

London Borough of Redbridge

Infrastructure Delivery Plan 2015- 2030

February 2017

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1 Planning for Infrastructure

1.1 Purpose

1.2 This Infrastructure Delivery Plan (IDP) identifies the infrastructure needed to deliver planned growth sustainably, effectively and at the right time in Redbridge.

1.3 The Council, its partners and other stakeholders will use this document to ensure that the appropriate infrastructure is provided to support the growth anticipated in the Redbridge Local Plan. It will be used to inform decisions on infrastructure delivery, for example, the allocation of Community Infrastructure Levy (CIL) receipts to projects or allocating specific sites for use as schools or other infrastructure. It may also be used where appropriate as supporting evidence in bids for infrastructure funding.

1.4 The IDP will be reviewed on a regular basis and treated as a 'live' document which is updated as new information and evidence become available informed by engagement with key stakeholders.

1.5 Stakeholder Consultation and the Duty to Cooperate

1.6 The Localism Act 2011 sets out a "Duty to Cooperate," on planning authorities and other public bodies. These bodies are set out in Part 2 of the Town & Country Planning (Local Planning) (England) Regulations. The National Planning Policy Framework (NPPF) states that the Duty to Cooperate should particularly focus on the strategic priorities identified in the Local Plan including the provision of infrastructure.

1.7 While there is no statutory requirement to consult on the preparation of an Infrastructure Delivery Plan, it has provided a useful framework for discussions with other public bodies and delivery partners – addressing the duty to cooperate on these matters.

1.8 Since the initial iteration of this IDP (previously known as the community infrastructure plan) was published in 2009, a continuous process of engagement has been undertaken with the following stakeholders:

- Redbridge Council Children's Services (Schools), Early Education, Libraries, Environmental Services, Planning and Regeneration, Adult Social Services, Housing and Adult and Community Education (Redbridge Institute of Adult Education)
- Vision
- Redbridge Clinical Commissioning Group (and previously NHS/HUDU)

- Redbridge College
- Thames Water
- National Grid
- BT
- Metropolitan Police
- The Education Funding Authority (EFA)

1.8.1 This document will be used for continued engagement with these stakeholders and neighbouring authorities which meet on cross boundary issues (see the Council's Duty to Cooperate Statement, 2016). It should be updated to reflect infrastructure delivery priorities and as costs and timescale for delivery are confirmed.

2 Policy and Legislative Context

- 2.1 Changes to government guidance and legislation have modified how infrastructure planning is undertaken and strengthened the link between the local plan and the delivery of infrastructure.
- 2.2 The NPPF clearly states that it is the responsibility of local planning authorities to plan positively for the provision of infrastructure.
- 2.3 It requires that Local planning authorities should “work with other authorities and providers to assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to forecast demand. [Plans] should also take into account the need for strategic infrastructure including nationally significant infrastructure in the area” (paragraph 162).
- 2.4 The NPPF that supports the implementation of the NPPF explains “a Local Plan is an opportunity for the local planning authority to set out a positive vision for the area, but the plan should also be realistic about what can be achieved and when (including in relation to infrastructure)” (paragraph 018). This includes “identifying what infrastructure is required and how it can be funded and brought on stream at the appropriate time; and ensuring that the requirements of the plan as a whole will not prejudice the viability of development” (paragraph 018).
- 2.5 The NPPF goes on to state that, “the Local Plan should make clear, for at least the first five years, what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development.” It also states that the “detail concerning planned infrastructure provision can be set out in a supporting document such as an infrastructure delivery programme that can be updated regularly. However, the key infrastructure requirements on

which delivery of the plan depends should be contained in the Local Plan itself” (paragraph 0.18).

- 2.6 The NPPF also states that CIL should be developed to support and incentivise local development, where justifiable (paragraph 175). Local Plan policies on infrastructure delivery and development are required to operate together, in order to ensure deliverability in a timely fashion.
- 2.7 **Funding Infrastructure through the Community Infrastructure Levy**
- 2.8 The Planning Act 2008 contained enabling legislation for the charging of a CIL, which was then prescribed in detail in the CIL Regulations 2010. The Planning Act 2008 (as amended), defines infrastructure (in the context of the application of CIL) as: (a) roads and other transport facilities, (b) flood defenses; (c) schools and other educational facilities; (d) medical facilities; (e) sporting and recreational facilities; and (f) open spaces. The Planning Act also identifies affordable housing as infrastructure but the CIL Regulations currently exclude affordable housing from being funded by CIL. Instead affordable housing is a ‘planning obligation’ secured through a Section 106 legal agreement between the Council, the developer and any other relevant parties.
- 2.9 The CIL Regulations 2010 (as amended) require that when setting a charge, a balance must be struck between the desirability of funding from CIL to deliver the infrastructure required to support the development of its area, and the potential impact on economic viability of CIL for future development. This means understanding the costs of infrastructure needed to support development in an area and the viability of the development to pay a CIL to support it. The National Planning Policy Guidance (NPPG) provides guidance on how infrastructure planning should be carried out to inform the process of preparing a CIL Charging Schedule. Further information on the Mayor of London’s CIL and Redbridge’s CIL is provided in Section 4 of this IDP.
- 2.10 **Draft Redbridge Local Plan: 2015-2030 and the Redbridge Corporate Strategy 2014 - 2018**
- 2.11 The emerging Redbridge Local Plan 2015-2030 sets out the spatial strategy for sustainable growth in the borough up to 2030, as well as detailed planning policies. The growth scenarios set out in the Local Plan provides the basis for the demand projections in this IDP.
- 2.12 The Council’s Corporate Strategy 2014 -2018 has fundamentally shaped the development of the Redbridge Local Plan. It sets out the

Council's priorities for the borough. The Strategy articulates the Council's ambitions for Redbridge and should capitalise on the boroughs strengths, including diversity of its population, large amounts of green open spaces, regeneration benefits of Crossrail expansion and a thriving small business sector.

3 Community Infrastructure Plan Methodology

3.1 This IDP has been prepared in line with the approach to infrastructure planning set out in the relevant government guidance highlighted in Section 2.

3.2 Determining the Level of Growth

3.3 Population estimates for the plan period states the borough's population is approximately **296,800** (ONS 2015 mid-year estimate). Based on the GLA population projections (short term migration scenario, 2014) the borough's population will grow by **65,200** to reach **362,000** by 2030 (mid-year 2015 estimates suggest a slightly lower population estimate of 360,882 by 2031). Some of this will be from natural population growth (e.g. associated with increased birth-rate and higher occupancy of housing) and some from construction of new homes.

3.4 The proposed Redbridge Local Plan target for housing delivery is 18,936 over the fifteen-year time frame from 2015- 2030. The phasing associated with this is set out in Table 3 A below. The average household occupancy is 2.8 in Redbridge (Census 2011) suggesting that approximately **80%** of the growth will be from residents of planned housing.

Table 3A Redbridge Planned Housing delivery and new job targets by Location and Plan Phase

Investment and Growth Area	Housing Units Phase 1: 2015 - 2020	Housing Units Phase2: 2021 - 2025	Housing Units Phase 3: 2026 - 2030	Housing Units Totals	New Employment Floorspace (Sqm)
1) Ilford	3,985	1, 641	437	6,063	15,000
2) Crossrail Corridor	853	3,243	951	5,047	3,500
3) Gants Hill	187	386	0	573	2,500
4) South Woodford	182	273	33	487	3,500
5) Barkingside	298	215	614	1,128	
Rest of the Borough	1,422	1,210	306	2,938	Not specified
Totals	6927	6,968	2,341	16,237	
Windfalls	0	1,350	1,350	2,700	
Totals with windfalls	6,927	8,318	3,691	18,936	

Source: Draft Redbridge Local Plan 2015 – 2030, February 2017

- 3.5 The growth targets for employment and housing reflect the findings of the Redbridge Employment Land Study (2016). The study recommended that the Council should manage the loss of approximately 12.9 ha of employment floorspace over the plan period. Informed by this evidence, the draft Local Plan identifies specific sites with the potential for redevelopment of employment land for housing with a focus on protecting (and intensifying) high quality successful employment areas. The Redbridge Quantitative Retail Capacity Study (2015) identified that due to *residential* population growth and real growth in expenditure, demand for new retail floorspace will increase with scope for between 23,178 – 38,630 sq.m (net) of comparison retail floorspace and between 6,120 – 10,515 sq.m (net) of convenience retail floorspace.
- 3.6 While employment related uses *will* give rise to some limited infrastructure impacts, particularly related to the public realm and transport, these are less significant than the impact of housing development. Growth from housing will be the primary driver of demand for supporting infrastructure. Accordingly, the IDP focuses *primarily* on demand arising from residential development.
- 3.7 **Scope of Infrastructure Delivery Plan**
- 3.8 The Council has identified the following types of essential community infrastructure that will be required to support this additional demand:
- Education (including early education, primary and secondary schools, further education and adult community learning)
 - Health and care facilities
 - Transport
 - Leisure (sports facilities defined as publicly owned leisure centres, gyms and swimming pools)
 - Library Services
 - Open Space Provision (including publicly accessible open space and allotments)
 - Community Facilities (community centres and meeting places but excluding places of worship; voluntary sector meeting places and centres; and public cultural facilities)
 - Public Emergency Services (fire/police)

- Waste Management and Disposal Facilities
- Decentralised Energy
- Electricity and Gas
- Telecommunications and Digital Infrastructure
- Water and Sewerage

3.9 Sections 5 to 19 of this IDP present a ‘snapshot’ of current provision for each infrastructure type and then makes an assessment of future demand based on growth planned in the Local Plan. Indicative costs and funding sources are identified where possible.

4 Sources of Infrastructure Funding

- 4.1 Infrastructure funding comes from a range of sources. Core funding is primarily from the Council’s own budget but private sector funding also has a role in particular developer contributions secured through CIL payments and site specific section 106 agreements.
- 4.2 Government funding in the UK has seen spending cuts in response to the global and global economic downturn in 2008/9. The government has reduced funding to Redbridge Council by £100m by 2018 and the Council is seeking costs savings of £58 million over the next three years (2016/17 – 2019/2020).
- 4.3 The Council’s capital spending programme established in 2016/17 has been re-profiled to achieve cost savings informed by consultation with communities on budget savings (see Table 4A).

Table 4A Capital Spending Proposals 2016/17

Cabinet Portfolio	2016/17	2017/18	2018/19	2019/20	2020/21	Total
	£000	£000	£000	£000	£000	£000
Corporate Items	4,826	4,826	4,826	4,826	4,826	24,120
A fairer Redbridge	70	50	0	0	0	120
Children and Young People	32,400	30,440	7,155	2,157	1,250	73,402
Civic Pride	3,298	3,175	225	200	200	7,098
Environment and	4,605	4,505	4,505	4,505	4,505	22,625

Sustainability						
Finance and Support Services	4,650	300	150	0	0	5,100
Housing, Payment and Benefits	5,000	4,000	3,000	3,000	0	15,000
Planning, Economy and regeneration	8,200	41,202	40,000	2,000	0	91,402
Total – Capital Spending Proposals	63,049	88,498	59,861	16,688	10,781	238,877
Previously Approved Capital Spending Proposals – 5 March	24,963	41,795	23,725	13,301	0	124,784
Change in Capital Spending Proposals	17,086	41,795	23,725	13,301	0	114,093

4.4 Redbridge Community Infrastructure Levy

4.5 The London Borough of Redbridge began charging the Community Infrastructure Levy (CIL) on 1 January 2012. This is a levy of £70 per square metre on all development over 100 square meters or where a new residential unit is created (with the exception of education facilities and health facilities which are zero rated). This replaced arrangements for this type of funding which was secured through Section 106 agreements associated with the grant of planning permission. Section 106 is now limited to securing affordable housing and other site specific matters.

4.6 CIL receipts received in the period since adoption up to 2015/16 (the last published reporting period) are set out below in Table 4B.

Table 4B Redbridge CIL Receipts 2011/12 – 2014/15

Financial Year	Redbridge CIL Receipts
2011/12	£15,435.00
2012/13	£263,389.00
2013/14	£1,953,018.00
2014/15	£748,033.36
2015/16	£1,564,295
Total	£4,544,170.36

- 4.7 At least 15% of CIL receipts collected in a neighbourhood, up to £100 per Council tax dwelling (or 25% where there is a neighbourhood plan) must be applied towards 'neighbourhood priorities' for infrastructure or any other matters that support development.
- 4.8 Details of projects that CIL have been allocated to are available on the Council's website: <https://www.redbridge.gov.uk/planning-and-building/planning-policy/community-infrastructure-levy/>
- 4.9 While CIL represents an important funding stream, the amounts involved are insufficient on their own to fund significant new major capital infrastructure items such as schools or area wide public realm schemes. CIL will however, provide useful top-up funding when combined with other infrastructure funding sources.
- 4.10 **Other Sources of funding**
- 4.11 Other sources of funding include the Mayor of London's Community Infrastructure Levy and other Transport for London (TfL) funds related to transport. The New Homes Bonus Scheme and retention of business rates may also have a role in supporting infrastructure delivery. More limited opportunities for funding also arise from other grant sources such as Heritage Lottery Fund and the GLA Outer London Fund. These are highlighted where relevant in Sections 5 – 19 of this report.

5 Early Years Education

- 5.1 **Current Provision**
- 5.2 Early Year's provision covers all free early education for 2-5 year olds. The Council delivers early education through maintained nurseries in local primary schools and in partnership with providers in the private and voluntary sector across the authority (independent schools, pre-schools, day nurseries and accredited childminders). Providers have to meet requirements to be part of the Local Authority's Directory of early education provision and are then funded directly to deliver free early education places.
- 5.3 The Childcare Act 2006 places a range of duties on local authorities regarding the provision of sufficient, sustainable and flexible childcare that is responsive to parents' needs. Local authorities are required to take a lead role in facilitating the childcare market within the broader framework of shaping children's services in partnership with the private, voluntary and independent sector. Childcare is defined in Section 18 of

the Childcare Act 2006 as “any form of care for a child” including “education ... and any other supervised activity”.

- 5.4 Local authorities are required by legislation to secure sufficient childcare, so far as is reasonably practicable. Section 6 of the Act defines ‘sufficient childcare’ as sufficient to meet the requirements of parents in the area of children aged 0-14 (or up to 18 for disabled children) who require childcare in order to enable them to take up, or remain in work or undertake education or training which could be reasonably expected to assist them obtain work.
- 5.5 Local Authority responsibilities under the Childcare Act include a duty to undertake an assessment of the sufficiency of local childcare. An initial assessment was undertaken in April 2008 and thereafter the assessment is required on a three year cycle, with a refresh every year. From 1st September 2008, s7 of the Childcare Act 2006 placed a legal duty on local authorities in England to secure free early years provision for eligible 2, 3 and 4 year olds (and 5 year olds who are not yet of compulsory school age) in their area. All three and four year olds and 40% of 2 Year Olds (subject to meeting criterion) are entitled to 15 hours of free nursery education for 38 weeks of the year. This applies until they reach compulsory school age (the term following their fifth birthday). Free nursery education can be delivered by public or private sector providers and parents may pay for additional hours or services.
- 5.6 The statutory requirements imposed through the Apprenticeship, Skills, Children and Learning Act 2009 mean that Redbridge Council must ensure that there is sufficient provision of not only early education places, but also children’s centres.
- 5.7 From 1 September 2017, s1 of the Childcare Act 2016 will place a legal duty on the Secretary of State to secure additional free early years provision for eligible parents and carers of 3 and 4 year olds (and 5 year olds who are not yet of compulsory school age) in their area. Eligible families will be entitled to an additional 15 hours of free nursery education for 38 weeks of the year in addition to the existing 15 hours universal entitlement. This duty may be discharged to local authorities under s2 of the Childcare Act 2016.
- 5.8 Children’s Centres
- 5.9 The core purpose of children’s centres is to improve outcomes for young children and their families and reduce inequalities between families in greatest need and their peers in:
- child development and school readiness;
 - parenting aspirations and parenting skills; and

- child and family health and life chances.
- 5.10 This relates directly to the wider duties local authorities have (under section 1 of the Childcare Act (2006)) to improve the well-being of young children in their area and reduce inequalities between young children in the area. Section 1 of the Act places a specific duty on local authorities to make arrangements to secure that early childhood services in their area are provided in an integrated manner which is calculated to:
- facilitate access to those services; and
 - maximise the benefit of those services to parents, prospective parents and young children.
- 5.11 Children’s centres are key to making this happen. Local authorities are expected to deliver or commission children’s centres to achieve the core purpose as a key component of their strategy to improve the wellbeing of young children. They will need to satisfy themselves that there is evidence of the effectiveness of activities undertaken to achieve the core purpose.
- 5.12 There are currently 17 children’s centres in Redbridge that operate across 21 sites. The location of children’s centres by ward is shown in Table 5A.

Table 5A List of Children’s Centres by Ward

Children’s Centre	Ward
Albert Road	Clementswood
Aldersbrook	Wanstead
Chadwell	Chadwell
Christchurch	Valentines
Cranbrook	Cranbrook
Fullwell and Forest	Fairlop
Gearies	Barkingside
Hainault	Hainault
Loxford and St Luke’s	Loxford
Newbury Hall	Aldborough
Oakdale	Roding
Orchard and Ray Lodge	Roding (<i>Orchard</i>) and Bridge (<i>Ray Lodge</i>)
Peabody	Newbury
Redbridge School	Clayhall
Thackeray Drive and All Saints	Seven Kings (<i>Thackeray</i>) and Goodmayes (<i>All Saints</i>)
Wanstead	Wanstead
Winston Way	Clementswood

- 5.13 Children's centres in Redbridge provide integrated universal and targeted services for young children and their families either directly or through other service providers. The number of children aged 0-5 within an area varies dependent on the local geography and deprivation scores. Children's centres outreach work and family support is a key source of early intervention. Midwives, health visitors, social workers, early years practitioners and other professionals work together to support the most vulnerable families.
- 5.14 Children's centres identify groups that need support through analysis of data, such as obesity rates at reception and the Early Years Foundation Stage Profile data. They also identify particular geographical pockets such as the lower super output areas (LSOAs) that feature highly for child poverty, unemployment, unemployed lone parents, or other factors making them less advantaged. These areas are targeted for outreach activity. By concentrating resources in this way more children and families in need of support can be reached and engage with appropriate services, and reduce the need for access to further statutory services in later life.
- 5.15 Since April 2015, the children's centres implemented a 'Hub and Spoke' model of delivery (see Table 5B) to enable families to continue to have access to good quality services within their local areas despite a reduction in funding.

Table 5B: LBR Children’s Centres Hubs and Spokes Structure since 1st April 2015

North Locality						
Hub children’s centres	Cranbrook		Newbury		Hainault	
Spoke children’s centres	Gearies	Redbridge	Peabody	Christchurch	Fullwell	Forest
West Locality						
Hub children’s centres	Aldersbrook		Orchard			
Spoke children’s centres	Wanstead		Oakdale		Ray Lodge	
South Locality						
Hub children’s centres	Loxford		Thackeray Drive		Albert Road	
Spoke children’s centres	St Luke’s		Chadwell	All Saints	Winston Way	

- 5.16 In the ‘Hub and Spoke’ structure:
- Hub means that the centre is open to the public from 9am to 5pm or 8:30am to 4:30pm every day of the week. Staff are also based there with a reception cover.
 - Spoke means that the centre is open to public as and when a session is being run by the Children’s Centre staff or by a partner agency. Children’s Centre staff are not based there.
- 5.17 Table 5C below summarises the number of early education and childcare places as collated for the Childcare Sufficiency Assessment 2015 (August 2015).

Table 5C: Number of Registered Childcare Places by Type

Type of early education or childcare place	Number of Registered Places
Full time places for children aged under 2 years	1320
Free early education places for children aged 2, 3 and 4 years	8688
Breakfast provision for school-aged children	932
After school provision for school-aged children	1169
Holiday provision for school-aged children	1287

- 5.18 The free entitlement of 15 hours of nursery education has been gradually extended to every disadvantaged two-year-old; 40% of two year olds are eligible nationally in 2016/17. The Department for Education (DfE) works in partnership with the Department for Work and Pensions to provide details of families eligible for a two year old early learning place. In 2015/16 there were approximately 1,500 families eligible for a place each term. The take-up of two year old learning places varied each term with an average take-up of 74% in 2015/16. This was high, particularly in the autumn term where take-up reached 81%, when compared to our statistical and London neighbours.
- 5.19 The number of three and four year olds accessing free funding early years education is now remaining steady. In the spring term 2015, a total of 6,118 children accessed a universal free early learning place. This is 412 places less when compared to summer term 2013, however, this is attributed to each summer term being the highest term of intake.
- 5.20 A number of children’s centres cover a wide area and as such make use of outreach points or service delivery points in order that every community within their reach area has appropriate provision. The number of children aged 0- 5 within a reach area vary dependent on the local geography and deprivation scores.
- 5.21 Whilst the 2015 Childcare Sufficiency Assessment reported sufficient early education and childcare places overall, there continues to be gaps in provision in the childcare market including:
- **Time gaps:** where there is a shortage of childcare at a time that parents/ carers wish to use childcare. These could be at certain times of the day or days of the week, or might be seasonal, for example during school holidays.
 - **Type gaps:** where there is a shortage of childcare for which parents/carers may be expressing a preference.

- **Specific need gaps:** where there is a shortage of suitable places for children with a disability, or children with other specific needs or requirements, including those from particular faiths or community groups.
- **Geographical gaps:** where a geographical area has a general shortage of supply, notably in the South of the borough in particular Chadwell Ward.

5.22 Future Requirements

5.23 The Council commissioned *Cognisant Research* to undertake the Redbridge Pupil Forecasting Study in 2013 to establish the Population Forecasts for new housing developments across the borough. Based on the child yield for flats (likely to be the primary housing development type in the plan period) this would lead to an additional requirement for 7,388 pre-school places in total (See Table 5C).

Table 5C Early Year's Child Yield

	Number of Bedrooms				
	1	2	3	4	TOTAL
PHASE 1 HOUSING UNITS 6,927	1260.71	2285.91	2687.68	692.70	
Pre School Children	390.82	1028.66	1021.32	242.45	2683.24
PHASE 2 HOUSING UNITS 8,318	1513.876	2744.94	3227.384	831.8	
Pre School Children	469.30156	1235.223	1226.40592	291.13	3222.06048
PHASE 3 HOUSING UNITS 3,691	671.762	1218.03	1432.108	369.1	
Pre School Children	208.24622	548.1135	544.20104	129.185	1429.74576

5.24 Demand for early years and childcare provision in an area is generated by both new housing development and levels of local employment. The economically active population in Redbridge is 74%¹. In addition, working careers often prefer childcare closer to their places of work so that they can respond quickly in an emergency. Only 17% of residents in work were employed in the borough according to the 2011 Census. This means that not all of the pre-school places projected based on housing delivery will be required and this makes modelling future demand difficult.

¹ Redbridge Employment and Skills and Enterprise Plan 2015/16, page 17

- 5.25 In practice, as well as population forecasting, the Redbridge Early Years' Service uses local knowledge of the registered places at maintained nurseries within primary schools, nurseries, pre-schools, independent schools and childminders, alongside submissions from providers on funding returns to measure the capacity of early education provider provision on an ongoing basis. There are no further plans for Children's centres and increased demand from new development will be met through the existing hub and spoke model with the main (hub) children's centres supplemented by sessions in other local community settings (as outlined in 5.16 above). This is likely to mean an intensification of delivery in existing and new community facilities rather than bespoke children's centres.
- 5.26 **Cost and Funding**
- 5.27 Existing Children's Centres and Free Early Education places for disadvantaged two year olds are funded through the Dedicated Schools Grant. Free Early Years education places for 3 and 4 year olds are funded through the Dedicated Schools Grant (Redbridge Council Schools all include nursery provision).

6 Primary and Secondary Schools

- 6.1 **Current Provision**
- 6.2 The Authority has a statutory duty to provide sufficient school places for statutory school aged children (5- 16) under section 14 (1) of the Education Act 1996. This requires the Local Authority to manage the supply of places against demand and take appropriate action to supply additional school places as required. Many London boroughs, including Redbridge, have experienced a sharp increase in demand for school places over the last few years. This is largely being driven by an increasing birth rate and the high quality of Redbridge's schools.
- 6.3 Redbridge has a total of 71 schools, including academies, an all-through school providing for the primary and secondary phase, and the first free-school to be opened nationally. The types of school provision within Redbridge, and the provision available for the academic year 2015/16 is illustrated in Table 6A below.

Table 6A Redbridge Schools Academic (2015/16)

Type of School	Number of Schools	Number of School Places	Percentage of Total Places	Average School Size
Infants	5	1350	3%	270
Juniors	4	1790	4%	448
Primary	42	24811	50%	591
Primary – Free-school/Academies	2	1050	2%	525
Secondary	10	10740	22%	1074
Secondary – Freeschool/Academies	6	6064	12%	1014
All-through -Academy	1	2340	5%	2340
All-through – Community	1	1740	3%	1740

6.4 Future Requirements

6.5 The pupil projection methodology produces pupil projections over a 15-year period starting at reception through to year 13. This uses data from a number of sources including the following:

- The reception population is modeled using the live birth data provided by the North East London NHS Foundation trust against the historical reception roll, in order to provide a birth to reception ratio (i.e. the proportion of babies that will take up a reception school place in Redbridge).
- Using admission application data for reception entry and applying a factor to increases to account for students which join throughout the academic year from reception to year 13
- Projected birth rates from the Office of National Statistics (ONS) about those who will enter reception (based on statistics from ONS for 2012 and published in 2013).

6.6 A range of other data inputs are used to ensure accurate projections including current and planned residential housing by ward and GLA projections.

6.7 Planned provision of schools

6.8 The Council agreed at its Cabinet meeting in October 2016, a number of expansions of existing schools to meet projected demand for reception and primary aged pupils for academic years 2015/16 to 2021/22. The Cabinet agreed additional primary places be created both on a temporary and a permanent basis to address the projected deficits. The permanent places, as shown in Table 6B, will be delivered in Phase 1 of the Local Plan (2015 – 2020). Indicative costs associated with these school expansions are provided in Appendix 1.

Table 6B Programme for Primary School Expansion (2015 -2020)

Expansions Phase 1 Local Plan	Primary School	Additional Forms of Entry	Permanent Places created	Provided By
2017/18	Cleveland Road Primary	1	90	1FE Expansion
2016/17	Parkhill Infants	1	90	Expansion to 4FE
2016/17	Parkhill Junior	1	120	Expansion to 4FE
2016/17	Gordon Infants	2	240	Change of age range
2016/17	South Park Primary	1	90	Expansion by 1FE Key Stage 1
2017/18	Al-Noor Primary	2	420	New school
2017/18	Gearies Primary	1	210	Expansion to 4FE
2017/18	Nightingale	1	210	
Total		10	1470	

- 6.9 These permanent expansions are focused on the South and Central area of the borough, aligned with the areas of highest proposed growth identified in the Local Plan (Ilford and Crossrail Corridor). Atam Academy faith free school opened to primary school students offering two forms of primary provision in September 2016. The school opened with 60 places in Reception and 30 places in initially Year 1.
- 6.10 Feasibility studies are also being undertaken on a number of other primary schools (in line with the November 2012 Cabinet Decision to undertake feasibility studies for expansion on all schools sites where Redbridge owns the land and is the admissions authority). The Council will need to wait until the outcome of these studies is known before they can advise on likelihood of expansions and the quantum of places arising.
- 6.11 Secondary schools typically serve a wider catchment as pupils of that age tend to travel further distances to attend school. There are two major expansions planned to Secondary Schools in Phase 1 of the Local Plan (2015 – 2020). These are shown in Table 6C below and indicative costs provided in Appendix 1. In addition, Ilford County and Woodford County High School each took the additional increases of 60 pupils each in Year 7 from September 2016.

Table 6C: Programme Secondary School Expansion (2015 -2020)

Expansions Phase 1 Local Plan Secondary School	Addition Forms of Entry	Permanent Places Created	Location
Expansion of Ilford County School	Two Forms of Entry	60 places per year group 420 in total	South
Woodford County High School	Two Forms of Entry	60 places per year group, 420 in total	North

- 6.12 It is anticipated that Atam Academy will start to offer 120 secondary places from September 2018. There is an application for 1260 place all-through Atam Academy for 4-19 year olds with additional 52-place

nursery at a development site south of Redbridge College, Little Heath, Chadwell Heath, Romford.

- 6.13 Even with the delivery of schools identified above in Phase 1 of the Local Plan period (2015-2020, shown in Table 6B and 6C above) and the temporary provision of additional classes, the Education department has advised that the most recent projections undertaken suggest that there will likely to be requirement for a further 10 primary school forms of entry (FE) - equivalent to 2,100 primary school places and 47 secondary forms of entry (FE) - 9,870 secondary school places over the life of the plan. This is calculated with reference to the projected need for reception places and year seven places by 2027/28 (see Table 6D – the inputs and factors influencing these estimates are outlined in 6.5 above).
- 6.14 The actual number of new schools required will vary depending on the quantum of places delivered through expansions (although opportunities for this are diminishing) and/or the size of schools delivered. Redbridge primary schools range from two to five forms of entry and secondary schools from six to twelve forms of entry. Some Free Schools will be smaller than this. But applying the average size of four FE for primary schools and eight for secondary suggests a need for the equivalent of three further primary schools and six secondary schools.

Table 6D: Projected need for primary and secondary forms of entry (2016)

Academic Year	Reception forms of entry	Y7 FORMS OF ENTRY
15/16	0	0
16/17	0	0
17/18	-1	-1
18/19	0	-4
19/20	-2	-11
20/21	-8	-10
21/22	-11	-18
22/23	-11	-26
23/24	-11	-33
24/25	-11	-34
25/26	-11	-33
26/27	-11	-37
27/28	-10	-44
28/29	-10	-47

- 6.15 The level of demand required throughout the plan period represents the high child yield in the borough associated with new development and the pace of population growth. This shows that deficits (in the absence

of any provision) will emerge towards the end of Phase 1 of the plan (2015 -2020). Therefore, delivery of education facilities early in the plan period is essential to ensure that there is sufficient capacity to meet demand (although it seems likely housing delivery will be skewed towards the end of Phase 1). This will need to be carefully monitored over the plan period.

- 6.16 In response to this level of demand, the Local Plan provides a framework for the delivery of schools to meet demand arising from the growth in housing projected in the plan. There are three elements to this approach as illustrated below:



- 1. Identification of schools sites:** the Council has identified Ley Street Car Park and Bus Depot, Ilford and Redbridge Enterprise and Ilford Retail Park, Ilford as potential sites suitable for primary education set out in Appendix 1 of the Local Plan.

- 6.17 **2. Major comprehensive mixed used development of ‘key opportunity sites’:** The local plan identifies strategic sites for mixed use development including education infrastructure this includes:
- (1) Crossrail Corridor: Land around King George and Goodmayes has been identified for mixed use redevelopment including secondary school provision (Local Plan Phase 1 2015 – 2020)*
 - (2) Crossrail Corridor: Ford Sports Ground has been identified for mixed use redevelopment including secondary school provision (Local Plan Phase 2/3: 2020 – 2025 and 2025-2030)*
 - (3) Crossrail Corridor: Land at Billet Road has been identified for mixed use redevelopment including secondary school provision (Phase 2/3: 2020 – 2025 and 2025-2030)*
 - (4) Oakfield Forest Road, Barkingside has been identified for mixed use redevelopment including secondary/ all through school provision (Phase 3 2025-2030)*
- 6.18 These sites will be subject to a detailed masterplanning process as outlined in the Local Plan. The intensification of these brown field sites and the managed release of the Green Belt sites of Oakfield, King George and Goodmayes Hospitals, Ford Sports Ground and land at Billet Road will accommodate this demand for schools and ensure that infrastructure provision is aligned with demand. This reflects the position in the Cabinet Update (October 2016) on Pupil Place Projections which identified the limited capacity for expansion on existing sites and need to identify new sites to support future demand.
- 6.19 **3. A supportive policy framework for school expansion and intensification:** Even with the delivery of the sites identified above (two primary schools and, based on the projections in Table 6D above there could still be a shortfall of two primary schools (or equivalent expansions) and three (or equivalent expansions) to secondary schools based on current projections. This further demand will need to be met through a combination of extensions to existing schools and identification of further schools sites.
- 6.20 Accordingly, the Local Plan provides a supportive policy framework for the delivery of education facilities which are identified as a priority in the growth areas (LP1A: Ilford, LP1B: Crossrail Corridor, LP1C Gants Hill, LP1D: South Woodford, and LP1E Barkingside).
- 6.21 There has been interest from free-school providers to create new provision within Redbridge. City Gates are seeking to open an all-through school with 2FE primary provision and 4FE secondary

provision. They are in the process of identifying a suitable site. The application has been approved by the DfE. The Harris Academy has expressed interest in opening a 6FE secondary academy school in the West of the borough, and have expressed interest for the former Chigwell Police site.

- 6.22 Expansion of Wanstead secondary school in the west of the borough may also come forward in Phase 1 defined in the Local Plan and would contribute to additional secondary school places over this period. Initial feasibility studies have been conducted on Wanstead High School for a possible permanent expansion from 8FE to 10FE creating 420 additional secondary school places.
- 6.23 In the longer term (Phase 2/ 3 of the Local Plan from 2020), there may also be opportunities to consider comprehensive re-development as distinct from expansion of existing schools to provide increased capacity. However, this is a longer-term option as sites at which expansion is feasible need to be identified and appropriate arrangements around decant of existing students.
- 6.24 It is worth recognising that while the need for additional school places is high, it is important to see the level of demand within the wider context of school place planning and delivery. Over the last 10 academic years, the Council has provided permanent primary provision of 38.5 forms of entry, which equates to 8,085 primary school places. In the secondary sector for the same time period, Redbridge has delivered secondary permanent provision of 21 forms of entry which equates to 4,340 secondary school places.
- 6.25 Feasibility studies (in line with the Council's earlier decision in Cabinet on 6th November 2012 to assess capacity for school expansions) are on-going as noted in paragraph 6.18 above and initial investigations on redevelopment or new site identification are underway.
- 6.26 **Costs and Funding**
- 6.27 The likely costs of delivering the school places required will depend on land costs and whether it is a new school or expansion. A useful benchmark is provided by the DfE costs per pupil place, identified based on local factors and actual build costs associated with planned extensions in Local Plan Phase 1 (2015 – 2020), is likely to provide a more useful indication of build costs (although the costs of land will vary).

Table 6E: Projected need for primary and secondary forms of entry (2014)

	DFE Cost 2016 Costs per pupil place	Actual build costs for programmed to 2017/18
Primary Place	£16,495	£21,860
Secondary Cost	£21,444	£27,493

- 6.28 There is a requirement for an additional **2,100** primary school places and **9,870** secondary places. Using the actual build costs programmed to 2017/18 suggests costs in the region of **£45,906,600** for primary provision and **£271,355,910** for secondary school provision.
- 6.29 The costs of delivery of primary and secondary schools identified above will be met through DfE/ Free School funding and Redbridge's own budget. Delivery in the early phase of the Local Plan will be enabled by DfE allocation of **£25,920,233.17** (this recent allocation is highest in London reflecting the level of demand). As identified in Section 3 of this report, Redbridge CIL receipts have been applied to fund capital expansions to education facilities and this should remain a priority use. This is reflected in the emerging Local Plan.

7 Further Education and Adult Community Learning

7.1 Current Provision

- 7.2 There are two providers in Redbridge; one Further Education (FE) College and one Adult and Community Learning (ACL) provider. Redbridge College has its main campus at Little Heath and a flexible learning centre in Ilford Town Centre. It has approximately 12,200 m² of floorspace and the Little Heath site has an area of 5.7 ha. This provides for the education of 4,000 students from Key Stage 4 and upwards. Most of these students are enrolled full time in formal vocational education. Approximately 60% of the students are drawn from within Redbridge and the remaining 40% from outside the borough. The college is currently reviewing the educational options available, in particular University College Status.
- 7.3 Redbridge Institute Community Learning and Skills has its own campus – the Gearies Learning Centre at Gaysham Avenue in Gants Hill. This has a floorspace of 2,400 m² on a 1.8 ha site and an annual enrolment in excess of 8,500 part-time students. These include a small number of 16 to 18 year olds and adult learners on vocational courses from Entry level to Level 5, employability provision for mandated learners referred

by Job Centre Plus, personal and community development learning including volunteering, neighbourhood learning in deprived communities and family learning (including family English, maths and language). The Institute has extended its building to provide additional classrooms to meet the increasing demand. In total, 39% of provision is delivered through outreach services and partnership working in Children's Centres, libraries, community and school venues.

7.4 The catchments of further education institutions typically overlap local authority boundaries. Institutions based in Redbridge also serve the population of other local authorities, while some Redbridge residents will study elsewhere. Although it is worth noting that the percentage of Redbridge Institute students resident in in the borough has increased from 80 to 85% with the increase in provision for unemployed residents.

7.5 **Future Requirements**

7.6 There are no set standards for further education places based on population, however, figures from the Data Service Further Education and Skills Statistics (2013) shows 535,680 learners in further education in London in the 2011/12 academic year is made up of 408,760 adults and 126,920 16 to 18 year olds. Against a population of 8.2 million (ONS Census 2011), this equates to one learner for every 15 people. In Redbridge 3,820 16-18 year olds and 16,320 adults from Redbridge participated in further education in 2011/12 (Data Service 2013); an increase from previous years. Based on the 2011 Redbridge population of 288,970, this equates to one learner per 14.3 people, indicating that approximately 15 learners per person is a reasonable reference point.

7.7 Based on this, a further **4,346** places could potentially be required to serve the **65,200** new residents. Case studies² of further education colleges in Redbridge and elsewhere indicate a floorspace requirement per further education student of 1.43 m². Based on this figure a further 6,214 sqm of floorspace would be required to meet this national demand. However, this represents a broad and indicative estimate.

7.8 **Costs and Funding**

7.9 Additional demand might be met by more intensive use of the facilities rather than expansions or new build space. The need for additional floor space should be kept under review.

7.10 Redbridge Institute Community Learning and Skills and Redbridge College are funded through grants from the Skills Funding Agency

² LBR Urban Development Capacity Study Infrastructure Analysis, GVA Grimley October 2008, para 3.31.

(SFA). Providers also receive income from tuition fees, but this is tied to delivery costs as learners not in receipt of work related benefits or actively seeking work are not subsidised.

8 Health and Care Provision

8.1 Current Provision

8.2 The Health and Wellbeing Board works in partnership at a strategic level to improve the health and wellbeing of people in Redbridge. By bringing together and working in partnership with a range of public services including adult social services, GP's, the Clinical Commissioning Group, local Healthwatch, public health, children's services, housing and community safety organisations, it aims to:

1. Promote the role of health and wellbeing to its population using an all-inclusive approach to tackle the wider determinants of health and wellbeing;
2. Provide collective leadership and joint working to bring the most appropriate results to our communities;
3. Be committed to making the best use of resources to improve health and wellbeing outcomes for the population of Redbridge; and
4. Recognise the importance of targeting and focusing integrated services on those patient groups most likely to derive the most benefit.

8.3 The identified strategic priorities are:

- **Improve life chances for children** and young people to maintain optimum physical and mental wellbeing and safety.
- **Healthy communities** – residents are supported to lead healthy lifestyles and manage risks to wellbeing including mental health.
- **Prevention and Early Intervention** – services support residents to manage long term conditions and avoid unnecessary hospital admissions.
- **Maximise the health benefits** for our communities by supporting children and vulnerable adults including older people and those with mental health needs to access good quality information advice and advocacy.

8.4 Current health facilities/ properties in Redbridge include:

- King Georges Hospital (acute)
- Goodmayes Hospital (mental health)
- Hainault Health Centre
- Loxford Polyclinic
- 46 general practices
- 47 dental practices
- 58 pharmacies

- 15 optometrists
 - 13 NHS PS properties
 - 41 NELFT properties
- 8.5 Since April 2013 the property ownership of the former Primary Care Trust has fragmented several ways and the ownership of NHS Estate has been split between two Department of Health controlled companies:
- Community Health Partnerships (CHP) hold all the new LIFT/PPP buildings
 - NHS Property Services (NHS PS) hold all the leased and PCT owned estate.
- 8.6 The current NHS estate is in a variable condition. It is not always in the right location to deliver local services to the population and it is often not fully utilised. Commissioners and providers need to make better use of the existing estate, where major issues include:
- Void or underutilised space.
 - Inappropriate tenants – for example, core clinical space is often filled with administration and support services. These services could be relocated, in most cases more cheaply and the space could be used to accommodate integrated clinical services.
 - Lack of joint working across organisations where new buildings are commissioned close to existing estate, which could have been utilised, potentially negating the need for the new facility.
- 8.7 There has been significant investment in the last decade with 13 new ‘polyclinic’ health centres, Queen’s Hospital PFI and Barking Community Hospital all newly built. These centres will be at the centre of future care delivery.
- 8.8 Redbridge residents do not solely rely on services from King Georges Hospital. There are significant outflows to hospitals out of borough which also contribute to meeting requirements for health facilities in Redbridge. In 2014/15, out of the total activity for which Redbridge CCG was responsible as a commissioner (Redbridge GP registered population), the following are the proportion of inpatient activity where the provider was Barts, Whipps Cross or Newham hospitals:
- 31% of elective care episodes
 - 37% of emergency episodes
 - 35% of maternity episodes
 - 40% of other care episodes
- 8.9 For outpatients care these providers accounted for:
- 32% of activity in out-patient care
 - 25% of A&E outpatient visits

8.10 Future Requirements

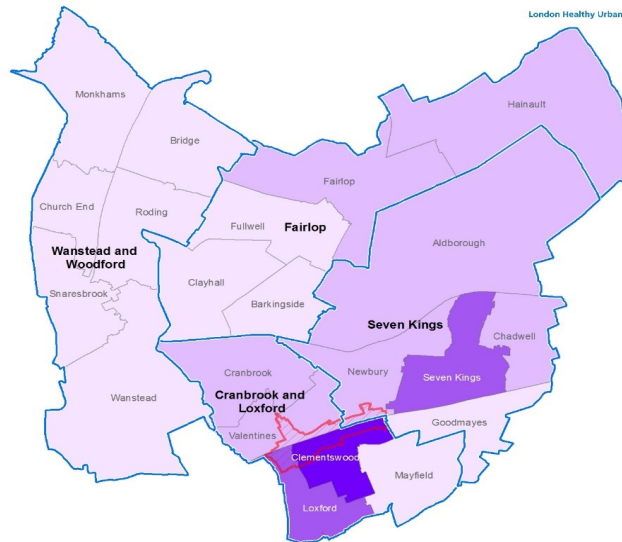
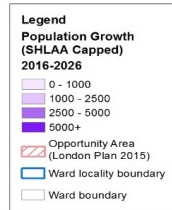
8.11 Redbridge is sub-divided into four locality areas for health planning purposes: (1) Wanstead & Woodford; (2) Fairlop (3) Seven Kings and (4) Cranbrook & Loxford . Map 8A shows that nearly three-quarters of all new homes could be developed on sites in the Cranbrook and Loxford and Seven Kings Localities between 2015 and 2025.

**Table 8A: Population
Yield by Locality**

Locality	Phase 1 2015-2020	Phase 2 2021- 2025	Phase 3 2026- 2030	Total
Wanstead and Woodford	348	2,397	892	3,637
Fairlop	2,250	2,463	2,575	7,288
Cranbrook and Loxford	10,949	5,707	1,106	17,762
Seven Kings	3,073	8,302	3,557	14,932
Total	16,620	18,869	8,130	43,619

Map

8A:



Source: GLA 2015 Round Projections
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Population Growth by ‘Locality Area’

8.12 Table 8B below based on the ‘HUDU model’, estimates the demand for primary healthcare in terms of FTE GPs and primary healthcare floorspace arising from the housing growth identified in the Local Plan. The outputs are provided by locality and phase (this is based on the London Plan housing target of 16,074), but provides an indication of the likely distribution of demand which will be slightly higher based on the Council’s housing trajectory. The HUDU Model definition of primary healthcare floorspace includes space for GP services and wider primary and community care services derived from Health Building Note 11-01: Facilities for Primary and Community Care Services (page 16, HBN 11-01).

TABLE 8B: Demand for Primary Health Care by Locality

Locality	Phase 1 2015-2020		Phase 2 2021-2025		Phase 3 2026-2030		Total	
	FTE GPs	Primary care m2	FTE GPs	Primary care m2	FTE GPs	Primary care m2	FTE GPs	Primary care m2
Wanstead and Woodford	0.2	33	1.3	226	0.5	84	2.0	343
Fairlop	1.3	213	1.4	233	1.4	243	4.1	689
Cranbrook and Loxford	6.1	1,034	3.2	539	0.6	104	9.9	1,677
Seven Kings	1.7	290	4.6	784	2.0	336	8.3	1,410
Total	9.3	1,570	10.5	1,782	4.5	767	24.3	4,119

Source: HUDU Model and HBN 11-01

8.13 Table 8C, based on the same data, estimates the demand for additional GP clinical rooms by Locality based on the HUDU Model.

TABLE 8C: Demand for Additional GP Clinical Rooms

Locality	Phase 1 2015-2020	Phase 2 2021-2025	Phase 3 2026-2030	Total
Wanstead and Woodford	0	2	1	3
Fairlop	2	2	3	7
Cranbrook and Loxford	11	5	1	17
Seven Kings	3	8	3	14
Total	16	17	8	41

Source: Department of Health HBN 11-01

8.14 Barking & Dagenham, Havering and Redbridge (BHR) Clinical Commissioning Groups are developing a Local Strategic Estate Plan (SEP) which is intended to support the health economy to create a fit for purpose estate at less cost, specifically addressing:

- changes in demography and population demand;
- changes in the way that health care services are provided - specifically reflecting plans for integrated health and social care, greater levels of care within communities and new commissioning models;
- challenges in funding and affordability.

8.15 The STP and Primary Care Transformation plans seek to deliver primary care at scale, improve access to services and support a local accountable care system centred on a locality model, delivering

primary and community services to populations of 50,000 to 70,000 patients.

- 8.16 The CCG's Primary Care Infrastructure Plan concludes that the nature of the existing estate (much of it in converted domestic premises), along with existing patient to GP ratios, indicates limited scope for greater utilisation of the existing estate through matters such as refurbishment, physical
- 8.17 extensions, and extended opening hours. As such, some new healthcare facilities will need to be provided alongside investment in those areas of the existing estate that does offer scope for greater utilisation.
- 8.18 Areas where investment in new or reconfigured healthcare facilities will be required correlates strongly with areas where population growth is expected to be highest; since this will place increased pressure on existing services. Across the borough, key requirements over the Local Plan period can be broken down as follows:
- Cranbrook and Loxford – investment in Loxford Polyclinic to enable better utilisation in the early phases of the plan, and provision of a new health hub as part of developments proposed in Ilford town centre;
 - Seven Kings – investment into some reconfiguration of Newbury Park Health Centre, provision of a new health centre at Goodmayes, and a new health hub as part of the proposed redevelopment at King George and Goodmayes Hospitals;
 - Fairlop – investment in some reconfiguration of Hainault Health Hub, and redevelopment and modernisation of Fullwell Cross Health Centre or provision of a new Locality Hub as part of the proposed Oakfield redevelopment;
 - Wanstead and Woodford – redevelopment of Wanstead Hospital as a new locality hub and key worker accommodation, and investment in South Woodford Health Centre to increase capacity.
- 8.19 The Council and health bodies are moving toward greater integration of adult care and health services. There is a focus on prevention and focus on primary care delivery of community services. This will be reflected in the emerging Strategic Estates Plan being developed by Redbridge Clinical Commissioning Group (CCG).
- 8.20 The Council is taking a proactive approach, actively engaging with Redbridge CCG which is committed to closer working to ensure health needs are met. The Council and the CCG have engaged in ongoing and continuous dialogue to better understand the implications of growth

projected through the Local Plan on existing and planned future primary healthcare provision.

8.21 The Local Plan provides a supportive framework for the delivery and improvement of facilities to meet these needs. The Local Plan Policy LP18 Health and Wellbeing is also relevant and states that the “Council will support the provision of new or improved health facilities, in line with Redbridge’s Clinical Commissioning Group and NHS England requirements; and protect existing health facilities in line with policy *LP17 Delivering Community Infrastructure*. Health facilities identified as a priority for delivery in the growth areas (LP1A: Ilford, LP1B: Crossrail Corridor, LP1C Gants Hill, LP1D: South Woodford, and LP1E Barkingside) and a number of sites allocations identify health facilities as appropriate uses (See Appendix 2).

8.22 **Costs and Funding**

8.23 Redbridge Clinical Commissioning Group (CCG) is now responsible for buying healthcare on behalf of Redbridge. The Better Care Fund set up the government to help local areas make the changes to services that might be needed in order to join up services around health and social care (this is overseen by the Health and Wellbeing Board).

9 Transport

9.1 **Current Provision**

9.2 Redbridge benefits from the following network of transport infrastructure:

- It lies on the main East Anglia to London Liverpool Street train line on a section of track that is benefitting from Crossrail investment. Crossrail is a £14.8bn rail project that will connect the existing railway from Shenfield and Abbey Wood in the east of London with Reading and Heathrow Airport in the west via a new underground link through central London. It is set to be delivered by 2019.
- TfL Rail services with stations at Ilford, Seven Kings, Goodmayes and Chadwell Heath.
- London Underground services (zone 4) on a Central Line branching loop which extends to the north of the borough and has stations in clockwise order at Snaresbrook, South Woodford, Woodford, Hainault, Fairlop, Barkingside, Newbury Park, Gants Hill, Redbridge and Wanstead.

- Well served by 34 bus routes, with most focused on Ilford as the major interchange.
 - A major arterial road network, mostly serving through-traffic, including the A12, M11, A406, A1400. The A12 runs east-west through the central area of the borough, linking Central London and East Anglia. The A406 meets the M11 east of South Woodford connecting London with Stanstead Airport and Cambridge.
 - A secondary road network.
 - A network of cycleways and pedestrian footpaths.
- 9.3 Redbridge has four stations on the proposed Crossrail route (Ilford, Seven Kings, Goodmayes and Chadwell Heath). Ilford Depot will provide Crossrail's main stabling facility in the east of London. Once operational Crossrail will reduce congestion on existing rail and Underground links, increase reliability and significantly reduce the journey time from Redbridge to Canary Wharf, central London and Heathrow Airport. This project is set to improve accessibility and connectivity to the wider London area and will be a major catalyst to promote investment and regeneration that delivers a wide range of local benefits.
- 9.4 The Local Implementation Plan (LIP) 2 (2011) document set out the borough's strategic transport objectives for 20 years to implement the goals of the Mayor of London's Transport Strategy. This was supported by delivery proposals and spending plans for the years 2011/12 to 2013/14 and 2014/15 to 2016/17. This assisted in securing funding for projects from TfL through their annual LIP spending submissions process.
- 9.5 The 2016/17 TfL settlement is the final year of the current three year LIP funding period. Future LIP funding is dependent on the outcome of Central Government's Comprehensive Spending Review (CSR) and the implications for the wider LIP process now that a new Mayor of London has been appointed. For example, a new Mayor's Transport Strategy may require boroughs to prepare new strategic LIP documents (LIP3).
- 9.6 Road congestion is a general issue for the borough's road network. This is experienced particularly acutely on the M11, A406 and A12. It is believed that the provision of Crossrail and high quality bus services such as East London Transit will help to alleviate congestion, although the issue is likely to persist, as the population continues to grow. Diversion of bus route 462 from January 2016 has provided a bus linkage to Fairlop Station for the first time. Major improvements planned

for public transport services within Redbridge are currently confined to the introduction of Crossrail on the current mainline rail alignment in 2019 with associated modifications of Ilford, Seven Kings, Goodmayes and Chadwell Heath Stations.

9.7 The Council's Local Implementation Plan submission to TfL for the 2017/18 financial year builds upon the local transport improvements up to 2016/17, outlined in the second Spending Plan period of Local Implementation Plan 2. These documents include and describe improvements to road corridors, shopping parades, traffic management, cycleways and pedestrian connections to complement the Mayor of London's Transport Strategy Plan. However, there are currently no "big ticket" capital items such as new highways, and much expenditure is for ongoing programmes such as street maintenance.

9.8 **Future Requirements**

9.9 The LIP 2 recognises that sub-regional growth projections to 2031 indicate 50% of London's population growth will be in the East London Region. There is significant employment growth projected in the City, West End, Canary Wharf and Royal Docks. Redbridge will be well connected to these growth areas by Crossrail and the TfL Road Network. It sets out a commitment to work with Network Rail to balance capacity and demand for travel through increasing public transport capacity at the four Crossrail stations in the borough in the run up to Crossrail being delivered in 2019. The Council will also work with TfL to smooth traffic flow on the TfL Network and Strategic Road Network and address congestion hot spots associated with growth in the borough.

9.10 Strategically positioned within the Thames Gateway and the London – Stansted – Cambridge growth corridors some parts of the borough will see transformational change with opportunities to be exploited by the arrival of Crossrail and the improved connectivity it will bring to the area. The potential scale of new development at proposed Investment and Growth Areas within the Local Plan will generate a need for additional junction, highway, accessibility and sustainable transport improvements and upgrades and mitigation measures in the relevant areas where there will be increased traffic congestion and pressure.

9.11 The LIP recognises that there are several significant development sites in Redbridge that are currently under construction, or offer the potential for major residential, education, leisure or commercial development. Appendix 1 of the Local Plan identifies these development opportunities. Redbridge aims to implement schemes at housing growth sites to provide improved transport connectivity between these areas, increase accessibility and reduce vehicular trips.

- 9.12 Planning for Crossrail delivery is led by TfL. However, the Council is primarily responsible for complementary initiatives, e.g. delivering urban realm improvements in the vicinity of the Crossrail stations. The Council has secured additional external funding from TfL (via the Crossrail Complementary Measures fund) to support S106 and CIL contributions of its own for these improvements. Until 2018/19, these funding combinations will deliver substantial streetscape and pedestrian or car park enhancements in close proximity of Ilford, Seven Kings, Goodmayes and Chadwell Heath stations.
- 9.13 The Council has allocated £12m for improvements in Ilford Town Centre for the integrated Ilford masterplan which covers the key growth area identified in the Local Plan. The Council has received a further £400,000 from TfL towards the development of the Ilford Town Centre public realm improvements and will be submitting further revised bids later in 2017. These improvements include upgrades to the High Road corridor between Cranbrook Road and Clements Road (east), and its Oakfield Road, Chadwick Road and Clements Road linkages.
- 9.14 The Council received over £1million from TfL over the two year period 2015/16 to 2016/17 to progress measures to introduce a Wanstead Park to Barkingside Quietway cycle route across the borough, due for completion in Spring 2017. Even when coupled with separate funding secured from various sources (including the Mayor of London's Big Green Fund) to complete the Roding Valley Way route south of Redbridge roundabout in 2016, it is likely that additional funding will be required to install cycle route linkages between the core Quietway (formerly Greenway) route and the Council's growth areas.
- 9.15 An assessment of opportunity sites at Billet Road, Oakfield Playing Fields and land in and around King George and Goodmayes Hospitals, including the Ford Sports Ground, has been carried out and concludes that development at these locations can be accommodated on the highway network over the Local Plan period to 2030. Furthermore, a borough wide Transport Assessment (2017) has been undertaken to consider the impact on the highway network from planned housing growth. In terms of vehicular trips, the quantitative assessment has found that the pattern of growth is predicted to vary across the borough. The most significant increases in traffic demand are reported in the main Investment and Growth Areas and are also concentrated upon key strategic routes such as the A12 and A118 High Road.
- 9.16 At the appropriate stage in the process, Transport Assessments will need to be produced to accompany planning applications and these should provide additional detail concerning the specific proposals, including the site access arrangements, land use(s), location and

predicted travel characteristics and impacts. Where appropriate, scheme mitigation will need to be proposed and LBR will look to secure contributions in addition to CIL, where scheme specific improvements are required.

- 9.17 The need for better walking and cycling infrastructure to improve access to parks and open spaces is discussed within the open space section of the IDP. In particular, the possibility of securing sustainable access to the River Roding leisure route via a new connection towards Ilford Town Centre is also being explored. A new bridge over the River Roding would provide a new pedestrian and cycling link between the London Borough of Newham towards Ilford Town Centre. The Council's preferred option is for this to be towards Ilford Golf Course from close to the Wanstead Park Road/ York Road junction, but an alternative location to cross the Roding in south Ilford and link Lavender Place in Redbridge with Little Ilford in LB Newham has also been studied. As of yet, there is no confirmed funding to take this project forward, but the Councils preferred option would be a useful way of opening up access to open space (River Roding linear park). This would be particularly valuable in light of the intensification of development in Ilford. This proposal is intended for discussion with the Mayor of London's new Walking and Cycling Commissioner.
- 9.18 Locally, the need for many physical transport improvements associated with individual development will be determined on a site specific basis. Costs cannot be predicted in advance and will have to be calculated in the context of individual development applications. Such sites specific improvements will be secured, where appropriate, through S106 agreements.
- 9.19 The projects outlined above are set out in Appendix 1 with associated project costs where known. However, this is not an exhaustive list for the entire period up to 2030. Projects identified for 2018/19 and beyond will be influenced by proposals and funding opportunities arising from publication of the Mayor's revised Transport Strategy for London.
- 9.20 **Costs and Funding**
- 9.21 The cost of constructing the Crossrail project and associated station infrastructure is being met from external sources, including Mayoral CIL, which the Council collects on behalf of the Mayor of London and transfers to TfL. No neighbourhood funding element applies to the Mayor of London's CIL. The total amount of Mayoral CIL received by the Council and transferred to TfL (excluding the 4% administration fee

retained by Redbridge Council for collection) was £969,796.57 in the period January 2012 to 15/16. This contributes to the target £600million of the £14.8bn total project cost that will be secured through CIL and Section 106 receipts secured across London.

- 9.22 In addition to internal Council funding, new capital transport projects receive significant funding from TfL. Capital investment from the Mayor of London/ GLA towards highway and public transport accessibility improvements in the Ilford Hill western gyratory area, in connection with the Council's Ilford Town Centre area Housing Zone bid, has been secured in principle and initial feasibility studies have been progressed to identify preferred scheme options and costs. Fully sourced funding packages to implement these measures will take some time yet to be worked up.

10 Open Space

10.1 Current Provision

- 10.2 An audit of the publicly accessible open spaces in Redbridge is set out in the Redbridge Open Space Study (2016). The greatest quantity of publicly accessible open space falls within the parks and gardens typology covering an area of 465.17 ha. This is closely followed by natural and semi-natural green spaces which cover an area of 329.19 ha.

- 10.3 The London Plan (2016) sets out a Public Open Space Hierarchy which categorises open spaces by their size and the catchment area that they serve. This ranges from Metropolitan Open Spaces (size guideline of 60 hectares with a catchment of 3.2 kilometers) down to Small Open Spaces (size guideline of under 2 hectares with a catchment of less than 400 metres). Included with these areas are:

- Golf complexes at Fairlop Waters and Hainault Forest Country Park.
- Athletics grounds at Cricklefields and Ashton Playing Fields.
- Cycle routes in Loxford Park, Goodmayes Park and Forest Park Playing Fields and the London Marathon Redbridge Cycling Centre at Hog Hill.
- The newly opened High Ropes and Climbing facility at Fairlop Waters.
- Skate parks at Seven Kings Park and Forest Road Playing Fields.
- A dual use water sports facility incorporating the Fairlop Outdoor Centre at Fairlop Waters.

- Eight multi use games areas (MUGAs).
- 43 sites that include one or more formally designated children's playgrounds (primarily for under 14 use), covering a total of 6 hectares.

- 10.4 In addition there are 24 allotments sites, 14 directly let and 10 run by allotment societies provide opportunities for people to combine the mental health benefits of spending time outdoors with physical benefits from healthy eating and lifestyles (Redbridge Leisure Strategy 2015 - 19). There have been recent improvements made to some of the plots to make these benefits accessible to disabled residents. Section 23 of the Small Holdings and Allotments Act 1908 states that where an allotments authority is of the opinion that there is demand for allotments in its area, the authority has a duty to provide a sufficient number of allotments and to let them to persons residing in its area who want them.
- 10.5 The Open Space Assessment (2017) compares existing provision with accessibility standards to show the levels of open space deficiencies within the borough. It highlights that despite being one of London's greenest boroughs, a significant proportion of the borough's residents are deficient in access to two levels of the open space hierarchy, which can in part be explained by large areas of land that are not available for informal recreation, such as agricultural land or playing pitches only available for private hire. Deficiencies in public open space are not necessarily uncommon in a London context, and the vast majority of residents are within the catchment area of a metropolitan scale open space. In addition a large proportion of the borough's residents are within the catchment area of a district open space. It is therefore important that these spaces are conserved and sensitively managed to ensure they are able to respond to the anticipated increase in use as well as the likely impacts of a changing climate.
- 10.6 The greatest challenge will be to alleviate deficiencies within dense urban environments, particularly Chadwell, Seven Kings and Goodmayes in the south of the borough, and Monkham's and Roding Wards in the northwest of the borough. In such locations, it will be vital that access to surrounding open spaces is fully promoted and any barriers to access removed/alleviated. Attempts should also be made to increase the amount of publicly accessible open spaces available in these areas through securing opportunities brought about by proposed development. The open space standards outlined in Section 4 of the Open Space Study (2017) and policy LP35 of the Local Plan should be used to guide the amount of open space that should be provided within a specific development.
- 10.7 The extent to which a development should be expected to contribute to open space depends on a range of factors, including the size of development, number and types of residents/dwellings as well as the

existing open space resources in and around the planned Investment and Growth Areas.

- 10.8 Barkingside is the area most deficient in allotment provision, with many residents more than 1.2km from the nearest allotment. There is also limited access to allotment sites for residents within Ilford. Opportunities should therefore be sought to increase the number of allotment plots within the existing sites. There may also be opportunities to increase the quality of the existing provision and to ensure facilities are provided to encourage use by all sections of the community (e.g. suitable paths and raised beds).

Map 10A: Public Open Space Deficiency Redbridge (2016)



10.9 Future Requirements

10.10 In practical terms, in a densely developed borough such as Redbridge, there are very limited opportunities to provide new open spaces of significant size. Therefore addressing open space deficiencies will rely on initiatives such as:

- Providing small, high quality spaces and generally improving the public realm in town centres – in some cases associated with the delivery of individual developments where appropriate.
- Improving pedestrian and cycle connections between residential areas and existing larger parks and the River Roding; including through the All London Green Grid (see Section 9 Transport).
- Establishing Goodmayes Park Extension as a destination for sport which will include refurbishing the changing pavilions and reintroducing sports pitches to the area.
- Retaining, and where practical increasing the number of allotment plots within the existing sites.

10.11 Costs and Funding

10.12 The cost will vary by project and the nature of the intervention. The Capital Programme identifies funding associated with the following projects listed in Table 10A in Phase 1 of the local Plan (2015 – 2020). However, investment of this nature will be required throughout the plan period.

Table 10A: Open Pace Improvements (Redbridge Capital Programme 2016/17)

Ref	Description	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000
16/17	Development of Hainault Forest Country Park (internally Funded). There is £4.5 million HLF lottery funding and £350K from Vision as part of the scheme.	0	1,250,000	0	0	0
16/17	Green Flag Parks	30,000	25,000	25,000	0	0

16/17L	Refurbishment of Sports Pavilions at Goodmayes Park Extension	250,000	200,000	0	0	0
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10.13 In addition to the Council’s own resources and TfL funding associated with access improvements, funding is potentially available from external sources such as Heritage Lottery and Big Lottery. But these are subject to successful bids. CIL/ and site specific Section 106 contributions may also be applied within the context of major development.

11 Libraries

11.1 Local authorities have a statutory legal duty to “provide a comprehensive and efficient library service for all persons deciding to make use of them” (Public Libraries and Museums Act 1964). There are 12 libraries in Redbridge, in addition to a mobile library service and joint use school/community library at Uphall Primary School. This is detailed in Table 11A below.

Table 11A: Redbridge Libraries

Redbridge Library Provision	
Location	Floorspace (m ²)
Redbridge Central	5,800
Aldersbrook	48
Clayhall	52
Fullwell Cross	1,151
Gants Hill	901
Goodmayes	464
Hainault	353
Keith Axon Centre	185
Seven Kings	61
South Woodford	882
Wanstead	836
Woodford Green	408
	11,141 (total)

- 11.2 There are no national or local service standards for the number of libraries “per head of population”. Library capacity can be partially analysed by looking at each library’s level of use based on annual footfall and levels of borrowing.
- 11.3 The Museums, Libraries and Archives Council (now Arts Council England) recommended a local authority benchmark of 30 m² of library space for every 1,000 residents. On this basis, the 2015 population of **296,800** should have **8,904** m² of available library space, so by this measure the current level of provision in spatial terms is considered adequate.
- 11.4 **Future Requirements**
- 11.5 No plans for future libraries have been identified but there will be a need to continue to upgrade the library service property network to ensure buildings remain accessible and attractive, delivering a modern and efficient service that is inviting to both new and existing communities coming into the borough.
- 11.6 Linked to this, there are plans to relocate Woodford Green Library to the existing Hawkey Hall building (subject to a capital works bid). Once this work is complete, Woodford Green Library - which is in need modernization - will be re-developed. This would be an opportunity to replace two dated buildings with a modern amenity. Consideration should be given to co-locate or integrate libraries with other services in order to provide a more sustainable service.
- 11.7 **Costs and Funding**
- 11.8 Funding will be required to maintain and upgrade the existing libraries infrastructure throughout the life of the plan. The capital programme identified £250,000 for the location of Woodford Green Library to Hackney Hawkey Hall 2016/17

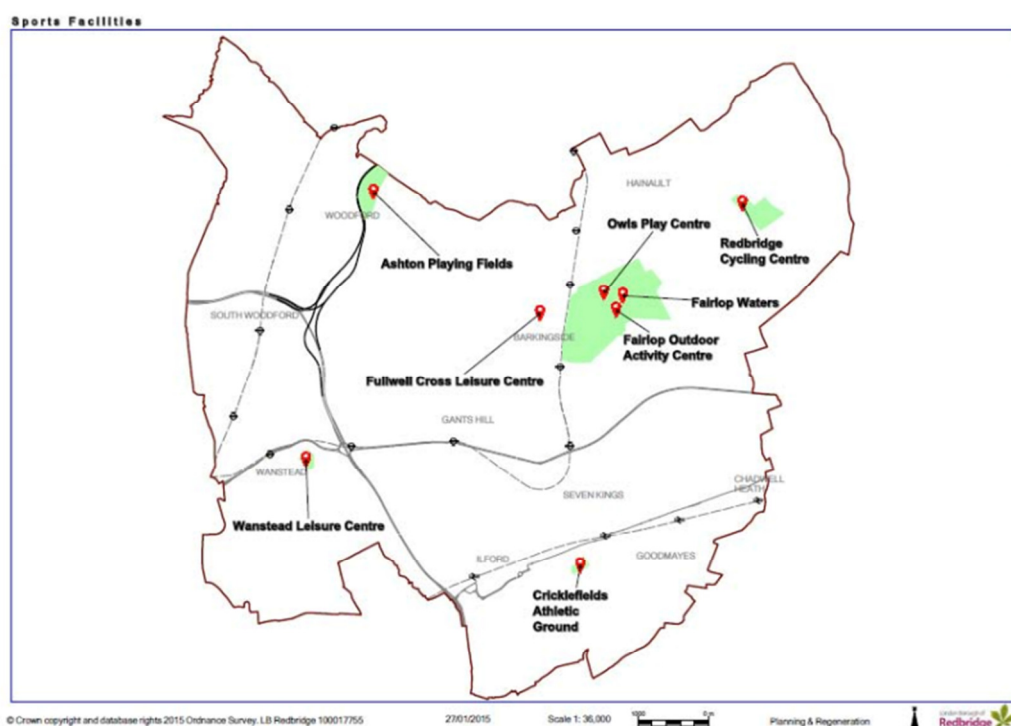
12 Leisure

12.1 Current Provision

12.2 There are 34 Sports Halls in Redbridge spread across 21 sites which supply Sport Hall space equivalent to 134 courts; these are a combination of school, leisure and community sites (data from Sports England, Sports Hall Facility Planning Tool, June 2015).

12.3 The main sports/ leisure centres in Redbridge are shown on Map 12 A below.

Map 12A Redbridge Sports Facilities



12.4 There are also significantly sized swimming pools attached to four schools:

- Ilford County High School has a 25 m x 3 lane pool
- Caterham High School has a 20 m pool
- The Loxford School of Science and Technology has a 25 m pool
- Bancrofts School has a 25 m pool.

12.5 There are five privately run leisure centres in Redbridge. Two are in Ilford (Nuffield and Fitness First), one at Newbury Park (Apples), one is

at Repton Park (Virgin Active) and the Redbridge Sports and Leisure Centre in Barkingside. The Virgin Active and Nuffield centres at Repton Park and Ilford, each have a swimming pool.

12.6 **Future Requirements**

- 12.7 As part of the development of the Redbridge Cultural and Leisure Strategy 2015-2019, extensive consultation was carried out to consider approaches to delivering sports and leisure facilities. It is aimed at helping to safeguard leisure and culture by delivering services in new and innovative ways. The panel examined existing services, considered 1,400 residents' views, analysed providers' needs and examined regional and national best practice.
- 12.8 Going forward, investment is to be focused on intensification of existing uses and increasing access to this provision. The approach to swimming facilities reflects this; capital spending proposals for 2016/17 also include the delivery of additional community swimming facilities within the borough. This will provide community access to swimming in three Redbridge schools and includes an allocation of £3,918,000 to improve community access to swimming. This includes constructing a new pool on one school site (Mayfield School), opening existing facilities at another school site and out of schools access to an existing pool at a further school site.
- 12.9 This proposal widens the availability of swimming facilities across school sites located in the north and south of the borough, and helps to address the current unmet demand for swimming lessons and the needs of the community as a whole.
- 12.10 Funding for a new swimming pool in the Wanstead area is included as an additional budget item in the Council's budget for 2017/18 and 2018/19. A feasibility study associated with delivering the new pool is due to be completed in early 2017. Following this, details of the location will be confirmed. The proposal for the development of a new pool in Wanstead is considered to meet the demand in the west of the borough.
- 12.11 The Capital programme also includes the refurbishment of the Sports Pavilion at Goodmayes Park.
- 12.12 The Redbridge Playing Pitch Strategy (2016) (PPS) has been undertaken to establish whether there is sufficient playing pitch provision in borough to meet both the current and future population growth. The Playing Pitch Strategy (2016) has identified existing and

future deficiencies in playing pitch facilities to meet the needs of local residents. The PPS has found that there is sufficient capacity within the borough's existing playing pitch provision through intensifying use, improving existing facilities, reconfiguring pitches or investment in bringing unused pitches back into use to meet the future demand created by population growth and future participation trends.

12.13 The strategy identifies that redevelopment of these facilities would result in a deficit in demand over the plan period, therefore, re-development proposals must provide for replacement of equivalent or better provision in line with the NPPF. This is acknowledged in the Local Plan and the Council is committed to undertaking detailed feasibility work on these sites to ensure re-provision of sports pitches in the borough.

12.14 **Costs and Funding**

12.15 Funding is from London Borough of Redbridge and Vision. Additional grant funding from external sources may be available subject to bids; this includes Sport England and the Department of Health.

13 Community Facilities

13.1 **Current Provision**

13.2 Community facilities in Redbridge (excluding cultural and leisure facilities) are identified in Table 13A below.

Table 13A Redbridge Community Facilities

Community Facility	Approximate Floorspace (m ²) Figures in brackets indicate notional floor area.
Community Centres	
Aldborough Hatch Community Centre	1,300
Chabad Lubavitch Centre	280
Jewish Care and Redbridge Jewish Youth and Community Care (Sinclair House)	2,300
Redbridge Gujarati Welfare Centre	340
Redbridge Punjabi Sabhia Charik (Cultural) Sabha	180
Iford Road Community Centre	400
Orchard Community Centre	(200)
Parish Church and Community Centre of	400

Community Facility	Approximate Floorspace (m ²) Figures in brackets indicate notional floor area.
St Paul's	
Tiptree Community Hall	(200)
Mildmay Neighbourhood Learning Centre	489
Hainault Forest Community Association	951
Parkside Community Association	735
Wanstead House Community Association	850
Youth Centres	
Wanstead Youth Centre	1,800
Loxford Youth Centre	620
Hainault Youth Centre	1,280
Chigwell and Hainault Jewish Youth Centre (Claybury Hall)	(200)
Eritrean Youth Centre (High Road, Ilford)	(200)
Ilford Youth Group (Ilford Lane)	(200)
Meeting Rooms	
Town Hall – Main Hall (capacity 590 people)	600
Town Hall – Lambourne Hall (capacity 200 people)	400
Sir James Hawkey Hall (capacity 480 people)	840
James Leal Centre (capacity 22 people)	44
Redbridge Business and Exhibition Centre (capacity of 200 people)	1,500
Central Library (Gloucester and York Rooms)	350
Fulwell Cross Library (Aldborough, Fairlop and Hainault Rooms)	459
Wanstead Library	130
Keith Axon Centre	(200)
St. Margaret's Church Ilford	150
Cardinal Heenan Centre (capacity 100 people)	(200)
Ilford Methodist Church Hall (capacity 180 people)	(200)
Redbridge Teachers Centre (capacity 120 people)	(200)
St Albans Church Hall (capacity 100 people)	(200)
Woodford Parish Church Memorial Hall (capacity 390 people)	300
Vine United Reformed Church (capacity 130 people)	(200)
Mildmay House Hall (capacity 150)	142
Wanstead House CA Hall (capacity 200)	265
Hainault Forest CA Hall (capacity 200)	(265)
Parkside CA Hall (capacity 200)	(265)
Aldersbrook Church Hall	(200)

Community Facility	Approximate Floorspace (m ²) Figures in brackets indicate notional floor area.
Barkingside Methodist Church	(200)
Cranbrook Baptist Church	(200)
East Ilford Business Partnership	37
The Pavilion, Ilford Sports Club	400
Seven Kings Library	90
Total	20,962

13.3 Earlier research on community space standards identified a requirement of 61 m² of community space per 1,000 residents³. Based on a Redbridge population of **296,800** people in 2015, it was found that approximately 18,000 m² of community floorspace would be required. The above table is not comprehensive but it suggests that the current level of provision, totaling 20,523 square metres, is sufficient to meet the 2015 requirement in accordance with the standard identified in the earlier study. However, the facilities are of varied quality with some having limited or no disabled access. This makes it difficult for the current community spaces to be effectively used by residents and community groups

13.4 **Future Requirements**

13.5 Increased development will put increased demand on these facilities. The additional population of 65,054 people would generate a requirement for another 3,968m² of community facility floorspace. This would be an overall requirement of 22,155m² when taking the existing borough population into consideration. Therefore, there would be a notational shortfall of 1,632 square metres of community facilities by 2030 - a fairly limited provision

13.6 But functionally, these facilities also have a role in supporting other community infrastructure requirements arising from development, most notably, Children's centre related activity which are delivered as part of the hub and spoke model and Adult education provision (Section 5 and 7 of this report)

13.7 The Local Plan supports the delivery of improved and new fit for purpose facilities/ hubs as part of new developments, particularly in Investment and Growth Areas (see Policy *LP17 Delivering Community Infrastructure*). Provisions of these facilities should be sought, where feasible and viable, as part of mixed use developments, in line with

³ LBR Urban Development Capacity Study Infrastructure Analysis, GVA Grimley October 2008, para 9.2.

this policy and the priority for this community uses. The key opportunity sites identified in the plan also identify the need for community infrastructure which could include co/ location and co use of facilities. The key development opportunity sites include:

(5) Land around King George and Goodmayes (Phase 1 2015 – 2020)

(6) Ford Sports Ground (Phase 2/3 2020-2025 & 2025-2030)

(7) Land at Billet Road (Phase 2/3 2020-2025 & 2025-2030)

(8) Oakfield, Forest Road, Barkingside (Phase 3 2025-2030)

13.8 Costs and Funding

Key funding sources include Redbridge Council/Vision and the private sector through developer contributions. Limited opportunities may also be available for community grants and the voluntary sector.

14 Emergency Services

14.1 Fire Service

14.2 Current Provision

14.3 There are currently three fire stations serving Redbridge at Ilford, Woodford and Hainault. There is no evidence of a deficit in existing service provision and this has not been raised in consultation on the Local Plan.

14.4 Future Requirements

14.5 Service standards are linked to response times; not housing numbers. The service has not identified need for additional facilities in the plan period.

14.6 Costs and Funding

14.7 No additional costs or funding required.

14.8 Police

14.9 Current Provision

14.10 The Mayor's Office for Policing and Crime (MOPC), formerly the Metropolitan Police Authority, operates four stations in Redbridge and a safer neighbourhood base, as listed below:

- Ilford Police Station
- Barkingside Police Station
- Fencepiece Road: Contact Point
- Woodford Police Station Station: Contact Point

14.11 **Future Requirements**

14.12 The current Metropolitan Police Estate Strategy considers the existing estate and then determines how it can be modified and developed to ensure appropriate policing continues to be delivered. It also gives consideration to regeneration, planning and commercial issues, such as new areas of development and growth. In responses to the Local Plan, the Metropolitan Police have not identified the need for significant expanded facilities.

14.13 **Costs and Funding Sources**

14.14 No additional costs or funding sources have been identified.

15 Waste Management and Disposal Facilities

15.1 **Current Provision**

15.2 Redbridge has prepared a Joint Waste Development Plan Document (DPD) with the London Boroughs of Newham, Havering and Barking and Dagenham (i.e. the East London Waste Authority- ELWA Boroughs). The purpose of the DPD is to establish planning policies to manage the waste arising in these boroughs in accordance with national and London Plan targets for recycling, composting and landfill. The DPD sets a planning framework for the management of municipal and commercial waste throughout the ELWA boroughs from 2011 to 2021.

15.3 The DPD was adopted by the Council on 19th January 2012. The document was published in February 2012 after it was adopted by all the ELWA Councils and now forms part of the Local Plan.

15.4 The DPD safeguards sixteen existing waste management facilities across the ELWA area. Three of the safeguarded sites are in Redbridge: Chigwell Road Reuse and Recycling Centre, Ilford Recycling Centre and Goodmayes Hospital (small site for clinical waste).

15.5 **Future Requirements**

- 15.6 The DPD identifies seven new sites for waste management facilities across the ELWA area. Of the seven new sites, none are in Redbridge. These sites, alongside the safeguarding of the existing waste sites, have been assessed to be sufficient to meet the London Plan apportionment targets for the amount of commercial and municipal waste to be managed by ELWA boroughs until 2021.
- 15.7 The London Plan (2016) incorporates targets for the management of municipal and commercial/ industrial waste projections at borough level until 2031. Therefore, there could be a requirement to allocate sites to meet these requirements post 2021, which would be undertaken through a review of the Waste DPD.

15.8 **Costs and Funding**

- 15.9 No additional costs or funding required have been identified for the early stage of the Local Plan.

16 **Flooding**

16.1 **Current Provision**

- 16.2 There are a series of water management structures and formal flood defenses identified in the Borough. There are tidal defences located along the River Roding downstream of Ilford Bridge, which have a design standard ranging between 70 and 1000 years (National Flood and Coastal Defence Database). There are fluvial defences that have varying design standards associated with them, protecting various sections of Main River and watercourses in Redbridge.
- 16.3 The Local Plan directs new development to areas of land which has a lower probability of flooding and requires measures to deal with flood risk, ensuring that any flood risk works can be funded for the entire lifetime of the development. The use of Sustainable Drainage Systems is promoted in order to ensure that the impact of the development on water quality and associated flood risk is minimised.
- 16.4 Flood risk investigation work is detailed within The Redbridge Local Flood Risk Management Strategy 2015. It identifies a number of areas within the Borough that are potentially at flood risk. These areas have been prioritised for future assessment. This work is planned to be progressed over the next two years and will indicate the level of funding required for flood risk reduction measures.

16.5 Following severe property flooding in areas adjacent to the Roding in 2000, the Environment Agency, assisted by Redbridge and Thames Water, has developed the Roding Strategy for reducing future flood risk adjacent to the Roding.

16.6 **Future Requirements**

16.7 A flood storage area on the Roding, at Shonks Mill, north of the M25. This would reduce the peak storm flow of the Roding with consequent reduction in flood risk. Though this scheme is not within the borough, Redbridge would be the major flood risk beneficiary. The estimate for this work is £10m, with design and construction programmed for 2020/25. The Redbridge Highways works programme identifies a contribution of £518, 000 toward the total cost of the project.

16.8 Funding has been secured by the Environment Agency to continue the detailed project appraisal of the "Chigwell Road" scheme. This will better establish the costs and benefits of the scheme to enable a formal bid for the works to be progressed.

16.9 **Costs and Funding**

16.10 There is funding available through EA/Thames Regional Flood and Coastal Committee Flood Defence Grant in Aid Funding (FDGIA), to implement measures to mitigate flood risk. A flood risk management scheme may secure this funding appropriate to the overall benefits it gives to the community. Separate "external" funding will have to be secured to meet any shortfall between the constraints of the partnership funding and the total scheme costs. FDGIA funding will prioritise flood mitigation schemes by assessing the overall funding raised for a scheme against the scheme benefits. Thus the more "external" (non Defra/ EA) funding achieved the greater the possibility of getting the scheme progressed.

17 Low Carbon / Decentralised Energy

17.1 **Current Provision**

17.2 At present there are no low carbon / decentralised energy networks within the borough. There are a number of small Combined Heat and Power (CHP) plants / communal heating systems serving one or two properties (Fullwell Cross Leisure Centre, and King George/ Goodmayes Hospitals). A number of recent planning permissions have included CHP plants and / or communal heating systems, but these

have been limited to one site only. There has been an increase in the number of CHP schemes proposed by new developments in order to meet the increasing carbon reduction targets for new development; this reflects the growing maturity of the technology and improved economic viability of smaller CHP engines. The increased uptake of CHP technology on a site-by-site basis means that communal heating systems are also being installed at this scale. This is a positive step for creating larger communal networks, as such communal networks can be more readily connected to broader networks.

17.3 **Future requirements - Low Carbon / Decentralised Energy Potential**

17.4 It is anticipated that decentralised and renewable energy will have a major role in reducing carbon emissions within the borough. As part of the GLA Decentralised Energy Master Planning (DeMAP) programme, five potential decentralised energy opportunity areas have been identified in the borough:

- Ilford Town Centre
- Crossrail Corridor
- Fullwell Cross / Oakfield
- King George / Goodmayes Hospitals
- Gants Hill

17.5 These areas correspond with areas where significant new development opportunities have been identified in Local Plan

17.6 Further analysis set out in the Decentralised Energy masterplan (2012/13) identified that two of these cluster sites were highlighted as the most suitable for decentralised energy – Ilford Town Centre and the Crossrail Corridor, and Goodmayes, based around King George Hospital. A DE master plan was completed in 2012/13 for these two sites.

- Ilford Town Centre, extending to the Crossrail Corridor - An initial 'cluster' project is viable in Ilford Town Centre, connecting a number of existing buildings. Over time, when new development is built, it is viable to extend the cluster network to other areas of Ilford and along the Crossrail Corridor. The master plan demonstrated that it is not viable to start a DE network just in the Crossrail Corridor (i.e. without the Ilford Town Centre network first).
- An area in Goodmayes, based around King George Hospital - which has an existing DE network (through a Combined Heat and Power Plant). There is the opportunity to create a wider DE network around King George and Goodmayes Hospital sites and the Redbridge College site.

17.7 **Costs and Funding**

17.8 The DE masterplan (which contains a detailed technical and financial assessment), found the following with respect to costs and suggested that with future returns of 11 %, or greater as measure by the Internal rate of return, with £1,000,000 grant funding both schemes would be potentially attractive to the private sector.

17.9 Private sector investment and developer contributions, including carbon offsetting where appropriate, could have a role in meeting this demand along with potential external EU or national grant schemes.

18 Water and Sewage

18.1 **Current Provision**

18.2 Thames Water Utilities Ltd is the statutory sewerage undertaker and the statutory water undertaker for the borough. Essex and Suffolk water also cover the north eastern part of the borough.

18.3 Thames Water's five year investment planning is based on allocations in development plans. Local network upgrades can take around 18 months to complete; water and sewage treatment work upgrades can take around 3-5 years and the provision of new water resources and treatment works can take 8-10 years.

18.4 Thames Water supplies water to Redbridge with the majority of supply coming from the Rivers Thames and Lee. Redbridge drains to Thames Water's Beckton Sewage Treatment Works (STW) located in Newham. Redbridge is part of the Essex & Suffolk Water's Essex Water Resource Zone (WRZ), with the majority of supply coming from the Chigwell raw water bulk supply from Lea Valley Reservoirs and the Ely Ouse.

18.5 **Future Requirements**

18.6 Essex & Suffolk Water confirmed to the Council in November 2015 that the Essex WRZ has been re-assessed as part of its 25 year statutory Water Resource Management Plan required by DEFRA. The Plan runs from 2015 until 2040. During this period the WRZ remains in significant surplus of supply to forecast demand. This demand covers all of the expected development within the area, including an element of additional headroom to allow for uncertainty from growth and climate

change. Therefore, no specific major infrastructure works will be required during this period.

- 18.7 Thames Water confirmed to the Council in January 2014 that there is limited capacity within the existing sewers and there will be a need for network upgrades in order to service the planned developments in the borough. However, due to the complexities of sewerage networks, Thames Water has been unable to determine the infrastructure needs at this stage. Thames Water confirmed to the Council in December 2015 that they do not have any specific planned works within Redbridge during the current AMP period (from 1 Apr 2015 to 31 Mar 2020).
- 18.8 Engagement with Thames water will continue over the life of the IDP, but where there is a capacity problem and no improvements are programmed by the statutory undertaker, then the developer will need to contact the water authority to agree what improvements are required and how they will be funded and delivered. Any upgrades required will need to be delivered prior to any occupation of the development

18.9 **Costs and Funding**

- 18.10 No identified costs.

19 **Electricity and Gas**

19.1 **Current Provision**

- 19.2 National Grid operates the national electricity transmission network across Great Britain and owns and maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. They do not distribute electricity to individual premises, but they are the key to ensuring a reliable and quality supply to all. UK Power Networks is the local distribution company for the borough, providing and operating electricity distribution networks and substations.
- 19.3 National Grid owns and operates the high pressure gas transmission system in England, Scotland and Wales. It also owns and operates approximately 82,000 miles of lower-pressure distribution gas mains in the north west of England, the west Midlands, east of England and north London. National Grid does not supply gas, but provides the networks through which it flows. National Grid's high voltage electricity overhead transmission lines/underground cables within Redbridge include:

- 275kV route from Barking substation in Barking and Dagenham to Redbridge substation in Redbridge.
 - 275kV route/275kV underground cables from Redbridge substation in Redbridge to Tottenham substation in Haringey.
- 19.4 National Grid has no gas transmission assets located within Redbridge, but it does own and operate the local gas distribution network in the Redbridge area.
- 19.5 **Future Requirements**
- 19.6 In December 2015 National Grid⁴ confirmed that they are not planning any new infrastructure in the Redbridge area but the assets will continue to be maintained and possibly renewed in the next 15 years. There may be more site-specific issues which relate to local distribution but these will need to be considered on a site by site basis by developers.
- 19.7 **Costs and Funding**
- 19.8 No identified costs.

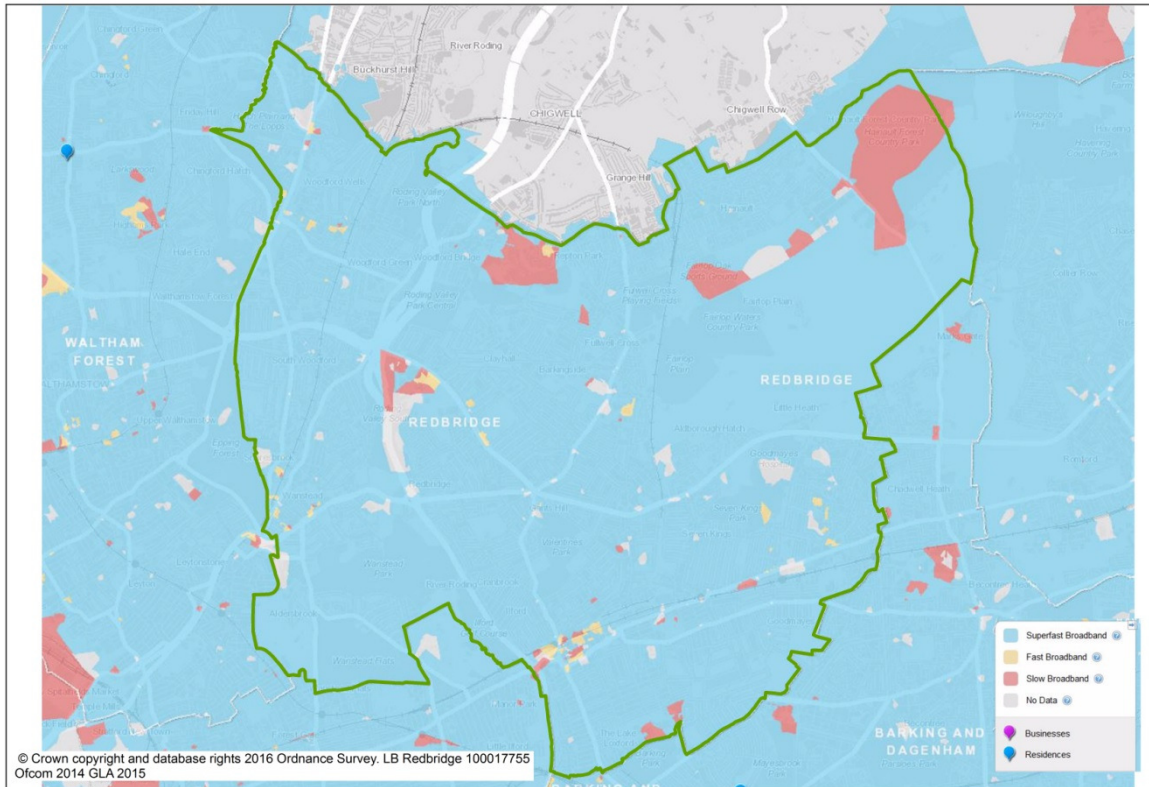
20 Telecommunications

- 20.1 **Current Provision**
- 20.2 Openreach, a subsidiary of the BT Group, is the statutory undertaker responsible for telecommunications connectivity throughout the UK, including maintaining the wiring, fibres and connections for the 'local access network' of telecommunications infrastructure. Its extensive underground network is responsible for connecting nearly all businesses and homes to the national broadband and telephone network. Openreach have a role to plan the necessary provision of infrastructure to ensure supplies to new development and are committed to ensuring that 95% of the UK's business and residential premises have access to super-fast broadband by the end of 2017.
- 20.3 In 2015, BT announced a project to roll out high-speed fibre broadband in Redbridge to an additional 7,000 homes and business. Since its implementation, 2040 premises have benefit from this scheme.
- 20.4 Redbridge has above average connectivity according to the Mayor London's broadband connectivity map. The map indicates that most of the borough is covered in what is defined as 'superfast' broadband,

⁴ Email from National Grid to the Council dated 24th November 2015.

which is over 10mps per second. However, some areas of the borough, particularly around Hainault, suffer from slower broadband. Levels of broadband connectivity are shown in map

Map 20 A: Broadband connectivity in Redbridge



20.5 As Openreach are committed to ensuring that 95% of the UK has access to super-fast broadband by 2017, it can be expected that the whole borough will have access by this time.

20.6 **Costs and Funding**

20.7 No identified costs.

21 Infrastructure Delivery Summary and Conclusions

- 21.1 The Local Plan sets out ambitious targets for growth which must be supported by infrastructure. It provides a policy framework that enables and prioritises infrastructure particularly in identified Investment and Growth areas.
- 21.2 The delivery of supporting infrastructure, particularly related to primary and secondary education facilities, is essential to enabling sustainable development. The need for provision of new education facilities in growth and investment areas is paramount. The target of 10 new primary school forms of entry and 47 secondary school forms of entry suggest the need for a continued programme of expansions on a temporary and permanent basis. As opportunities for expansion diminish, the delivery of new schools in the borough and associated site requirements in growth and investment areas must be prioritised. Delivery of education infrastructure must be appropriately phased. This should be kept under review over the life of the plan to ensure that provision keeps pace with demand arising from new development.
- 21.3 The Clinical Commissioning Group's Strategic Estate Strategy, which is imminent, will also need to inform detailed masterplanning and where relevant, have discussions on specific sites. Engagement with the CCG is ongoing in relation to this.
- 21.4 The approach in the emerging Local Plan to applying CIL receipts to education and health uses reflects the priority for delivery of education and where appropriate and required, health infrastructure.
- 21.5 The delivery of the Elizabeth line (Crossrail, line 1) is a fundamental component of the growth strategy articulated in the Local Plan. Creating and improving access and links within and between growth areas is also essential to the delivery of successful places. This is reflected in the Local Plan policies.
- 21.6 In relation to open space and sports facilities the focus should be on maintaining current levels and improving access to these facilities. This is in line with relevant corporate strategies, notably the Redbridge Leisure and Cultural Strategy (2015 -19), which responds to the current challenging public funding climate (see Section 4). On major sites in growth and investment areas, opportunities to create new open space or improve access to existing open space should be taken. This is an essential means of meeting new demand and reducing pressure on existing open spaces. Again, detailed masterplanning and feasibility work, including those in relation to playing pitches, will be necessary to support implementation.

- 21.7 Community facilities play a particularly important role as spaces for local delivery of other activities associated with a range of type of provision, for example, early years activities associated with children's centres and further education. Opportunities to redevelop and provide new purpose built provision with enhanced capacity, or in locations more in line with demand, should also be considered throughout the life of the plan particularly in relation to Libraries and community facilities.
- 21.8 The detailed masterplanning, associated with Growth and Investment Areas proposed in the Local Plan, could be undertaken alongside a review of the Community Infrastructure Levy. This will help to ensure that the costs of delivery on these sites are properly factored in. It will also enable detailed consideration to be given to the legislative framework set out in the CIL Regulations 2010 (as amended) which 'polices' the divide between what can be secured via CIL and Section 106.
- 21.9 Appendix 1 identifies a schedule of key infrastructure projects. These have associated infrastructure costs of £427,613,566.00. This is focused on known costs in Phase 1 of the plan (2015/6– 2020/21). This represents a minimum costs as the costs of delivery at later plan stages, for example in relation to ongoing open space and community facility provision, are unknown at this time. Furthermore, land costs in relation to schools provision have not been factored in as they will be highly variable depending on the mode of delivery. In addition, total costs of Crossrail project (now funded and nearing completion in 2017/18) have been excluded. Therefore costs over the life of the plan will be significantly higher. The IDP should be updated regularly to identify future infrastructure projects (some of which are still the subject of feasibility analysis at this stage) and the associated costs.

Annex 1 – Redbridge Infrastructure Delivery Plan Schedule of Projects

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Childcare/ Early Years	Childcare/ Early Years	Childcare spaces	TBC	London Borough Redbridge/DfE	Private and voluntary sector	All	Potential demand - keep under review	Borough Wide
Education	Primary School	Parkhill Infants 1 Form of Entry expansion	£1,736,608.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	Central
Education	Primary School	ATAM Academy Expansion	TBC	-	Atam Academy	Phase 1	Critical	South
Education	Primary School	Parkhill Junior 1 Form of Entry expansion	£2,315,477.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Primary School	Gordon Infants 2Forms of Entryexpansion	£8,450,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Primary School	South Park Primary 1 Form of Entry expansion	£2,142,747.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Primary School	Cleveland Infants 1 Form of Entry expansion	£3,589,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Primary School	Al-Noor Primary 2 Forms of Entry expansion	£8,450,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Primary School	Gearies Primary 1 Form of Entry expansion	£3,556,686.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 2	Critical	Central
Education	Primary School	Nightingale 1 Form of Entry expansion	£3,692,538.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 3	Critical	North east

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Education	Primary School	Addition 10 Forms of Entry (FE) equivalent to 4 schools based on average primary school size of 4 FE	£45,906,600.00	London Borough Redbridge/DfE / Developer contributions (not, costs shown excludes land costs and is based on LB Redbridge Build Cost only)	Redbridge/ Free Schools	All	Critical	Borough wide
Education	Secondary School	Expansion of Ilford County School Two Form Expansion (180 per year group)	£7,000,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	South
Education	Secondary School	Expansion Woodford County High School Two Form Expansion (180 per year group) Excluding land costs	£7,600,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	North West
Education	Secondary School	To provide sufficient additional teaching and non-teaching accommodation to allow Wanstead High School to expand by 2 forms of entry; from 8 to 10 forms of entry in September 2019.	£11,000,000.00	London Borough Redbridge/DfE	London Borough Redbridge	Phase 1	Critical	West
Education	Secondary School	Addition 47 Forms of Entry (FE) through extensions and new provisions (equivalent to 6-7 secondary schools)	£271,355,910.00	London Borough Redbridge/DfE/Developer contributions (not, costs shown excludes land costs and is based	Redbridge/ Free Schools	All	Critical	Borough wide - particularly south/creating

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
		based on average secondary school size of 8 FE)		on LB Redbridge Build Cost only)				capacity in Crossrail Corridor
Education	Further Education and Adult Community Learning	Further education places/ expansions	TBC	TBC	TBC	All	Potential demand - keep under review	Borough Wide
Health	Primary care	New health hub on Wanstead Hospital site	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Wanstead and Woodford
Health	Primary care	Improvements to South Woodford Health Centre	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Wanstead and Woodford
Health	Primary Care	Improvements to Hainault Health Centre/ Fullwell Cross Health Centre/ New locality hub at Oakfield	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Fairlop
Health	Primary Care	Improvements/ redevelopment of Fullwell Cross Health Centre or new locality hub at Oakfield	TBC	CCG/ Developer contributions	CCG	Phase 3	Critical	Fairlop

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Health	Primary Care	Improvements to Loxford Polyclinic	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Cranbrook and Loxford
Health	Primary Care	New health hub in Ilford town centre	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Cranbrook and Loxford
Health	Primary Care	Improvements to Newbury Park Health Centre	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Seven Kings
Health	Primary Care	New health hub at King George/ Goodmayes Hospital	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Seven Kings
Health	Primary Care	New health facility in Goodmayes	TBC	CCG/ Developer contributions	CCG	Phase 2	Critical	Seven Kings
Transport	Public realm	Ilford Growth Area Integrated Masterplan and Delivery	£22,000,000.00	£12m Redbridge funding £10m TfL (subject to funding bid to TfL , £100,000 already awarded for feasibility)	London Borough Redbridge	Phase 1 and 2	Critical	Ilford Growth Area
Transport	Public Realm/ Highways Improvements	Radial Corridor 1: High Road A118, A118 Ilford Hill, Goodmayes Road B177 and Green Lane A1083.	£2,135,000.00	TfL - Local Implementation (LIP)	TfL/ London Borough of Redbridge	Phase 1	Necessary	South

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Transport	Public Realm/ Highways Improvements	Orbital Corridor 2: A123/A1400/A104/A121	£2,014,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Borough wide
Transport	Highways Improvement	Radial Corridor 3: Redbridge Lane East / Longwood Gardens/ Forest Road	£755,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Borough wide
Transport	Highways Improvement	Ilford Eastern Gateway (complementary works)	£500,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Ilford Growth Area
Transport	Public realm	Ilford Station (complementary works)	£40,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Ilford Growth Area
Transport	Public realm	Woodford (complementary works)	£170,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	North east
Transport	Public realm	Seven Kings Station (complementary works)	£300,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Transport	Public realm	Goodmayes Road Station (complementary works)	£300,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor
Transport	Public realm	Orbital Corridor 3 Ley Street/ Horns Road	£160,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	
Transport	Public realm	Snaresbrook Station Neighbourhood (Public realm)	£149,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	
Transport	Public realm	Orbital Corridor 5 Chadwell Health Lane	£55,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	
Transport	Public realm	Green Corridor 2: Roading Valley walking and cycling route	£353,000.00	TfL - Local Implementation (LIP)	London Borough of Redbridge	Phase 1	Necessary	
	Public realm	Crossrail Stations/ Infrastructure	£2,272,000.00	TfL (non LIP funding)	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor
Transport	Public realm	Improved cycling infrastructure and pedestrian links to Fairlop Waters and	£905,000.00	TfL	London Borough of Redbridge	Phase 1	Necessary	Barkingside Investment and

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
		Hainault Forest Country Park (Mayors Green Grid)						Growth Area
Transport	Public Realm	Urban realm improvement scheme - New public space at the heart of Seven Kings	£2,020,000.00	Crossrail complementary measures TfL - Local Implementation Plan	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor
Transport	Public Realm	Urban realm improvement scheme - Goodmayes	£1,230,000.00	Crossrail complementary measures TfL - Local Implementation Plan	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor
Transport	Public Realm	Urban realm improvement scheme - Chadwell Heath	£147,000.00	Crossrail complementary measures	London Borough of Redbridge	Phase 1	Necessary	Crossrail Corridor
Transport	Public Realm	Urban realm improvement scheme - to enhance the centre and improve legibility, way finding and safety	£3,778,000.00	Crossrail complementary measures Redbridge Community Infrastructure Levy, Section 106 Funding, TfL - Local Implementation Plan	London Borough of Redbridge	Phase 1	Necessary	Ilford Growth Area
Transport	Public Realm	Ilford Town Centre/Gants Hill Town Centre/Roding Valley/Fairlop Plain "greenway" connection	£2,500,000.00	Redbridge/ TfL	London Borough of Redbridge	Phase 1	Necessary	Roding Valley

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Transport	Public realm	River Roding Leisure Route (Bridge) - improving access to linear park	TBC	TBC	London Borough of Redbridge/TfL	TBC	Necessary	Ilford Town Centre and
Transport	Public realm	Quietway cycle route (initial phases)	£917,000.00	TfL	London Borough of Redbridge	Phase 1	Necessary	Borough Wide
Transport	Public Realm	Public realm improvements including improved links to Valentines Park	£100,000.00	Redbridge	London Borough of Redbridge	Phase 1	Necessary	Gants Hill Investment and Growth Area
Transport	Public Realm	High street and public realm improvements.	TBC	Redbridge/ TfL	London Borough of Redbridge	All	Necessary	Investment and Growth Areas
Flood risk	Reducing Flood Risk	Flood Storage Area	£518,000.00	London Borough of Redbridge (with additional funding for works from the Environment Agency)	DEFRA and Environment Agency	Phase 1	Critical	Roding, Shonks Mill (Outside Borough)
Open Space	Open space improvements	Maintenance and enhancement to open spaces	TBC	Redbridge	London Borough of Redbridge	All	Necessary	Borough Wide
Open Space	Access to Allotments	Bringing allotments back into use/ Creation of new allotments	TBC	TBC	London Borough of Redbridge	All	Important	Borough Wide

Category	Type	Infrastructure Project	Cost of future growth Costs 2016 – 2030	Sources of Funding	Delivery Agency	Phase	Local Plan Delivery	Location
Energy	Decentralised energy	Development of Decentralised Energy network (initial cost estimate)	£2,000,000.00	Redbridge	London Borough of Redbridge/ Private Sector	Phase 1	Necessary	Ilford and Goodmayes
Leisure/ Culture	Sports facilities	Swimming pool at Wanstead	£5,500,000.00	Redbridge	London Borough of Redbridge	Phase 1 and 2	Important	Wanstead
Leisure/ Culture	Community Facilities	Maintenance / improvements and new securing new facilities in growth areas	TBC	TBC potentially Developer Contributions (CIL/S106) and other grant funding	London Borough of Redbridge/ Voluntary Sector	All	Necessary	Borough Wide
Leisure/ Culture	Sports facilities	Maintenance and improvements / Access and quality improvements to sports and leisure facilities	TBC	Vision and potentially Developer Contributions (CIL/S106) and other grant funding	London Borough of Redbridge/ Voluntary Sector	All	Necessary	Borough Wide
Leisure/ Culture	Refurbishment and improvement of existing libraries	Refurbishment and improvement of existing libraries	TBC	Vision	London Borough of Redbridge /Vision	All	Necessary	Borough Wide
Waste	Waste Facilities	Detailed in Waste DPD	-	-	-	-	Critical	Borough wide
TOTAL			£427,613,566.00					