

**APPENDIX 15 | LB HARINGEY'S
INFRASTRUCTURE DELIVERY PLAN
UPDATE (2016)**

London Borough of Haringey

Infrastructure Delivery Plan

Update

April 2016

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1. Introduction

- 1.1 The London Borough of Haringey adopted its Local Plan: Strategic Policies in March 2013. This document sets out how the Council will deliver local and strategic development needs including housing, employment, and leisure and retail provision. It addresses the key issues of getting the right development in the right place, ensuring high quality design, and ensuring that appropriate infrastructure is provided to make places attractive, sustainable and successful. To achieve this, it is important to set out a high level assessment of infrastructure requirements and priorities.
- 1.2 The Further Alterations to the London Plan (2015) has identified a new annual housing target for Haringey of 1,502 new homes for the period between 2011 and 2026. This creates an overall housing requirement of 19,802 new homes from 2011-2026.

Community Infrastructure Study 2010

- 1.3 The infrastructure that will be needed to support future growth in the Local Plan: Strategic Policies was assessed in the Community Infrastructure Study (CIS)(2010) as part of the preparation of the Local Plan: Strategic Policies. The study is a “working paper” setting out the local planning authority’s understanding of infrastructure needs arising. It incorporates an assessment of existing facilities and was developed through engagement with service providers and stakeholders. It serves a range of purposes including:
 - Support the delivery of the outcomes envisaged in the Sustainable Community Strategy
 - Support the delivery of the Local Plan: Strategic Policies, and other Development Plan Documents
 - Help to identify the possible need for financial contributions associated with individual planning applications and form the basis of a tariff system for defining developers’ contribution to infrastructure needs which stem from the housing growth
 - Inform relevant partners of social infrastructure requirements associated with planned housing development and population growth
 - Create a corporate community of stakeholders within the borough to ensure consideration of community infrastructure in future development, planning and policy
- 1.4 One of the key aims of the Community Infrastructure Study is to ensure that service deliverers throughout the borough are fully aware of future growth in Haringey, and all stakeholders are sharing information and forward planning requirements.
- 1.5 The main study incorporates an assessment of existing facilities and has been developed through engagement with officers in Council services and other service providers and stakeholders. We have collated information and carried out assessments where practical and relevant on the following community infrastructure areas:
 - Health
 - Education
 - Social Care
 - Libraries and Museums
 - Open Spaces

- Leisure and Sport
- Emergency Services
- Transport
- Waste, Water Supply and Sewerage
- Energy and Telecommunications Infrastructure
- Community Facilities including youth facilities

- 1.6 In developing this report, the methodology included consultation with statutory and other providers of services in Haringey. Workshops have been held to review current provision, identify current deficits and surpluses, and quantify additional requirements for services associated with population growth and future housing capacity, based on a range of national and regional standards, local models of service delivery, as well as case studies.
- 1.7 Whilst as much reference as possible has been made to national and regional standards, it is recognised that local service providers are best placed to make judgements about the models of service delivery required in the borough. The CIS is intended to be a starting point for the analysis of infrastructural requirements in Haringey over the Local Plan period. One of the key outcomes was alignment between all partners on future requirements, incorporating both current and evolving local models of service provision.
- 1.8 The CIS supported Haringey's Local Plan formerly called the Core Strategy, including the creation of a table of Local Plan Key Infrastructure Programmes and Projects: Infrastructure Delivery Plan (IDP) as Appendix 4 of the Local Plan: Strategic Policies DPD.

Infrastructure Delivery Plan Update 2013

- 1.9 The IDP was updated in 2013 to support the introduction of the Haringey Community Infrastructure Levy (CIL). This involved updating the findings of the CIS, and the projects included in the IDP. The funding gap identified for provision of strategic infrastructure in the borough was £230m, which justified the creation of a CIL to collect money to meet this shortfall.
- 1.10 Since 2011, some of the infrastructure projects listed in the 2011 IDP were implemented. The progress was reported in Haringey's Annual Monitoring Reports.
- 1.11 The health organisations in the borough prepared a specific Health Infrastructure Plan (HIP)¹ in 2011 which was reported to the Health and Well Being Board in September 2011. This updates the Health section of the Community Infrastructure Plan. However due to changes to the service delivery models for the NHS in general the HIP needs further updates.
- 1.12 Identified funding gaps are summarised at the conclusion of the document in order to understand the potential funding shortfall that the Community Infrastructure Levy may contribute towards.

About This Document

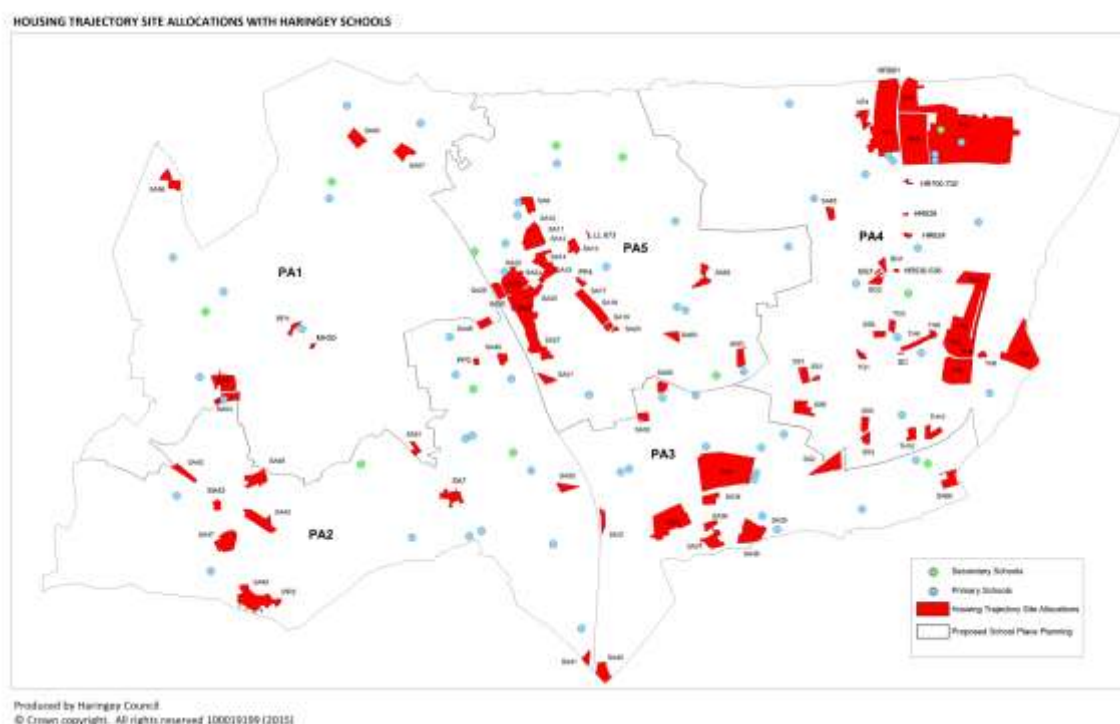
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¹ www.minutes.haringey.gov.uk/mgConvert2PDF.aspx?ID=25158

- 1.14 This document updates the following items from the 2013 IDP Update, with a view to understanding the infrastructure requirements of the post-2015 housing target.
- Education infrastructure from the latest School Place Planning Report
 - Health infrastructure needs coming from the latest Haringey Strategic Premises Development Plan
 - Specific infrastructure interventions planned in the Council's three Growth Areas (Tottenham Hale, North Tottenham and Wood green).

2. Education

- 2.1 Evidence in this section is taken from the School Place Planning Report 2015, which is available on the Council's website at <http://www.haringey.gov.uk/children-and-families/schools-and-education/projects-consultations-and-inspections/consultations/school-place-planning-report>



- 2.2 Table 1 below sets out the actual and projected births for the for the corresponding reception year and shows the number of places available and the actual/projected surplus or deficit for that year.

Table – Reception places borough wide					
Intake year	Actual (2008/9-2014/15) & Projected (2015/16-2024/25)	Number of school places across borough	% of reception surplus	Deficit/surplus No. of places	Equivalent Form of Entry

	reception aged pupils				
2008/09	2,983 (actual)	3,062	2.6%	79	3fe
2009/10	3,007 (actual)	3,071	2.1%	64	2fe
2010/11	2,985 (actual)	3,041	1.8%	56	2fe
2011/12	3,198 (actual)	3,280*	2.5%	82	3fe
2012/13	3,259 (actual)	3,290**	0.9%	31	1fe
2013/14	3,139 (actual)	3,230***	2.8%	91	3fe
2014/15	3,181 (actual)	3,350****	5.0%	169	6fe
2015/16	3,224 (projected)	3,350	3.8%	126	4fe
2016/17	3,155 (projected)	3,350	5.8%	195	6/7fe
2017/18	3,120 (projected)	3,350	6.9%	230	8fe
2018/19	3,104 (projected)	3,350	7.3%	246	8fe
2019/20	3,125 (projected)	3,350	6.7%	225	7/8fe
2020/21	3,142 (projected)	3,350	6.2%	208	7fe
2021/22	3,156 (projected)	3,350	5.8%	194	6fe
2022/23	3,164 (projected)	3,350	5.6%	186	6fe
2023/24	3,168 (projected)	3,350	5.4%	182	6fe
2024/25	3,172 (projected)	3,350	5.3%	178	6fe

Source: 2008/09-2014/15 January PLASC counts. 2015/16 – 2024/25 GLA School Roll Projections 2015

* includes 180 reception places created through additional bulge class provision: Alexandra, Welbourne, Lancasterian, South Harringay, Seven Sisters and the Triangle children's centre

** includes 120 reception places created through additional bulge class provision: Bounds Green, Weston Park, The Triangle children's centre and Earlsmead

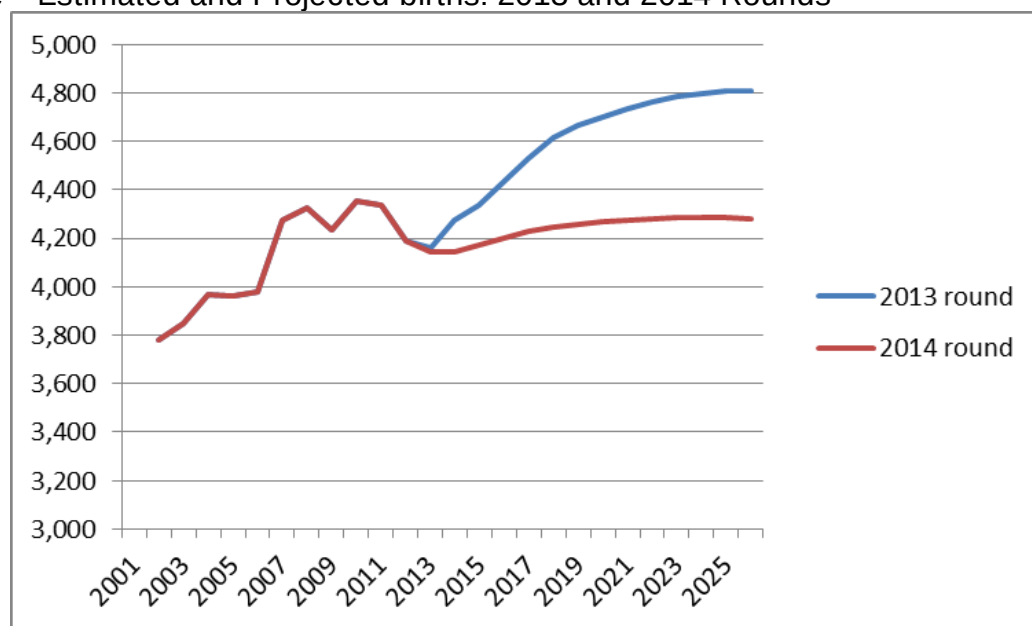
*** includes bulge class at Weston Park (+1fe)

****includes bulges class at St James (+1fe), bulge class at Noel Park (+1fe), bulge class at St Mary's CE (+1fe) and additional 2fe at Harris Academy Tottenham (new school)

Please note that the "Equivalent form of Entry" column have been rounded to the nearest form of entry (30 places) for planning purposes.

- 2.3 The latest available projections from the Greater London Authority (GLA) show a significant change to the number of projected births in our borough. The latest GLA projections shown below in Figure 1 (called the 2014 round) show a large reduction in the number of projected births from 2014 onwards compared to last year's projections (called the 2013 round). The impact of this downward revision is that the projected demand for reception places has been forecast to fall by 530 (<11%) by the year 2026².

Figure – Estimated and Projected births: 2013 and 2014 Rounds



Source: GLA Population projection rounds, 2013 and 2014

- 2.4 While this reduction in overall demand is small it does mean that we need to carefully consider any planned provision/increase of places to ensure that we do not end up with a large surplus of places that is too high leading to financial and other difficulties for school(s). This reduction is in contrast to previous years' projections when a projected deficit of places was shown leading us to plan for additional provision in those parts of the borough where we saw demand projected to outstrip supply.
- 2.5 This projected surplus is not evenly spread across the borough and some parts of Haringey, mainly focused on those areas where major regeneration is planned, see a deficit of reception places from around 2020. School place planning is therefore managed by areas within the borough. Projections are available through to 2024/25, which is considered appropriate to the Plan period up to 2026. Developments allocated in the Local Plan have been incorporated into the GLA's projections, which inform these Planning Area projections.

² The reduction in projected births by the GLA has been given greater weight by the recent release (June 2015) of the latest Office for National Statistics Mid-Year Estimates (MYEs). The ONS data for 2014 give Haringey births of 4,090, close to the 2014 GLA round estimate of 4,141.

Primary School Provision

Planning Area 1 (PA1)

- 2.6 There are currently a total of 510 reception places in this PA each year, although for September 2014 and 2015 this increased to 540 as a result of two consecutive bulge classes at St James C of E Primary School. For 2016 the PAN in this PA will permanently rise to 540 as a result of an expansion of Bounds Green Infant and Junior School from two (60 reception pupils admitted each year) to three (90) forms of entry. Previous projections showed a deficit of places in this PA but latest projections show that demand is expected to outstrip supply by one form of entry (1fe) between 2015 and 2016, before a surplus of 1fe begins from 2017, rising to a 3fe surplus by 2023.

Planning Area 2 (PA2)

- 2.7 There are currently a total of 656 reception places in this PA. This figure includes the permanent expansion of St Mary's CE Primary which expands from two to three forms of entry (3fe) with effect from the September 2015 reception intake. Previous projections showed a deficit of 2fe in 2015 (not taking account of the additional 30 places provided by the permanent expansion of St Mary's), but latest projections show a surplus of places in this PA standing at just under 1fe in 2015 and rising to 4fe surplus by 2022. Based on our actual demand for places in this PA for September 2015 we see a local demand for places which is very close to the number of places available. Local provision has been affected by the provision of 60 additional reception places just across the border from this PA at Whitehall Park School which has provided places for a small number of Haringey Children in and close to the Hornsey Lane N6 area.

Planning Area 3 (PA3)

- 2.8 There are currently a total of 540 reception places in this PA. Previous projections showed sufficiency of reception places across a ten year period and latest projections show that this picture is expected to continue with a surplus of between 1 and 2fe over the next ten years. The PA's proximity to the large scale regeneration of Woodbury Down Estate and significant residential development expected as part of the partial development of the St Ann's Hospital site. These developments forms part of the Council's housing trajectory which means that the Greater London Authority, who provide our school roll projections, have factored this additional residential provision into the future demand for school places.

Planning Area 4 (PA4)

- 2.9 We currently provide a total of 898 reception places in this PA. In September 2014 a new free school Harris Academy Tottenham opened providing an additional 60 reception places a year bringing the total number of reception places in this PA to 958. In our 2014 SPPR supply was projected to meet demand up until 2019/20. Our latest projections show a change in projected demand and supply in this area. It is now projected that **PA 4 will see a 100 place deficit (3.5 FE) of primary school places from 2020/21 to the end of the Plan Period.** This is largely as a

result of the actual and anticipated development taking place as a result of regeneration work in the area which offsets the actual and projected drop in births. The introduction of the Harris Academy into Tottenham Hale, means that the Growth Area with unmet demand is most likely to be North Tottenham. The masterplanning of the Northumberland Park Estate will therefore be the most logical area to expand school provision in PA4.

Planning Area 5 (PA5)

2.10 There are a total of 626 reception places in this PA. Based on last year's projections demand was projected to outstrip supply by approximately 1fe from 2015/16-2017/18, rising to 2fe in 2018/19 and 3fe in 2021/22. The latest projections still show future unmet demand - demand is projected to outstrip supply by approximately **1fe from 2020/21**. A one form of entry primary school will be required in the Wood Green area over the plan period.

Secondary School Provision

2.11 There is a long term upward trend in the demand for places in the borough based on the larger cohorts working their way through the primary phase and into the secondary phase. Our 2015 projections show that we expect demand, based on current provision, to be exceeded from 2018/19 onwards. Table 2 below sets out the projected rising year 7 numbers based on actual rolls in the primary phase.

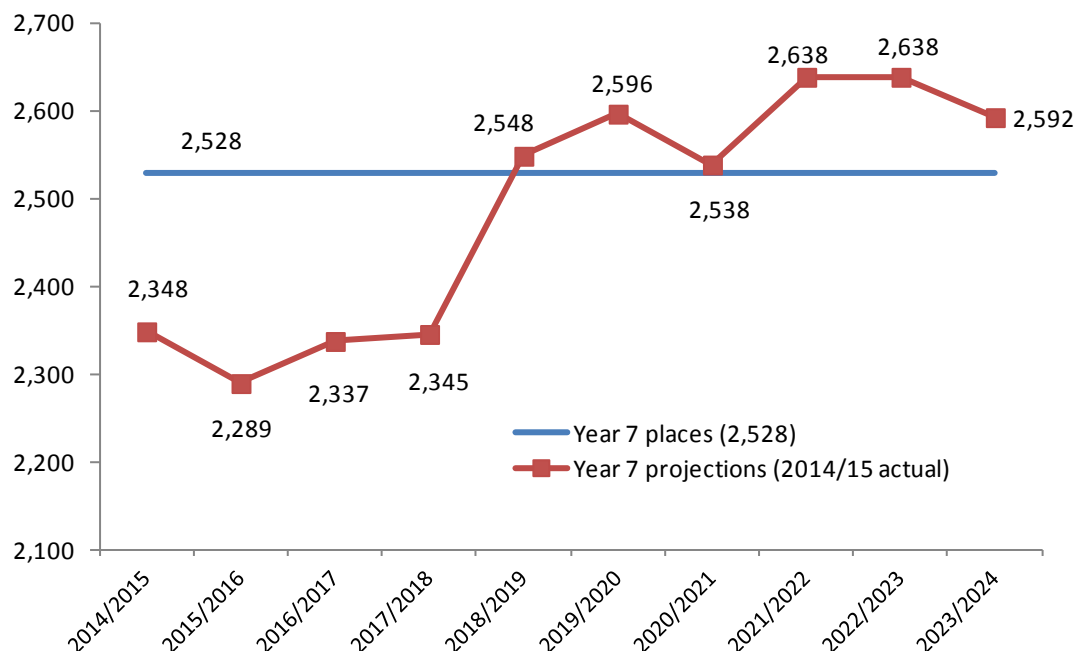
	Year	Number of year 7 places	Number of year 6 pupils	Number of year 7 pupils	year 7 place shortfall / surplus	% of year 7 surplus places
Actual	2004/2005	2,358	2,658	2,215	143	6.06%
Actual	2005/2006	2,336	2,672	2,203	133	5.69%
Actual	2006/2007	2,336	2,724	2,207	129	5.52%
Actual	2007/2008	2,336	2,728	2,191	145	6.21%
Actual	2008/2009	2,336	2,687	2,192	144	6.16%
Actual	2009/2010	2,336	2,625	2,110	226	9.67%
Actual	2010/2011	2,390	2,648	2,149	241	10.08%
Actual	2011/2012	2,390	2,584	2,165	225	9.41%
Actual	2012/2013	2,390	2,675	2,089	301	12.59%
Actual	2013/2014	2,357	2,877	2,146	211	8.95%
Actual	2014/2015	2,528*	2,882	2,348	180	7.1%
Projection	2015/2016	2,528	2,910	2,289	239	9.5%
Projection	2016/2017	2,528	2,919	2,337	191	7.6%
Projection	2017/2018	2,528	3,171	2,345	183	7.2%
Projection	2018/2019	2,528	3,227	2,548	-20	-0.8%

Projection	2019/2020	2,528	3,153	2,596	-68	-2.7%
Projection	2020/2021	2,528	3,275	2,538	-10	-0.4%
Projection	2021/2022	2,528	3,270	2,638	-110	-4.4%
Projection	2022/2023	2,528	3,195	2,638	-110	-4.4%
Projection	2023/2024	2,528	3,155	2,592	-64	-2.5%

Source: 2005-2015 PLASC counts and GLA School Roll Projections 2015
includes Harris Academy with a PAN of 90, eventually expected to rise to 180, date to be confirmed.

2.12 At present there are 2,528³ year 7 places across all Haringey secondary schools. By 2018 we expect the demand for places to rise to 2,548 meaning that we will need to increase capacity to meet this demand. This figure does not include the potential for Harris Tottenham Academy to raise its PAN from its current 90 to 180 which would create an additional 90 places. If this occurred we would have a borough PAN figure of 2,618 meaning that we would have sufficiency of places until 2021 at which point projected demand is expected to be 2,638 which means additional capacity would be needed as we would be **1fe short across the borough**. These figures do not allow for any surplus capacity at year 7 which would allow for some parental choice and movement. The projected demand for year 7 places is shown in the graph below.

Figure: Year 7 places vs. Projections, 2014/15-2023/24



³ This figure includes Harris Tottenham Academy at a PAN of 90, with this PAN eventually expected to rise to 180, date to be confirmed.

Post 16 provision in Haringey

- 2.13 The Education and Skills Act 2008 made a phased change to the participation age for education and training. In 2013 the age was raised to 17 (affecting those who started secondary school in 2007) and in September 2015 the age will be raised to 18 (affecting those who started secondary school in September 2009).
- 2.14 Raising the participation age does not necessarily mean young people must continue in school; they are able to choose one of the following options:
- full-time education, such as school, college or other training providers
 - work-based learning, such as an apprenticeship
 - part-time education or training if they are employed, self-employed or volunteering for more than 20 hours a week.
- 2.15 Despite the raising of the participation age we still continue to have sufficiency of post 16 places in the short and longer term although there are settings that are popular and oversubscribed while some settings have lower demand and rolls. A table showing the school based settings of post 16 places along with the Haringey Sixth Form Centre's capacity.

Table: Post 16 capacity (Years 12 and 13) and school roll numbers in Haringey				
School	2014/15 Capacity	Jan 13	Jan 14	Jan 15
		Census	Census	Census
Alexandra Park School	300	366	351	358
Fortismere School	450	438	461	448
Grieg City Academy	250	215	213	259
Highgate Wood school	250	212	261	257
Hornsey School for Girls*	140	127	140	177
St Thomas More School	180	268	344	201
Tottenham UTC	210	-	-	48**
Haringey Sixth Form Centre	1,050	869	722	782
Total	2,830	2,495	2,492	2,551
*Hornsey School for Girls admitted 140 pupils in 2013/14. The school's total 6 th form capacity is 237 under Building School's for the Future. ** Year 12 only				

- 2.16 In 2016 a joint venture between Tottenham Hotspur and Highgate School to jointly operate a sixth form in Tottenham was announced. This would operate at the Tottenham UTC, with support and expertise from Highgate School being provided.

Special Educational Needs

- 2.16 The number of children and young people with a statement in our borough is on an overall upward trajectory - there are currently 1,455 children with a statement in our schools compared with 1,262 in 2009. The average age of a child with a statement has been on a downward trajectory for the last few years too. In terms of specific need, the numbers of children with ASD (autistic spectrum disorder) has shown the biggest increase in numbers, with other primary needs remaining relatively stable. Language and communication needs have shown a decrease.
- 2.17 Demand for specialist in-borough provision for severe learning difficulties, ASD and hearing impairments is close to capacity in the borough. The capacity issue must be seen alongside the recent trend for increasing ASD place demand which has contributed towards reduced capacity. Any provision provided by free schools or academies will be factored into projections for future demand. In 2015 DfE approval was given to the provision of an autism base for high functioning ASD young people at ages 11 – 19. The provider for this base is Heartlands High School.
- 2.18 In September 2014 a new SEN Code of Practice came into effect. Under this Code SEN statements are now in the process of being replaced with education, health and care plans (EHCP) which take children and young people up to the age of 25. It is anticipated that, with the widening age range to include young people up to the age of 25, the number of children with statements/EHCPs will increase across the borough in the coming years. Rising numbers and the new Code means that we should plan to provide more in-borough special school places and/or resourced provision to meet the rising needs within the borough with particular emphasis on the following:
- Increased number of places in the primary sector for children with autism, including accommodating more complex needs;
 - Increase numbers of places in the secondary sector for children with autism, including accommodating more complex needs.

3 Health

Primary Care

- 3.1 There are 46 practices in the borough that currently address the primary care needs of Haringey's population. In a national context all 19 Haringey wards rank in the top half of 7,679 wards nationally, and 8 of Haringey's wards are in the top 500 most deprived wards nationally. However, this is only part of the current issue, as a Capacity Review on key wards within the borough has identified existing capacity pressures and a need to plan for retiring GPs. The focus will be on enabling patient choice as a driver for change.

- 3.2 The recommendations within the Haringey Strategic Premises Development Plan⁴ are to pursue with the current Primary Care Infrastructure Fund Bid applications to support the estate and access for patients in the immediate to short-term. Analysis has shown that currently some capacity is available across the system that could be utilised and additional patients that could be accommodated by fully utilizing existing clinical rooms. However, dialogue will need to be undertaken with the existing practices in order to understand how much capacity they have and their ability and willingness to absorb the increase in population, otherwise an estimated 7,842m² of space would be required across the borough by 2026. Using a hub model this is summarised by GP practice collaborative in Figure 33 below;
- 3.3 Using the assumption of 1,800 people per GP, there are identified future shortfalls in the Northumberland Park, South East (Harringay/St. Ann's/Seven Sisters/West Green), Wood Green, and most noticeably, Tottenham Hale areas. The analysis for each area, based on measuring a combination of Existing deficit measured based on existing GP shortfalls, projected retiring GPs, and future population rise from new development, as well as that demonstrating sufficiency in the West of the borough, is set out below.

Tottenham Hale

- 3.4 There is an existing population in the Tottenham Hale area totalling 18,686 people who are not registered with a GP. Additionally, new development is forecast to increase the population of Tottenham Hale by 10,899. This creates a need for an additional 16 new GPs, 15 new C&E rooms, and 8 new treatment rooms. This equates to a floorspace of 2,057m², and is allocated to be delivered through the redevelopment of the Welborne Centre site.

Northumberland Park

- 3.5 There is an existing population in the Northumberland Park area totalling 7,689 people who are not registered with a GP. Additionally, new development is forecast to increase the population of Northumberland Park by 3,690. This creates a need for an additional 6 new GPs, 7 new C&E rooms, and 2 new treatment rooms. This equates to a floorspace of 792m², and is allocated to be delivered through the masterplanned redevelopment of Northumberland Park Estate.

Centre of the borough (Wood Green)

- 3.6 There is projected deficit in the Wood Green area totalling 3,755 people due to the anticipated retirement of current single handed GPs. Additionally, new development is forecast to increase the population of Wood Green by 10,785. This

⁴ <http://www.minutes.haringey.gov.uk/ieListDocuments.aspx?CId=771&MId=7425&Ver=4>

creates a need for an additional 8 new GPs, 8 new C&E rooms, and 3 new treatment rooms. This equates to a floorspace of 1,011m²

West of the Borough

- 3.7 No identified need for additional capacity to be created. There is potential for The Vale Practice in Muswell Hill to extend premises into neighbouring blank space, creating additional clinical rooms and reception space.

South East of the borough (Haringay/Seven Sisters)

- 3.8 There is an existing population in the Northumberland Park area totalling 2,143 people who are not registered with a GP. Additionally there is projected deficit in this area totalling 2,000 people due to the anticipated retirement of current single handed GPs. Additionally, new development is forecast to increase the population of the area by 4,786. This creates a need for an additional 5 new GPs, 4 new C&E rooms, and 2 new treatment rooms. This equates to a floorspace of 621m². This may be partially accommodated on the Woodberry down site, and the West Green Surgery has the potential to practice through a portacabin to extend premises into neighbouring blank space, creating additional clinical rooms and reception space. This is not seen as a sustainable option however, and it is anticipated that when the Arena Retail Park site comes forward, that it will provide an appropriate opportunity to provide space to cover need in this area.

4 Libraries and Museums

- 4.1 Condition survey of Haringey's nine libraries undertaken in 2013 has identified an investment need of £6,136,890 to keep the buildings in good order and fit for purpose up to 2022. This amount is to maintain existing facilities only and does not include works for new facilities or for insulation or energy consumption reduction.
- 4.2 Bruce Castle Museum is the only museum facility directly funded by the Council. A project to undertake restoration and facility enhancement works will be initiated in 2013 with the aim of securing circa £6m. Haringey has committed £1.2m of this funding and will seek external funding for the remainder.

5 Open Space, Leisure and Sport

- 5.1 The Open Space Study 2008 identified areas of open space deficiency where CIL investment may be required. As a focus for new housing in the borough, Haringey Heartlands will create demand for open space in the Noel Park Ward and part of Hornsey Ward. Part of Noel Park Ward is considered to be deficient in access to public open space. Options for increasing access to Alexandra Palace Park from Haringey Heartlands are being considered.

- 5.2 Given the proximity to Lee Valley Regional Park and other local parks, the Tottenham Hale growth area generally has good access to public open space. However the access to the Park and other spaces needs to be improved. There is also a pocket of Tottenham Green Ward which suffers from poor access.
- 5.3 However, there is a very real difficulty in increasing the quantity of public open space in Haringey as this is an urban borough and the focus is therefore, primarily on the function, quality, usage and accessibility of existing public open space. In the east, opening up the access to the Lee Valley regional Park is a key priority. In addition, other measures such as tree planning and improving access to allotments and creation of greenroutes and will help to improve green infrastructure in the borough. The Council currently maintains 40,000 trees in streets and open space. The recent Natural Environment White Paper states the need to create an ecological network which is resilient to changing pressures and local authorities have a statutory duty to take account of the conservation of biodiversity. There are 60 designated Sites of Importance for Nature Conservation in Haringey that form the basis for this ecological network.
- 5.4 Since the development of CIP in 2011, Lordship Recreation Ground major improvements work has been progressed during 2011 and 2012. £5m of improvements (£4m from the Heritage Lottery Fund) have been celebrated in September 2012 with a community festival. Other improvement works to Haringey's parks include a major restoration and improvement work to Finsbury Park. Public consultation on improvements to Hartington Park in North Tottenham was carried out in 2012, outcomes of which will feed into a programme of works in 2013. The Council is also developing proposals for use of s106 funds for Wood Green Common, Nightingale Gardens and Barratt Avenue open space improvements with plans being finalised for expenditure in early 2013.
- 5.5 The Council has recently secured £14.75m investment in the facilities at Tottenham Green, Park Road and the Broadwater Community Centre as part of a 20-year management contract with Fusion Lifestyle. The Council is further seeking to lease the outdoor facilities at White Hart Lane Community Sports Centre and Finsbury Park Track & Gym in order to remove any ongoing requirements for either revenue subsidy or capital expenditure.
- 5.6 A potential need for a new district level combination swimming pool and leisure centre has been identified to meet the predicted growth. Such a new facility could cost around £11.2m. This is a neighbourhood or district scale model rather than a full service, town centre model, of which larger local authorities typically only provide one. A prime location for this pool would be the central part of the borough. Land availability will be a key issue in securing this provision.
- 5.7 The infrastructure table below summarises the expenditure required in order to adequately maintain the infrastructure of the borough's open spaces, sites of importance for nature conservation play sites, allotment and trees.

Table 3 – Open Space, Leisure and Sports Infrastructure and Investment needs to 2026
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Infrastructure Type	Investment Required (£m)	Funding Available (£m)	Funding Gap (£m)
Parks - Hard surface & paths, Furniture (Bins, benches gates etc), Fencing & walls, Signs	5.8	1.1	4.7
Parks Play Areas (Exc HfH)	0.9	0	0.9
Football Facilities	2.3	0	2.3
Allotments	0.2	0	0.2
Trees	1.9	0.4	1.5
Leisure Centres	1.2	0	1.2
Total	£ 22.3	£ 1.5	£20.8

- 5.8 A Playing Pitch Strategy (2016-2026) and a Outdoor Sports Facilities Strategy (2016-2026) are in the process of being finalised, and their findings are scheduled to be introduced in to the IDP via the AMR in Summer 2016.

6. Transport

- 6.1 The Mayor's Transport Strategy (2010) identifies key transport issues which are likely to affect the borough over the next 20 years including overcrowding on tube and rail lines serving the borough.
- 6.2 Transport for London and Department for Transport have identified the West Anglia line through Tottenham Hale and Northumberland Park as a key priority for investment to expand capacity. The line is running at capacity during peak periods. Enhancement to capacity on the Lea Valley Line serving Tottenham Hale and Northumberland Park is key to regeneration in the ULV. Network Rail and TfL are supporting additional track capacity and platforms initially to allow for a 4 trains per hour local service between Angel Road and Stratford. The scheme is expected to complete in late 2018.
- 6.3 Expansion of capacity at Tottenham Hale station is being developed by TfL to cater for planned growth in ULV. An additional platform, new lifts and rebuilt station concourse are to be delivered. This will create a fully accessible station. Works are expected to complete by 2018.
- 6.4 TfL has taken over responsibility for services on the Enfield/Cheshunt to Liverpool Street line via Seven Sisters which has become part of the Overground network. Investment in stations, new customer information, installation of ticket barriers and other investment will be delivered. New rolling stock on the line is planned to be introduced in 2018.
- 6.5 TfL and Network Rail are also leading on the redevelopment of White Hart Lane station. This will increase station capacity, improve passenger experience and provide for a fully accessible station. These works will support the planned expansion at Spurs football ground and support the regeneration of north Tottenham. The works are planned to complete in late 2018.

- 6.6 The London Overground service on Barking – Gospel Oak line has seen crowding in peak periods. TfL and Network Rail have commenced work to electrify the line. Combined with new rolling stock the line would see a doubling of the line’s capacity . Line electrification is due to complete in 2017 with new trains planned for 2018..
- 6.7 TfL are supporting through its Business Plan expansion of capacity on the Piccadilly and Northern lines such as from new signalling and new rolling stock. This will meet current and expected demand in the short to medium term. Even with investment on its upgrade by mid 2020s the Piccadilly line is still likely to be congested towards central London due to predicted growth in housing and employment in London.
- 6.8 In the longer term Crossrail 2 could deliver a step change in capacity and connectivity. This will require 4 tracking of the West Anglia main line through Tottenham Hale. The eastern route through Tottenham would support regeneration over a wide area in the Upper Lea Valley. The north western branch through Seven Sisters to New Southgate would support our plans for regeneration in the Wood Green area and in the southern part of Tottenham.
- 6.9 TfL has completed the removal of one way working of Tottenham gyratory. The aims of the scheme include reduced road user casualties, improved accessibility and better pedestrian and cyclist facilities. Linked to this scheme is the new bus station interchange at Tottenham Hale station.
- 6.10 TfL are planning to invest in cycling through a range of measures such as cycle superhighway and cycle hire scheme. Cycle Superhighway 1 between Tottenham and central London is due to complete in summer 2016. In addition a north south Quietway cycle route is being developed which will provide a safer, less trafficked route through the borough. Other investment to promote cycling being led by the Borough includes cycle training, local cycle routes and cycle parking. Such investment is included in the Council’s Local Implementation Plan for funding until 2017.
- 6.11 Investment in the Borough’s road network would be required. The lack of capacity at critical junctions would need to be addressed in the context of planned growth in housing and jobs. Traffic modelling for the Tottenham area has highlighted where investment would be needed. A similar assessment will be required for the Borough’s other main regeneration area at Wood Green. Assessments are carried out for the overall condition of our highways for both carriageways and footways. Currently we are in the bottom quartile compared to other boroughs. More than half our footways require maintenance. The investment will enable us to improve our current conditions and thereby reduce reactive maintenance cost while improving accessibility for pedestrians and encourage more walking and cycling.
- 6.12 Further investment in street lighting will be required. We have around 4,300 lamp columns which need replacing. Better street lighting assists in addressing crime and road safety issues. In addition our progress in converting lamps to LED will provide lower future maintenance costs and support a reduction in CO2 emissions.
- 6.13 The social and economic costs of road accident casualties are high with a fatality costing society in excess of £1m. We have high levels of road casualties and are unlikely to meet Mayoral targets. Much more therefore needs to be done.

6.14 CIL funding will be required mostly for sustainable transport measures, local maintenance of highways and streetscene. Majority of funding for major transport projects comes from TfL or Network Rail through Department for Transport.

Table 4 - Transport Infrastructure and Investment needs to 2026

Scheme	Investment Required £m	Funding available £m	Funding Gap £m
Highway junction improvements in Tottenham	15	0	15
Highway junction improvements in Wood Green	TBC	TBC	TBC
Tottenham Green Link	16	0.5	15.5
Interchanges – accessibility at Finsbury Park and Alexandra Palace	(c)	(c)	(c)
West Anglia main line – 3 rd tracking	(c)	(c)	(c)
Station capacity and accessibility improvements such as at Seven Sisters and Bruce Grove	(c)	(c)	(c)
Barking – Gospel Oak line – electrification and longer trains/platforms	(d)	(d)	(d)
Cycle superhighways	(b)	(b)	(b)
Quietways	(b)	(b)	(b)
Cycle parking	(a)	(a)	(a)
Local cycle routes	22	0	22
Car club bays	(a)	(a)	(a)
Borough wide transport improvements	(a)	(a)	(a)
Highway maintenance	100	30	70
Street lighting	40	10	30
Road safety	30	0	30
Total	223	40.5	182.5
a) to be funded through LIP via TfL b) to be funded by TfL directly c) to be funded by Network Rail/DfT d) to be funded by Network Rail and TfL Note- Major investment in underground lines [Piccadilly, and Northern] and Crossrail 2 excluded as would be led by TfL/DfT/NR and have London-wide benefits and funding regimes.			

7 Waste facilities

7.1 The North London Waste Plan was restarted in February 2013, and will identify where additional capacity for waste and recycling facilities will be delivered in the North London Area. This is a joint strategy by the seven North London Councils, and the North London Waste Authority. It is envisaged that any increase in capacity will be funded by the NLWA, and will not require CIL revenues. Waste facilities in the borough will not be charged CIL.

8 Surface Water Management Measures

- 8.1 Grant in aid funding for surface water related flooding will be available from DEFRA, subject to scheme scrutiny and a percentage of matched funding. Schemes in deprived areas will receive greater grant aid. CIL funding may be required.
- 8.2 The Infrastructure Delivery Plan (July 2011) does not include specific measures for flood risk alleviation. The Council has been working to develop a Surface Water Management Plan during 2011 and 2012. The Surface Water Management Plan has identified 9 Critical Drainage Areas in the Borough. These CDA's require investment in resilience and mitigation measures to protect those that live and work in these areas from the risks associated with flooding. Met Office predictions indicate that intensities of storms are likely to increase giving rise to greater likelihood of flood incidents in the future.
- 8.3 To implement measures identified in the Surface Water Management Plan to alleviate flood risk in the Borough has been estimated to cost £20.6 million. The expectation of the Environment Agency is that the Borough should fund this work. Grant in aid funding is available from DEFRA, subject to scheme scrutiny and a percentage of matched funding. Schemes in deprived areas will receive greater grant aid.
- 8.4 Progression will be dependent upon securing capital funds. The timetable for works may need to be extended if funding is not available within the timescale indicated.

Table 5- Flood and Surface Water Mitigation Measures from the Surface Water Management Action Plan - Infrastructure and Investment needs to 2026				
Critical Drainage Area ID	Location	Investment Required £m	Funding Available £m	Funding Gap £m (Grant in Aid funding to be applied for. Award outcome is currently unknown)
Group4_010	Bounds Green	2.0	0	2.0
Group4_055	Hornsey	3.0	0	3.0
Group4_056	Hornsey Vale	2.7	0	2.7
Group4_057	Harringay and Sth Tottenham	5.9	0	5.9
Group4_061	Northumberland	2.9	0	2.9
Group4_062	Highgate and Crouch End	0.6	0	0.6
Group4_063	White Hart Lane	2.2	0	2.2
Group4_073	Palace Gates and Dukes Ave	0.2	0	0.2
Group4_075	Ellenborough Road	1.1	0	1.1
Total		20.6	0*	20.6
*Grant in Aid funding to be applied for (award outcome currently unknown)				

9 Water Quality

- 9.1 Thames Water (TW) proposes to continue the Victorian Mains Replacement programme. Alongside measures to reduce demand, TW is also considering new water resource schemes for the medium term to offset the risk associated with a strategy heavily dependent on demand management the outcomes of which are uncertain. These measures are considered at a regional level.
- 9.2 Deephams Sewage Treatment Works (STW) serves part of the Haringey Borough. Deephams STW is situated in Edmonton in the Borough of Enfield and has a catchment that extends across an area of 249km² including the northern part of Haringey and therefore has a strategic role in providing sewage treatment within North London.
- 9.3 Deephams plant requires improvements and upgrade. This upgrade will cater for population growth within Haringey and surrounding Boroughs, and improve the water quality of the Salmon's and Pymmes Brooks and River Lee, through improving the treatment of influent at Deephams STW. Thames Water's preferred option is to build the upgrade on the existing Deephams Sewage Works site (rather than a replacement site).

10 Electricity Network

- 10.1 National Grid is working on a major national infrastructure project called the North the London Reinforcement Project (NLRP). The project comprises of a series of upgrades to an existing overhead line route that runs from Waltham Cross Substation, near Waltham Abbey to Hackney Substation in London. The route consists of two sections, one runs from Waltham Cross to Tottenham, and the other runs from Tottenham to Hackney. The aim of this upgrade project is to ensure that new sources of power generation located in, and supplying the boundaries of, the London region can continue to meet the city's demand for energy.

11 Decentralised Energy Infrastructure

- 11.1 Haringey energy studies, energy masterplanning, heatmapping and other feasibility studies for the borough have shown the potential for decentralised energy networks in and around Upper Lee Valley corridor (North and South Tottenham, Tottenham Hale), Broadwater Farm, and Hornsey Town Hall. Other opportunities exist in regeneration and redevelopment areas, including Hornsey High Street, Wood Green East, Haringey Heartlands, Wood Green North, Tottenham Town Hall and St Ann's Hospital site.
- 11.2 This is a long term programme and it is expected that the costs of delivering decentralised energy networks in the borough will be funded by both private and public sectors. At this stage the funding sources are not confirmed, although a capital grant from the Mayor's Regeneration Fund (MRF) has been allocated to developing DE as part of regeneration in North Tottenham (up to £2.5m). This means the potential funding is large; however this should reduce over time as the schemes come forward and other funding sources are confirmed. Other capital funding sources include connection charges

for new developments, and depending on the nature of the project private sector finance, or public sector finance.

- 11.3 The estimated capital cost of the networks is £25.2m, and the MRF grant is up to £2.5m, leaving a gap of £22.7m. A business case would be prepared before each scheme is delivered, clearly identifying the contribution from other funding sources listed above and CIL. A business case is currently being evaluated for the Upper Lee Valley network which includes North Tottenham.

12 Emergency Services

- 12.1 During the course of Community Infrastructure study, the Council met with borough commanders or their representatives for emergency services, and also discussed the relevant business plans and asset planning documents for these services where available.
- 12.2 London Mayor's recent announcements (2012) for emergency service provision in London mean that there may be changes to the police services in the borough including the potential reduction in services from Tottenham Police Station.
- 12.3 The Metropolitan Police considers the existing patrol facilities in Western Road N22 to be inadequate, and expensive to maintain. The facility has a temporary planning permission until 2014. The site is within the Haringey Heartlands growth area, and the Council will be keen to see that the land is used efficiently.
- 12.4 Although the draft Assets Plan by the Metropolitan Police (2007) indicated that the Patrol base will be considered as part of the proposed development of the Wood Green Custody Centre, this is no longer the case. Planning permission for the new police custody centre in Wood Green (without the patrol base) was granted in 2011, and the construction work has already started.
- 12.5 The Ambulance Services has an aspiration to identify a small plot to locate one ambulance vehicle in the borough.

13 Total Infrastructure Funding Gap by Infrastructure

- 13.1 The table below summarizes the potential cost of providing the infrastructure requirements outlined in the 2013 document (except transport for which the figurers have been updated in 2016). Some service providers are yet to provide more definitive information on infrastructure needs. Figures below are from 2013, indexed using BCIS indexation to bring them to April 2016 prices. As in 2013, these amounts and funding routes change as priorities change and additional funding streams are identified. It is hoped that the implementation of the Haringey Community Infrastructure Levy in 2013 will make a contribution towards bridging the identified funding gap.

Table 6-Summary of Infrastructure Investment Estimates 2013/14-2026/27			
Infrastructure	Investment Required	Funding Available	Funding Gap (£m)

Type	(£m)	(£m)	
Education	231.9	140.5	91.3
Health	tbc	tbc	tbc
Open space/ Leisure	26.1	1.8	24.4
Transport	223	40.5	182.5
Emergency Services	--	--	--
Decentralised Energy	29.3	2.9	26.3
Water Management & Surface water Flooding	24.1	tbc	24.1
Waste	--	--	--
Total (£m)	£534.4	£185.7	£348.6

14 Growth Area Infrastructure

14.1 The following information is drawn from emerging masterplans and as such may be subject to change as feasibility studies continue to be developed. The IDP will be updated as necessary to accommodate this.

14 (a) Tottenham Hale

14.2 Work undertaken to develop a District Centre Framework for Tottenham Hale has created an indicative list of infrastructure items, costs, locations, and potential funding streams required to be delivered as part of the regeneration of the area. These items and costs may be subject to change as feasibility studies continue to be developed. The IDP will be updated as necessary to accommodate this.

Tottenham Hale Infrastructure and Placemaking February 2016			Total Cost Estimate from Infrastructure Table (000's)	Potential Funding Source
Community Facilities	New as part of development on site	New nursery/ early years	Not known	Not identified
		Multi use space in Tottenham Hale Retail Park	Not known	Not identified
	Upgrade as part of development on site	Nursery in Ashley Road South	Not known	Not identified
Education	Primary School		Not known	DFE Funding
	Secondary School		Not known	DFE Funding
Health	Primary Care Facilities	Welbourne Site	Not known	NHS funding
Employment and Training	Provision of facilities		Not known	Not identified
	Construction phase skills and training	All sites	Not known	S106
	End user skills training	All sites	Not known	S106
	Compensation for loss of employment land		Not known	S106
Transport and Highways Section	Strategic borough wide transport improvements	Ferry Lane - Millmead to boundary	1650	Housing Zone/ Haringey Capital/ CIL
		Markfield Road	720	Housing Zone/ Haringey Capital/ CIL
		Highcross	480	Housing Zone/ Haringey Capital/ CIL
	Site specific transport and highway measures	Broad Lane - next to Retail Park	1200	Haringey Capital/ S106/S278

		Watermead Way	996	S106/ S278
		Ferry Lane Station to Millmead	996	S106/ S278
		1 - Ashley NS Link 1	891	Housing Zone/ S106/ S278
		2 - Ashley EW Link	1375	
		3 - Ashley NS Link 2	506	
		4 - Ashley NS Link Station Island	935	
		5 - Station Square	1034	Haringey Capital/ S106/S278
		6 - Station Road	506	S106/ S278
		7 - Welbourne Site Landscaping	1760	S106/ S278
		8 - Monument Way Pocket Park	350	S106/ S278
		9 - Monument Way Site Landscaping	188	S106/ S278
		10 - Hale Road	1875	S106/ S278
		11 - The Hale	1875	S106/ S278
		Monument Way Road Realignment	1200	Housing Zone/ S106/ S278
		Tynemouth	375	S106/ S278 / CIL/ Other public grant
Open Space and Public Realm	Open space/ parks including improvements to existing	Paddock	2750	Haringey Capital/ S106/ S278 / CIL/ Other public grant
		Down Lane Park 1	750	S106/ S278 / CIL/ Other public grant
	Borough wide improvements to streetscene and built environment	HV2 - Hale Village Rail Bridge	8100	Housing Zone/ CIL
		HW1 - Hale Wharf Bridge	2325	Housing Zone/ S106/ S278 / CIL
		PB1 - Pymme's Brook	310	S106/ S278 / CIL
		Paddock Bridge LV1	378	S106/ S278 / CIL

		GG Chesnut Rd Phase 1	500	Haringey Capital/ S106/ S278 / CIL
		GG Chesnut Rd Phase 2	1200	Public Grant/ CIL
	Public art not linked to site		Not known	Not yet identified
	Public art on or adjacent to site		Not known	Not yet identified
	Site specific improvements to public realm (on site or immediate surrounds)	GG Underpass	219	Haringey Capital/ S106/ S278 / CIL
		Down Lane Park 2	1125	Public Grant/ S106/ S278 /
		Down Lane Park 3	1125	Public Grant/ S106/ S278 /
	Estate maintenance revenue costs	Estate Maintenance Inside SPD	200	CIL
		Estate Maintenance Outside SPD	400	CIL
Environmental Sustainability	Carbon Reduction Measures/ Initiatives		Not known	Not yet identified
	Creation of new DE capacity	New DE Centre for east of railway line	Not known	Not yet identified
	Connection to existing/ future decentralised energy networks	All sites	Not known	Not yet identified
	Biodiversity Measures/ Initiatives	Down Lane Park Phase 2	Not known	Not yet identified
	Strategic flood mitigation		Not known	Not yet identified
	Site specific flood mitigation		Not known	Not yet identified
TOTALS (£000's)			38293.25	16670

14 (b) North Tottenham

14.3 Work undertaken to develop a Masterplan for High Road West has created an indicative list of infrastructure items with costings required to be delivered as part of the regeneration of the area. These items and costs may be subject to change as feasibility studies continue to be developed. The IDP will be updated as necessary to accommodate this.

North Tottenham Infrastructure List	£Total (000's)
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Education	Early years	756
	Primary School	4,345
	Secondary School and Integral Sixth Form	13,340
Health	Primary Healthcare Facilities	663
Open space/ leisure	Moselle Square	2,400
	Peacock Gardens	800
	White Hart Lane Station	700
	Play space	1,260
	Playing Pitches	3,600
	Tennis Courts	80
	Indoor sports provision	480
	Community Sports Hall	1,260
Community	Library	1,800
	Community Space	1,650
Transport, movement and access	Highways Projects: On-Site	6,967
	Primary Roads	444
	Secondary Roads	1,831
	Tertiary Road	1,548
	Shared Surfaces	1,938
	High Street	1,205
	Highways and Junction Improvements: Off-Site	1,700
	Junction Improvements: On-Site	1,000
	Pedestrian and Cycle Projects: Off-Site	2,748
	Tottenham East-West Link ; apportionment of £7.5m contribution	2,748
Utilities and drainage	Energy Centre & District Heating On Site	8,500
	Allowance for energy centre and district heating	0
	Electricity and Gas On-Site	4,048
	Electricity and Gas Off Site	2,000
	Water On-Site	1,492
	Water Off-Site	1,000
	Foul & Surface Water Drainage - On Site	2,485
	Communications / Broadband On Site	979
	Communications/ Broadband Off-site	500
	Civil Engineering works associated with utilities services (common service trench)	2,316
Waste management	Waste Management On Site	250
TOTAL (£000's)		57,330

14 (c) Wood Green/ Heartlands

14.4 The quantum below is drawn from the Scenario 1 infrastructure assumptions contained within the Wood Green AAP Issues & Options Report (2016). These are

considered to be the closest approximation of the net increases in demand stemming from new development in the Site Allocations DPD (2016). They do not take account of existing deficits, which are set out in the existing Community Infrastructure Study. Additionally, as work has started later on this piece of work, the assumptions do not have costs against them as yet. It is expected that these will become available in Autumn 2016 when the preferred option of the Wood Green AAP is available. Health and education demand has been included in the analysis in Sections 2 & 3 of this document. These items and costs may be subject to change as feasibility studies continue to be developed. The IDP will be updated as necessary to accommodate this.

Wood Green Infrastructure List		Quantum	Delivery Location
Education	Early Years Provision	157 Places (3 x 52 Place facilities)	Within AAP area
	Primary School Provision	3 Forms of Entry	Within AAP area
	Secondary School provision	2.6 Forms of Entry	Within AAP area
Health	General Practitioners	5	Within AAP area
	Dental Surgeons	5	Within AAP area
	Combined Primary Care (m ²)	1,049 m ²	Within AAP area
	Acute Healthcare Beds	18	Outside of AAP area
	Extra Care Housing Beds	20	Within or outside AAP area
Community/ Leisure provision	Flexible community space (m ²)	585m ²	Within AAP area
	Library space (m ²)	270m ²	Within AAP area
	Swimming Pool Lanes	2 Lanes	Within or outside AAP area
	Sports Courts	3 courts	Within AAP area

Public Open Space	Playing pitches	5.13 Ha	Outside of AAP area
	Children's play	1.79 Ha	Outside of AAP area
	Allotments	2.16 Ha	Outside of AAP area

15 Monitoring

- 15.1 The Community Infrastructure Study and the associated schedule form the baseline from which the monitoring of the delivery of infrastructure schemes can be assessed. These have been set out as a number of iterative Infrastructure Delivery Plan documents.
- 15.2 However, the nature of projects, model of service delivery, the funding sources and phasing may be subject to change over the lifetime of the Local Plan. Haringey Council has identified a set of service providers with whom to liaise regularly to keep under review the infrastructure needs and delivery of identified infrastructure projects.
- 15.3 The progress of projects will be included as updates to the Infrastructure Delivery Plan as reported annually during the preparation of the LDF's Authority Monitoring Report (AMR). The AMR will be the vehicle to collect the findings of emerging monitoring mechanisms such as the Annual School Place Planning Report, Playing pitch Strategy which provide updates on the emerging need and implementation of projects included in the IDP. This will in turn ensure that the Council's Regulation 123 list is updated to direct CIL revenues to the most appropriate infrastructure projects.
- 15.4 It is expected that a formal update of the IDP will take place in 2016 to support the updating of the Council's CIL.