Royal Borough of Greenwich Local Plan

Infrastructure Delivery Plan (IDP) October 2021

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I Introduction

Purpose of this document

- 1.1 The purpose of the Infrastructure Delivery Plan (IDP) is to assess the amount and type of Infrastructure required to support the level of growth identified in the Local Plan. The IDP seeks to assess current infrastructure provision in the borough, how well it meets existing needs and identifies future infrastructure requirements to support expected future growth. Whilst a broad range of physical, social and green infrastructure is assessed in this IDP some of these infrastructure items are not assessed to the same extent as others as these are provided and assessed by private companies, therefore the council has no control over them, for example utilities.
- 1.2 The indicative costs and potential funding sources of the Infrastructure needed to support the level of growth are set out in Appendix I. In addition, all local authorities must publish an annual Infrastructure Funding Statement (IFS) by December of each year with details on S106 and CIL contributions including how they have been spent and how they will be spent in the future. The first IFS was published in 2020 and this sets out Royal Greenwich's priorities for spending planning contributions.
- 1.3 The information used in this document is drawn from a combination of sources including existing published reports, strategies and evidence base studies as well as directly from discussions with relevant services such as the CCG, emergency services and internal council departments.
- 1.4 Given the significant levels of planned housing growth in the borough, it is necessary to keep the IDP under review to ensure it accurately reflects the boroughs infrastructure needs and this infrastructure is sought as development comes forward in line with National Planning Practice Guidance. The IDP is a living document, and is updated regularly to inform the publication of the IFS and any priority projects included within it.
- 1.5 The IDP will be used to inform preparation of both the Local Plan and the Infrastructure Funding Statement, to communicate infrastructure requirements to developers at the planning application stage as part of Local Plan implementation and to improve partnership working and coordination with infrastructure delivery agencies.

Policy Context

National Policy

1.6 The overarching purpose of the planning system is to contribute to sustainable development, and the <u>National Planning Policy Framework</u> (NPPF) sets out the principles of sustainable development. It requires that sufficient provision for infrastructure is made through policies in the Local Plan. The national <u>Planning Practice Guidance</u> states that local authorities must identify what infrastructure is required and how it can be funded and brought forward. Local authorities must work with infrastructure providers to take a co-ordinated approach.

1.7 Under the Planning Act 2008, the government introduced the Community Infrastructure Levy (CIL); a planning charge used by Local Authorities to help deliver infrastructure to support the development of their area. The Royal Borough of Greenwich introduced its <u>CIL charging schedule</u> in April 2015. The Royal Borough of Greenwich also produced a Regulation 123 list which set out the types of infrastructure that would be funded through CIL. However, amendments to the CIL regulations in 2019 specify that the Regulation 123 List must be replaced with an Infrastructure Funding Statement.

Regional Policy

- 1.8 The Mayor produces a spatial development strategy for London, known as the London Plan. The Local Plan must be in general conformity with the London Plan.
- 1.9 The London Plan sets out ten-year borough level housing targets based on land availability and developments that already have permission; additionally it sets out indicative guidelines for new homes and jobs within identified opportunity areas. Development capacity in opportunity areas is linked to existing or potential improvements in public transport connectivity (for example Crossrail), and the timeframes for delivery in opportunity areas often extends over 20 years or more (beyond the 15 year timeframe of Local Plans). Depending on the progress within opportunity areas in unlocking growth potential, the majority of potential housing growth may be outside the ten year period on which housing targets are based.
- 1.10 The IDP therefore considers growth beyond the 15 year time frame of the Local Plan to take account of the potential infrastructure needs in these opportunity areas, whilst recognising that these growth projections may be revised several times before certain infrastructure is delivered. For example, infrastructure needs are better understood in areas such as Kidbrooke and Greenwich Peninsula where delivery is already underway, whereas infrastructure needs in opportunity areas such as Charlton Riverside and Thamesmead will need refining over time.
- 1.11 The London Plan identifies and supports London wide infrastructure necessary to support the proposed level of growth across London. The infrastructure requirements are informed by a robust evidence base.

Local Policy

- 1.12 The <u>Core Strategy with Detailed Policies Local Plan</u> (adopted July 2014) sets out the overarching vision for the Royal Borough as well as guiding decisions on planning applications. The Royal Borough is currently in the process of producing a Site Allocations Local Plan which complements the Core Strategy by setting out specific policies for key sites to ensure that the vision and objectives of the Core Strategy are achieved.
- 1.13 The Local Plan is informed by evidence base documents which provide robust evidence of development needs, pressures, and issues within the borough. The IDP forms part of the evidence base.

Phasing and timing of infrastructure requirements

- 1.14 In the short term/medium term infrastructure requirements are generally understood and funded. This is because the majority of growth in the borough comes from large strategic sites which include infrastructure provision.
- 1.15 Over the longer term, there is a decreasing amount of certainty where development extends beyond the plan period and it is not possible to identify all infrastructure requirements at the outset. For example, different service providers will plan services over different time periods (some short term and some longer term), models of provision will change over time and new information and data will become available all of which will impact infrastructure requirements. As such, the NPPF states that anticipated rates of delivery and infrastructure requirements should therefore be kept under review.

Future Housing Growth

1.16 The Core Strategy identifies broad locations in which housing growth is expected to be delivered known as Strategic Development Locations. The six Strategic Development Locations are listed below and illustrated in Figure 1.



Figure 1 Strategic Development Locations

- 1.17 **Charlton Riverside Opportunity Area** The Charlton Riverside SPD was adopted in 2017, and sets a long term (20+ years) vision for the entirety of the Charlton Riverside area. The most potential for change within the plan period, and for housing growth, is concentrated within the central part of the area (Phase I in the SPD). A key component of delivering change in the area is increasing business growth alongside the introduction of residential, and sustainable growth, which is dependent on the timely delivery the range of physical and social infrastructure required to support new residents.
- 1.18 **Deptford Creek/Greenwich Riverside Opportunity Area** This area is partly in London Borough of Lewisham. A significant amount of new development has already been delivered in the Creekside area, therefore the ability of the area to support further development is now more limited.
- 1.19 **Greenwich Peninsula/Greenwich Peninsula West Opportunity Area** The majority of development over the plan period is focused on the Peninsula, with outline permission granted for 15,000 new homes on the GLA/Knight Dragon site and several other significant development sites under construction on the western side of the Peninsula. Further opportunities have been identified with the decommissioning of the gasholder and the potential relocation of the Tunnel Glucose safeguarded wharf.
- 1.20 **Kidbrooke** As with the Creekside area, redevelopment in Kidbrooke is well underway. The focus for the remaining sites is ensuring that they complement Kidbrooke Village as well as providing adequate social infrastructure provision to support new their residents.
- 1.21 **Thamesmead and Abbey Wood Opportunity Area** This area is partly in London Borough of Bexley. An OAPF for the area was prepared in partnership with the Greater London Authority, Transport for London and the London Borough of Bexley and was adopted in December 2020, replacing the Thamesmead and Abbey Wood SPD. The focus is on unlocking the significant growth potential in Thamesmead town centre and waterfront area through a step-change in public transport provision. This long term potential is complemented by short/medium term opportunities in Abbey Wood arising from the opening of Crossrail.
- 1.22 Woolwich Opportunity Area The strategy for the town centre is to capitalise on its strengths, including its heritage, riverside location and excellent transport links. The majority of the development in Woolwich to date has been concentrated in the Royal Arsenal, and this is now nearing completion. A new SPD is being prepared for the town centre to ensure a coordinated, consistent and high quality approach to managing all scales of development in the town centre.
- 1.23 As set out in the 2019 Local Development Scheme (LDS), a review of the Core Strategy is underway. The spatial strategy and SDLs will not change as part of the review, giving certainty regarding strategic policies and locations for growth in the borough. However, the review will be based on updated housing growth projections that take into account more recent permissions, the 2017

London SHLAA and the results of detailed capacity work that have been undertaken to inform area-specific guidance and the emerging Site Allocations Local Plan.

- 1.24 As a reflection of this high level of housing growth, Royal Greenwich has one of the highest housing targets in London; 2824 units per year as per the London Plan 2021¹ and the capacity for 21,000 jobs in the identified opportunity areas. The Core Strategy review will focus on refining the approach to balancing competing development needs and accommodating higher projected level of growth within these areas.
- 1.25 Additionally, as part of the <u>Authority Monitoring Report (AMR)</u>, RBG identifies and updates a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against the London Plan housing requirement. The five year supply is set within the context of the 15 year housing trajectory, which is updated on an annual basis and provides full details of the large sites (0.25ha and above) included in the trajectory, and their indicative capacity and phasing. The IDP is based on the most recent housing growth projections published in the AMR and will help to identify sufficient infrastructure to support the new higher level of anticipated growth as identified in the new London Plan.
- 1.26 Greenwich Peninsula is one of the largest areas of growth with planning permission for over 15,000 new homes on the Knight Dragon site alone. Thamesmead is expected to deliver 15,000 new homes subject to future public transport infrastructure (DLR extension), Charlton Riverside approximately 6,000 new homes, Woolwich Town Centre circa 7,000 new homes and Kidbrooke around 4,500 new homes. The capacities in Greenwich Peninsula, Woolwich Town Centre and Kidbrooke are a combination of existing strategic sites and new sites which are expected to be delivered in the short to medium term, whereas capacity in Charlton Riverside and Thamesmead is largely expected to come forward in the medium to long term.

The London Plan 2021

2 Population Projections

- 2.1 Projected housing growth as set out above is what drives population growth; increasing the number of homes in an area in turn increases the number of people living there. The assessment of infrastructure requirements is therefore underpinned by the expectations of population growth. The level and type of infrastructure needed is not simply defined by the size of the population but the characteristics of the population such as age, ethnicity and deprivation levels.
- 2.2 The GLA housing-led population projections (central trend) are used to consider how the population will grow in the Borough. These are based on the expected housing development in the Borough in the period up to 2050 and as informed by the 2017 Strategic Housing Land Availability Assessment (SHLAA). The 2017 SHLAA forms the basis of the housing targets in the new London Plan.
- 2.3 The GLA has recently published 2020-based population projections which project slightly lower levels of growth than the previous 2017 population projections. For the purposes of this IDP, the 2020-based population projections were used.
- 2.4 The most recent official GLA estimates show that Royal Greenwich has a population of 295,185 (2023)². This is an increase of 15.5% since the 2011 census was undertaken, following an 18% growth in population between 2001 and 2011³. In recent years, the rate of population growth has slowed down in line with national trends; with an average annual increase of 1% in Greenwich over the last 3 years compared to an annual increase of 2% between 2011/12 2015/16.
- 2.5 The latest GLA projections (2017) suggest there are currently 113,690 households in Greenwich, an increase of 9% since the 2011 census. This indicates that the general population has grown at a faster pace than the number of households in Greenwich and as a result the household size has increased from 2.48 to 2.55 persons per household. One reason for this may be due to increasing house prices which have resulted in an increasing number of young adults living with their parents. The number of 20-34 year olds living at home with parents in 2022 has risen by 1 million compared to in 2000 and 27% of this age group are now in this situation⁴.
- 2.6 By 2035, the population in Royal Greenwich is set to reach 335,174 an increase of 13.5% from 2023 as can be seen in figure 2 below.

² GLA population projections

³ 2011 Census data

⁴ ONS - young adults living with parents



Figure 2 Population increase in Royal Greenwich (2023 – 2035)

Ward Level Growth

- 2.7 The most densely populated ward in the borough is currently Woolwich Riverside (27,088) followed by: Peninsula (26,446) Thamesmead Moorings (25,113), and Greenwich West (21,700)⁵. In terms of patterns of expected growth across Greenwich, the Peninsula ward is expected to see the highest rate of growth of 79%, between 2023 and 2035, which reflects the fact a minimum of 15,000 homes are planned in this area over the next 15-20 years. Thamesmead Moorings and Woolwich Riverside (which includes both Woolwich Town Centre and Charlton Riverside) wards are also expected to see significant levels of growth which correspond with their designations as Strategic Development Locations.
- 2.8 The ward boundaries have recently been reviewed by the Local Government Boundary Commission for England, with final recommendations published in August 2021.

⁵ GLA ward based population-projections 2020

Age profile⁶

2.9 Greenwich has a young and diverse population when compared nationally: 1 in 4 of our population are under 19 years old, compared to 1 in 5 in England. Just over 1 in 10 of Greenwich's population is over 65, compared to just 1 in 6 for England, however this proportion is set to increase over the next 10-15 years. This is shown in Table 1 below, which illustrates the population of people aged 65 and over is expected to increase by 42.7% by 2035.

Year	Aged 0-15	Aged 16-64	Aged 65+
2023	58,376	203,977	32,832
2035	54,491	233,823	46,860
Change (No)	-3,885	29,846	14,028
Change (%)	-6.7%	14.6%	42.7%

Table 1 Predicted population by age

2.10 The structure of the UK's population is changing; people are living longer and having fewer children, which results in the age structure of the population shifting towards later ages as can be seen in Figure 3 overleaf.

⁶ Based on <u>GLA population projections</u>

Population by Age: Greenwich

Identified Capacity, 2023, Borough Total, All Persons

6,000 People (projected)



Population by Age: Greenwich Identified Capacity, 2035, Borough Total, All Persons



Figure 3 Population in Royal Greenwich by age, 2023 compared to 2035

Ethnicity

2.11 Greenwich is an ethnically diverse place with 41% of its population coming from a non-white ethnic group⁷. The ethnic make-up of the borough is shown in



the Figure 4 below:

Figure 4 Royal Greenwich population breakdown by ethnicity

2.12 Overall Greenwich has a more diverse population than the average in England but is similar to outer London boroughs. More diversity is seen in our children, young people and young adults and over the next 10 years, population increases will be greater in BAME groups. Diversity varies between age groups with increasing diversity in older age groups expected over the next decade. Between 2019 and 2035 the ethnic groups expected to see the biggest population increase in Royal Greenwich are Chinese (38%), Other Asian (42%) and White/Black African (46%).

Deprivation

2.13 The Indices of Multiple Deprivation are produced by MHCLG and look at measures such as income, employment, education, health, crime, barriers to housing and living environment to produce an average score for local authorities across England. Based on the most commonly used indicator of deprivation (rank of average scores), Greenwich ranked 88 out of 317 local authorities in England

⁷ Source: GLA 2017 based housing led projections ethnic group projections

in the Indices of Multiple Deprivation 2019⁸. This is an improvement since 2015 when Greenwich was ranked 78th, meaning deprivation levels have improved slightly. In London, Greenwich ranks 13th out of 33 London Boroughs and has a similar level of deprivation to Croydon, Waltham Forest and Ealing.

2.14 Figure 5 below illustrates the level of deprivation across the borough based on Lower Layer Super Output Areas. The most deprived areas are concentrated in the North of the Borough in Thamesmead, Woolwich, Charlton and Peninsula with pockets of deprivation further south in Kidbrooke, Eltham West and Middle Park and Sutcliffe.



Contains Ordnance Survey Data ©Crown Copyright and database right 2019

Figure 5 IMD quintiles in Royal Greenwich

2.15 In summary, Royal Greenwich is set to experience a high level of growth over the plan period and beyond. Due to the certainty that the majority of

⁸ London Datastore Indices of Multiple Deprivation London analysis

development in the borough is expected to be delivered on large sites, many of which do not have existing residential populations. The IDP focuses on ensuring the big infrastructure items are planned for very early on. It is paramount these items are understood and planned for at the earliest stages to support the level of population increase these developments will bring. Smaller infrastructure items are kept under more regular review by service providers as models of provision and infrastructure needs are likely to change more frequently.

2.16 In addition, the structure of the population is changing over time, which means that certain infrastructure items will take priority and/or become more or less important in the future. For example, a younger population will put increased pressure on school provision whereas an older population will put increased pressure on health provision. Additionally, an increase in total population driven by housing growth will place demand on existing infrastructure and create a need for new infrastructure, which must be planned for accordingly.

PHYSICAL INFRASTRUCTURE

Physical infrastructure requirements in the borough include digital connectivity, energy, transport, waste and water and drainage. The majority of physical infrastructure is provided by private service providers and control over future provision is outside of the Council's control. The key infrastructure requirements for each section are outlined in Table 2.

Table 2 Physical Infrastructure key requirements

	Planned Infrastructure
Digital	National Centre of Excellence and test-bed for connected and autonomous vehicles and new mobility services
Connectivity	Fibre to the Premises (FttP) rollout across the borough to improve digital connectivity
	Decarbonise electricity and gas supply
	Support development of District Heat Networks across the borough
Energy	Decentralised Heat Transmission pipeline from west (Thamesmead and Abbey Wood) of the borough to the existing areas of high demand (e.g Greenwich Peninsula)
	Retrofit Council owned housing stock and new Council homes provision will aim for zero carbon
	DLR extension to Thamesmead and Bus Rapid Transit from Woolwich to Abbey Wood
	Cycleway 4
Transport	Silvertown Tunnel
	Reduce reliance on cars through schemes such as Liveable Neighbourhoods, restricting traffic speed and introducing more Controlled Parking Zones (CPZs) as well as improvements to public transport accessibility such as Rapid Transit.
Waste	Improve recycling rates across the borough, particularly in flats
vv aste	In the longer term, seek a new civic amenity centre in a more accessible location
	Work with Thames Water to ensure a continued supply of water to manage population growth by reducing leakage and encouraging water efficiency before finding alternative sources of supply
Water and Drainage	Work with the Environment Agency to manage flood risk across the borough in accordance with their T2100 Plan. This indicates maintenance of the Thames Barrier is the key requirement in the short term until later in the century where significant changes to flood defences will be required
	Reduce the risk of surface water flooding in line with the Local Flood Risk Strategy Action Plan

3 Digital Connectivity

- 3.1 Fast and resilient digital connectivity is increasingly regarded as essential to support a strong local economy, to meet resident's needs and to enable the delivery of the next generation of public services. Improving Digital Connectivity allows digital data to be transferred more rapidly, enabling new forms of digital communication. This includes data for business, domestic and leisure use, such as films, games, complex drawings, business models, or reports, which can be uploaded/downloaded by households and businesses onto computers or mobile devices as well as remote feeds from sensors/CCTV for use by Council services. With the rapid increase in demand for data along with private sector investment, the need for better digital connectivity has changed considerably in the last five years.
- 3.2 The importance of high speed ubiquitous fixed and mobile connectivity as a driver to economic growth is the focus of recent Government Policy papers including the DCMS UK Digital Strategy (October 2022) and the UK Wireless Infrastructure Strategy April 2023.

Existing provision

Broadband Connectivity

- 3.3 Ofcom monitors UK performance against its leading European cities. The latest report published in 2020⁹ shows a mixed picture for the UK compared to Italy, Spain, Germany and France while the UK has the second highest availability of superfast broadband at 95%, it has the lowest availability of speeds greater than IGbps, at only 7%, compared to 22% in Italy and 89% in Spain. However, the House of Lords report 'Make or break; The UK's Digital Future' highlighted that when compared internationally, London's performance is one of the poorest among European capitals (26th out of 33). In addition, the Financial Times Broadband Report found that connections are very poor in the centre of main cities including London, Manchester, Liverpool and Birmingham.
- 3.4 According to the <u>Mayor of London's Connectivity Map</u> and as illustrated in Table 3 below, the availability of Superfast broadband available is slightly higher in Greenwich than the London average, while Ultrafast and Full Fibre broadband availability is slightly below the London average. The map also illustrates that in areas of unavailability¹⁰ 1.8% of Royal Greenwich cannot access broadband of 30 megabits per second compared to 4.4% in London overall.

⁹ Ofcom International Broadband Scorecard 2020

¹⁰ Areas of unavailability are areas where properties cannot access speeds of two, five, 10 and 30 megabits per second.

Table 3 Broadband connectivity

Super-Fast	Ultra-Fast	Full Fibre
(more than 24Mbps)	(more than 300Mbps)	(capable of 1,000Mbps)
London Average		
95.32%	76.66%	21.05%
Royal Greenwich		
98.1%	74.9%	19.9%

3.5 Figure 6 below shows that the average download speed is 46Mbps across the borough compared to 54.2Mbps across the UK¹¹. with wards in the north of the borough having the worst download speeds, particularly Thamesmead.

Smart Cities

- 3.6 The <u>Greenwich Smart City Strategy 2015</u> focuses on how Royal Greenwich can drive and enable improvements in connectivity. Royal Greenwich aspires to be recognised as London's 'smart' and innovative borough able to deliver resource efficient, low carbon, healthy and liveable neighbourhoods. A smart city is a collaborative, connected and responsive city that integrates digital technologies and uses data to respond to resident's needs. It involves harnessing digital innovation to solve challenges in areas such as housing, transport, adult social care, environment and skills.
- 3.7 The Smart City Strategy sets out how this vision will be achieved in the face of many challenges, such as, a rapidly rising population, ageing demographic, the cost of healthcare, the need to reduce traffic congestion and emissions and create a resilient economy in the face of global competition and technological change.

¹¹ ISP review - Ofcom Connected Nations report



Figure 6 Average download speeds in Royal Greenwich by ward¹²

Future Provision

3.8 A smart city approach and improved digital connectivity will ensure the Royal Borough has the necessary infrastructure to support the level of growth identified in the Local Plan and create jobs locally to support this growth. The need for improved digital connectivity will be reflected in the Local Plan Review. However, digital connectivity is not something which can be secured through planning applications, as it is not required to make the development acceptable in planning terms. Yet, wherever possible, the Royal Borough of Greenwich will take a more interventionist role to facilitate earlier investment in upgraded connectivity in the borough than the private sector may deliver on its own.

Broadband Connectivity

3.9 The Royal Borough of Greenwich is seeking to provide businesses and residents with a fibre (fixed) and mobile connectivity that underpins a modern society. As set out in the <u>Digital Connectivity Strategy 2019</u>, the Council has facilitated a corporate joint venture, between DG Cities and ITS Technology Group to build, maintain a commercialise a fibre to the premises infrastructure across the Royal Borough, Digital Greenwich Connect, the new joint venture, completed the first phase, a 21km fibre network in Woolwich in February 2023. This infrastructure is capable of delivering 1Gbps speeds to both residents and businesses, radically

¹² <u>Royal Greenwich - Digital Connectivity Strategy</u>

improving digital connectivity and supporting the digital delivery of council services.

Smart City Innovation

- 3.10 One of the most significant projects in the borough has been the creation of a National Centre of Excellence and test-bed for connected and autonomous vehicles and new mobility services the smart mobility living lab (SMLL). This £20M initiative, funded by Industry and Government, comprises: control rooms, demonstration facilities, high tech garages and advanced road-side monitoring equipment. SMLL's HQ is located in Woolwich. It offers the most technically advanced real-world testing facility in Europe and builds on earlier work through the GATEway consortium which led to the first UK public trials of autonomous passenger pods and delivery vehicles.
- 3.11 The test bed provides a real-world environment where vehicles manufacturers, software developers and service providers, will be able to monitor vehicles operating under current legislative controls and strict safety requirements on the existing road network. The creation of the Smart Mobility Living Lab (SMLL) reinforces Greenwich's position as a centre for innovation and helping bring jobs, businesses and investment in this important growth sector.



Figure 7 Smart Mobility Living Lab driverless car trials (image source https://smartmobility.london/)

4 Energy

4.1 In June 2019, the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050. The new legislation requires the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels. The new London Plan reflects this target of net zero carbon by 2050. Following the introduction of new legislation, the Royal Borough of Greenwich declared a Climate Change Emergency and aims to become carbon neutral by 2030. In order to achieve this ambition, the Royal Borough has published its first year review of its Carbon Neutral Plan (CNP) and is current in the process of drafting the next action plan. The plan is split into 7 key climate themes, one of these being "Energy Supply".

Existing Provision

Electricity Transmission

- 4.2 Electricity infrastructure is owned and transmitted by National Grid Electricity Transmission plc (NGET) in England and Wales.
- 4.3 It operates the national electricity transmission systems across Great Britain and is responsible for maintaining supply to meet demand. National Grid does not distribute electricity to homes and businesses, this is the role of distributor companies. The distributor company in Royal Greenwich is UK Power Networks for electricity.
- 4.4 To facilitate competition in the supply and generation of electricity, National Grid must offer connection to any proposed generator, major industry or distribution network operator who wishes to generate electricity or requires a high voltage electricity supply. Often proposals for new electricity projects involve transmission reinforcements remote from the generating site, such as new overhead lines or new development at substations. If there are significant demand increases across a local distribution electricity network area, then the local network distribution operator may seek reinforcements at an existing substation or a new grid supply point. In addition, National Grid may undertake development works at its existing substations to meet changing patterns of generation and supply.

Gas Transmission

4.5 National Grid Gas plc (NGG) owns and operates the high-pressure gas transmission system in England, Scotland and Wales which consists of approximately 4,300 miles of pipelines and 26 compressor stations connecting to 8 distribution networks. National Grid has a duty to develop and maintain an efficient co-ordinated and economical transmission system for the conveyance of gas, and to respond to requests for new gas supplies in certain circumstances. As with electricity transmission, National Grid does not distribute gas to homes and businesses, this is the role of distributor companies which in Royal Greenwich is Southern Gas Network (SGN).

4.6 New gas transmission infrastructure developments (pipelines and associated installations) are periodically required to meet increases in demand and changes in patterns of supply. Developments to the network are as a result of specific connection requests (for example power stations) and requests for additional capacity on the network from gas shippers. Generally, network developments to provide supplies to the local gas distribution network are as a result of overall demand growth in a region rather than site-specific developments.

Energy Consumption

4.7 Energy consumption in Royal Greenwich is fairly typical, ranking 16th out of 33 London Boroughs. As can be seen in Table 4 below, the largest amount of energy is used within residents' homes (44%) followed by industry and commercial uses (29%) and transport (27%)¹³

Table 4 Energy usage in Royal Greenwich 2020

Type of Use	Energy consumption (KWh)	Percentage of total
Domestic	1,582,990,235	47%
Commercial and industrial	947,607,127	28%
Transport	822,547,218	25%
Grand Total	3,353,144,580	100%

- 4.8 Figure 8 below shows, the majority of domestic energy comes from electricity and gas, this trend is also the case for the industrial and commercial sector. As expected, the majority of energy used for transport is on roads (94%), with approximately 1% for aviation, 5% for electric railways, less than 1% for shipping and less than 1% for diesel railways.
- 4.9 The Royal Borough of Greenwich emitted 2.5% of London's total CO2 emissions in 2020, with the highest emissions coming from the domestic sector, followed by transport then industry and commercial uses.

Decentralised Energy

- 4.10 Decentralised energy schemes have a critical role to play in reducing London's CO2 emissions. In broad terms, decentralised energy means local or sub-regional supply of heat and electricity, rather than reliance on national supply networks.
- 4.11 Since 2012, the Royal Borough has explored opportunities to develop decentralised heat networks in the Borough with Greater London Authority (GLA) support. A Heat Mapping Study (March 2012), which formed the evidence base for establishing our current Local Plan policies, identified eight Focus Areas within the Borough with Woolwich Arsenal, Greenwich Peninsula and East Greenwich presenting the greatest potential.

¹³ LEGGI data for London 2017



Figure 8 Energy usage by sector

- 4.12 Following this study, the <u>Energy Masterplan</u> for Greenwich (November 2014) was completed in collaboration with the GLA's Decentralised Energy Project Delivery Unit. The Masterplan confirmed that the most effective way to deliver the low carbon requirements set out by the Mayor is by establishing a decentralised energy network made up of a series of inter-connected energy centres generating low carbon heat and power, supplied to existing and emerging development opportunities to a service level and price that protects the consumer.
- 4.13 A number of areas identified within the Heat Mapping Study and Energy Masterplan have progressed with their own onsite District Heating Energy Centres located at:
- Greenwich Peninsula (operational)
- Royal Arsenal, Woolwich (operational)
- Kidbrooke (operational)
 - 4.14 All four heating networks are run on natural gas Combined Heat and Power (CHP) which provides heating and hot water to a mix of uses but primarily residential units.

- 4.15 In particular, the Greenwich Peninsula Masterplan is being developed by Knight Dragon. A site wide district heating network run on natural gas (CHP) provides space heating and hot water to 15,700 residential units and over 3.5 million ft² of commercial space. Pinnacle Power (Knight Dragon's subsidiary company) operates and maintains the 2,600sqm Greenwich Peninsula Low Carbon Energy Centre (GP LCEC), which is located on the "Gateway Site" just outside of the 2015 Masterplan area. The GP LCEC includes 87MW of heat generation capacity¹⁴. A revised masterplan was submitted in August 2019 (19/2733/O) stating that the energy centre is served by 1 x 3MW gas boiler, 2 x 10MW gas boiler (one boiler will be on standby only) and 1 x 2MWe gas CHP.
- 4.16 The Greenwich Millennium Village is being developed by Countryside and Taylor Wimpey Central London. A site wide heat network provides space heating and hot water to the residential development. Vital Energi was appointed for the design and delivery of a CHP Energy Centre for the GMV built to be an environmentally innovative and sustainable development of around 3,000 homes.
- 4.17 The Royal Arsenal riverside development in Woolwich is supplied via a CHP Energy Centre (EC) owned and operated by Scottish and Southern Energy (SSE). The EC currently contains a 150kWe/200kWth CHP, together with two 2MW boilers and a 70m³ thermal store. Expansion is planned to meet future phases of development; which would see the existing CHP capacity increased to 2.4MWe.
- 4.18 The Kidbrooke village redevelopment (Berkeley Homes) consists of approximately 4,800 residential units and 34,000m2 of non-residential space. A district heating system, with CHP, is being implemented. The current status of the DHN is that both primary energy centres are operational, with a total of 16.7MW plant installed, including 1.261MWth combined heat and power, with facilitating works for a further 12.4MW of plant. Both energy centres supply heat to the resilient ring which is extended as each building is developed to ensure heat is supplied to each new building from Day 1 of operation. The heat network was designed to have sufficient capacity for all homes within this development.
- 4.19 The East Greenwich area includes a Council lead project exploring the retrofit of a communal heating network with a renewable heating solution in the form of Water Source Heat Pumps.
- 4.20 The Royal Borough of Greenwich is also exploring options of low carbon heat infrastructure on its own housing stock which will explore the use of hybrid systems and low carbon and renewable technology, for example, an innovative water source heat pump drawing on the natural resource of water from Thames Basin.
- 4.21 In July 2021, the Council was awarded a funding of £45,000.00 from GLA LEA to undertake a heat network techno-economic feasibility study for Greenwich Town Centre area. The study confirmed the viability of 5 Heat network clusters and an opportunity to bid for HNDU Funding to support the next stage of a

¹⁴ https://www.pinnaclepower.co.uk/case-studies/greenwich-peninsula-district-energy/

Detailed Project Development plan. This is anticipated to take 12-15 months to complete.

Future Energy Provision

- 4.22 As set out in the <u>Mayor's Environment Strategy</u>, the vast majority of London's energy demand (approximately 94 per cent) is currently sourced from outside of the city. London's zero carbon scenario is linked to the decarbonisation of the UK's electricity and gas grids because there is limited space within London to produce renewable energy. In recent years, the amount of carbon produced by electricity has rapidly reduced due to the increased use of renewable and nuclear sources; these low carbon sources of energy have accounted for more than half of UK energy generation since 2017.
- 4.23 Although a national target to decarbonise the electricity grid by 2035 exists, a lack of clear government strategy on the future of gas has led to uncertainty on the wider approach to the long-term decarbonisation of heat and this is one of the major challenges in realising a zero-carbon future. As set out in the Mayor's environment strategy, London will therefore develop a decentralised energy system that is flexible and reduce heat demand through making our homes and buildings more energy efficient.
- 4.24 The majority of energy that serves the borough is privately owned and the provision of this infrastructure is largely outside of the Royal Borough's control. It is therefore difficult to calculate future needs of energy infrastructure in line with the projected population growth. In addition, energy providers do not plan infrastructure on a borough by borough basis but at the regional level.
- 4.25 However, in some Strategic Development Locations where there are supply issues with planned development capacity, such as Charlton Riverside and Thamesmead, Royal Greenwich is working proactively with major landowners and developers to facilitate discussion with relevant energy companies to establish future energy and infrastructure requirements within these areas.
- 4.26 The below summarises what electricity and gas providers are doing to decarbonise the energy system regionally and UK wide, and the actions that the Council is taking to ensure that new development is carbon neutral.

Decarbonising Electricity and Gas Supply

- 4.27 The National Grid has a number of infrastructure projects in London to decarbonise the electricity system and increase its capacity. In 2011, a 7-year project began to rewire London via 32km of underground tunnels deep below the road network to carry high voltage electricity cables. The tunnelling is now complete and 200km of high voltage cable is being installed which will provide the power needed to meet London's growing electricity demand. Housing electricity cables underground will cause less disruption during construction, less disruption for maintenance and allow for repairs and additional cables can be easily installed into the tunnels to meet future demand.
- 4.28 New high temperature, low-sag (HTLS) overhead line conductors are also being trialled, which will see the replacement of conventional conductors with a

conductor of a similar size to allow more power to be transported without strengthening or rebuilding the pylons that hold them. This will facilitate low carbon generation in a sustainable way. National Grid will continue to shift towards decentralised and renewable energy sources.

- 4.29 Currently, 85% of households in the UK rely on gas to heat their homes. If the UK is going to meet the target of net zero carbon by 2050 then greener forms of energy must be used, such as biomethane or hydrogen or switching to electricity generated from renewables.
- 4.30 SGN is undertaking a series of research and development projects to investigate how to decarbonise the gas network. Some pilot projects are currently taking place to illustrate the low carbon capabilities of hydrogen (a clean gas) as the most efficient method for drastically reducing heat related carbon emissions.
- 4.31 SGN have already connected 35 biomethane plants to their network in the UK, supplying enough green gas to heat 191,000 homes with another 11 plants planned over the next year. This should enable them to meet their target of heating the equivalent of 250,000 homes by 2023. Currently, only 2.5% of the estimated available organic farm waste in the UK is used to create green gas, making biomethane a promising component in our future low carbon gas mix.

Decarbonising Electricity and Gas Supply in Royal Borough of Greenwich

- 4.32 The Council is already doing a lot to tackle the climate emergency as part of its Greener Greenwich strategy, including retrofitting our corporate estate and maintained schools, installing electric vehicle charging points and making roads and pavements safer to enable more cycling and walking.
- 4.33 In order to meet the national targets for carbon reduction by 2050, the Royal Borough of Greenwich commissioned a Carbon Neutral Evidence Base Study which sets out a suggested action plan to achieve net carbon by 2030 (RBG ambition). This informed a costed <u>Carbon Neutral Plan</u> which was adopted in 2021. The evidence base quantifies the borough's current emissions and forecasts what the reduction could be by 2030 if action is taken to tackle the two biggest issues: buildings and transport. The forecast says that emissions could be reduced by between 27%, if currently planned action is taken, and 89% if very significant action is taken by central government, the Council and local communities and businesses.
- 4.34 The reductions by 2030 would be comprised of further grid decarbonisation, additional local renewable capacity, further increases in the energy efficiency of the built environment and increases in sustainable travel. The priority actions are summarised in Figure 9.
- 4.35 A key objective of RBGs Carbon Neutral Plan is to support the development of District Heat Networks (DHNs). Properly designed and managed DHNs provide a low carbon, low cost source of heat (space heating/cooling and hot water) alongside reduced building management costs for all types of residential and non-residential properties. The ambition is that 10% of the borough's heat

demand will be served by zero-carbon district heat networks (which is approximately 13,000 homes).

- 4.36 Most of the existing DHN operators in Greenwich are in discussions with the GLA regarding the development of decarbonisation plans of the Energy Centres. The Council is also exploring options of low carbon heat infrastructure on its own housing stock which will explore the use of hybrid systems and low carbon and renewable technology e.g. innovative first of its kind water source heat pump drawing on natural resource of water from Thames Basin.
- 4.37 As mentioned in paragraph 4.21, the Council has secured further support to procure an updated borough-wide heat network techno-economic feasibility study which will form part of the evidence base for Local Plan review. The study will update the results of the previous studies and also focus on areas of high potential (i.e. Charlton Riverside, Thamesmead and Abbey Wood, Woolwich Town Centre) and an overall transmission pipeline from west of the borough to the existing areas of high demand (Peninsula) and potentially to Greenwich Town Centre. Notwithstanding this, reliable information from previous studies can inform the stakeholder engagement plan to avoid disjointed approach by developments coming forward while ascertaining appropriate buy-in from developers to enable the development of a future business case to create a Greenwich wide DCE network and market interest from ESCOs to deliver the network.
- 4.38 As part of the study and if required, consideration will be taken in procuring further technical evidence base to support delivery of heat network via heat zoning. This would identify both delivery models and a preferred policy approach. It could help to ensure that technical and economic considerations have fully informed policy requirements/restrictions on the use of building specific solutions, and that the performance of the network and reasonable end cost to the consumer are secured.

Figure 9: Steps towards becoming carbon neutral in Royal Greenwich



5 Transport

5.1 TfL's London Travel Demand Survey shows that on an average day, 27% of the borough's residents use public transport, 40% travel by car and 30% walk (for the majority of a journey) as can be seen in Figure 10 below.



Figure 10 Transport modes used in Royal Greenwich - 2014/15 to 2016/17

- 5.2 The <u>Mayor's Transport Strategy</u> 2018 aims for 80% of all trips in London to be made on foot, by cycling or using public transport by 2041, meaning that car usage in the borough will need to be reduced by more than half in order to meet this target and allow for growth. To reduce reliance on cars, the Mayor is taking a 'healthy streets' approach to encourage more Londoners to walk, cycle and use public transport. This will help to improve air quality, reduce congestion and help to make London a greener, healthier, more attractive place to live and work.
- 5.3 Major transport systems in the borough, including tube, Docklands Light Rail (DLR) and buses are run by TfL. The National Rail network is the responsibility of Network Rail, with services provided by a Train Operating Company, currently Southeastern. The Transport for London Road Network is managed by TfL and other public highways by the Royal Borough. Borough wide projects are set out in the Royal Borough's adopted <u>Transport Strategy</u> and <u>Local</u> <u>Implementation Plan</u> (LIP3) 2019/20-2021/22. The LIP sets out the borough's transport objectives and how the Mayor's Transport Strategy 2018 will be implemented.
- 5.4 The Transport Strategy sets out how we can support a healthier, greener borough, and the challenges we face in doing so. These include:
- Delivering our target to reach net zero carbon emissions by 2030;

- Ensuring that the growth of housing and jobs in the borough is sustainable and benefits everyone;
- Supporting more active healthy lifestyles, helping to tackle obesity, heart disease, health inequality and other health issues;
- Improving air quality by reducing traffic and emissions;
- Improving road safety and eliminating deaths and serious injuries on our roads by 2041; and responding to the changes in the ways people travel and how often.

5.5 The objectives in the current LIP are:

- To promote active travel (through infrastructure and behaviour change)
- Encourage traffic reduction
- Reduce emissions
- Improve public transport
- Reduce road danger
 - 5.6 The Council and Greenwich Services Plus Ltd operate an in-house fleet delivering a range of services including: waste collection, street cleansing, parks and open space management, caretaking and housing maintenance.

Existing Provision

5.7 Transport links across the borough from east to west and into London are generally relatively good as can be seen in Figure 11 below. The north of the borough benefits from connections to London Underground, DLR and river transport services.



Figure 11 Existing transport provision

5.8 However, the north-south connections, and links to Thamesmead and Abbey Wood are poor with buses offering the only links between major transport hubs and residential areas, resulting in more reliance on cars.

DLR and Underground

5.9 The DLR has two lines in the borough. The Lewisham line crosses the River Thames to pass through Cutty Sark, Greenwich and Deptford Bridge. The Woolwich line crosses the River Thames to terminate at Woolwich Arsenal. The Greenwich Peninsula has the Borough's only underground station, on the Jubilee line at North Greenwich. The Elizabeth Line has two stations in Royal Greenwich at Woolwich and Abbey Wood will be served by faster trains to Canary Wharf, central London and further west (including Heathrow). Elizabeth lines services have reduced some journey times by 50% with journeys from Woolwich to Canary Wharf taking 7 minutes and Woolwich to Bond Street taking 20 minutes.

Rail

- 5.10 The National Rail network is the responsibility of Network Rail, with services provided by a Train Operating Company The borough has three national rail lines, currently operated by Southeastern and Thameslink. These form a series of radial (east west) links for the Borough between Central London and Kent.
- 5.11 The North Kent (Woolwich) line passes through Abbey Wood, Plumstead, Woolwich Arsenal, Woolwich Dockyard, Charlton, Westcombe Park, Maze Hill and Greenwich.
- 5.12 The Bexleyheath Line serves Falconwood, Eltham, Kidbrooke and Blackheath Stations and the Sidcup line serves Mottingham and New Eltham stations.
- 5.13 Thameslink trains provide routes operating through Greenwich, Woolwich, Charlton and Deptford. In May 2018, the Thameslink Programme was completed, providing longer trains between a wider range of stations to the north and south of London. Work included platform lengthening, station remodelling, new railway infrastructure, and additional rolling stock. Thameslink has reduced some journey times and improved accessibility to parts of London removing the need for passengers to change trains.

Buses

5.14 There is a well-established network of Transport for London Bus Services that run on both local and more strategic routes in Greenwich. Crucially they form the only north south links in the Borough and provide links between major transport hubs and for existing residential areas and new opportunity areas.

River Services

- 5.15 Thames Clippers provide a timetabled service stopping at Woolwich, North Greenwich (O2) and Greenwich, which then links westward to Canary Wharf and Central London. There is also a weekend service from North Greenwich which serves Woolwich Arsenal.
- 5.16 The Woolwich Ferry also runs daily, linking Woolwich and North Woolwich. The service is free and carries pedestrians, cyclists, cars, vans and

lorries. Two new hybrid ferries came into operation in January 2019 with aims to reduce emissions.

Walking and Cycling

5.17 There is a network of formal walking and cycling routes in the Royal Borough. The Thames Path forms a formal walking route across the borough and extends into the surrounding south-eastern boroughs. There are two foottunnels, which take pedestrians and cyclists across the river at Woolwich and Greenwich. These tunnels form vital parts of the active travel network. Work is ongoing to identify and deliver more comprehensive walking and cycling networks across the Borough. As the LIP notes, using the Strategic Cycling Analysis conducted by TfL, population growth forecasts and site-specific evaluations has allowed the Council to identify the routes with the highest potential for future cycling growth.

Cable car

5.18 The cable car crosses the river from Greenwich Peninsula to Royal Docks. It opened in 2012 and is operated by TFL.

In-house fleet

- 5.19 The Council currently operates around 460 vehicles with a further c. 100 vehicles being operated by its arms-length company, Greenwich Services Plus Ltd. As of December 2020, the breakdown of this combined fleet was made up of 96.2% diesel, 0.5% diesel-hybrid, 0.2% petrol-hybrid, 0.9% petrol and 2.2% electric.
- 5.20 The Birchmere Centre (the Council's main operational depot) has 20 standard electric vehicle chargers and 5 vehicle-to-grid (V2G) chargers and is able to support a small increase in the number of electric vehicles in the fleet before additional infrastructure and electrical capacity is required.
- 5.21 The Council has held a Fleet Operator's Recognition Scheme (FORS) bronze accreditation since 2015 to improve the environmental and safety performance of its fleet.

Future Provision - Strategic Projects

- 5.22 Significant population, housing and employment growth will have implications on the borough's transport network. Ensuring transport infrastructure is adequate to support this growth is essential in ensuring future development is sustainable. Transport infrastructure is not only about capacity on the road and public transport network but also improving attractiveness and accessibility for all residents by foot, bicycle, public transport and interchange between travel modes - especially in areas of growth.
- 5.23 Current and future transport projects that have been identified to-date are illustrated on the map below and more details on each scheme can be seen in Table 5. These projects are being developed in partnership with TfL to support future growth, without which the growth potential for the areas will be limited. Connections across the borough will continue to improve with the majority of

major transport infrastructure projects anticipated in the north of the borough to correspond with future population growth.

Public transport to Thamesmead

5.24 Growth in Thamesmead is intrinsically linked to the delivery of strategic public transport and new public transport infrastructure is needed to support housing and employment growth. The <u>Thamesmead and Abbey Wood</u> <u>Opportunity Area Planning Framework</u> identifies the extension of the Docklands Light Railway (DLR) from Beckton to Thamesmead and a supporting Bus Rapid Transit link from Woolwich as necessary to unlock significant growth potential of the Opportunity Area. This would have to be supported by significant measures to improve local connectivity and reduce physical obstacles.

Buses

- 5.25 It is expected that the introduction of Crossrail will result in significant changes to bus travel patterns in Royal Greenwich. The addition of two new Crossrail stations at Woolwich and Abbey Wood will change patterns significantly. This is anticipated to include:
- An increase in demand from the southern corridors (Ha Ha Road, Plumstead Common Shrewsbury Lane etc)
- Slight decline from the east (including Thamesmead). Trips are likely to be reassigned to Abbey Wood.
- Increase in demand for services to Woolwich from the west. These trips are likely to be reassigned from North Greenwich.
- Demand is expected to increase less than would otherwise be expected at North Greenwich (with reassignments largely expected to be offset by new developments) and the number of trips through Woolwich to North Greenwich will decrease.
 - 5.26 Changes have been made to a number of routes in order to ensure an appropriate level of capacity is provided and bus connectivity to the new Crossrail stations is maximised.
 - 5.27 TFL monitor capacity and overcrowding on bus routes and will use this to inform when to modify bus services. This may require additional or expanded services, infrastructure, and/or other bus priority measures. For instance, as a result of monitoring and developer contributions, a new bus service from North Greenwich to Kidbrooke was introduced in October 2019.
 - 5.28 The extreme lack of other public transport connectivity between the south of Royal Greenwich, the remainder of the Borough and other key destinations makes north-south bus services particularly important. Cross-river bus connections are required to the South of Royal Greenwich, including the long-discussed need for a cross-river bus connection to Eltham.


Figure 12 Future transport provision (committed and potential)

Table 5 Anticipated future major TfL schemes

Scheme	Description	Area of borough	Status
Silvertown Tunnel	A new twin-bore road tunnel under the Thames in east London that will link the Greenwich Peninsula and Silvertown.	Greenwich Peninsula	Enabling works and construction underway. Expected to open in 2025
DLR extension	A cross-river Docklands Light Railway (DLR) extension from Gallions Reach to Thamesmead, reducing severance caused by the Thames and opening up development opportunities.	Thamesmead	Not yet committed, no confirmed dates
Greenwich and Woolwich Cycleway	A continuous cycleway from Tower Bridge to Greenwich and then onwards to Woolwich (and Thamesmead). It will improve public spaces and facilities for people who are walking. It is supported by wider cycleways and local cycle routes programmes spanning the Royal Borough.	Greenwich to Woolwich	A temporary / emergency scheme covering Phase I is in place with work ongoing on a permanent scheme and further sections. Funded by TFL
Charlton Riverside East West Route and Riverside Route	The East-West Route for public transport, walking and cycling is proposed to provide a new corridor through the heart of Charlton Riverside. This will help to link the area to public transport hubs, existing areas and new development between Woolwich and North Greenwich. The Riverside Route, along Herringham Road and through Anchorage Point Industrial Estate to Anchor & Hope Lane, will provide better accessibility towards the north of the area furthest away from existing public transport.		Riverside Route expected from 2026 East West Route from 2026 onwards

- 5.29 As new development comes forward and population increases, so does pressure on the existing transport system. Bus Rapid Transits (BRT) will therefore be needed to improve connectivity in areas of expected growth. The Bus Rapid Transit would be a modern, high quality system, comprising of bus transit lanes separated from general traffic where possible. Transit stops would be highly identifiable and fully accessible, spaced further apart than conventional bus stops, enabling quicker journey times between key locations such as Thamesmead Town Centre and Abbey Wood station.
- 5.30 A BRT will be needed to support the levels of expected growth in Thamesmead and better connect the area with Woolwich, Plumstead and Abbey wood. Similarly, in Charlton new and improved bus provision will be needed as well as improved access and connections to surrounding public transport hubs and new cycling and walking routes.
- 5.31 Buses are an affordable means of transport and need to be the focus of improvement, especially in areas of deprivation such as the north of the borough.
- 5.32 Whilst population increase is expected to be higher in the north of the borough where major development is taking place and major transport infrastructure is needed to support this growth, the majority of small sites are in the south of the borough which will still see population growth and an increase in reliance on cars if public transport accessibility is not improved. This needs to be addressed if Royal Greenwich is to meet the target set out in the Mayor's Transport Strategy of 80% of all journeys being made on foot, by bike or using public transport by 2041. Developments across the borough should mitigate their impacts on the road network, improve access to public transport and encourage active travel.

Future Provision - Borough projects

5.33 Royal Greenwich runs a number of programmes and initiatives to support walking, cycling and the public transport network and to achieve the objectives set out in the Transport Strategy and LIP. These include physical measures to improve the walking and cycling environment, reduce road traffic, slow traffic down and better connect places to public transport routes as well as initiatives to change people's attitudes and behaviours towards public transport and encourage active travel. Royal Greenwich also aims to improve existing conditions and ensure that new developments do not worsen traffic but instead contribute to creating an environment that encourages active travel.

Traffic levels, congestion and safety

- 5.34 Reducing private car usage is a priority for Royal Greenwich in order to create healthier streets, meet the Mayor's targets set out in the Transport Strategy and improve air quality. In order to achieve this, the Royal Borough aims to create low traffic neighbourhoods where traffic is restricted.
- 5.35 There are already a number of Controlled Parking Zones (CPZ's) in the borough and Royal Greenwich will continue to update and expand these, and introduce new ones to reduce reliance on cars. Work undertaken to support the Council's Carbon Neutral Plan has identified the need for a borough-wide CPZ

and banded parking permit charges that vary with vehicle emissions. The Transport Strategy sets out a number of actions that the Council will undertake in order to implement a borough wide CPZ.

- 5.36 In addition to reducing the use of motor vehicles, it is necessary to reduce the danger that they pose by improving road safety. The LIP sets out traffic calming measures (such as 20mph zones) and a number of training courses and safety programmes run across the borough to help improve road safety including Bike Safe and Scooter Safe to teach riders how to ride safely and Travel Training Bus and Stepping Stones to improve user confidence. As set out in the Transport Strategy, a Road Safety Action Plan will be produced which will prioritise issues, locations and areas for road safety interventions and set out RBG's action plan to achieve Vision Zero for road collisions and injuries.
- 5.37 As part of its approach to encouraging safer speeds, the Royal Borough is committed to completing the introduction of 20mph zones in all residential areas and the expansion of 20mph limits on appropriate non-residential routes.
- 5.38 When vehicle use is necessary, Royal Greenwich is committed to encouraging ultra-low emission vehicles (such as electric) as set out in the Transport Strategy. Based on the Department for Transport figures there are around 176 charging points in the Borough. Royal Greenwich will ensure that the number of plug-in charge points continues to grow as the number of registered electric vehicles continues to increase. Royal Greenwich will produce an Electric Vehicle Strategy which sets out an action plan for implementing charging infrastructure in the borough, providing an extensive and attractive charging network which builds on the borough's existing public charging points. As set out in the Transport Strategy, an emission-based charging structure will also be introduced to help drive the purchase of low emission vehicles in the borough. Active Travel Walking and cycling
- 5.39 The Royal Borough's Carbon Neutral Plan 2021-2030 sets out an ambitious strategy for Greenwich's response to the climate emergency. It highlights transport as a key contributor to the Borough's greenhouse gas emissions, with road transport being the second highest behind domestic buildings, producing 216 kilotons of CO2 equivalent per year. Transport is one of the plan's seven key themes for becoming carbon neutral. It highlights the necessity of making walking, cycling and public transport the first choice. An Active Travel Action Plan will be produced to support the Transport Strategy. It will set out how the Royal borough will help people in the borough, to reduce their reliance on private cars and walk or cycle more instead.
- 5.40 As set out in figure 10, on average 30% of trips in Greenwich are by walking and this is the second most popular mode of transport. Walking is an accessible mode of travel for most people and improving conditions for walking can bring a range of benefits to health and wellbeing. As set out in the LIP, pedestrianisation and improvements to pedestrian facilities will be focused around Woolwich, Greenwich, Plumstead, Thamesmead and Eltham and 'healthy routes' will be delivered to create attractive, safe and accessible walking routes to schools, town centres and public transport interchanges.

- 5.41 Cycling has a lower take up than walking with an average of 2%. The main reasons for this are safety concerns and inconsistent cycling facilities. There are a number of planned improvements to cycle routes to make cycling more attractive and safer, to achieve a 5% cycling mode share by 2026 as set out in the borough <u>Cycling Strategy</u>. These include delivering new cycling and walking routes such as extending the Thames Path around the West of the Peninsula to create a continuous route along the river, exploring the potential for a dockless biking system, improving connectivity to public transport, improving wayfinding and continuing to install cycle parking.
- 5.42 In addition to improving the cycling infrastructure and creating a safer cycling environment, the Royal Borough will continue to promote active travel and run training programmes to increase residents' confidence. Developers are required to contribute towards the cost of providing or enhancing the pedestrian and cycling environment and active travel promotion and training.

6 Waste

- 6.1 The Royal Borough of Greenwich is part of the South East London Boroughs Joint Waste Working Group. This group was originally formed by five unitary waste planning authorities working together to identify and meet sub-regional requirements for waste management facilities. The initial group consisted of the London boroughs of Bexley, Bromley, Lewisham, Greenwich and Southwark. The City of London subsequently joined the group, with Bexley taking responsibility for their apportionment. The Leaders of all 6 Local Authorities have formally agreed to pool their individual waste apportionment requirements for waste management facilities.
- 6.2 The South East London Joint Waste Working Group produce the South East London Waste Technical Paper which demonstrates how waste apportionment targets set by the London Plan will be met. Apportionment is a per cent share of London's total waste to be managed by the borough; Greenwich's current percentage share is 4.1%.
- 6.3 London boroughs may collaborate by pooling their apportionment requirements, as the South East London Waste Group have done and it is these totals that the joint waste technical paper establishes can be met within the sub-region.

Borough	Borough Apportionment*	2021	2041
Bexley	5.6	457	485
Bromley	2.3	192	204
City of London	1.0	84	90
Greenwich	4.1	338	359
Lewisham	2.2	184	195
Southwark	1.8	150	159
South East London Totals	17.1	1405	1492
London Total	100	8,217	8,726

Table 6 Borough-level apportionments of household, commercial and industrial waste 2021-2041 (000's tonnes) according to London Plan 2021

* Apportionment is per cent share of London's total waste to be managed by borough

Existing Waste Capacity Provision

6.4 The London Plan requires boroughs to safeguard sufficient land (sites and/or areas) and identify waste management facilities to provide the capacity to manage their apportioned tonnages of waste to meet the apportionment requirements. The Royal Borough of Greenwich's target is 338,000 – 359,000 tonnes (2021-2041) in the London Plan 2021. Safeguarded strategic waste sites in Greenwich are shown on the map below (figure 13). The combined capacity of these sites is insufficient to meet the London Plan waste apportionment target for Greenwich.



Figure 13 Existing safeguarded strategic waste sites in Royal Greenwich

6.5 However, as the South East London Technical Paper demonstrates, the South East London Waste Group collectively has enough capacity to meet its apportionment targets in the 2016 London Plan plus a surplus over the plan period as illustrated in table 7 below. The London Plan 2021 decreases the South East London waste apportionment figure to 1,492,000 tonnes in 2041 from 1,582,000 tonnes in 2036 in the London Plan 2016 (see figure 14), therefore increasing this surplus capacity further. As no new waste sites are required, a Waste DPD is therefore not necessary and the Boroughs will continue to safeguard existing waste sites in their Local Plans.



Figure	14 London	Plan waste	apportionment	figures
1.841.6		i lan maste	apportionmente	1.8

	2016	2021	2026	2031	2036
Bromley capacity	81,932	95,240	102,264	109,288	109,288
Bexley capacity	1,219,584	1,224,297	1,224,297	1,224,297	1,224,297
City of London capacity	0	0	0	0	0
Lewisham capacity	502,297	502,623	502,888	503,152	503,152
Royal Greenwich capacity	93,546	99,072	102,482	105,893	105,893
Southwark capacity	104,850	106,950	109,050	,150	111,150
Total capacity	2,002,209	2,028,182	2,040,981	2,053,780	2,053,780
SE London total apportionment target (2016)	1,131,000	1,293,000	1,530,000	1,553,000	1,582,000
projected total surplus (above target)	871,209	735,182	510,981	500,780	471,780
projected surplus capacity from operational sites (see explanatory text below)	665,609	529,582	305,381	295,180	266,180

*Please note these figures are based on the Waste Technical Paper which uses 2016 London Plan figures, the Waste Technical Paper is yet to be updated to reflect the 2021 London Plan apportionment figures. However, given the decrease in waste apportionment figure for South East London the surplus capacity illustrated above will increase.

Future Waste Capacity Provision

- 6.6 As illustrated in table 7 above, the South East London Joint Waste Working Group has capacity now and for the foreseeable future to process waste produced within its locality. There are also a number of 'non-strategic' sites in each borough that are currently operating as licenced waste facilities that were not identified in the Joint Waste Technical Paper as they are not considered strategic and not required to meet the waste capacity apportionment targets during the London Plan period.
- 6.7 At present, there is no need to identify any additional waste management sites in Royal Greenwich, but existing waste sites will need to continue to be safeguarded. It is worth noting that there is only one planned Energy from Waste facility in South East London to process organic waste and there may be a need for an anaerobic digester in the future.
- 6.8 The Royal Borough of Greenwich will also continue to seek to reduce the amount of waste arising in the borough through effective waste management.

Existing Waste management Provision

- 6.9 The Royal Borough of Greenwich collects recycling from households in three streams:
- Green Organic food and garden waste
- Blue Mixed dry recycling
- Black Residual waste includes anything that cannot be recycled in the blue or green top bins as residual waste in a black topped bin.
 - 6.10 The Royal Borough also offers additional waste collection services for Waste Electrical and Electronic Equipment (WEEE), textiles such as clothes and shoes and bulky waste such as white goods and furniture.
 - 6.11 As can be seen in figure 15 below, recycling rates are relatively low at 31.5% in 2021/22 when compared to a national average of 44.1%. In addition, recycling rates have actually reduced in recent years rather than increased 15 as a result of property growth particularly flats.

¹⁵ Taken from the London's <u>Waste and Recycling Board</u>



Percentage of waste recycled

Figure 15 Amount of waste recycled in Royal Greenwich

- 6.12 RBG's Waste Strategy (2016-2025) was developed to enable the Royal Borough to achieve a more sustainable approach to municipal¹⁶ waste management. The Strategy aims to:
- Address reducing recycling rates
- Use data to gain a greater understanding of performance and identify opportunities for improvement
- Improve and expand the range of services offered to residents
- Manage the challenges presented by the growing population whilst ensuring efficient, safe waste collections which maximise recycling.
 - 6.13 An update to the existing waste strategy, titled 'Towards Zero Waste', was agreed by Cabinet in September 2020 to accelerate the shift to more sustainable waste management. The strategy update aims to:
- Improve the borough's recycling performance
- Reduce the levels of contamination in the recycling material collected
- Reduce overall waste generation per household
- Reduce the use of single use plastics
 - 6.14 Following the updated strategy, the borough has introduced a stricter contamination policy to improve the quality of the dry mixed recycling collected (November 2022) and introduced fortnightly residual collections from kerbside

¹⁶ The London Plan defines Municipal waste in the possession or under the control of local authorities or agents acting on their behalf. It includes all household waste, street litter, waste delivered to council recycling points, municipal parks and gardens wastes, council office waste, Civic Amenity waste, and some commercial waste from shops and smaller trading estates where local authorities have waste collection agreements in place.

properties (February 2023) to encourage behaviour change and increase the borough recycling rate.

- 6.15 The London Environment Strategy (2018) also requires boroughs to develop Reduction and Recycling Plans (RRP) to demonstrate general conformity with the London Mayor's policies. Greenwich is currently working on delivering its second <u>RRP</u>, with actions centred along 4 themes:
- Waste Reduction
- Maximising Recycling
- Reducing Environmental Impact
- Maximising local waste sites
 - 6.16 Recycling rates across London have also slowed down and were at 33% in 2016/17. The Mayor's Environment Strategy also recognises that London as a whole needs to reduce the amount of municipal waste generated by the capital, increase recycling and composting performance significantly, and generate energy from rubbish that cannot be reused or recycled in a way that is no more polluting in carbon terms than the energy source it replaces.
 - 6.17 In order to do this, the approach to waste management will need to change from a linear economy where materials are used until the end of their life and then disposed of to a circular economy where waste is designed out entirely by reusing and recycling.
 - 6.18 The hierarchy in figure 16 illustrates how waste management should be approached to achieve this shift in economy.



Figure 16 Waste management hierarchy

6.19 This will involve changing people's attitude towards waste and its disposal including encouraging people to reuse materials, educating people about how to recycle correctly and how to make better buying choices. It will also involve reducing products in plastic packaging and increasing availability and visibility of recycling facilities and making sure the infrastructure is available to encourage and create opportunities for businesses developing reuse, repair and remanufacturing services.

- 6.20 With a significant amount of growth planned in Royal Greenwich, it will be paramount that waste collection services are considered at the earliest point in planning applications and developments comply with Royal Greenwich guidance and any other best practice guidance (e.g. ReLondon Flats Toolkit), as appropriate.
- 6.21 One of the biggest challenges in terms of improving recycling rates is that the majority of new developments are flats and recycling bins are not as conveniently located as they are for houses. A number of new technologies are emerging including tri-separation chutes, vacuum systems and Underground Refuse Storage (URS), although all are in the early stages and their impact on recycling rates is not yet known. A tri-separation chute has recently been installed in Union Wharf, Deptford, however it will be a while before the impact of these systems on recycling rates is understood.
- 6.22 Royal Greenwich already implements a number of smaller initiatives to improve recycling rates including running educational programmes, tackling contamination issues by raising awareness and attending community events. All residents also receive a leaflet detailing bin collection days, what each bin is for and what to put in them. Royal Greenwich also runs a Junior Environment Champion programme, which involves pupils in activities such as litter picks, making items from re-used materials and recycling better at home and in school. Events such as 'recycle week' are also held. The Royal Borough of Greenwich also work with Greenwich and Bexley Community Hospice who manage the Repurpose reuse shop, which adjoins the recycling centre and refurbishes/upcycle products that would otherwise have been waste.

Future Waste Management Provision

- 6.23 It will be particularly important to consider waste management in areas where high levels of growth are expected such as the Peninsula, Woolwich and Charlton and new approaches to waste management (as detailed above) will be encouraged.
- 6.24 In February 2023, the borough changed the way it collects waste from kerbside properties by collecting residual waste fortnightly, no longer collecting side waste and no longer collecting contaminated recycling or organic waste bins. This is expected to increase the borough's recycling performance by 5%.
- 6.25 Nationally, there are numerous legislative changes that will occur in the coming years that will bring greater consistency in waste collections, the introduction of a deposit return scheme and extended producer responsibility. These changes will bring major changes to the way in which waste is presented, collected and processed, as well as, how local authority waste management is funded.
- 6.26 One of the major changes required by changes in regional and national policy is for the introduction of separate food waste collections. This will have a substantial capital cost in terms of infrastructure upgrades, waste containers and vehicles.

6.27 Although the policy changes that are due to occur by 2024 will mitigate the growth in waste generation from the increasing population, capital investment will also be required to have sufficient waste collection and street cleansing vehicles to service the borough. As the waste collection vehicles are the most energy-demanding and polluting vehicles in the fleet due to the operation they carry out, it will be essential that fully electric variants are purchased when suitable infrastructure is introduced at the main operating depot.

7 Water and Drainage

- 7.1 High population density combined with limited resources means that water resources in London need to be carefully planned and managed. Water consumption in London is higher than the national average for England and Wales despite being one of the driest parts of the country. According to the <u>State of the Environment report for London</u>, the current average Londoner consumes 164 litres of water a day. Whilst there has been a general reduction in consumption over the last 10 years consumption is still 14% higher than England and Wales.
- 7.2 London and the South East have been classified as areas under serious water stress and there is increasing pressure on water resources as can be seen in figure 17 below:



Figure 17 Areas of relative water stress

7.3 London is served by four water companies and Royal Greenwich falls within the Thames Water Region. It is the responsibility of Thames Water to plan for current and future water supply and demand in London taking into consideration factors such as current water usage, population growth, predicted housing growth and climate change. The Environment Agency have a role ensuring abstraction does not affect bio-diversity and ecology and Thames Water must also have regard to this.

Existing Provision

7.4 Water supply is planned and managed based on Water Resource Zones where all customers in this zone have the same water supply risk. Royal Greenwich is part of the London Water Resource Zone.

- 7.5 Under the current assessment of water resource availability for the next 25 years, the supply demand deficit in the London Water Resource Zone (WRZ) is predicted to increase from a current deficit of 24 million litres a day to 362 million litres a day by 2045¹⁷. This highlights the significant pressure that London's water resource base is under to continue to supply water to meet the demand of current and future populations, which will be further exacerbated by the level of housing growth anticipated in London.
- 7.6 Water supplies are derived from a combination of surface water (from rivers) and groundwater (water holding rock formations, known as aquifers). In London, the supply is primarily derived from the surface waters of the River Thames and River Lee, via reservoirs. There are four reservoirs in Royal Greenwich; Castlewood, Oxleas Wood reservoir, East Wickham reservoir and Eltham reservoir. However, due to the topography of the borough and the effect this has on water pressure, most of the boroughs water supply comes from other areas of London such as Honor Oak Pumping Station and Nunhead Upper Reservoir¹⁸. There is also a desalination plant in Beckton which takes water from the Thames estuary, removes the salt, and treats the water. It is an important reserve but is a last resort as it is expensive and energy intensive.

Future Provision

- 7.7 Thames Water's Resource Management Plan (2020-2100) sets out the steps planned to address the forecast deficit in the London Water Resource Zone through a combination of measures including tackling leakage, managing and reducing water demand and installing new water supply schemes. The strategy states that Thames Water will continue to study three main options that have been identified for a major new water resource, likely to be needed in the late 2020s: a new reservoir, wastewater recycling in London, and long-distance water transfers. Each has advantages and disadvantages that need to be examined further.
- 7.8 The Water Resources Management Plan is in the process of being updated and the new draft plan will cover a 50 year period from 2025 to 2075. <u>The Water</u> <u>Resources Management Plan (2020-2100)</u> sets out more details on future plans to address the deficit in London. Currently, around 25% of the water supply in London is lost through leakages, the average daily water usage is above the national average and new water supplies are needed in order to meet future predicted demand. The <u>Drainage and Wastewater Management Plan (DWMP)</u> assessed a number of options, their cost and environmental impact; the preferred options are illustrated in Figure 18 below.

¹⁷ Thames Water Utilities Ltd Water Resources Management Plan 2020 – 2100

¹⁸ Charlton to Bexley Riverside Integrated Water Management Strategy 2017



Figure 18 Thames Water approach to London's water deficit

- 7.9 In the first instance, Thames Water seeks to prioritise making the best use of water that is already available by reducing leakage; installing more water meters and providing more help for people to use water more efficiently. In the longer term, the DWMP identifies the need for more new water supplies with the preferred options being:
- A reservoir in Oxfordshire which would provide up to 300 million litres of water per day in the 2040s;
- A water transfer from the Midlands using the Oxford canal which would provide 15 million litres of water per day around 2060;
- A water reuse scheme at Beckton in east London which would provide up to 285 million litres of water per day over a 10 year period from the 2060s;
- An aquifer storage and recovery scheme in south east London which would provide 3 million litres of water per day by 2070.
 - 7.10 The Royal Borough will continue to work with Thames Water to address these issues. The Royal Borough will ensure developers consider the water infrastructure necessary to support their developments and the measures needed to reduce water usage such as achieving a predicted water consumption of less than 105litres/head/day as required by the <u>Greener Greenwich SPD</u>.
 - 7.11 The scale of development expected in the borough over the next 15-20 years will increase the pressure on water supply further and will require new innovative solutions; it will not be acceptable to rely on existing water supplies. The Integrated Water Management Strategy illustrates that development within these opportunity areas (including Charlton, Woolwich and Thamesmead as well

as parts of Bexley) are forecast to double the current water demand and wastewater generation for these areas. It is therefore essential to understand, plan and implement new fully integrated water services infrastructure to support the proposed development to avoid sewer and surface water flooding and increase water supply security in a more sustainable way.

- 7.12 Grey water reuse should also be considered in Charlton Riverside and Woolwich amongst other appropriate measures to ensure new developments reduce water usage and use alternative water sources for supply. Demand for water should be managed, and new developments should be metered and include green or blue roofs wherever possible. In Thamesmead, there is the potential to re-use the treated waste water from Crossness Sewage to supply non-potable uses within homes and businesses, as well as, for irrigation and process uses. In Charlton and Woolwich, further investigation should be undertaken into the feasibility of ground water recharge and a streetscape surface water conveyance network to discharge water into the River Thames.
- 7.13 In addition, all wastewater companies are required to produce Drainage Wastewater Management Plans (DWMP) by 2022 to provide the basis for more collaborative and integrated long-term planning by water companies, working with other organisations that have responsibilities relating to drainage, flooding and protection of the environment. The wastewater companies will need Local Authorities to help develop these plans.

Flood Risk Management

- 7.14 Following the devastating floods of 2007, the Pitt Review was undertaken which lead to the introduction of the Flood and Water Management Act 2010. Under this legislation, the Royal Borough is a Lead Local Flood authority (LLFA) and has roles and responsibilities which include developing a Local Flood Risk Strategy, which was produced in 2015.
- 7.15 Royal Greenwich works with the Drain London Forum, which is a partnership between the GLA and other key stakeholders such as London Boroughs, the Environment Agency, Thames Water, TfL and London Councils. It provides a coordinated work programme to ensure that local authorities can manage flood risk efficiently. Through the Drain London Forum, the Royal Borough of Greenwich has produced a Preliminary Flood Risk Assessment (PFRA), as required by the FRR, and a Surface Water Management Plan (SWMP). These documents establish long-term measures and action plans to manage flood risk, which will influence future capital investment, maintenance and so on. Royal Greenwich is also part of the South East London Flood Risk Management Partnership and will work within that partnership to manage local flood risk.
- 7.16 The borough is susceptible to three types of flooding; tidal, fluvial and surface water. Tidal flood risk from the River Thames is extensive and most of the north of the Borough falls within Flood Zone 3. The Royal Borough is also at risk of fluvial flooding in certain areas alongside the River Quaggy, Ravensbourne, Shuttle, Deptford Creek and Butts Canal. Surface water flooding varies across the borough according to topography as can be seen in the Environment Agency

Surface Water Flood Risk Map. The provision of flood risk infrastructure is therefore imperative to maintain the safety of the current and future population.

- 7.17 The Environment Agency are responsible for flood risk management of the River Thames and their TE2100 Plan sets out how they plan to manage the flood risk in the Thames Estuary up to the year 2100. The Thames Tidal Flood defence system is made up of the Thames Barrier and eight other flood defence barriers owned and managed by the environment agency. According to the TE2100 Plan, the Thames Tidal Flood defence is a world class system that has more capacity than was originally thought.
- 7.18 Therefore, although it is necessary to maintain high standards of maintenance and operation and make some improvements, major changes to the structure of the system will not be needed until much later in the century under Government's current climate change guidance new arrangements must be in place by 2070. As a result, the Environment Agency recommends the current management and maintenance of the flood risk system is sufficient for the first 25 years of the T2100 Plan (2010-2034).
- 7.19 Whilst the Environment Agency is responsible for managing flood risk from large rivers such as the Thames, the Quaggy and Kidbrooke, the Royal Borough is responsible for local flood risk, which is flood risk from surface water (rainfall) groundwater and ordinary watercourses. These are smaller rivers and streams or in some instances ditches.
- 7.20 The latest Local Flood Risk Management Strategy outlines the strategy and long-term action plan for the management of local flood risk in the borough. It suggests several measures to help reduce the risk of flooding including intercepting run off, rainwater harvesting, green roofs, permeable paving and depaving wherever possible. Developments also need to ensure better flood risk and surface water management and the use of SuDS.
- 7.21 The Royal Borough also seeks to work closely with internal partners to identify opportunities to reduce flood risk, especially opportunities to de-pave parks and open spaces and manage run off. There is also a need to work closely with businesses, residents and developers; producing guidance on expectations for design for developers and guidance on water efficiency and DIY projects for residents. The LFRMS action plan also recognises a need to improve knowledge of the local flood risk and undertake a borough wide study on ground water flooding. This action plan and its progress will be reviewed every 6 years.
- 7.22 The Strategic Flood Risk Assessment was reviewed in 2017 to take account of the significant changes in the legislative framework for flood risk management (Flood Risk Regulations 2009 and Flood and Water Management Act 2010) and the introduction of the NPPF and PPG. Additionally, the Environment Agency has refined breach models relating to tidal flood risk from the Thames and updated climate change projections.
- 7.23 A level 2 SFRA was also carried out in 2018 to assess further risk to the sites identified in the draft Site Allocations Local Plan. A Level 2 SFRA is prepared when land outside flood risk areas cannot accommodate the necessary

development and therefore the Exception Test needs to be applied. The purpose of the Exception Test is to ensure that, where it may be necessary to locate development in areas at risk of flooding, new development is only permitted in Flood Zone 2 and Flood Zone 3 where the flood risk is clearly outweighed by other sustainability factors and where the development will be safe during its lifetime, considering climate change.

7.24 Royal Borough of Greenwich faces the challenge of meeting the need for new development within some areas that have already been identified at risk of fluvial and surface water flooding, as well as large areas along the tidal River Thames floodplain, which are at residual risk of tidal flooding in the event of a breach or failure of the flood defence system. The majority of Strategic Development Locations identified in the Local Plan are largely located in Flood Zone 3. As a result, developments that are found to be acceptable in the flood zone will need to carefully consider how to mitigate flood risk and incorporate flood resilience and resistance measures.

SOCIAL INFRASTRUCTURE

This section summaries the infrastructure requirements for social infrastructure including community facilities, cultural infrastructure, education, emergency services, health and social care and sports and Leisure facilities. Table 8 below summarises the key requirements for each section.

Table 8 Social Infrastructure	key requirements
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	Key Infrastructure Requirements
Community Facilities	Multi- use spaces with affordable rent
	Community space as part of a community hub in the redevelopment of Charlton Riverside
	Library provision in the form of a multi-use community building that provides space for computer access, study space, community meetings and fitness classes.
Cultural Infrastructure	A number of cultural infrastructure projects are set to take place over the plan period including; Woolwich Works, Plumstead Power Station, Greenwich Peninsula Design District and Thamesmead Cultural Infrastructure Plan
Education	Two additional primary schools on Greenwich Peninsula based on the Knight Dragon development, further school provision is likely to be required if more developments come forward in this area.
	New primary school provision will need to be provided as part of the Charlton Riverside redevelopment
	As the Thamesmead and Abbey Wood Opportunity Framework comes forward new primary school provisions will be needed in the area one of which should be an all through school (subject to review).
	Secondary school future demand will be met through the opening of the planned Harris Free School for Boys.
	SEND provision: current priorities include: addition of post-16 provision at existing special school; establishment of a new all-through special school; and establishment of an in-borough facility for 19-25 year olds. There is also a need for new MLD and SEMH provision.

Emergency Services	Although it is outside RBG control, emergency services are looking to rationalise their estate and collaborate where possible
	Health and community hubs are needed in Greenwich Peninsula and Charlton Riverside
Health and Social Care	In other areas, health floorspace is likely to need expanding and reconfiguring to align with the way the provision of health care is changing and meet the needs of the existing population.
Public Safety	CCTV modernisation/digital evidence
Sports and Leisure	Swimming pool on Greenwich Peninsula (as per the masterplan)
	Protect access to Greenwich Park for mini soccer and half size AGP at Millennium School
	Seek 2 new artificial grass pitches in Charlton Riverside, Thamesmead and Peninsula to meet unmet demand identified in Sports Facility Strategy
	Actively promote underused parks pitches, MUGAs and other informal facilities for football as demand for informal sports increases
	Maintain and improve school sports facilities and Increase access to school facilities including outside of term time
	Four full size 3G turf pitches and 3 smaller 3G FTPs as set out in table 15
	Two new indoor football facilities at the new Woolwich Leisure Centre and Westminster Industrial Estate in Charlton.
	Sports Pitch or MUGA in central park on Greenwich Peninsula
	Junior Rugby Pitch
	II new or refurbished high quality all weather Multi Use Games Areas (MUGAs) to meet increasing demand for informal sport and maximise the use of land as pressure for housing and other uses grows
	Indoor Sports hall or MUGA on Greenwich Peninsula
	Make better use of our grey unused spaces to keep people active and encourage social interaction

Lawn Tennis Association investigating potential for an indoor tennis facility based on increasing demand
Thamesmere Leisure Centre will need expanding/renewing to accommodate the growth identified in the Thamesmead Opportunity Area Planning Framework (OAPF)

8 Community Facilities

- 8.1 For the purposes of the IDP, Community facilities include community centres, halls and libraries. These facilities make an essential contribution to the health and well-being of residents and provide affordable venues for them to enjoy accessible, welcoming and diverse activities which help to build inclusive and strong communities. The Core Strategy seeks to protect community facilities and ensure they stay in community use wherever possible.
- 8.2 Other community uses as set out in the Core Strategy also form an important contribution:
- Buildings used by voluntary sector groups
- Social service and day centres
- Places of public worship or religious instruction
- Medical or health services, and healthy living centres (except for the use of premises attached to the residence of the consultant or practitioner)
- Fire safety, policing and other criminal justice and community safety facilities
- Facilities for youth provision
- Sport, leisure and recreational facilities
- Arts and cultural facilities
- Crèches, day nurseries or other childcare facilities
- Schools, education and training centres
- Ancillary community uses.
 - 8.3 However, these community facilities are either covered in other relevant sections of the IDP or are left to market forces in terms of future infrastructure planning such as places of worship.

Existing provision

8.4 Currently, facilities in the Borough include:

- 12 libraries
- 26 community centres
 - 8.5 Community centres offer a wide range of activities and services to many different sections of the local community; from affordable meeting venues to bingo and fitness classes. They have an important social value and a positive impact on health and wellbeing, reducing social isolation and building community cohesion. The Royal Borough of Greenwich recognises the importance of community facilities and will continue to support them. Some community centres are located in council owned buildings and some are located in buildings run by the voluntary sector.



Figure 19 Map of community facilities

8.6 Libraries are also valuable assets to the local community offering valuable meeting spaces, study space, computer access and a wide range of books and resources. They also have an important social role in the community with many borough libraries running a wide array of classes. For example, The Woolwich Centre Library runs a weekly programme including; coffee mornings, knit and natter, reading groups, learning courses, mindfulness and fitness classes and baby rhyme time in various languages to reflect the ethnically diverse community.

Future Provision

- 8.7 The high cost of premises in London creates an expensive environment in which smaller organisations are struggling to find suitable affordable space to deliver services and activities. At the same time, many publicly owned buildings need investment to ensure they are fit for purpose and are suitable for the changing profile of use.
- 8.8 To address these challenges, the Royal Borough seeks to maximise the use of available and suitable facilities to create multi-use spaces which share resources. This may involve maximising existing available facilities such as school sports halls or church halls that serve a multi-purpose function or it may involve consolidating numerous single use premises into larger multi-purpose spaces.
- 8.9 For example, the Eltham Centre accommodates the leisure centre, library and office space and is well used by the local community. Similarly, the Woolwich Centre includes the main Royal Borough of Greenwich offices and an extensive library which is extremely well used. Lastly, Plumstead library (a Grade II listed building) which re-opened in February 2020, had a major transformation into a multifunctional library, leisure, culture and sports centre. Refurbishing of Plumstead Library has reactivated its presence as a community hub on the high street, making it a more valuable and useable space with improved access to all members of the community. A brand-new health and well-being community centre has also recently been built at Kidbrooke, with rooms available for hire, GP services, social prescribing and plans to offer a programme of creative and cultural activities and desk space for the local community.
- 8.10 The Royal Borough is committed to building a new Leisure Centre in the heart of Woolwich, replacing the Waterfront Leisure Centre. The design of the centre is at the early stages and community consultation took place in 2020 which highlighted the need for a community facility not just a leisure centre. There was also a strong desire to future proof the facility enabling flexibility of space and maximising ability to respond to changing needs. More information on what the new Woolwich Leisure Centre is likely to contain is set out in section fourteen.
- 8.11 Making the best use of assets in this way allows a wider range of services to be offered and generates higher footfall. This increases the viability of centres making them more sustainable and adaptable to the changing needs of the local community and increasing population now and in the future.

- 8.12 Future growth is expected to be highest in the north of the borough with at least 6,000 homes planned in Charlton Riverside and up to 15,500 in Thamesmead. The current Thamesmere Leisure Centre and library in Thamesmead town centre is identified in the Sports Facilities Strategy 2015 as in need of refurbishment. With the proposed level of development in the area over the plan period and beyond, the need for additional and improved community infrastructure will become more apparent. The Leisure Centre and adjacent vacant land will need to be redeveloped/ and or improved to support the level of proposed growth. This may take the form of a community hub which provides a variety of leisure services, rentable space and rooms, flexible space for community events and study space for the local community. Alternatively, a community hub may be created at Gallions Reach by expanding the existing health centre.
- 8.13 Similarly, with the level of growth expected in Charlton Riverside, a multi-use facility will need to be provided that functions as a health and well-being centre and provides community health services alongside opportunities for social integration. It should be a space that encourages health and well-being by combining a range of services which complement the primary health function such as nurseries, youth provision, a sports hall or indoor MUGA and a general purpose affordable rentable space large enough for residents and community groups and private hire. The space will need to be well designed and flexible in order to meet a wide array of community needs and could potentially be subdivided into smaller spaces when not being used to maximise its usage.
- 8.14 Considering the level of housing growth on the Peninsula, the area could benefit from library provision in the form of a multi-use community building that provides space for computer access, study space, community meetings and fitness classes.
- 8.15 As part of the development of the new Community Resource Strategy, the Council is developing a new needs analysis, helping to ensure that the future provision of funding and facilities by the Council better aligns with the needs of local communities and community organisations.

9 Cultural Infrastructure

- 9.1 Cultural Infrastructure is vital to London's success and is responsible for generating £52 billion a year. The Mayor has produced a <u>Cultural Infrastructure</u> <u>Plan</u> which sets out what we need to do to protect and enhance our cultural facilities.
- 9.2 The Mayor defines cultural Infrastructure as places where culture is consumed or produced. For example; museums, theatres, galleries, cinemas and music venues (consumption) or creative arts spaces, performing arts spaces, recording studios and industrial and light industrial units used by creative and cultural businesses (production). Creative industries are part of where cultural infrastructure is produced. They include industries which have their origin in individual creativity, skill and talent which are used to create businesses such as advertising, architecture, design, fashion, television, radio and film.

Existing Provision

- 9.3 The Royal Borough of Greenwich is rich in culture and home to a wide range of heritage assets. Tourism is at an all-time high with 19.37 million tourists visiting the borough each year. The borough is home to a multitude of tourist attractions including the world-famous Greenwich Market and maritime history as well as one of the busiest music venues in the world; the O2 Arena. Royal Greenwich has held a number of events and festivals over the years to celebrate its rich and diverse culture including the Tall Ships Regatta, Greenwich and Docklands International Festival and Armed Forces Day.
- 9.4 According to the Mayor's Cultural Infrastructure Plan, cultural infrastructure has been declining in recent years. An increasing population means continued pressure for housing coupled with rising property prices and increasing costs for space is proving too much for many cultural facilities to survive.
- 9.5 The Royal Borough of Greenwich has an array of cultural infrastructure spread across the borough including:

Table 9 Places where culture is consumed

	O2 arena
	Studio 338, Greenwich Peninsula
Music Venues	Music Mill, Plumstead
	Blackheath Halls, Blackheath
From grass roots music venues to	Oliver's Jazz Bar, Greenwich
the International 02 arena. Music venues have been increasingly	Red Lion, Shooters Hill
under threat	The Bull Hotel, Shooters Hill
	The Long Pond, Eltham
	Post Office Public House, Eltham

	The British Oak, Old Dover Road
	Pelton Arms, Greenwich
	Trinity Laban Faculty of Music, Greenwich
	The Admiral Hardy, Greenwich
	Coach and Horses, Greenwich
	The Duke Greenwich
	The Equitable, Woolwich
	Dial Arch, Woolwich
	The Guard house, Woolwich
	Eltham Palace
	National Maritime Museum
Visitor Attractions	The Royal Observatory
	Old Royal Naval College
	The Cutty Sark
	Rangers House
	Charlton House
	Woolwich Town Hall
	Tudor Barn
	Odeon IMAX, Bugsby Way
	Cineworld, the O2
Cinemas	Greenwich Picture house, Greenwich
	Vue Cinema Eltham
	Greenwich Theatre
	Bob Hope Theatre, Eltham
Theatres	Greenwich, Lewisham and Young People's Theatre (Tramshed) Woolwich
	Bathway Theatre (Greenwich University)
	The Greenwich Gallery
	The Stephen Lawrence Gallery
Galleries & Museums	Heritage Gallery, Greenwich (part of University)
Galleries & Museums	. ,
Galleries & Museums	Heritage Gallery, Greenwich (part of University)

	Made in Greenwich, Greenwich
	JonaQuestArt, Greenwich
	Greenwich Printmakers Gallery, Greenwich
	Origin Gallery, Greenwich
	The Green Parrot Gallery, Greenwich
	The Art of Robert Sutherland, Greenwich
	Atelier JI Fine Art Print Making Studio, Charlton
	Thameside Studios Gallery, Woolwich
	Woolwich Contemporary Print Fair, Woolwich
	Capital Arts Gallery, Well Hall
	The Now Gallery, Greenwich Peninsula
	War Gallery, Lee
	The Fan Museum, Greenwich
	The National Maritime Museum, Greenwich
	Royal Observatory Greenwich
	Abbey Wood Library
	Abbey Wood Library Blackheath Library
Libraries	
Libraries	Blackheath Library
Libraries	Blackheath Library Charlton Library
Libraries	Blackheath Library Charlton Library Coldharbour Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library Slade Centre Library
Libraries	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library Slade Centre Library Thamesmere Library
Libraries Comedy Clubs	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library Slade Centre Library Thamesmere Library West Greenwich Library
	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library Slade Centre Library Thamesmere Library West Greenwich Library Woolwich Centre Library
	Blackheath Library Charlton Library Coldharbour Library Eltham Centre Library Greenwich Centre Library New Eltham Library Plumstead Library Slade Centre Library Thamesmere Library West Greenwich Library Woolwich Centre Library

- 9.6 Community centres also offer valuable space for cultural activities to take place, from dance classes to music lessons. Further details on community centres in the borough are in section 8.
- 9.7 The Royal Borough of Greenwich is also home to a range of places where culture is produced and these are listed in the table below.

Table 10 Places where culture is produced

Studio Spaces	Thameside Studio Space, Charlton (home to over 450 artist and creative studios)
	Art Hub, Westminster Industrial Estate
	AZOF, Greenwich
	ACAVA Norman House, Greenwich
	Crixus Studios, Dockyard Industrial Estate, Greenwich Peninsula
	Blackheath Halls, Blackheath
Performing Arts Venues	Kings Charles Court, Old Royal Naval College, Greenwich
	The Tramshed, Woolwich
	Greenwich Dance, Greenwich
	OMJ24 Creative Space
	Millennium Performing Arts, Woolwich
	Hanger Art Trust, Woolwich
	FFGM, Woolwich
	Angela's Studio Ltd, Eltham
Fashion Design and	Greenwich Sewing Atelier, Greenwich
Manufacturing	Karen Gold, Charlton
	The London Leather Workshop, Thames side Studios, Woolwich
	Fran Rios London, Woolwich
	Maze Hill Pottery, Maze Hill
	Greenwich Print Makers Association
Makerspace and Manufacturers	London Sculpture Workshop, Woolwich
	Thames Barrier Print Studio, Woolwich
	Creative Nature, Woolwich

	MDM Props, Greenwich Peninsula
	Elliot Ceramics, Woolwich
	Bubble House, Woolwich
	James Print and Production, Woolwich
	Nicholas Alexander, Woolwich
	Helix 3D LTD, Thamesmead
	Paye Stoneworks and Restoration, Mottingham
	S2 Events, Thamesmead
	45RPM Studio, Charlton
	45RPM Studio, Charlton Sound Performance LTD, Greenwich
Music businesses and recording	,
Music businesses and recording studios	Sound Performance LTD, Greenwich
	Sound Performance LTD, Greenwich Suspect Records, Blackheath
	Sound Performance LTD, Greenwich Suspect Records, Blackheath V records, Greenwich
	Sound Performance LTD, Greenwich Suspect Records, Blackheath V records, Greenwich Pirate Studios, Charlton
	Sound Performance LTD, Greenwich Suspect Records, Blackheath V records, Greenwich Pirate Studios, Charlton Abbey Music Studios, Abbey Wood

9.8 These creative workshops, studios and makerspaces tend to be clustered in the North of the borough particularly in and around Strategic Industrial Land in light industrial units where space is ample and rents are affordable. Thameside Studios in Charlton Riverside is the largest single site studio provider in the UK, with 455 studios run by Social Enterprise Company Second Floor Studios and Arts (SFSA). These studios are home to a range of creatives including artists, fashion designers, printers, photographers, sculptors, ceramics, designers and many more.

Future Provision

9.9 The creative industry is one of the fastest growing parts of the national economy and is a key growth sector in the Royal Greenwich economy. There are a number of projects currently under construction or in the pipeline that will expand the boroughs cultural infrastructure even further.

Design District Greenwich Peninsula

9.10 The Design District recently opened and includes 150,000 sq ft of workspace, studios and flexible spaces with affordable rents for small businesses to grow. A market hall is at the heart of the district, offering multifunctional event space, food stalls and craft wares made in the design district. There are also rooftop terraces, bars, a roof top basketball court and retail outlets with rotating work from the district on display.

9.11 The Peninsula is also home to Magazine London, a new event space which opened in September 2019 and the largest of its kind in London. The flexible space boasts interior space for up to 3,000 people and can extend to accommodate a further 7,000 people across the outdoor showground.

Woolwich Works

- 9.12 In October 2018, planning permission was granted for the first phase of a multi-million pound restoration of historic buildings, to create a 15,000sqm creative complex on the Royal Arsenal. Woolwich works opened in 2021 and includes:
- A venue with excellent acoustics that can house an audience of 1200 seated or 1800 standing and will be run by a Theatre company called Punchdrunk
- An open-sided quadrangle courtyard for performance seating up to 600
- Five rehearsal studios, which can also be used as informal performance spaces
- Performing art studios and offices for resident companies
- Generous public facilities, including a cafe / bar and space for hire for community group and events.
 - 9.13 A diverse range of tenants will be ensured by hiring 70 per cent of space to cultural organisations and local community groups at subsidised levels, and the remaining 30 per cent to commercial operators; looking for rehearsal venues, conference facilities and event space. The space will be managed by a trust, Woolwich Works.
 - 9.14 It's anticipated that Woolwich Works will provide more than 400 local jobs in addition to new roles during construction. The district will have a significant economic impact on Woolwich and the surrounding areas and bring benefits to the whole borough.

Plumstead Power Station

- 9.15 The Royal Borough of Greenwich was awarded the GLA Good Growth Fund in 2018 to regenerate Plumstead. The fund will pay for improvements to the high street and fund the renovation of the derelict Plumstead Power Station. The vision for the power station is to establish a multi-functional hub including managed work spaces for creative start-up businesses, community and event spaces that could host an array of cultural activities.
- 9.16 The good growth fund will also see improvements to the public realm and potential pop up projects and events around Plumstead Station, run by local community groups.

Thamesmead Cultural Infrastructure Plan

9.17 There are ambitious plans to for Thamesmead to provide up to 15,500 new homes, thousands of jobs and new leisure, cultural and commercial facilities. Peabody has developed a Cultural Infrastructure Plan for Thamesmead to ensure local people have daily opportunities to experience high quality culture and to work in the creative industries. The vision includes a waterfront arts centre focused on innovation and creative production, alongside a marina with views of the Thames.

Charlton Riverside

- 9.18 The Charlton Riverside area accommodates an existing cluster of creative industries businesses, in refurbished historic properties and new purpose built industrial spaces. The area includes Thames-Side Studios, the largest single studio provider in the UK. With 6000 new homes planned in the area, it is important that space for cultural production and consumption is included to retain, diversify and intensify the area's role in supporting the creative industries.
- 9.19 As set out above there is a wide range of existing cultural infrastructure across the borough and a number of developments in the pipeline that will see a significant increase in the supply of cultural infrastructure to support this expected level of growth and increased demand.
- 9.20 The Royal Borough of Greenwich recognises the importance of cultural infrastructure in making the borough an enjoyable and interesting place to live, work and visit and will continue to protect these spaces and encourage new ones ensuring that new residential development adds to the boroughs cultural infrastructure and does not drive it out.

I0 Education

- 10.1 The Royal Borough of Greenwich has a statutory responsibility for ensuring that there are sufficient education places for children of primary and secondary school age to meet the level and pattern of demand from residents. For young people with SEND this duty extends to the age of 25 years. Changes in the demographic profile of the borough, particularly arising from changes in the number of births, net migration and new housing developments, have important implications for the level and pattern of demand for places at all phases of education. School place planning reports are updated and published yearly setting out where new school places are needed based on these demographic changes. The information in the IDP is subject to change based on these school place planning reports.
- 10.2 Central government provides capital support to local authorities to ensure sufficiency of school places, either by expanding existing schools or commissioning new free schools. Government policy is that there is a presumption that any new school will be a free school (which under certain circumstances may be capital funded by central government).

Early Years

Existing Provision

- 10.3 Early year's education and childcare is legislated for in the Childcare Act 2006 and 2016 and the Children's Act 2004. Early years education and childcare refers to child minders, nurseries and nursery schools. Local authorities have a duty to ensure there is sufficient high-quality childcare for working parents of children aged 0-4 (or up to 18 for disabled children). Royal Greenwich plays a strategic role in the provision of childcare locally; acting as a market facilitator rather than a provider, and supporting providers across the sector to meet the needs of working parents and carers.
- 10.4 The Royal Greenwich <u>Child Care Sufficiency Assessment and Strategy</u> found that overall there is sufficient early years and child care provision to meet the needs of parents and carers. In addition, the quality of early education and childcare in Greenwich is high as demonstrated by a high proportion (91%) of providers rated good and outstanding by Ofsted and a high proportion (78%) of children achieving a good level of development at the Early Years Foundation Stage. Existing providers have increased and adapted their childcare offer to the market in response to changing demand and government initiatives. For example, in response to the 2017 introduction of the 30 hour 3 and 4 year old free entitlement for some working parents, all maintained schools and the vast majority of private, voluntary and independent settings are offering this provision. This has resulted in sufficient capacity to meet current levels of demand across the borough.
- 10.5 The sufficiency of childcare provision in the borough is assessed using five Children Centre Areas illustrated in Figure 20 below.

Future Provision



urce: Greenwich Children's Services (*Vista Field Federation also includes Vista Field and Horn Park Outreach Centres)

10.6 Table 11 below, taken from the Child Care Sufficiency Assessment and Strategy, illustrates that there is a need for 9,245 early years places by 2022 and there are already 8,951 places across the borough which are concentrated in the South and West of the borough.

Figure 20 Royal Greenwich Children's Centre Areas

- 10.7 When considering the estimated number of 0-4 places currently available and the projected population increase for this age group, Table 9 below estimates a further 300 early years places are required by 2022, particularly in the West and Central B areas. This includes an estimated additional 180x 3 and 4 year olds and 50x 2 year olds accessing funded places.
- 10.8 There are also current pressures in the east of the borough for nursery provision which are likely to continue to increase in the long term with a significant amount of development planned in Thamesmead. It will therefore be essential that any future development in the East of the borough provides sufficient nursery places. Additionally, as a result of further housing developments, child-care places in the West and Central B areas of the borough

are increasingly in demand. New developments in the West of the borough and around Charlton Riverside must also provide the necessary early years provision to support the level of population growth they are proposing. There is an oversupply of provision in the South which continues to be a popular area for providers to set up nursery provision and childminding businesses.
Area	Childminder	Maintained nursery School	Out of School	Primary schools with nursery	Private, voluntary and independent	Special School	Grand total	Estimated 0-4 population change by 2022 (rounded)	FT equivalent shift based on population change	Est minimum FTE required for 2022
Central A	380			440	743	26	1589	-5%	-79	1,510
Central B	292	126	26	338	472		1254	7%	91	1,345
East	485	78		442	325		1330	-6%	-85	1,245
South	730			534	1413		2677	-6%	-157	2,520
West	337	250		299	1215		2101	25%	524	2,625
Grand Total	222 4	454	26	2053	4168	26	8951	3%	294	9,245

Table 11 Estimate full time equivalent early years places available and needed to 2022

10.9 With our population forecast continuing to rise as a borough, in particular within the secondary age range, there is also likely to be pressure for wider childcare, such as after school clubs and holiday provision. Feedback from parents also suggests there may be additional need for childcare for older children with special educational needs and disabilities, including during school holidays.

Primary Schools

Existing Provision

- 10.10 For primary school place planning purposes, the borough is divided into six planning areas (PAs) as illustrated in the map below (note: these PAs are currently in the process of being revised.) These areas reflect the pattern of applications for places and groups of schools serving the neighbourhood.
- 10.11 There are currently 64 primary schools in the borough, the distribution of which can be seen in figure 21 below.

Future Provision

10.12 The Royal Borough of Greenwich updates place projections annually based on school roll projections commissioned from the GLA. The projections take account of local births data, GP registration data, ONS and GLA annual mid-year population estimates and forecasts, school census information and planned housing completions. The projections may be moderated by Royal Greenwich to reflect local knowledge, including patterns of demand for places based on applications for school places. The projections are used to inform the School Place Planning and Capital Programme Report which is published annually.



*School located on two sites

Figure 21 Primary school place planning areas capacity to 2023

- 10.13 In planning area I (North-East), the area experienced one of the fastest growth rates in primary school aged children after 2009 where primary school capacity was increased by 7.5FE (forms of entry, each form equates to 30 places) to reflect this. However, the primary aged population is estimated to have fallen by 12% over the five years to 2021 and is forecast to fall by a further 10% over the following five years to 2026. The demand for school places in this part of the borough has declined markedly since 2017/18 and this trend is expected to continue over the medium term. However, in the long term, the plans for Abbey Wood and Thamesmead are expected to impact the demand for school places.
- 10.14 In planning area 2 (North-West), the population of primary school aged children is estimated to have risen by 21% over the last five years, but this growth is forecast to slow to around 9% over the five years to 2026. Given the scale of new housing developments being completed or planned, this area is expected to experience sustained growth over the longer term. Four schools have been expanded in this area since 2011 to provide an additional 7.5 FE to cope with the rise in population. Demand for reception places is anticipated to be overall reasonably stable in the short to medium term. However, over the medium to long term demand is expected to increase as more new homes are completed. The extent and timing of rising pressure on school places will depend on the pace of build and occupation of new homes built, particularly on the Greenwich Peninsula.
- 10.15 In planning area 3 (North), the population of primary school aged children in this area is estimated to have fallen by 10% over the last five years and is forecast to fall by a further 3% over the next five years. The demand for reception places is expected to remain broadly steady over the short term but is anticipated to rise in the medium to long term as planned new homes are built.
- 10.16 In planning area 4 (West), the population of primary school age children has been reasonably steady but increasing over the past five years and is anticipated to follow a similar trend over the next five years. The demand for school places is expected to remain broadly stable over much of the medium term period.
- 10.17 In planning area 5 (South), the primary school age population is estimated to have risen by around 7% over the last five years but is forecast to fall by just over 1% over the next five years. Demand for school places is currently expected to decline over the medium term.
- 10.18 In planning area 6 (East), the population of primary school aged children is estimated to have fallen by around 4% over the past five years and is forecast to fall by around 11% over the next five years. Demand for school places is currently expected to decline over the medium term.

Table 12 Estimated and forecast population changes in primary school age children (<u>RBG School Place</u> <u>Planning and Capital Programme Report 2022</u>)

Area	Last five years	Next five years
PAI	-12%	-10%

PA2	21%	9%
PA3	-10%	-3%
PA4	3%	2%
PA5	7%	-1%
PA6	-4%	-11%

10.19 The population change in each area informs the demand for primary school places in each area. Table 12 above illustrates that the greatest demand for primary school places will be in PA2 (North/Northwest), although no new places are anticipated to be needed over the short to medium term (ie to 2026/27). Figure 22 below summarises the position for mainstream provision, by planning area, up to 2026/27.

Figure 22 Demand for primary school places

PAI	•No demand for new places before 2026/27.
PA2	•No demand for new places before 2026/27. Two sites currently agreed on the Greenwich Peninsula for new schools in the medium to long term and further sites will be sought as part of Charlton Riverside (neighbouring PA3).
PA3	•No demand for new places expected before 2026/27 (See also PA2 above).
PA4	•No demand for new places before 2026/27.
PA5	•No demand for new places before 2026/27.
PA6	•No demand for new places before 2026/27.

- 10.20 In summary, it is clear from the School Place Planning and Capital Programme Report 2022, that in the short to medium term to 2026/27 there are sufficient primary school places in the borough to meet overall demand.
- 10.21 There are factors that will affect the demand for school places such as the rate new homes are built, the pace of occupation and the profile of residents.
- 10.22 Given the level of planned housing growth in the borough, it is important that school places are considered beyond 2026/27. The majority of growth expected in the next 15 years will be along the riverfront in Thamesmead, Charlton

Riverside, and Greenwich Peninsula (PAI, PA2 and PA3). The planned housing growth is taken into consideration as part of the school roll projections. The School Place Planning and Capital Programme Report 2022 highlights the need for primary school places in the medium to long term in these areas.

10.23 The Abbey Wood and Thamesmead Housing Zone and the draft Thamesmead Opportunity Area Framework will create a significant number of new homes in the area and a need for new primary school provision including an all-through school (subject to review). New primary school provision will also be required as part of the redevelopment of Charlton Riverside to meet additional demand for school places as a result of development in the north of the borough. In the north-west of the borough, two school sites have been identified with a developer on the Greenwich Peninsula to help meet future demand over the medium to long term.

Secondary Schools

Existing Provision

- 10.24 Secondary school planning is borough wide as older children are expected to travel further and travel independently. Secondary school projections are based on actual school roll in primary schools, the pattern of children attending a Royal Greenwich primary school who transfer to a secondary school outside of the borough, the pattern of children from other boroughs transferring to Royal Greenwich secondary schools, and local assumptions about the completion of housing developments and the potential school age population they will bring. The potential demand for new school places over the medium term is reviewed each year.
- 10.25 For the secondary phase, there is expected to be a broadly stable demand for places over the next five years. The rate of demand will be affected by school performance and popularity, cross border movement, and the extent to which Royal Greenwich schools retain the number of pupils offered a place after National Offer Day. Royal Greenwich is currently a net exporter of secondary pupils, with a net loss equivalent to around 9% of the secondary school population 19.
- 10.26 There are currently 16 secondary schools within the borough, with 17 planned from 2025, as illustrated on the map below (figure 23).

Future provision

- 10.27 The planned Harris Free School for Boys currently due to open in 2025, should ensure that the borough has sufficient secondary provision for the foreseeable future, with a reasonable gender balance of school places across the borough.
- 10.28 These plans do not reflect the need for new secondary schools as a result of new developments in the longer term. For instance, as set out in the draft

¹⁹ DfE school census, January 2022

Thamesmead Opportunity Area Framework, there is a need for new secondary school provision to support the level of proposed growth.



Figure 23 Map of secondary schools in the borough

Post 16 places

10.29 The population of young people aged 16-18 resident in the borough is predicted to rise over the medium term. A sixth form at St Mary Magdalene CE All-through School opened in September 2021, with new provision opening at Leigh Academy Blackheath from September 2023. Looking ahead, Woolwich Polytechnic Boys and Girls Schools are also expected to increase their sixth form capacity from September 2024. In the longer term, the proposed Harris Free School for Boys will include sixth form provision. Royal Greenwich's current assessment is that there will be sufficient places over the medium term, although this will be kept under review.

Special Educational Needs and Disability

Existing Provision

10.30 There are four special schools in Royal Greenwich designed to meet the needs of children with Special Educational Needs and Disability (SEND) as set out in the Table below.

Table 13 SEND schools in Royal Greenwich

Greenwich Special Schools	Capacity	Age range
Waterside Primary	40	5 – 11
Willow Dene Primary Phase	200 (excl. temps)	3 – 11
Willow Dene Secondary Phase	40	- 6
Charlton Park Academy	209	– 9
Kings Oak Secondary	40	– 6

- 10.31 In addition to the above, the Nook specialist provision has been commissioned at Waterside School for up to eight primary pupils with Autistic Spectrum Disorder and mental health/behaviour that challenges.
- 10.32 Several mainstream schools and Newhaven School (Pupil Referral Unit) have designated specialist provisions (DSPs) commissioned to support pupils with special educational needs. There are currently eight primary DSPs providing 115 places. There are currently eight secondary DSPs (in six schools), and a Post-16 DSP, providing 157 places in total. Further, Kings Park campus (managed by Newhaven School) has, since September 2016, provided 55 places for pupils aged 11-18 with Autistic Spectrum Disorder and mental health/behaviour that challenges.
- 10.33 The number of young people with an Education and Health Care Plan is continuing to rise, and there is a backlog of young people awaiting an assessment. Over the medium term it is anticipated that the numbers requiring specialist provision are likely to rise in both the primary and secondary phases, by at least 100 and 180 respectively.

Future Provision

- 10.34 The annual School Place Planning and Capital Programme report includes an assessment of SEND provision, trends and likely future demand over the medium term, with recommendations on how these challenges may be met. There is an urgent need to increase specialist provision for those children and young people with the most complex needs so that they can continue to be educated locally without the need to travel. Royal Greenwich has been allocated SEND capital grant support to address SEND need and this is being supplemented with other sources of funding.
- 10.35 Plans for meeting future demand are set out in the School Place Planning and Capital Programme report. The current priorities include: expanding an existing special school to provide post-16 provision, the establishment of a new special school, and the establishment of an in-borough facility for 19-25 year olds. There is also a need for new MLD and SEMH provision.

12 Emergency Services

12.1 Emergency services in Royal Greenwich include the Metropolitan Police, London Fire Brigade and the London Ambulance Service.

Existing Provision

12.2 The existing provision of stations across the borough is set out in Table 14 below:

Emergency Service	Area of Borough	Address
Police	Plumstead	200 Plumstead High St, London SE18 IJY
Fire	East Greenwich	325 Woolwich Road, SE7 7RF
Fire	Eltham	266 Eltham High St, SE9 IBA
Fire	Greenwich	4 Blisset Street, SEI0 8UP
Fire	Lee Green	9 Eltham Road, Se I 2 8ES
Fire	Plumstead	I Lakedale Road Plumstead, SEI2 8ES
Ambulance	Woolwich	Ferry Approach, London SE18 6DP
Ambulance	Mottingham	205 Eltham Road, London SE9 5LN
Ambulance	Greenwich	392 Shooters Hill Road, London SE18 4LP

Table 14 Emergency services stations in Royal Greenwich

Sources: Police Stations; Fire stations; Ambulance stations

Metropolitan Police Service

12.3 Plumstead is the sole Police Station within the Royal Borough and is open 24 hours a day. As a result of cuts to Government police funding, in the past four years the Metropolitan Police Service (MPS) has had to lose more than 100 police stations and 2,800 police staff, with a further £400m in savings to be made in the next few years²⁰. In Greenwich, this has led to the loss of 4 police stations; Woolwich, Thamesmead, Greenwich and Eltham. There are however, 17 Safer Neighbourhood policing teams remaining looking after different sections of the borough.

²⁰ Mayor's Office for Policing and Crime - Police and Crime Plan for London 2017-2021

London Fire Brigade

- 12.4 The London Fire Brigade (LFB) plans fire cover on a London-wide basis therefore the Borough doesn't solely rely on the stations located within the borough. As set out in table 11 above there are 5 fire stations in the Royal Borough of Greenwich.
- 12.5 Borough boundaries are not used for emergency response purposes. The level of service need is determined by their attendance standard (speed of response), which is impacted on by fire station locations and demand for services. LFB aims to get a first fire engine to an emergency incident in six minutes and a second fire engine in eight minutes. Performance in Greenwich for 2018 was well within those targets with the first fire engine arriving within 5 minutes 18 seconds and a second fire engine arriving within 6 minutes and 28 seconds²¹.

London Ambulance Service

- 12.6 The London Ambulance Service NHS Trust provides urgent and emergency healthcare service for over 8 and a half million people living in London, as well as visitors and commuters. There are three Ambulance Stations in the borough as detailed in Table 11 above.
- 12.7 The London Ambulance Service is the busiest ambulance service in the country and one of the busiest in the world; with demand for services increasing year on year. In 2016/17 they responded to around 2m 999 calls, attending 1.1m incidents²².

Future Provision

Metropolitan Police Service

- 12.8 As with many public services, the MPS are under increasing pressure to reduce costs and improve efficiency. In addition, as set out in the <u>MOPAC Public Access Strategy November 2017</u>, the way the public use public services is changing as society is becoming more digitised. To address these challenges, the MPS are reducing the size of their estate and investing substantially in a much smaller retained estate to ensure retained buildings are fit for purpose, efficient and compliant with current and future demands²³.
- 12.9 Although front line face to face interaction will be reduced, public access to services through digital channels will be improved and every borough will continue to have one police station with a font counter open 24 hours a day, 7 days a week. Instead the focus will be on neighbourhood policing with 1,700 neighbourhood policing officers across London with two dedicated police

²¹ LFB Incident Response Times

²² <u>A world class ambulance service for a world class city Strategy 2018/2019-2022/23</u>

²³ MPS Service Business Plan 2018-2021

constables as dedicated ward officers and one and Police Community Support Officer (PCSO).

- London Fire Brigade
 - 12.10 As set out in the London Fire and Emergency Planning Authority (LFEPA) Asset Management Plan 2017 the challenges facing the LFB include ensuring fire stations are operationally fit for purpose, able to respond to the new risks facing London and that they meet the accommodation needs of a diverse workforce. This is in the context of an aging estate with many stations constructed during the same period and requiring refurbishment simultaneously. The LFEPA Asset Management Plan also sets out the intention to collaborate with the MPS and LAS to reduce their estates and explore opportunities for co locating to improve efficiency and cut costs.

London Ambulance Service

- 12.11 The demand for ambulance services has been increasing year on year, but like many other public services the London Ambulance Service is under pressure to make savings without compromising the level of service. The London Ambulance Service has published a 2018-2023 strategy and has recently published an 'estates vision' which includes the intent to consolidate their estate by creating "ambulance deployment centres" across the capital, potentially co-locating make-ready and vehicle preparation hubs to support a faster, consistent vehicle turnaround. This will involve working with NHS, 'blue light' (London Fire Brigade and Metropolitan Police) and other London system partners to identify opportunities to co-locate in order to maximise land use efficiency and save money.
- 12.12 In all cases, Royal Borough of Greenwich will continue to work proactively with MPS, LFB and LAS to support the delivery of emergency services.

13 Health and Social Care

The health needs of Greenwich

- 13.1 Royal Greenwich is a richly diverse borough with a range of different communities and health needs. The Royal Borough of Greenwich's population is relatively young and with significant levels of housing growth planned and the number of families and young people expected to continue to rise. The number of old people is also rising, meaning that health and care services need to respond to greater numbers of people with more complex health needs. There are still high levels of deprivation amongst significant proportions of the population, especially in the north of the borough and significant inequality impacting on the health and wellbeing of the population and their need for health and care services.
- 13.2 As set out in <u>Greenwich's Joint Strategic Needs Assessment</u> there are a number of social, economic and environmental factors impacting on the health and wellbeing of the local population such as poverty, environment, housing and worklessness. These factors often contribute to lifestyle or behavioural risk issues such as smoking, alcohol misuse and poor diet, which can in turn lead to major health conditions (such as obesity, cancer, heart disease or diabetes). The <u>Health and Wellbeing Strategy</u> produced by the Health and Well Being Board, sets out the priorities and actions for tackling these key issues in Greenwich.
- 13.3 Live Well Greenwich is the Council's prevention system which promotes health and wellbeing by encouraging and enabling people to be more physically active, have a healthier diet and supports good mental health. This includes a range of support services relating to a number of different life matters such as health, work, finances, community activities and family life. The prevention of illnesses and the reduction of risk factors benefits the individual, community and reduces pressure on the NHS. Many of the other types of infrastructure discussed in the IDP have a role to play in enabling people to live healthier lifestyles, for example, having access to green spaces, cultural activities, sports and recreation facilities supports peoples physical, mental and emotional wellbeing.
- 13.4 Whilst the IDP focuses largely on the treatment of ill health and the infrastructure requirements related to this, floorspace is also required to run prevention services such as the Live Well Greenwich programme. As set out in figure 27 and explained in the rest of this chapter, providing community health hubs which combine primary care with community and social care, including the Live Well Greenwich Programme in one place creates a more useable and accessible health service that integrates prevention into the wider health model which helps relieve pressure on other parts of the health care system such as GP practices and hospitals.

The health and social care system

13.5 There are 3 main elements of health and social care as set out in figure 24; Acute care, community-based care and primary care.

13.6 The South East London Integrated Care Board (ICB) is responsible for



commissioning the majority of health care services to meet the needs of the people living in the Royal Borough of Greenwich. NHS England continues to commission dental, pharmacy and optometry services and other specialist services, as well as oversee the ICB. Demand for dentists, pharmacists and optometry services is often met by private providers.

Figure 24 Model of health and social care (Greenwich Commissioning Strategy 2018 – 2022)

- 13.7 The Greenwich Commissioning Strategy 2018-2022, published by the Greenwich Clinical Commissioning Group (now part of the South East London ICB), sets out the plans for commissioning health and social care services for the next three years. The focus is on preventing ill-health and on early diagnosis of disease as well as providing more primary and community care closer to home.
- 13.8 Royal Borough of Greenwich has a strategic objective for a Healthier Greenwich. The local authority is responsible for a range of children's health and wellbeing services (including safeguarding and child protection, alcohol and drug treatment, school nurses and health visitors) which are delivered mainly through Children's Centres, schools, and youth and community venues in partnership with NHS and voluntary and community sector organisations.
- 13.9 Royal Borough of Greenwich is also responsible for Public Health services including stop smoking services, physical activity programmes, cookery clubs, child weight management, NHS Health Checks, sexual health services and alcohol and drugs treatment services. Many of these services are delivered in partnership with GPs. Adult social care services including mental health, learning disabilities, physical disabilities, sheltered housing and residential and domiciliary care

services are also the responsibility of the Royal Borough of Greenwich. They are run in partnership with the ICB, Oxleas and Lewisham and Greenwich Trust to jointly plan and join up services for adults and older people.

How the NHS is changing

- 13.10 The South East London Sustainability and Transformation Partnership (SEL STP) brings together senior figures from different parts of the health care system to implement the Sustainability and Transformation Strategy. The purpose of these plans is to help ensure health and social care services in England become one unified system and are built around the needs of the local population. In some areas, STPs have evolved to become Integrated Care Systems a new form of even closer collaboration between NHS organisations and local councils to take collective responsibility for managing resources and providing more joined up care for patients.
- 13.11 For South East London, the SEL STP recently became an Integrate Care System (ICS) which saw six CCGs merge into one South East London ICB.
- 13.12 As set out in the <u>NHS Long Term Plan</u>, the aim is to transform the way in which services are delivered and redesign patient care to ensure the NHS is sustainable for the future. This involves moving some intermediate outpatient care out of hospitals to reduce pressure on acute hospital services, reducing the barriers between primary and community health services and providing more personalised care for patients.
- 13.13 The health infrastructure required to provide a wide range of health care services must respond to changes in healthcare needs and in the way people access and use services. The level of need is not simply defined by the size of the population but is significantly shaped by population characteristics (e.g. age and ethnicity profile), lifestyle factors, and environmental and economic influences.

Existing provision

- 13.14 There are currently 35 General Practices across Royal Greenwich and 15 branch surgeries²⁴. There are also two GP Access Hubs, which offer appointments outside of normal practice hours. There is one major hospital (Queen Elizabeth) and 3 community hospitals; Eltham, Goldie Leigh and Memorial Hospital, all of which offer intermediate services such as community mental health, mobility and falls services and rehabilitation.
- 13.15 The distribution of GP surgeries and branch surgeries can be seen in figure 25 below. A larger proportion of surgeries and health centres are concentrated in the North East of the borough which correlates to evidence that people living in more deprived areas are heavier users of GP services and demand is therefore higher.

²⁴ Greenwich Commissioning Strategy 2018-2022

13.16 As set out in the Royal Borough of Greenwich <u>Pharmaceutical Needs</u> <u>Assessment</u>, there are 63 pharmacies in Royal Greenwich, with a pharmacy within 500 metres of all GP practices in the borough except one, which is within Ikm radius of a pharmacy. The Pharmaceutical Needs Assessment concludes that the pharmacy provision for NHS services is sufficient for supplying a necessary service in the borough with capacity to accommodate future population growth.



Figure 25 Map of Greenwich Primary Care Networks (PCNs) (Source: HUDU)

Pressures on the health care system

- 13.17 Like many parts of the country, there is a lack of qualified primary care workforce, including a shortage of qualified GPs in the borough. Currently there are 162 GPs spread across Royal Greenwich, and one third of these are approaching retirement age, as can be seen in figure 26. In addition, many GPs are working part time.
- 13.18 NHS England states that on average a GP is expected to serve a list size of 1800 patients. Currently, of the 50 surgeries in the borough 28 of these surgeries have list sizes that considerably exceed the 1800 average and just 7 surgeries

have GP's operating within this recommended average (data is unavailable for the 15 branch surgeries).

13.19 Many GPs are also self-employed and own the premises in which they work; some of which are houses that have been converted to surgeries. This is no longer seen as an efficient use of space as these buildings were not built for health care purposes and offer a limited number of health services.



Figure 26 Greenwich GPs at retirement age

- 13.20 Funding the build and fit out of new premises is often difficult with ever increasing financial pressures on the NHS and the complexity of funding. Currently, health infrastructure is funded through a variety of sources such as the Estates Technology Transformation Fund or Local Improvement Grants as well as CIL. However, the release of capital from funds and grants is often unreliable and not sufficient to pay for the build and fit out costs.
- 13.21 The London Estates Board: Health and Care Estates Strategy, published in July 2019, sets out a vision for London to have a world class health and care service estate that reflects and adds to its stature as a leading global city in the 21st century. To achieve this, it is estimated that £8 billion of new investment is required over the next 10 years in London.

Future Provision

Acute Care

- 13.22 To address the pressure acute health services are under, Queen Elizabeth Hospital will need significant improvements and expansion.. The scale of ambition must match the significance of population growth in the Borough which is going to require capital investment in extending existing facilities and improving those which will remain. The Trust has begun facilitating major works to the site with its finance provider, Meridien, which are currently on site to improve the infrastructure. The key priorities for the Trust are set out below. Some objectives will involve working with the wider public sector to achieve them. The key priorities are:
 - Increasing our bedded care by 100 net additional over the next 3 years. This involves the refurbishment of existing space, and enabling further site expansion
 - Progress the adoption of Stadium Road in partnership with Greenwich Council

- Enabling our community sites to deliver as many neighbourhood-based services as possible. This includes Community Diagnostic Centres with one already funded through NHS England in Eltham.
- Consolidating the estate and expanding Queen Elizabeth Hospital to deal with the increasing population and corresponding increase in health care demands
- Consider how to provide affordable staff accommodation in order to ensure the workforce required can be housed locally
- Achieving Net Zero Carbon The Trust has made a commitment to achieving net zero carbon as part of its overall Sustainability Strategy. All Trust construction projects will support this ambition through requiring the best efficiency in terms of energy use and carbon emissions.

Primary and Community Care

- 13.23 The Greenwich Commissioning Strategy 2018 to 2022 sets out how the ICB will commission health care services for the next five years: it focuses on providing integrated community-based health services. For primary care services such as GPs this means working at a larger scale and offering more services in one location to improve resilience, access to services and reduce pressure on hospitals.
- 13.24 As a result, General Practices will work together and with other mental health and social care professionals such as counsellors, pharmacists, physiotherapists, practice nurses and social prescribers in their local areas under Primary Care Networks (PCNs)²⁵. There are six PCN's in Greenwich which can be seen in Figure 25 above, some of which have overlapping boundaries.
- 13.25 Bringing together a range of specialists to deal with managing long term conditions and minor ailments will improve the quality of care, reduce waiting times and free up GPs to diagnose and treat more complicated conditions. Furthermore, decentralising some services currently provided in hospitals such as blood tests and dialysis, which could be provided for through community health services will relieve pressure on hospitals allowing them to concentrate on major incidents.
- 13.26 The ICB is committed to making more efficient use of the existing estate and in supporting PCNs and their practices to use existing larger, purpose-built health facilities where possible. However, it is also recognised that in the medium-long term (post 2022), the scale of development potential in the borough is likely to require the development of new health facilities in areas of significant development to meet the growing population in these areas.
- 13.27 The Healthy Urban Development Unit model was used to analyse GLA population projections (2018) and provide an indication as to the type of health care needed to accommodate this level of population growth. The HUDU

²⁵ NHS Long Term Plan 2019

Planning Contributions Model is a comprehensive tool to assess the health service requirements and cost impacts of new residential developments.

- The model calculates: •
- The net increase in population resulting from new development
- Health activity levels •
- Primary healthcare needs (GPs and community health facilities)
- Hospital beds and floor space requirements
- Other healthcare floorspace
- Capital and revenue cost impacts
 - 13.28 The methodology is long established and widely used and encouraged by the London Plan. Based on the model, Table 15 below sets out what health care facilities are likely to be needed across the borough to meet the health care needs of residents. These figures would be subject to change if the level of housing growth in these locations increased.

Table 13 Projected Juture nealthcare Jacinity requirements			
Area	Level of Growth (approx.)	Future Health Care Provision	
Greenwich Peninsula	High 15,000 new homes	Provision of new health centre at Greenwich Peninsula of 2,500sqm with 1,500sqm of dedicated medical space based on the HUDU model and as agreed as part of the master plan for the area.	
Woolwich	High 7,000 new homes	Reconfiguration of existing floor space and expand existing facilities to respond to changing demographic and increased population. Provide bookable health care consulting rooms at new Leisure Centre.	
Charlton	High 5-7,000 new homes	New health care facility/community hub of approximately 2,500sqm with a minimum of 1,300sqm dedicated medical floorspace and a minimum of 14 consulting rooms based on the HUDU model ²⁶ .	
Thamesmead & Abbey Wood	High 8,000- 15,000 new homes	Expand and reconfigure existing floorspace. Gallions Reach health centre has the potential to expand from a 4 to a 12 GP practice as does Lakeside Medical Practice, which falls under Bexley borough. There may also be potential to expand or reconfigure other existing practices.	

Table 15 Projected future healthcare facility requirements

²⁶ Note: The 2,500sqm floorspace has been agreed as part of the Greenwich Peninsula master plan application and the 1,300sqm medical floorspace comes from the HUDU model outputs. This floorspace is for health purposes only and does not take account of the need to provide sports or community floorspace in a multi-purpose community hub as part of the wider development of Charlton Riverside.

Kidbrooke	High 4,500 homes	New Kidbrooke Living Health and Well Being Centre being provided which includes GP consulting rooms, space for social prescribing, non-clinical space such as training and co working space, welfare advice, co locates a range of sports, leisure, cultural and social activities, promotes health and wellbeing and social integration (including mental health)
Eltham	Low	Eltham is not a Strategic Development Location and is therefore not expecting to see high levels of housing and population growth. However, the population in Eltham is ageing which is likely to increase pressure on health services. Eltham is well equipped to respond to this change through expansion of existing surgeries and reconfiguration of existing NHS property and Eltham Community Hospital which is being re modelled as a community diagnostic centre.
Rest of the borough	Low	Based on the low level of development planned in this area, health needs can be met by expanding and reconfiguring floor space within the existing estate using CIL funding. In line with NHS Estates Strategy, when current estate properties reach the end of their life and GPs retire move services to purpose-built facilities which allows more resilience to increasing pressures from population growth or change in demographics and a lack of GPs
Borough-wide	Low	In addition to the above, there will be the need for additional health floorspace through expansion and reconfiguration of existing practices to align with the way the provision of health care is changing and meet the needs of the existing population.

- 13.29 The current world-wide health pandemic caused by COVID 19 has significantly changed the way health care is provided. Although the NHS long term plan already involved the increased use of technology and online consultations, COVID 19 has precipitated that process. In addition, with social distancing rules in place for the foreseeable future many health care facilities may need to be temporarily reconfigured to allow for social distancing and additional floorspace may be required.
- 13.30 The impacts of the pandemic on the provision of future health care are not yet fully understood and the above requirements are therefore indicative. As schemes come forward the HUDU model should be used at the earliest opportunity to calculate floorspace requirements and costs based on the more detailed information provided at application stage.

Requirements of new health facilities/community hubs

- 13.31 In line with the NHS Long Term Plan, new facilities will need to act as multipurpose community hubs to create a sustainable place which provides community health services alongside opportunities for social integration and encourages communities to stay healthy. It should act as a catalyst for health and well-being rather than just somewhere to treat health problems. The diagram in Figure 28 summarises the types of services that could be included in a health and well-being hub centre and the figures in Table 15 above reflect the indicative size of a facility that would be needed to provide an integrated centre.
- 13.32 This approach to integrated health and community care is part of the <u>Healthy</u> <u>New Towns Programme</u>, which explores how the development of new places can create healthier and connected communities with integrated and high quality services. All new developments should be designed in a way as to encourage active travel, create compact neighbourhoods, enable healthy eating, ensure buildings support and facilitate growth, enable healthy play and leisure and develop health services that help people stay well. Thamesmead is one of six healthy new towns implementing the lessons from 'Putting Health into Place', a report by the healthy new towns' initiative.
- 13.33 When new health care facilities are provided to address the pressures caused by new developments, these should be fitted out and fit for reasonable occupation; provision of facilities at shell and core will be strongly discouraged. The management of any new facilities should be discussed with the ICB at the earliest opportunity.



Figure 27 Types of services that could be included in health and wellbeing hubs

Design guidance and technology

- 13.34 There are specific design requirements and guidance for health care facilities including, but not limited to, space standards which should be adhered to²⁷. It is important to provide floorspace that is flexible and can be adapted for a variety of uses now and in the future. For example, larger spaces should be able to accommodate health clinics and be used for community events and classes. The space should be 'future proofed' by making provision for pods for e-consultations and bookable space that the practice can expand into as the population grows. However, there should also be dedicated floorspace for medical use.
- 13.35 A new facility should be easily accessible by public transport, easily visible from a public highway, have accessible parking for those with mobility issues and have easy access for emergency vehicles. Surfaces in and around health hubs including in surrounding roads should be flat. Natural light must also be provided including to consultation rooms, bookable space and multi-use spaces and glass foyers and atriums will be encouraged. It should include storage for IT and other equipment, be ready for 5G and have publicly accessible free Wi-fi. The reception for all services should be integrated to create a smooth-running service and where services are located above ground floor level a fire lift must be provided.
- 13.36 The <u>Greenwood Centre</u> in Kensington is a good example of how community, voluntary and social uses can be co-located alongside health services. It provides independent living for people with disabilities and mental health problems. The building's range of flexible space includes a multi-purpose hall, meeting and interview rooms, a training kitchen and café, IT resources, fitness and physiotherapy spaces, arts and crafts studios, a music room and landscaped gardens on each level. The spaces provide opportunities for professional development, spaces to learn new skills, be active, form relationships and grow independently.
- 13.37 The James Wigg Centre is another good example of integrated health and community facilities with a range of services available including GP's, blood taking services, mental health services, clinics, dentistry, podiatry, acupuncture, aromatherapy massage, osteopath, social prescribing and healthy living advice.

Mental Health

13.38 Adult mental health services are provided in community and hospital settings within the Royal Borough of Greenwich. Improving mental health is one of the Health and Wellbeing Board's priorities with Greenwich residents experiencing a higher rate of mental illness compared the London average and significantly above the England average. To meet the increased demand for mental health services and to provide services in appropriate accommodation across the borough, new opportunities are required to offer flexible services locally within communities via sessional space and for the reconfiguration d improvement of existing sites to increase capacity.

²⁷ Guidance for facilities for providing primary and community care services

Children and Young People's Community Health Services

13.39 Children and Young People's services are provided in a range of community settings, including health centres, GPs, schools, children's centres. Highpoint House in Shooters Hill is an integrated hub for children and young people and provides both physical and mental health services in a child-focussed venue. The demand for additional children's services in Greenwich will require more flexible clinical accommodation to be made available throughout the borough. There is also a need for some children's services to move to a more 'neighbourhood approach' creating better access to services that are closer to families

Public Safety

- 13.40 The Our Greenwich Plan 2023 sets out a number of corporate priorities with a substantial number linked directly or indirectly to the work RBG does under the umbrella of Public Safety. In addition to this the Crime and Disorder Act 1998 (Section 17) states that "Local Authorities are required by law to consider the crime and disorder implications of all their activities and functions and do all they reasonably can do reduce these problems". As such the Local Government Association (LGA) states that "designing out crime and designing in community safety through planning are a vital tool".
- 13.41 There is a correlation between the building of new housing development and increased crime and anti-social behaviour in some areas of the borough, particularly, Woolwich Arsenal, Greenwich Peninsula and Greenwich Creekside. Other areas of the borough also have higher than average crime and anti-social behaviour numbers; Abbey Wood, Eltham Town with Avery Hill, and Plumstead with Glyndon.
- 13.42 The 2021 Census shows crime was higher in Greenwich (13.6%) than in London (7.7%) and England (6.6%) since 2011. Given the increasing population size both in Greenwich and London it is anticipated that all public safety/crime and disorder issues will worsen unless existing resources are bolstered and additional ones introduced.

Existing provision

13.43 There are numerous Public Safety initiatives operating at any one time across the borough led by the Greenwich Community Safety and Environmental Health division. These can range from problem solving and target hardening a high volume crime/anti-social behaviour location, improving and modernising CCTV, raising levels of Hate Crime reporting or diversionary work with Domestic Abuse Perpetrators. Some of these initiatives are responses to issues in specific areas whilst many are borough wide, cross cutting or thematic in nature which benefit all residents.

Future Provision

- 13.44 The anticipated levels of housing and population growth will require our current infrastructure to expand to respond to new and emerging issues in order to keep our residents safe.
- 13.45 The Greenwich CCTV/Digital Evidence service is cutting edge and heavily relied upon in both a crime reduction and evidential capacity. Each development and increase in population puts additional strain on this resource. The technology itself is constantly

evolving and continually requires modernisation. It is anticipated that c.£4m will be needed by 2032 to maintain and modernise this service.

13.46 Air Quality Control Continuous Monitoring stations are required to operate long term at a cost to Greenwich of £141k per annum.

14 Sports and Leisure Facilities

- 14.1 Access to quality sport and leisure facilities is essential to improving the health and wellbeing of residents and it is important to have the right type of space in the right place. The quality of sports provision in the borough has an impact on the participation opportunities that are available to local people and in turn on participation rates at a local authority level. With a lower than average life expectancy²⁸ in Greenwich compared to England, high poverty rates and a high level of obesity across the borough, encouraging participation in sport is also key to improving the health and well-being of residents.
- 14.2 Royal Greenwich is set to have one of the highest housing and population growth rates in London over the next 10-15 years. This will place increasing pressure on sports facilities as such it is important that new sports facilities are provided, and existing facilities improved to ensure this planned growth has the right level and mix of sports facilities to enable residents to live an active and healthy lifestyle.
- 14.3 The new 'Greenwich Get Active' Physical Activity and Sports Strategy 2019-2024 and the associated Action Plan outline clear aims to get residents active, improve health and well-being, develop people, grow the economy and strengthen communities and facilities infrastructure. The strategy sets out eight objectives:
- Increase Communication and awareness
- Raise participation rates
- Use behaviour change interventions
- Use Physical Activity and Sport as a means of prevention
- Use Physical Activity and Sport to improve social mobility
- Grow paid and volunteer workforce
- Widen access to community assets
- Use local insight to make the offer relevant
 - 14.4 It will be important to improve access to community assets by embedding sport and physical activity into planning policies and regeneration schemes and to use local insight to ensure the relevance of the physical activity and sport offer engages more people in community life. Any new facility and infrastructure changes should be in line with the <u>Sport England's Strategic Outcomes Planning</u> <u>Model</u> which seeks to ensure that investment best meets local strategic outcomes and the needs of the community, whist recognising the challenges faced in terms of resourcing.
 - 14.5 There is also a requirement to follow Sport England's Strategic Outcomes Planning Model in relation to any facility and infrastructure changes and to follow the 4 stage approach:

²⁸ Greenwich Joint Strategic Needs Assessment

- Stage I Develop shared local strategic outcomes for Royal Borough of Greenwich
- Stage 2 Understand the community of Royal Borough of Greenwich
- Stage 3 Identify how the outcomes can be delivered sustainably
- Stage 4 Secure investment commitment to outcome delivery



Figure 28 Stage 4 approach, Sports England Strategic Outcomes Planning Model

Existing Provision

14.6 Currently Greenwich has a wide range of indoor and outdoor facilities including swimming pools, leisure centres, sports courts and pitches. In addition, a number of the Borough's schools have facilities which are available for the public to access, where there are formal community use agreements in place. The existing provision is listed in Table 16 below. The information summarised in each section below is taken from the Sports Facilities Strategy 2015, unless otherwise stated.

Sports Pitches

14.7 As set out in Table overleaf, there are a large number of grass pitches (223) in the borough in comparison to other facilities. These are well used for football, hockey, cricket and rugby; the distribution of pitches across these sports is illustrated in the diagram below.

14.8 Most of these pitches are located in the south and centre of the borough. In terms of existing provision, this often falls short of demand especially for football and hockey. There are current supply issues in relation to access to sufficient junior football pitches and many artificial grass pitches are undersized for full adult league football. Similarly, Woolwich Polytechnic is undersized for league hockey. In terms of provision for cricket and rugby, currently the supply meets demand but the quality of pitches can be poor.

Table 16 Summary of existing sport and leisure provision

Facilities	Number in borough	Location
Athletics Track	I	Sutcliffe Park
Grass Pitches	223	Borough wide
Artificial Grass Pitches	22	Borough wide
Leisure Centre	8	Woolwich, Eltham, Cold harbour, Sutcliffe Park, Charlton Lido, Greenwich, Plumstead, Thamesmead
Bowls	15	Eltham, Woolwich, Plumstead, Well Hall, Abbey Wood
School sports Halls*	12	Colfe's Leisure Centre, Eltham Hill, Harris Academy, Plumstead Manor School, Shooters Hill, St Pauls Academy, Crown Woods, Thomas Tallis School, University of Greenwich Avery Hill, Woolwich Polytechnic, Woolwich Polytechnic School for Girls
Swimming Pools	14 pools over 9 sites	Woolwich, Eltham, Charlton Lido, Greenwich, Thamesmead, Shooters Hill Post 16 campus, David Lloyd Kidbrooke, Colfe's School, Royal Herbert Leisure Club
Tennis Courts (private)	33	Blackheath wanderers sports club, Charlton lido, David Lloyd, Greenwich Park, Shooters Hill Lawn Tennis Club, Shooters Hill Post 16 Campus, The Blackheath Lawn Tennis Club
Tennis courts (public)	43	Altash Gardens (currently needs refurbishment), Blackheath, Bostall gardens, Eltham Park South, Fairy Hill Park, Hornfair Park, Kidbrooke Green, Maryon Park, Plumstead Common
Squash Courts	13	Rectory Fields, Waterfront Leisure Centre Woolwich, Blackheath, Colfe's School, Horn Park
Skate Park	3	Charlton Park (combined skate and BMX track), Horn Park
BMX track	I	Hornfair Park

(Source: Sports Facility Strategy 2015 and updated information from RBG)

*community accessible sports halls offering at least 3+ badminton courts have been included within the audit and analysis (taken from the Sports Facilities Strategy)

Football	Rugby	Hockey	Cricket
173 grass pitches	20 grass pitches	5 pitches 3 operational	25 pitches 19 operational
44 operational sites	9 operational sites	sites	sites

Figure 29 Distribution of grass pitches according to RBG Sports Facilities Strategy 2015

14.9 As set out in the Playing Pitch Strategy 2015 (due to be review and updated in 2023), some pitches are owned and run by private clubs, some are located within school grounds or school playing fields and others are located within parks. The quality of the facilities seems to vary according to ownership with privately run pitches generally able to maintain a higher standard of facility. The Local Football Facility Plan also identifies opportunities to accurately target investment in football facilities, 3G artificial pitches, grass pitches and small sided MUGA facilities.

Leisure Centres, Swimming pools and Sports Halls

- 14.10 GLL run 7 public leisure centres in Greenwich on behalf of the Royal Borough of Greenwich and have added new services and facilities over time to adapt to changing needs. The leisure centres are distributed across the borough although not located in the areas of highest population growth. There are also twelve swimming pools in the borough, over nine sites, four of which are located within Greenwich Leisure Centres and five of which are privately run.
- 14.11 Many of the leisure centres have been recently replaced or upgraded, or are due to be in the future, to become multi-use spaces offering a wider array of sports and activities. In addition, the Sports Centre at Sutcliffe Park built in 2018 offers an indoor training athletics track, a 400-metre outdoor athletics track, and field events, soft play and climbing facilities.
- 14.12 There are 12 sports halls within the borough, which is slightly below the London average. Of these halls 80% are within a school which means access to them is restricted to term time and opening hours are limited.
- 14.13 In addition, the quantity of sports facilities supplied in Greenwich (especially sports halls and swimming pools) is considered to be average or below average in some instances according to the Sports England Facilities Planning Model used in the Sports Facility Strategy 2022.

Tennis and Squash Courts

- 14.14 There are 76 tennis courts within Royal Greenwich. Some of which are privately owned and some of which are publicly owned. The majority of the publicly owned tennis courts are in average condition, with a number requiring refurbishment, these are currently being discussed with Lawn Tennis Association and funding requirements. In terms of private courts, the Sports Facilities Strategy scores these courts as average.
- 14.15 Most of the borough is located within a 1-mile catchment of a community accessible outdoor tennis court except the Peninsula, Thamesmead and Coldharbour/New Eltham. There are 9 squash courts in the borough which are also rated 'average'. These are concentrated at 3 locations; Blackheath, Woolwich and Rectory Fields.

Bowls

14.16 From the Sports Facility Strategy 2022, there is no indoor bowls facility within the borough and the number of outdoor rinks are outlined in Table 16.

Multi Use Games Areas (MUGAs)

14.17 There are 17 outdoor MUGA's in the borough's parks and open spaces and 14 outdoor gyms in parks. Many of the MUGA's need resurfacing and remarking. At the last internal audit in October 2019, approximately 40% of the courts need remarking and some need new fences and resurfacing.

Future Provision

14.18 A summary of key priorities for future sports provision required in the borough can be found in table 8 at the beginning of the social infrastructure section for ease of reference.

Football

- 14.19 According to the <u>Playing Pitch Strategy 2015</u>, there are current supply issues in relation to sufficient junior football pitches particularly for teams aged 11-18 and many artificial grass pitches are under sized for full adult league football. The current geographic provision of pitches across the borough is unbalanced with significantly more marked pitches in the south of the borough. The largest forecast population growth is in Greenwich Peninsula and Greenwich West where there is no formal grass pitch supply and no full size AGPs since the loss of two 3G AGPs at London Soccer Dome on Greenwich Peninsula. The Playing Pitch Strategy 2015 is due to be reviewed in 2023.
- 14.20 It will therefore be important to protect access to Greenwich Park for mini soccer coaching and to the half size AGP at Millennium School as well as to actively seek opportunities for new provision in opportunity areas such as Charlton Riverside, Thamesmead and Greenwich Peninsula. It will be important that these pitches are in accessible locations near public transport routes as 41% of residents in Greenwich do not have access to a car.
- 14.21 There is also a high level of population growth predicted in Woolwich and Thamesmead and the Strategy identified a need to protect existing pitches and

increase community access to school sites as well as a need for new provision to meet the needs of the future population.

- 14.22 There is however a decline in the number of participants taking part in sports that demand a commitment to regular attendance in favour of more causal involvement. There is upward demand for informal forms of football, particularly among the young and BAME communities. The forecast large growth of these communities in Royal Greenwich over the next ten years evidences a need for more active promotion of underused parks pitches, MUGAs and other informal facilities for football. There are however issues with the quality of park pitches and inadequate maintenance as well as issues with maintenance of changing rooms at a number of football sites in the borough.
- 14.23 The Local Football Facility Plan undertaken as part of the Football Association's (FA) National Football Facility Strategy also assessed football facilities in the borough to enable investment to be accurately targeted. The document has identified the following projects in need of investment:
- 4 Full size 3G Football Turf Pitches (FTP) and 3 smaller 3G FTPs
- 51 Improved grass pitches
- II changing rooms/pavilions/clubhouses
- 15 small sided facilities
 - 14.24 The improvements to grass pitches and changing rooms are spread across the borough whereas the need for new pitches identified in the strategy is concentrated in the north of the borough as illustrated in Table 17 below. Three of the four 3G pitches are needed in the North of the borough in Charlton Park, Peninsula Ward and Shooters Hill Ward and the fourth pitch is in Eltham West Ward which will see a significant increase in population from Kidbrooke Village. This corresponds with the findings of the Playing Pitch Strategy and expected future population growth.

Area	7v7 3G FTP	9v9 3G FTP	llvll 3G FTP
Charlton Park			\checkmark
Eltham West			\checkmark
Metrogas Sports ground, New Eltham		\checkmark	
Peninsula ward			\checkmark
Plumstead Manor School	\checkmark		
Shooters Hill ward			\checkmark

Table 17 Potential new football pitches (LFFP)

14.25 The ancillary football facilities are also in need of improvement with a number of pavilions and changing rooms in need of refurbishment.

 \checkmark

14.26 Local consultation undertaken as part of the LFFP also suggests there is a need for 2 new indoor football facilities at the new Woolwich Leisure Centre and Westminster Industrial Estate in Charlton. A new indoor football facility has been agreed as part of the Woolwich Leisure Centre redevelopment.

Hockey, Rugby and Cricket

- 14.27 Based on the Playing Pitch Strategy 2015, the Sports England Facilities Planning Model identifies a need for one new sand-based hockey pitch. However, this does not take into consideration the demand in Royal Greenwich to play hockey; given the limited number of clubs in the borough this suggests demand is minimal.
- 14.28 The Playing Pitch Strategy 2015 (to be update in 2023) illustrates that currently the supply of cricket and rugby pitches meets demand in the borough and a number of people travel from outside the borough to use them. Hervey Road Sports Ground which was previously closed, secured capital grants for enhancement and re-opened as a site for junior cricket and youth football as planned as well as providing training facilities for Rugby. The facilities on offer include; a Multi-Use Games Area for various activities including tennis, netball, mini cricket, mini rounder's, a new inclusive play area for under 10s, a pavilion and new changing rooms.
- 14.29 London Cricket Trust have provided funding for 2 x 2 bays of two bay cricket nets at Hervey Road playing fields and Bostall Heath. These will be installed May 2023. The London Cricket Trust are providing funding for an artificial grass pitches (NTP) at 2 sites across the borough Charlton Park, Hervey Road playing fields and Bostall Heath. A new artificial wicket was also installed at Avery Hill Park in 2018.
- 14.30 There is also a particular challenge on how to respond to "informal" sports especially cricket that is particularly fast growing among BAME communities. Space for informal opportunities for sports are important in poorer areas of the borough where formal participation in sport might not be possible.
- 14.31 Whilst supply meets demand for rugby, many of the junior pitches are marked over larger pitches meaning many pitches are over played; as a result, the Playing Pitch Strategy identifies a need for a new junior pitch in the borough. Hervey Road Playing Fields development in 2018 now meets this demand.
- 14.32 The Playing Pitch Strategy also identifies a lack of sports provision on Greenwich Peninsula and publicly accessible sports pitches should be provided. A sports pitch or MUGA could be provided to help address this deficit in Central Park.

Multi-use spaces, Multi-Use Games Areas (MUGA's) and Grey Space

- 14.33 With population increasing and pressure for additional housing growing, there is a need to focus on multi-use spaces to maximise the use of land. As a result, MUGAs are becoming an increasingly popular way to meet demand. This is demonstrated in the Local Football Facility Plan (LFFP) which identifies a potential need for 11 new or refurbished, small sided MUGAs in the borough.
- 14.34 It is important that the quality of MUGAs provided is to a high standard and each offers a variety of sports. MUGAs can be well designed to meet a wide variety of needs with sand-based football pitches, basketball hoops, running tracks and bouldering walls to name a few. MUGAs should also be undercover, if possible, but not an immediate requirement, and have timer lights to allow use during winter months as well as summer.
- 14.35 Based on the current and expected future population growth in Charlton Riverside there will be the need for additional indoor and outdoor sports facilities. There will be a need for a well-designed MUGA in this area to meet demand. It should cater for an array of sports, including football, and have a roof and timer lights in order to maximise the hours of use. As detailed in the community facilities section below, the redevelopment of Charlton Riverside should include a multi-use space that functions as a community centre and health and well-being centre providing large enough spaces to cater for fitness classes and various other sports activities.
- 14.36 Given the amount of unmet demand there is also a need for a new sports hall or indoor MUGA in the borough. This would be best placed in the north of the borough, in particular the Peninsula where there is a high level of demand and very little supply.
- 14.37 There is also a growing need for informal sports and recreation opportunities within the borough that can be accommodated in grey unused spaces to keep people active and encourage social interaction. This can include activities such as hopscotch, wall ball, handball, dodgeball, kickball etc. There are plenty of opportunities within existing spaces and new developments to better use small grey spaces as places for informal sports. This would create a more interesting street scene, encourage impromptu activity and encourage participation in a wider variety of sports across the borough. This is currently being discussed with external partners in 2023 with the creation of a series of Playzones/MUGA's.
- 14.38 Given the level of growth in the borough and the number of large development sites, there are also opportunities to provide meanwhile and pop-up spaces for sports facilities and events to encourage healthy lifestyles and participation in sports that people may not have otherwise considered.
- 14.39 As detailed in the Green Infrastructure section, there is a need for new parks and open spaces to become multi-functional spaces providing traditional park sports pitches as well as MUGA's, children's play space and informal sports opportunities in under used grey spaces. Sometimes it may be more appropriate for developers to upgrade or repair existing MUGAs or other sports facilities

rather than provide new ones, but this will depend on the quantity and quality of existing provision.

Tennis and Squash Courts

14.40 Whilst the Sports Facilities Strategy does not identify a need for any new facilities based on existing demand, it illustrates that existing facilities, particularly park tennis courts, are well used and need to be maintained and upgraded. This is underway through 2023/24. In addition, the Lawn Tennis Association has identified Greenwich as one of 8 London boroughs with the potential demand for an indoor tennis facility; Royal Greenwich will continue to explore this potential with the LTA.

Bowls

14.41 Whilst the Sports Facility Strategy concludes that the whole borough is within a 3 mile catchment of a bowls facility, this took into consideration the Warehouse Sports and performing Arts Centre which has since closed. Therefore, according to the Sports England Calculator, there could be a need for 3-4 new indoor bowls rinks in the borough by 2028. However, this is based on future population projections and does not take into account that demand for bowls in Greenwich is relatively low as illustrated by the low membership rates of existing bowls clubs.

Leisure Centres, Swimming pools and Sports Halls

- 14.42 The Indoor Sports Facility Strategy 2022- 24 has now superseded the one undertaken in 2015. The Council owns seven sports facilities. The following facilities are managed via a management contract with Greenwich Leisure:
 - Coldharbour Leisure Centre, New Eltham
 - The Eltham Centre, Eltham• The Greenwich Centre, East Greenwich
 - The Plumstead Centre, Plumstead
 - Sutcliffe Park Sports Centre, Eltham
 - Thamesmere Leisure Centre, Thamesmead
 - Waterfront Leisure Centre, Woolwich

The Sport England Sports Facility Calculator has been applied to the projected 32,000 increase in population over the 10-year period, to 2031, identifies that the following indoor sports facility needs (sports hall and swimming pools) will be generated. This shows that over 9 more badminton courts of sports hall space and an additional 7 lanes of 25m pool space would be required to support the projected population growth:

Table 18 Sports Facility Calculator results for the Borough based on 32,000 increase in Population to 2031

Sports Halls	
Courts	9.63
Halls (4 court)	2.4
Swimming Pools	
Square meters	362m ²
Lanes (x25m)	6.8

Sports Halls

- 14.43 The Royal Borough of Greenwich has an extensive and relatively modern supply of sports halls. The Waterfront Leisure Centre is in the ownership of the Council which is set to be replaced in 2025 by the new Woolwich Leisure Centre. This will result in significant improvements to the quality of the sports hall. There will mean increase in capacity from 4 to 6 courts, adding a further 2 courts to supply accessible halls in the borough.
- 14.44 Overall, the current supply of sports halls is inadequate, with a deficit equivalent to 9 badminton courts. It is important that existing facilities are maintained. The planned increased capacity at the new Woolwich Leisure Centre, with a net gain of 2 courts, will help address the existing shortfall and meet more of the demand for sports halls. If new facilities are provided by the Council, then it will have more control over direct delivery of the Council's health and well-being objectives. Despite a significant shortfall remaining, it will increase over time, as the population grows. There is also a lack of sports halls in the northeast of the borough, particularly in the Abbey Wood area.
- 14.45 Education sites play a vital role in the borough. Access to educational sports halls in the borough should be protected and increased where possible. This can be done through the sports hall programming in partnership with schools. The Council acknowledges this is recognised as a challenging task, when many sports hall sites in the borough are owned by educational providers, as opposed to the Council. Therefore, support should be provided to organisations seeking to increase the quantity of facilities in the borough, with the Council working with them to maximise club and community access to all sites. This should also include provision for indoor cricket nets at suitable sites, to meet the specific needs identified for cricket.
- 14.46 In summary, as of 2022, the borough has a deficit equivalent of 9 badminton courts, or just over 2 x 4 court sports halls. Based on the forecast population growth to 2031, and assuming that the planned Woolwich Leisure Centre is delivered and that none of the existing halls close, this deficit will increase to 15 courts or just under 4 x 4 court sports halls.

Swimming Pools

14.47 The ability of the borough's residents to access a swimming pool (inside and outside the borough) is considered strong. This is partly due to a higher than

average supply of water and the number of pool sites in the borough. The key risk to future provision involves the age of two of the main public pool sites (Thamesmere and Waterfront Leisure Centres), due to their age being over 30 years old and the likely implications this has for the condition and remaining lifespan of the buildings.

- 14.48 The development of the new Woolwich Leisure Centre will see a net increase of 2 lanes of 25 metre swimming pool space, compared to the existing Waterfront Leisure Centre, which it will replace. Once delivered, this increased provision will reduce the forecast deficit from 10 lanes of 25 metre water space to 8 lanes by 2032. Greenwich remains short of supply.
- 14.49 The Council will remain a key provider of fully accessible community swimming pools. Given the current and projected shortfall in provision, it is important that existing facilities are maintained. The planned increased capacity at the new Woolwich Leisure Centre, with a net gain of 2 lanes of pool provision, will help address the existing shortfall and meet more of the demand for swimming. However, a significant shortfall will remain, which will increase over time as the population grows. Areas of planned population growth should be a focus for the development of new facilities.
- 14.50 Greenwich Peninsula has secured additional pool provision, due to the significant residential development planned for that area. The pool will be at least 25m in length and no less than 6 lanes wide and must be made available to members of the public. The delivery is linked to the occupation of 5,950 units and the timescales for this are not clear at the time of writing this strategy.
- 14.51 In summary, as of 2022, the borough has a deficit equivalent to 4 lanes of 25m pool space. Based on the forecast population growth to 2031, and assuming that the planned Woolwich Leisure Centre is delivered and that none of the existing pools close, this deficit will increase to 8 lanes of 25m pool space.
- 14.52 In addition, the Greater London Authority (GLA) developed an evidencebased assessment of need for swimming pools. The assessment is based on the current provision of swimming pools and the supply, demand and access to them for community use in 2017. A second assessment was completed based on 2041, to identify how the projected population growth 2017 – 2041 changes the total demand for swimming pools and the distribution of demand. The estimated shortfall in water space is 226m2 in 2017 (equivalent to a 4.5 lanes 25m pool) and 448m2 in 2041 (equivalent to a 9 lane 25m pool).

School Sports Provision

- 14.53 Whilst Royal Greenwich has a good level of sports facilities in the borough there is a need to maintain and upgrade facilities and increase access especially in schools where facilities are available but limited to term time. In addition, they are often paid facilities that are unreasonably priced and not affordable for community groups. Access to these facilities need to be improved.
- 14.54 Schools have a legal requirement under <u>The School Premises Regulations</u> 2012 to provide suitable outdoor space for sports provision, it is important that

this is considered at the application stage for new schools. It is not appropriate for schools to use park facilities instead of providing dedicated sports provision unless agreed with the Parks and Open Spaces Department.

15 GREEN INFRASTRUCTURE

15.1 This section summaries the infrastructure requirements for green infrastructure including open spaces, allotments and SINCs.

Table 19 Key green infrastructure requirements

Green Infrastructure				
Open spaces	New public open spaces in Charlton Riverside and Greenwich Peninsula			
	High quality open spaces and public squares coupled with new pedestrian routes that improve permeability through Woolwich town centre			
	Improve the quality of publicly accessible open spaces to become multifunctional spaces for sports, leisure, recreation, relaxation, socialising etc			
	Ensure all new open spaces are publicly accessible			
	Consider how publicly accessible parks can better meet the needs of older children			
Allotments	Seek opportunities to provide new small allotments or community growing opportunities in new developments.			
	Possibly divide larger allotments into smaller more manageable plots to meet demand			
SINCs	Consider the recommendations for SINCs as part of the Local Plan review as set out in the Green Infrastructure Study			

15.2 The Towards a Greener Greenwich - Green Infrastructure Study 2017

assessed all types of green infrastructure across the borough including public parks, green spaces, children's outdoor play provision, allotments, urban greening (trees, living roofs), Sites of Importance for Nature Conservation (SINCs) and Metropolitan Open Land (MOL). It assessed the accessibility, quality, quantity and value of the open spaces across the borough.

- 15.3 In terms of quantity, there is currently 2.69ha of public open space per 1000 population and the study recommends that this level of provision is maintained. The standards recommended by the study highlight where investment in existing spaces to enhance their role, or the provision of new spaces, should be focused.
- 15.4 Eltham and Kidbrooke have the highest levels of open space provision per 1000 population (3.40ha per 1000 people) whilst Woolwich, Thamesmead and Greenwich are currently below the standard (2.37ha per 1000 population and 2.20 ha per 1000 population). This will only be exacerbated given the level of housing growth expected in these strategic growth locations by 2028, particularly in the Greenwich area, where provision per 1000 population will be well below the expected level by 2028.

- 15.5 In comparison to surrounding local authorities the current provision in Greenwich of 2.69ha per 1000 population is similar to Lewisham (2.74ha), lower than Bromley (4ha) and higher Tower Hamlets (1.2ha).
- 15.6 In terms of quality and value, the Green Infrastructure Study found that a number of parks and amenity spaces were considered by residents to be low value and these spaces could benefit from investment to improve their functionality. This was particularly the case at the local and small local level of the hierarchy. Larger sites were almost all high quality and high value.
- 15.7 Although the Green Infrastructure Study is based on lower population projections and population growth is expected to be higher than anticipated as part of the study, the principle of how green infrastructure will be delivered also remains the same. Additional open space will need to be provided through new development to meet the quantity standard proposed in the Green Infrastructure Study (2.69ha) and or existing open spaces will need to be made more functional for a variety of users.
- 15.8 Given the increasing population and pressure to maximise land, open spaces have an increasing role to play as multi-functional spaces that meet a variety of needs. From traditional sports facilities including pitches and traditional children's play areas to MUGAs, tranquil space to relax and opportunities for informal play and recreation; these elements will form part of a well-designed open space. In addition, it will be important to improve and increase urban greening through green roofs and living walls, increase tree planting where provision is low and strengthen the green chain which runs through the borough.

Existing provision

15.9 There are around 300 different open spaces within the Royal Borough totalling 1,390 hectares of land and covering approximately 28% of the Borough's total area. Royal Greenwich contains many valued areas of open space, including Blackheath and Greenwich Park, which is one of the largest green spaces in South East London.

Parks and open spaces

- 15.10 There are many different types of open space that provide different functions and the quantity of these types of spaces and accessibility to them can be seen in Table 19 below.
- 15.11 The largest proportion of open space is made up of 'other' provision such as play and sport provision, agricultural land and allotments, followed closely by parks, gardens and natural and semi natural green spaces. Overall, 60% of the open space in the borough is publicly accessible and 40% is managed by the Royal Borough.

Table 20 Provision of open space in Royal Greenwich

Туроlоду	Total area (ha)	Publicly accessible area (ha)	Area managed by Royal Borough (ha)
Parks and gardens	391.64	381.85	240.13
Natural and semi natural green space	378.57	299.79	266.95
Green corridor	36.98	18.85	n/a
Amenity greenspace	92.48	59.23	12.96
Cemeteries and churchyards	54.43	54.43	2.93
Civic space	7.83	7.83	1.69
Other provision (play, sport, agricultural land, allotments)	406.01	n/a	28.99
All typologies	1387.14	821.98	553.65

Source: Towards a Greener Greenwich: Green Infrastructure Study 2017 carried out by LUC for RBG

- 15.12 The distribution of open spaces and their accessibility can also be seen in the map below (Figure 30). The map also illustrates that large areas of the borough are deficient in at least one level of open space with Peninsula, parts of Kidbrooke, Eltham, northern Woolwich and Thamesmead having the highest levels of deficiency. The open space hierarchy is set out in the London Plan along with benchmarks for how far people should live from each type of open space in order for them to be considered accessible.
- 15.13 Areas deficient in access are deemed to be those that are further than 280m from a small local or pocket park, 400m from a local park, 1.2km from a district park and 3.2km from a metropolitan park. As the map below illustrates, public open space in Royal Greenwich is unevenly distributed meaning that less mobile people, younger and older people and parents with young children do not always have adequate access to open spaces. It is therefore important that new developments provide adequate open space, especially in areas of deficiency to improve access to publicly open space for all.



Source: Towards a Greener Greenwich: Green Infrastructure Study 2017

Figure 30 Deficiency in access to publicly accessible open space

Allotments

- 15.14 There are 15 allotment sites in Royal Greenwich managed directly by the Council and 3 managed privately, the location of which can be seen in Figure 31 below.
- 15.15 In total, there are currently 590 residents on the waiting lists across all allotment sites with particularly long waiting lists in Greenwich (Prior Street), Blackheath (Maze Hill and Humber Road) Plumstead (Church Manorway), Kidbrooke (Kidbrooke Park), Crathie Road (East and West), Middle Park (Eltham) and Charlton (Highcombe). Interest in allotments and growing space has increased drastically as a result of the COVID 19 pandemic, with the number of people on the waiting list more than doubling (from 285 pre-COVID).



Figure 31 Map of existing allotments in Royal Greenwich

Biodiversity

15.16 Royal Greenwich supports 55 SINCs across the Royal Borough. This is made up of seven sites of Metropolitan importance, 16 of Borough Grade I importance, 18 of Borough Grade II importance and 14 of Local importance. Our green spaces play an important role at the local level at combating climate change with our parks, woodlands and green spaces storing large volumes of carbon, absorbing pollutants, helping to improve air quality, helping with flood alleviation and combating over-heating by providing places of shade.

Play and Informal Recreation

15.17 There are 44 sites within the borough which contain play provision. The Royal Borough manages 26 of these facilities. In addition to the dedicated provision, there are numerous open spaces that have informal areas suitable for children's play. When compared to the GLA's benchmark figure of 10sqm per child, Greenwich is well provided for in terms of child play space (when informal play areas are included). However, there is a need to improve provision and accessibility for some age categories. Greenwich Leisure Limited manages Adventure Play Centres at Plumstead Common and The Course as well as a BMX track at Hornfair Park.

Future Provision

- 15.18 The anticipated levels of housing and population growth as set out in ChapterI, will require effective open space management to provide a network of safe, clean, multi-functional green spaces for all residents.
- 15.19 It is clear from the Green Infrastructure Study that new open spaces will be needed to ensure the level of 2.69ha of open space per 1000 population is maintained. As can be seen in figure 30, the strategic development locations, which are the areas expected to see the highest levels of population growth, are also the areas that have the least amount of existing public open space. This will need to be addressed as part of the redevelopment of these areas through new open spaces and improvements to existing open space.
- 15.20 In Charlton Riverside and Greenwich Peninsula, there is a lack of existing open space. New public open spaces will need to be created, particularly on the Peninsula where currently all open space needs are met by Central Park, Southern Park and the ecology park (which has restricted opening hours). Thamesmead has a number of existing open spaces but many of these are not publicly accessible; as part of the redevelopment of this area their quality will need to be improved to create multi-functional spaces for sports, leisure and recreation and they will need to be open to the public. In Woolwich there is a need for high quality open spaces and public squares coupled with new pedestrian routes that improve permeability through the town centre.

Public Open Space

- 15.21 As the population increases and a large proportion of new housing in the borough is flats, open space will become increasingly important for offering a variety of functions for a variety of people, not just a visual break from the urban landscape. The value of publicly accessible green space for all has become even more apparent since the world health pandemic caused by COVID-19.
- 15.22 As can be seen in figure 30, whilst the borough has many open spaces, a large proportion of these (40%) are private and therefore not accessible to the public. Private open spaces include uses such as golf courses which do not offer the same value as public open space. As illustrated in the Green Infrastructure Study, the borough's public open spaces offer a range of health and wellbeing benefits and are used for recreation, sport and physical activity, family outings, playgrounds, dog walking, use of facilities, rest and relaxation, socialising, events, food growing, habitats for wildlife and access to nature. Requirements for Public Open Space as part of new developments are separate from, and in addition to, requirements for communal amenity space for residents as these spaces serve different purposes.
- 15.23 New open spaces therefore need to offer more than just a grassed area, they should be created to meet increasing recreational, leisure and nature needs associated with population growth. It is important that new open spaces create multifunctional spaces for all ages with facilities such as playgrounds, sports facilities or MUGAs and natural habitats as well as provide green space. This is

important in smaller parks as well as larger parks, to ensure these spaces contribute to health and wellbeing not just visual amenity.

- 15.24 As highlighted in Section 14, as the population continues to grow and the pressure on space for competing uses increases, under-used grey spaces should be used to provide informal sport and recreational opportunities or natural environments to increase wildlife and biodiversity.
- 15.25 Any new open spaces and play space must not feel isolated or private, all new open space should be publicly accessible, clearly signposted and designed to be inclusive of all ages and abilities.
- 15.26 There is also the need to improve the functionality of existing parks to ensure they are multifunctional spaces to meet to needs of residents. As set out in the <u>Parks and Open Space Strategy 2017</u>, the Royal Borough seeks to provide spaces that offer good quality outdoor sports facilities, improve the health and well-being of residents, provide space for children to play and provide habitats for wildlife.

Allotments

- 15.27 Allotments are an important element of encouraging healthy lifestyles. They support objectives in the Corporate Plan²⁹ to address food poverty and poor nutrition by providing opportunities to grow healthy and affordable food and combat social isolation.
- 15.28 The Royal Greenwich Allotment Action Plan sets out a need to protect and improve existing allotments and secure additional allotment land to meet existing and future demand. However, as the population continues to grow it becomes more difficult to identify large areas of land for allotments when there is an ever increasing pressure to provide more housing.
- 15.29 There may be opportunities to reduce the size of plots within existing allotments to provide smaller more manageable plots for residents³⁰ as well as opportunities to provide new small allotments or community growing opportunities in new developments. This will be particularly important in Charlton Riverside, Plumstead and Greenwich including Greenwich Peninsula considering the current waiting list in and around these areas. These allotments/community growing spaces could be located in grey spaces and on roof terraces but must be clearly accessible.

Biodiversity

15.30 The Green Infrastructure Study found that four SINC sites should be upgraded, three sites require urgent investigation to risk losing their designation, two new sites should be newly designated and six sites should be extended. In addition, a number of SINCs need better management in order to protect their special features and prevent them from becoming at risk. It should be noted that since the Green Infrastructure Study, work has been undertaken at Twinkle Park

²⁹ Royal Greenwich Corporate Plan

³⁰ Royal Greenwich Allotment Action Plan

(one of the SINC sites at risk) by the Twinkle Park Trust to protect its designation by restoring the pond.

15.31 The Parks and Open Space Strategy aims to protect and enhance biodiversity within parks and open spaces owned by the Royal Borough and ensure the future management arrangements support the <u>Biodiversity Action Plan</u> (BAP). It will be important to maximise urban greening and create open spaces that help to make the borough more resilient to climate change by enhancing biodiversity, addressing the urban heat island effect, increasing sustainable drainage and reducing flooding. Landscaping and urban greening should be designed to ecologically enhance and, where possible, physically connect, existing parks and open spaces.

Proposed new designations	Recommended Extensions	Upgrade	At risk
 Charlotte Turner Gardens (to local) Gallions Park, Thamesmead Canal and Gallions Hill (Grade II) 	 Plumstead Common (Winns Common, Black Hill, The Slade) Eltham Palace Fields Woolwich Common Birchmere Royal Blackheath Golf Course Kidbrooke Green and Birdbrook Road Nature Reserves 	 Royal Blackheath Golf Course South (Grad II to Metropolitan Sutcliffe Park Flood Alleviation Scheme (Grad II to Grade I) Westcombe Woodlands (Local to Grade II) Eaglesfield Wood (Local to Grade II) 	 Southwood Recreation Ground Wickham Open Space Twinkle Park

Play and Information Recreation

- 15.32 Traditional play equipment normally caters for younger children and there are limited activities available for older children. As set out in the Parks and Open Space Strategy, the Royal Borough will consider how parks managed by the borough can accommodate play for a wider range of ages and interests. The Royal Borough will consider how to improve areas for teenagers to actively use our parks, in addition to providing play equipment for younger children.
- 15.33 New open spaces should also consider how to provide play for a range of ages and improve formal play facilities for older children 6-11 years old and for ages 12+ as well as provide informal play areas. For instance, larger more challenging facilities for older children could be provided in parks alongside formal play areas for younger children. MUGAs could also be designed to incorporate space for youths to socialise as well as take part in physical activity. The Mayor's <u>Play and Informal Recreation SPG</u> suggests Skate parks, bicycle tracks, climbing walls, adventure playgrounds, fitness trails and open access sports facilities would also provide suitable space for youths.

- 15.34 Whilst informal recreation such as doorstep play space and linear space compliment traditional forms of play such as playgrounds these smaller types of space should not be seen as alternatives to larger open spaces. It is important, especially for larger development sites, that parks and open spaces are large enough to meet the needs of the additional population and offer a range of benefits and functions for all ages. Furthermore, where smaller green spaces are provided in addition to larger parks and open spaces these should create interest with their landscaping and have a clear function such as seating to provide a relaxing tranquil space, natural areas or informal play opportunities.
- 15.35 All large development sites including the Peninsula, Charlton Riverside and Thamesmead will be expected to provide a variety of open spaces as described above.