13.10 The London Borough of Bromley is able to calculate past performance in waste collection and disposal via contractual monitoring. Table 13.2 below shows the 2018/19 targets and the actual figures for that year through Key Performance Indicators (KPIs).

Table 13.2 Waste and Recycling Key Performance Indicators

Description (KPIs)	2018/19 Target	2018/19 Actual
Household waste recycled/composted (%)	50	50

Municipal waste landfilled (%)	24	27
Residual waste per household (kg)	485	454
Organics recycling per household (kg)	N/A	189
Number of garden waste customers	27,259	28189
Total waste arising (refuse & recycling) (tonnes)	146,000	144,233
Missed bins (per 100,000)	60	128
	120	135

Future Demand

13.11 Reducing the amount of waste generated is not only better for the environment but also minimises disposal costs. Therefore, we will continue to work with residents and local businesses to waste less and recycle more, providing a high quality waste service that is financially and environmentally sustainable. The Council aims to increase the proportion of waste recycled and has a target to send virtually zero to landfill from 2020/21.

13.12 Bromley's recycling performance remains high compared with other London boroughs, at 50%. However, our recycling rate has plateaued. The Council's Reuse and Recycling Plan sets out activities that will be taken over the period 2019 to 2022 to support households and businesses in Bromley to minimise waste and increase recycling.

13.13 Legislation and policy may also require the Council to review its collection and disposal options to ensure regulatory compliance. For example, the Governments Resource and Waste Strategy for England 2018 could alter the way in which local authorities manage waste in the future with consideration of a system where producers (i.e. manufacturers of products/ retailers) fully fund local authority collection systems.

13.14 The Council will continue to promote its subscription-based green garden waste collection scheme through a range of communication channels. In addition, the collection schedules will be altered in 2020/21 to enable further growth of the service. It is hoped that customers of the Green Garden Waste Collection Service will increase to 35,000 with the option to pay by Direct Debit.

13.15 Options for site reconfiguration at Waldo Road and Churchfields Road HWRCs will continue to be explored to facilitate better separation and quality control of recyclable and reusable materials. The allocation of Waldo Road, Churchfields and Cookham Road as strategic waste management sites will safeguard them for waste uses only⁵⁰.

Infrastructure Costs and Funding Sources

13.16 Following a review of Council Depots in 2017, a programme has been identified for improvements including making the drainage and hard standing at Waldo Road and Churchfields Waste Depots fit for purpose. This Depot Improvement Programme will be funded through identified council capital funds. The Programme is currently in the design stage and has an estimated completion date of 2022/23.

⁵⁰ Development Control Committee – July 2016

14. FLOOD RISK MITIGATION

Definition

14.1 Flooding can be caused by a range of sources including heavy rainfall, rivers overflowing or river banks being breached, dams overflowing or being breached, or groundwater emergence⁵¹. There are areas of land in Bromley surrounding the main watercourses in the north of the Borough that sit within flood zones 2 and 3 of the River Ravensbourne and the River Cray. These areas are at particular risk of flooding and have been the subject of floods in the Ravensbourne catchment since 2001.

14.2 Surface water flooding will occur as storm water flows over ground towards the Main River Network. Normal ground water flooding affects a tiny proportion of residences, other than those with un-tanked basements or cellars. There is group known as Groundwater 'Solution Cell' which consists of the neighbouring boroughs, which was initiated in 2014 following the major Groundwater emergence in Croydon and Bromley to monitor, investigate and develop medium to long-term measures for managing groundwater flooding. The Environment Agency regularly monitors Groundwater levels and issues alerts to members of this group.

14.3 The Flooding and Water Management Act (FWMA) 2010 requires the London Borough of Bromley, as the Lead Local Flood Authority (LLFA), to develop, maintain, apply and monitor a strategy for local flood risk management in its area.

14.4 As the LLFA, the Borough has a duty to identify the causes of surface water flooding, including groundwater, and determine those organisations or authorities that have a role in mitigating the flood risk. Bromley is of the South East London Flood Risk Partnership (SELFRP), working in partnership with the boroughs of Bexley, Lewisham, and Greenwich.

Existing Infrastructure Provision

14.5 The Borough of Bromley is outside of the tidal limit of the River Thames and therefore is not affected by coastal flood risk. However, there is a risk of river flooding. In an effort to address the flood risk from rivers, the Environment Agency, its predecessors and partners have implemented alleviation measures to reduce the risk to the community. This included significant works undertaken on the River Ravensbourne in the mid to late 1960s to improve the channel's ability to convey floodwater quickly to the River Thames. Rivers in the borough have been extensively culverted which can create significant complications when preparing future proposals to manage the flood risk. This is especially in regard to maintenance and risk of blockage during flood incidents.

14.6 Environment Agency data indicates that as a consequence of existing mitigation works, 85% of the properties at risk of fluvial flooding in the borough are in areas where the likelihood of flooding is low. However, 1252 properties, less than 1%, remain at a moderate to significant risk of fluvial flooding within the borough. These are largely grouped along the length of the River Ravensbourne and its tributaries.

⁵¹ London Borough of Bromley – Local Flood Risk Management Strategy, August 2015

14.7 The Ravensbourne catchment partnership is hosted by Thames21. The steering group is made up of Thames21, the Environment Agency, London boroughs of Lewisham, Bromley and Greenwich, the London Wildlife Trust and the Quarry Waterways Action Group. The priority river basin management issues to tackle in this catchment are the physical modifications made to the river, diffuse pollution from urban areas and point-source pollution of sewage.

Current Shortfall

14.8 The shortfalls currently identified in the flood mitigation infrastructure in Bromley are being addressed over time by planning restrictions that reduce run off from redeveloped sites, by creating the Local Flood Risk Management Strategy action plan and through active cooperation with agencies such as the Environment Agency and partners.

Future Demand

14.9 The probability of flooding will increase in the future as a result of factors such as:

- Urban Creep (infill development and loss of green space)
- Ageing infrastructure (increased pressure on drainage systems and other infrastructure designed for different levels and patterns of use and in deteriorating condition)
- Population Growth (denser populations means the impact of a flood for a given area will impact upon more people)
- Climate Change (increased storms)

14.10 Development management policies aim to prevent vulnerable development, such as housing, from being located in areas of the borough where there is a heightened risk of flooding. All development proposals should seek to incorporate Sustainable Urban Drainage Systems (SUDS) or demonstrate alternative sustainable approaches to the management of surface water as far as possible. In flood risk areas, the sequential test and exception test, as set out in the NPPF and associated technical guidance, should be applied. Flood Risk Assessments should be submitted in support of all planning applications in these areas as for major development proposals across the borough to ensure that all development is appropriate.

14.11 The Surface Water Management Plan (SWMP) 2011 for Bromley identifies critical drainage areas and local flood risk zones in the borough. The SWMP has an action plan which is designed to be reviewed and updated annually, with potential impacts for infrastructure needs in the future. Many mitigation measures identified in the SWMP aim to protect existing infrastructure from flooding. These measures should be delivered by the relevant infrastructure provider, in line with an agreed timeframe with the Council.

14.12 Bromley will continue to contribute to key mitigation projects within the flood risk management partnership (SELFRG) area such as the Thames Estuary 2100 Plan, the Ravensbourne Corridors Improvement Plan and the Cray Valley's set of long-term projects.

Infrastructure Costs

14.13 A Flood Risk Management Plan (FRMP⁵²), published August 2015, was conducted by JBA Consulting on behalf of the London Borough of Bromley. Annex 3 of the Flood Risk Management Strategy includes indicative costs of potential schemes. The Environment Agency has four projects in the borough dealing with Fluvial Flood Risk Management in their current 6 year plan - see Table 14.1 below.

Table 14.1 Environment Agency Projects - Updated July 2020

Location	Project	RFCC	Value (£'s)	GiA (£'s)	External funding Req'd (£s)	Number of Properties at risk
Kyd Brook – project being amended to improve flood risk for area impacted by recent floods.	Fluvial Flood Risk Management	Thames	1,380?	814	TBC £100.00 bid	195
Ravensbourne (East Branch) (Options being finalised)	Fluvial Flood Risk Management	Thames	634	120	63	11
St James Stream, Upper Elmers End – progress uncertain	Fluvial Flood Risk Management	Thames	1,236	767	TBC	110
Beck (East Branch) progress uncertain	Fluvial Flood Risk Management	Thames	497	80	50	108

Funding Sources

14.14 The Environment Agency operates a Flood Defence Grant in Aid (FDGiA) programme for capital works which runs on a six year programme with an opportunity to refresh on an annual basis (see current list of local projects above). This can be applicable to all flood mitigation schemes, subject to being put forward for project appraisal funding at the annual programme refresh.

14.15 As LLFA, Bromley Council will, where possible, prepare schemes and measures that provide multiple benefits and target government funding for the most vulnerable communities. An area-based grant is available to each LLFA from central government, depending on the level of flood risk.

14.16 Bromley works with the SELFRG partnership and with other organisations to support their applications for funding where there will be a tangible benefit to Bromley or its residents.

⁵² http://www.bromley.gov.uk/downloads/file/2236/flood_risk_management_strategy_appendix_3_action_plan

Infrastructure Delivery Plan (IDP) Schedule Table 2020

Project Name	Timeframe	Estimated Value (capital costs)	Funding currently secured/ identified	Remaining funding gap	Project Status
Transport					
Shortlands, Ravensbourne and Bromley Better Villages Liveable Neighbourhoods	2019-2022	£5,000,000	The project has been approved by TfL with £149k of feasibility funding provided in 2019/20.	Indicatively fully funded	TfL Gateway 2 Feasibility
Junction and on-line improvements from Keston to Biggin Hill including Keston Mark Junction	2019-2022	£1,000,000+	TfL TLRN funding, TfL Bus Priority Programme, LIP3 contribution, S278	£1,000,000+	Feasibility design by TfL
Car clubs, Borough wide	Ongoing	N/A	Operator permit fee and LIP S106	N/A	Ongoing monitoring and development
Local Cycle network	2019-2041	£12,000,000	LIP	£9,400,000	Ongoing
Strategic Cycle Network (Excluding A21 Corridor)	2019-2041	£12,000,000+	TfL Quietways (or similar), S278	£11,400,000	Ongoing as routes are funded by TfL
Segregated cycle route on A21 Catford to Bromley Common SCA corridor	2020-2030	£20,000,000+	TfL	£20,000,000+	Aspirational
Cycle hub at Beckenham Junction Station	2019-2022	£120,000	TfL Cycle Parking funding	Funding potentially identified to bid for in future years	Feasibility
Cycle hub at Crystal Palace Station	2019-2022	£120,000	TfL Cycle Parking funding	Funding potentially identified to bid for in future	Feasibility
Cycle hub at Shortlands Station	2019-2022	£120,000	Liveable Neighbourhoods	Indicatively fully funded	Feasibility

Cycle hub at Bromley South Station	2019-2022	£120,000	No	£120,000	Aspirational, lower cost alternatives are being explored
Realignment and signalisation of Oakley Road/Bromley Common junction	2020-2030	£1,000,000	TfL TLRN funding	£1,000,000	Concept design
Bromley Town Centre Junction Enhancements	2020-2030	£3,000,000	TfL Liveable Neighbourhoods, Bus Priority Programme, S278	£3,000,000	Aspirational
Junction improvements at A21/A232 Crofton Road and A21 Farnborough Common	2020-2030	£1,000,000	TfL investment in TLRN and TfL Bus Priority Programme, S278	No funding identified	Aspirational
Chislehurst bus reliability scheme	2020-2030	£1m+	TfL Bus Priority Programme	None anticipated	On hold
Elmers End casualty reduction and regeneration scheme	2020-2030	£5,000,000+	Liveable Neighbourhoods, Mayor's Air Quality Fund	£5,000,000+	Aspirational
Provision of step free access at Petts Wood Station	2019-2024	£4,000,000	Department for Transport (Access for All)	Fully funded	Under development
Provision of step free access at St Mary Cray Station	2019-2024	£4,000,000	Department for Transport (Access for All)	Fully funded	Under development
Chislehurst or Elmstead Woods Station accessibility enhancements	2019-2024	£4,000,000	Department for Transport (Access for All)	£4,000,000+	Aspirational
Penge West accessible entrance and 'out of station interchange' improvements with Penge East	2019-2024	£3,000,000	Department for Transport (Access for All)	£3,000,000+	Aspirational
Passenger capacity enhancements including an additional entrance at Bromley South Station	2019-2027	£5,000,000	Department for Transport. Some funding identified but will not provide a satisfactory long-term solution.	£5,000,000	Aspirational

Passenger capacity enhancements and upgrades to Beckenham Junction station	2030-2041	£3,000,000+	Department for Transport	£3,000,000+	Aspirational
Increased capacity on South Eastern services serving central London termini	2019-2027	Private sector project funded by franchisee	New South Eastern Franchise	N/A	Awaiting appointment of new franchisee
Additional capacity on Elmers End London Trams branch	2019-2022	£9,000,000	Funding under review	£9,000,000	Early Development
Additional capacity on Beckenham Junction London Trams branch	2020-2030	TBC	TfL	TBC	Aspirational
Improvements to connectivity between Bromley Town Centre and Canary Wharf/Docklands	2022-2030	£250,000,000+	None	£250,000,000+	Aspirational
Beckenham to Bexley Express Bus	2022-2030	TBC	None	TBC	Aspirational
South London Metro/Metroisation to support improved orbital travel	2022-2041	Across south London c.£1,700,000,000	None	£1,700,000,000	Early development/ lobbying by TfL
Development of BRT Corridors to improve intra-borough connectivity	2022-2041	TBC	None	TBC	Aspirational
Improvements to public transport on the Crystal Palace to Beckenham corridor e.g. Tram extension to Crystal Palace	2022-2041	£200,000,000 + if tram	None	TBC	Aspirational
Improved connectivity with North West Kent inc. proposed Bromley South to Ebbsfleet International service	2024-2041	TBC	Department for Transport	TBC	Aspirational

Bakerloo Line southern extension Phase 2	Beyond 2030	£1,000,000,000	TBC	No funding secured	Aspirational by TfL. The Council is not supportive unless it can be shown to deliver connectivity benefits identified in Bromley's LIP3
Utilities					
Digital – 5G Cell project	TBC				
Education					
New 150 pupil SEN (ASD) Free School	2023	Not known DfE delivered	TBC	TBC	No current proposals
Expansion of St John's CE Primary	2016+	£4,430,300	TBC	£4,430,300	On hold
Expansion of Stewart Fleming (pioneer)	2018-20	TBC	TBC	TBC	Planning consent achieved. Phase 1 Construction complete. Phase 2 under construction. Works due to complete late 2020.
Expansion of Marian Vian Primary	TBC	£3,009,000	£182,389	£2,826,611	Planning application due to be submitted early 2019
Expansion of Wickham Common Primary	TBC	TBC	TBC	TBC	No current proposals
Expansion of Scotts Park Primary	2017	£3,468,000	TBC	TBC	On hold
Expansion of Farnborough Primary	2017	£5,093,000	£750,000	TBC	On hold
Expansion of Trinity (Princes Plain) Primary	2016	£6,537,000	TBC	TBC	Refurbishment of EDC underway. Later phases dependent on

					need.
Expansion of Castlecombe Primary	2017	£3,711,015	£3,711,015	TBC	Planning consent achieved. Phase 1 Construction complete
Expansion of St Mary Cray Primary	TBC	£2,970,000	TBC	£2,970,000	Currently at feasibility stage
Expansion of Blenheim Primary	TBC	£2,972,000	TBC	£2,972,000	Feasibility complete. Not currently progressing.
Expansion of Oaklands Primary	2016	£7,334,000	£2,512,000	£4,822,000	Planning consent achieved. Phase 1 under construction
New 8FE secondary school Eden Park High School	2019	Not known, delivered by DFE	TBC	TBC	Planning consent achieved under construction
New 6FE secondary school Bullers Wood School for Boys	2019	Not known, delivered by DFE	TBC	TBC	Planning consent achieved
New 6FE secondary school SHaW Futures Westmoreland Road	2020	Not known, delivered by DFE	TBC	TBC	At Planning Inquiry
New 6FE secondary school Harris Kentwood	2021	Not known, delivered by DFE	TBC	TBC	Feasibility
New 6-8FE secondary school Turpington Lane Allotments	TBC	TBC	TBC	TBC	No current proposals
New secondary school at BET Hayes Lane	TBC	TBC	TBC	TBC	No current proposals
Relocation and reprovision of Marjorie McClure Special School at land adjacent to Edgebury Primary School.	2020-22	Not known delivered by DfE	TBC	TBC	Planning application expected later in 2020.

Secondary expansion at Chislehurst School for Girls	TBC	TBC	TBC	TBC	No current proposals
Secondary expansion at Bishop Justus	2016-2019	£5,042,000	TBC	TBC	Complete
Special education facilities at BET Hayes Lane	TBC	£1,205,000	£1,205,000	£0	PRU Scheme at Feasibility
Special education facilities at Midfield Site	TBC	TBC	TBC	TBC	No current proposals
Special education facilities at Bromley Beacon Academy (Orpington)	2016-2018	£5,249,000	£5,249,000	£0	Planning consent achieved. Phase 1 complete, phase 2 complete, and phase 3 under construction.
*Special education facilities at Marjorie McClure	Post 2016	Not known, delivered by DFE	TBC	TBC	School now to be provided at site behind Edgebury Primary School (See above).
Health facilities					
Health Facilities	TBC				
Open Space, Parks, Gardens, Sports					
Crystal Palace Park Regeneration Plan	2017-25	TBC	TBC	TBC	DRR 20/018
Community Facilities					
West Wickham Library and Leisure Centre	2019-2022	TBC	TBC	TBC	DRR19053 & 027
Bromley Valley Gym	2019-2022	TBC	TBC	TBC	DRR19/059/A
Southborough Library?	TBC	TBC	TBC	TBC	DRR19/051 & CDS 19/181
Central Library & Churchill Theatre	TBC	TBC	TBC	TBC	TBC

Chislehurst Library	TBC	TBC	TBC	TBC	TBC
Public Realm					
Beckenham Town Centre - ??	DONE	COMPLETED	TBC	TBC	DRR19/049?
Bromley Town Centre Improvements	2015-19	TBC	TBC	TBC	DRR/20/020
Orpington Town Centre Improvements	2015-19	TBC	TBC	TBC	DRR20/021
Emergency Services					
Policing Infrastructure towards DWO costs.	TBC	TBC	TBC	TBC	TBC
Fire-fighting facilities	TBC	TBC	TBC	TBC	TBC
Energy and Low Carbon					
Carbon Off Setting Fund	On-going	Site specific – not known	Site specific	Site specific – not known	TBC
Combined Heat and Power facilities – creation of energy networks	Various schemes	Not known	LBB/developers	Not known	TBC
Waste and Recycling Facilities					
Waste/recycling facilities	TBC	TBC	LBB/contractors	TBC	TBC
Flood Risk Mitigation					
Flood Risk Mitigation - various	2020-31	TBC	FDGiA, Env Agency + s106	TBC	Strategic Flood risk Assessment. Local Flood Risk Strategy

Stakeholder list

The following agencies directly contributed to the production of this Infrastructure Delivery Plan in addition to relevant services in the Council and existing published infrastructure reports (referenced within each section):

- Community Facilities – Sport England, idverde
- Utilities – Thames Water, National Grid, UK Power Networks, SGN
- Waste – Environment Agency
- Flood Risk Mitigation – Environment Agency
- Health - NHS South East London CCG (Bromley) / NHS London Healthy Urban Development Unit
- Emergency Services – London Fire & Emergency Planning Authority (via Dron & Wright) Metropolitan Police Service (Via Lambert Smith Hampton)