

Enfield's Infrastructure Delivery Plan

2013 Review: Consultation Draft

May 2013

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Contents

1 Executive Summary

Executive Summary

- 1.1** This Infrastructure Delivery Plan (IDP) seeks to establish what additional infrastructure is required to support the planned increase in new homes and jobs, and the projected population growth within the borough up to 2026 and beyond. Although there is no comprehensive and generally agreed definition of infrastructure this IDP identifies three broad typologies: social infrastructure, (such as health and education facilities), physical infrastructure, (such as transport and utilities) and green infrastructure, (such as parks and open spaces). The IDP provides an analysis of both existing and future infrastructure provision. In relation to future provision the IDP indicates where it will be provided, when it will be provided, how it will be funded, including importantly the identification of any funding gaps, and who will be responsible for the delivery.
- 1.2** The IDP was produced in March 2010 as part of the evidence base supporting the Council's submission stage Core Strategy. The Council's Core Strategy adopted in November 2010 sets out the spatial strategy for Enfield.⁽¹⁾ The Core Strategy seeks to focus growth within four broad locations, referred to as Strategic Growth Areas. These are:
- Central Leaside - a large area in the south east of the borough where growth will be focused south of the North Circular in an area known as the Meridian Water Place Regeneration Priority Area.
 - North East Enfield - growth in this area will be focused in the area of the Ponders End Regeneration Priority Area.
 - North Circular Road - growth will be focused in the New Southgate Regeneration Priority Area.
 - Enfield Town - the borough's major town centre where growth will be focused in the vicinity of the Enfield Town Station Regeneration Priority Area.
- 1.3** This IDP review updates the 2010 study and supports the delivery of the Core Strategy and other documents within the Local Plan and will help to ensure that all supporting infrastructure is identified and delivered in a timely, coordinated, efficient and sustainable way.
- 1.4** The Council is currently preparing a Community Infrastructure Levy (CIL) that will be used to help fund new infrastructure requirements identified to support the proposed growth set out in the Council's Development Plan Documents. This IDP review will form part of the evidence base supporting the introduction of CIL charging within the borough.
- 1.5** There is a range of governance that supports infrastructure delivery at the regional (for example, Mayor of London), sub regional (for example, the North London Strategic Alliance), and local level.⁽²⁾ This IDP is consistent with the Mayor of London's recently published Implementation Plan⁽³⁾. It identifies existing infrastructure and the infrastructure needed to meet the backlog and proposed growth, focusing on key infrastructure needs.
- 1.6** This IDP has been informed by liaison with, and information provided by, a wide range of Council services (including education, libraries, highways), and infrastructure providers external to the Council (such as emergency services, health and utility companies). It focuses on key infrastructure needs derived from the plans and strategies of each of these internal and external partners. Where known, the anticipated infrastructure funding gap is summarised in table 1.1 below according to infrastructure type. Ongoing dialogue with infrastructure providers is essential to plan for infrastructure needs and this document, alongside the Core Strategy and other Local Plan documents, informs other business plans and strategies of all partners to help to shape and influence the borough. This IDP includes an Infrastructure Delivery Supporting Schedule which sets out those schemes that are proposed to take place during the Core Strategy plan period to 2026 and beyond. Whilst the IDP seeks to be comprehensive in terms of its coverage, it should not be considered as comprising of a complete list for every infrastructure scheme currently programmed in the various plans and strategies.

1 The Enfield Plan Core Strategy 2010

2 Enfield's Future - a Sustainable Community Strategy for Enfield 2009 - 2019

3 London Plan Implementation Plan 1 - London Plan 2011 implementation Framework - Mayor of London January 2013

1 Executive Summary

Type of Infrastructure	Funding Gap (£ million)
Transportation	42.530
Utilities and Renewable Energy	40.000
Water and Drainage	11.789
Waste	tbc
Education	63.000
Health Care	10.200
Social Care	tbc
Community Services	3.481
Leisure & Cultural Services	18.000
Parks & Open Spaces	3.340
Waterways	tbc
TOTAL ESTIMATED INFRASTRUCTURE FUNDING GAP	£192.34m

Table 1.1 Infrastructure Funding Gap Estimates

- 1.7** This IDP is not a policy document and information contained within it does not override or supersede policies and commitments contained within the formal suite of Local Plan documents including the Core Strategy. It is a key part of the Council's evidence base and will further provide a robust basis on which the Council will seek to influence public, private and agency funding and priorities. As noted above, the initial IDP was produced three years ago with the intention that the document should be updated on a regular basis. More recent population projections and the first data from the 2011 Census suggest more rapid population growth than previously projected meaning an increased demand for all types of infrastructure. The Council therefore considers it timely for this review of the IDP to be undertaken in order to provide important evidence source used to inform both the Council's emerging Community Infrastructure Levy (CIL) Charging Schedule and Local Plan documents.

Monitoring

- 1.8** This revised draft IDP, once finalised, will form the baseline from which the monitoring and delivery of infrastructure can be assessed. An attempt has been made to try and ensure that the document is accurate as possible at the time of writing, however it should be noted that the nature of projects detailed may change, together with funding sources and timings; particularly as more detailed infrastructure information emerges as a result of the Area Action Plans and masterplanning processes. This IDP highlights those instances where funding and other delivery requirements are unknown or where there are likely to be shortfalls. However, a key purpose of this document is to continue a process of dialogue with infrastructure providers, in seeking to align infrastructure priorities within the various plans and strategies. The IDP and accompanying schedule will continue to be updated on a regular basis.

1 Executive Summary

Your Views

- 1.9** This revised draft IDP together with the Council's Community Infrastructure Levy (CIL): Preliminary Draft Charging Schedule are the subject of a six week consultation commencing **7th June to 19th July 2013**. Any comments received to this draft IDP will be considered in finalising the document. The final IDP will then be made available as part of the evidence supporting the CIL Draft Charging Schedule.
- 1.10** We would like to receive any comments you may have on the revised draft IDP. Comments should be made in writing and sent to:

Strategic Planning and Design,
Regeneration, Leisure and Culture,
Enfield Council,
Civic Centre,
Silver Street,
Enfield EN1 3XA

Or,

Email: cil@enfield.gov.uk

For further information please contact the Planning Policy Team at cil@enfield.gov.uk or call us on 020 8379 3866

1 Executive Summary

2 Introduction

2.1 Introduction

2.1 Introduction

- 2.1.1** The Council has produced this consultation draft revision to its Infrastructure Delivery Plan alongside its preliminary draft Community Infrastructure Levy (CIL) and invites comments on this document between **7th June 2013 and 19th July 2013**. Following this six week public consultation it is intended that infrastructure providers will be contacted again, as part of an ongoing dialogue, to confirm that they agree with the information contained within this document and to ensure that it is accurate as possible at the time of writing.
- 2.1.2** This Infrastructure Delivery Plan (IDP) seeks to establish the additional infrastructure required to support the planned increase in new homes and jobs, and the projected population growth, within the borough up to 2026. It includes a review of existing provision for social infrastructure (such as health and education facilities), physical infrastructure, (such as transport and utilities) and green infrastructure, (such as parks and open spaces). The IDP provides an analysis of the nature of future infrastructure provision, and if known, where it will be provided, when it will be provided, how much it will cost (excluding land costs), how it will be funded and who will be responsible for the delivery.
- 2.1.3** The IDP supports Enfield's Core Strategy, ⁽⁴⁾ and other emerging Local Plan documents, to help ensure that all supporting infrastructure is identified and delivered in a timely, coordinated, efficient and sustainable way. The Council is currently preparing a Development Management Document ⁽⁵⁾ containing policies that will be used in the determination of planning applications across the borough. It is anticipated that the DMD will reach independent examination stage later in 2013 and this revised IDP will form part of the underlying evidence base. A number of Area Action Plans are also being progressed which cover areas of the borough identified as Regeneration Priority Areas.
- 2.1.4** The latest population approximation, taken from mid-2011, estimates the borough's population to be 313,935 ⁽⁶⁾ making Enfield the fourth largest amongst the 32 London boroughs. Enfield has a large population of both 0 -15s and older people in comparison with the rest of London. Just under a quarter of residents (22.4%) are aged 15 or below, the fourth greatest proportion in London. 12.5% of residents are aged 65 or over, with this figure being the tenth highest in London and expected to increase significantly over the next decade. The borough's population is expected to increase steadily to about 330,000 by 2022⁽⁷⁾ according to the latest GLA projections. Demographic changes have influenced the spatial strategy approach within the Core Strategy, and in turn the infrastructure required to deliver growth.
- 2.1.5** Enfield's spatial strategy set out in the Core Strategy seeks to focus growth within four locations, referred to as Regeneration Priority Areas. These are:
- Central Leaside - a large area in the south east of the borough where growth will be focused south of the North Circular in an area known as the Meridian Water Regeneration Area.
 - North East Enfield - growth in this area will be focused in the area of Ponders End Regeneration Area.
 - North Circular Road - growth will be focused in the New Southgate Regeneration Area.
 - Enfield Town - the borough's major town centre where growth will be focused in the vicinity of Enfield Town Station Regeneration Area.
- 2.1.6** The Council is preparing a number of Area Action Plans for Regeneration Priority Areas and within these broad locations in some cases masterplans, are also being produced for defined areas. The Area Action Plans and Regeneration Priority Area locations are defined in Figure 2.1. Further work is also being undertaken for the Edmonton area where preparation of a masterplan is underway.

4 The Enfield Plan Core Strategy 2010 - 2015 November 2010 <http://www.enfield.gov.uk/core-strategy>

5 Submission Draft Development Management Document 'Planning for managing development in Enfield' April 2013 www.enfield.gov.uk/dmd

6 ONS Mid Year Estimates

7 GLA Projections

2 Introduction

- 2.1.7** There is a range of governance that supports infrastructure delivery at the regional level (for example, Mayor of London), sub-regional level (for example, the London Anglia Growth Partnership and the North London Strategic Alliance), and at the local level (for example the Enfield Strategic Partnership and the Sustainable Community Strategy).⁽⁸⁾ At the regional level the Mayor is considering ways of improving infrastructure planning in London. Through the Implementation Plan ⁽⁹⁾the Mayor is working with boroughs and other stakeholders (including authorities adjoining London) to ensure that strategically important infrastructure is identified, funded and implemented effectively.
- 2.1.8** The way in which infrastructure is provided and delivered is an important aspect of sustainable communities. The IDP seeks to be comprehensive in its coverage while focusing on key infrastructure needs and may therefore not list every infrastructure scheme currently programmed in the various plans and strategies. The IDP has been produced by drawing on information from a range of Council services (such as education, libraries, highways and neighbourhood regeneration), and infrastructure providers external to the Council (such as NHS colleagues, emergency services and utility companies). Ongoing dialogue with infrastructure providers is essential to plan for the infrastructure needs arising from the anticipated level and location of development proposed within the Core Strategy. Alongside the Core Strategy, this document informs other business plans and strategies of the partners helping to shape and influence the borough. As part of this ongoing dialogue the IDP seeks to establish available sources of funding that will be used to deliver essential infrastructure required to deliver the growth proposed within the borough. Any shortfalls in funding are highlighted and will be used as part of the Council's evidence used to support the case for the Community Infrastructure Levy (CIL) Charging Schedule that is being developed for introduction within the Borough in 2014.
- 2.1.9** The IDP includes a supporting Infrastructure Schedule which should be read in conjunction with the chapter texts in the document. The Schedule sets out the schemes that are proposed to take place during the Core Strategy plan period, up to 2026. Schemes that are considered key to the successful delivery of the levels of growth proposed within the borough are highlighted on the Schedule in bold type against a white background. The Schedule will continue to be updated as and when required, including when the CIL Charging Schedule is reviewed and in the light of ongoing Council Monitoring Reports (MR).
- 2.1.10** This IDP is not a policy document and the information contained within it does not override or supersede the policies and commitments contained within the Council's Core Strategy and other Local Plan documents. It is key piece of evidence that provides a robust basis on which the Council seeks to influence public, private and agency funding and priorities. As such the IDP forms part of the evidence base needed to establish the Council's Community Infrastructure Levy (CIL) Charging Schedule. The Council's current approach to seeking developer contributions towards infrastructure provision is set out in Core Policy 46 of the Core Strategy and in the Section 106 Planning Obligations Supplementary Planning Document (SPD).⁽¹⁰⁾ The S106 document will be reviewed prior to the adoption of the Council CIL Charging Schedule.

Your Views

- 2.1.11** This revised draft IDP together with the Council's Community Infrastructure Levy (CIL): Preliminary Draft Charging Schedule are the subject of a six week consultation commencing **7th June to 19th July 2013**. Any comments received to this draft IDP will be considered in finalising the document. The final IDP will be made available as part of the evidence supporting the CIL Draft Charging Schedule.
- 2.1.12** We would like to receive any comments you may have on the revised draft IDP. Comments should be made in writing and sent to:

8 Enfield's Future - A Sustainable Community Strategy for Enfield 2009 - 2019.

9 London Plan Implementation Plan 1, January 2013 <http://www.london.gov.uk/publication/implementation-plan>

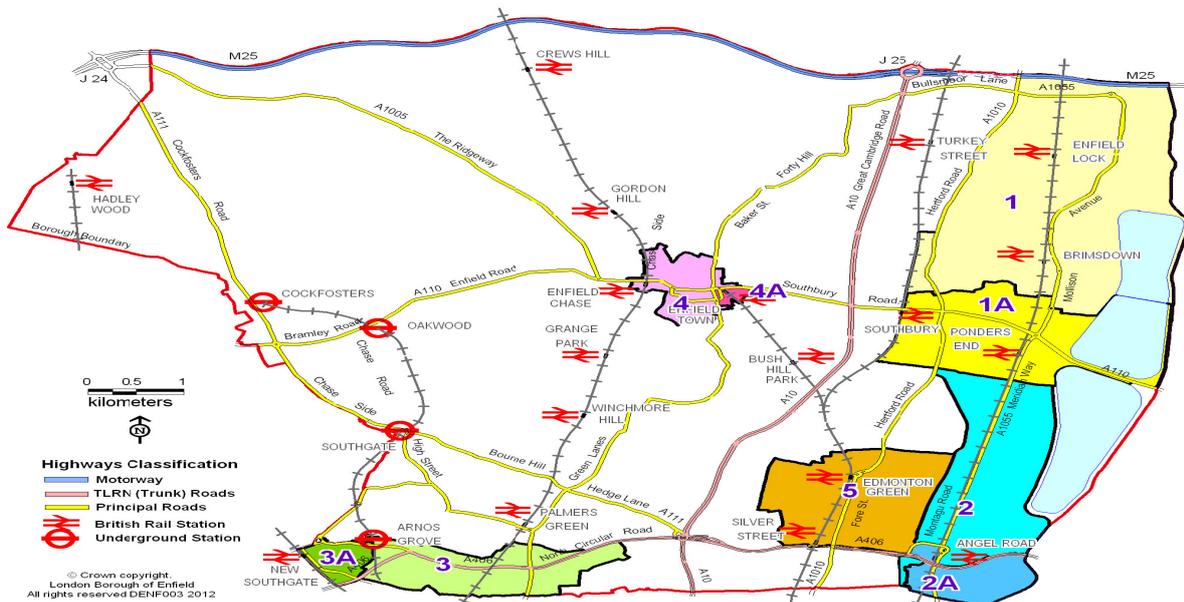
10 Enfield Council S106 Supplementary planning document - November 2011

http://www.enfield.gov.uk/info/856/planning-local_development_framework/1761/s106_supplementary_planning_document_spd

2 Introduction

Strategic Planning and Design,
 Regeneration, Leisure and Culture,
 Enfield Council,
 Civic Centre,
 Silver Street,
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Area Action Plans / Regeneration Priority Areas

- | | | |
|--|---|-------------------------------------|
| 1. North East Enfield AAP / 1A.Ponders End | 3. North Circular AAP / 3A.New Southgate | 5. Masterplan for the Edmonton Area |
| 2. Central Leaside AAP / 2A.Meridian Water | 4. Enfield Town AAP / 4A.Enfield Town Station | |

5831AAP PSPA 10
 April 2013

Picture 2.1

2 Introduction

2.2 Aims and Scope of the Infrastructure Delivery Plan

2.2.1 The aims of the IDP are to:

- Review the existing capacity of physical, social and green infrastructure provision across the borough.
- Identify the infrastructure required to serve the proposed level and location of development and growth within the borough, including:
 - The renewal of existing infrastructure to meet the needs of the existing and new communities.
 - The provision of new infrastructure to support proposed growth as set out in the Core Strategy.
 - Ensuring that the necessary infrastructure is planned for and provided in sync with the development strategy of the Core Strategy and other documents that together form Enfield's Local Plan.
- Use information on identified infrastructure funding gaps as part of the evidence base to support the introduction of a CIL Charging Schedule in Enfield in 2014.
- Engage infrastructure providers in the IDP process and align priorities and resources of infrastructure providers to help deliver the spatial strategy.
- Provide information on the range of infrastructure providers, their programmes and plans and how these relate to the spatial vision of the Core Strategy.
- Establish how the infrastructure is to be funded, who will be responsible for infrastructure delivery and whether there are any deficits / gaps or surpluses in infrastructure provision.

Physical Infrastructure	Sub Categories
Transport	<ul style="list-style-type: none"> ● Road ● Rail ● Tube ● Buses ● Cycling & Pedestrian ● Parking ● Waterborne Transport
Energy	<ul style="list-style-type: none"> ● Electricity ● Gas ● Renewable Energy
Water and Drainage	<ul style="list-style-type: none"> ● Water Supply ● Waste Water ● Drainage ● Flood Defences
Waste	<ul style="list-style-type: none"> ● Collection and Disposal
Telecommunications	<ul style="list-style-type: none"> ● Broadband
Public Realm	<ul style="list-style-type: none"> ● Street Scene
Historic	<ul style="list-style-type: none"> ● Listed Buildings ● Conservation Areas
Social and Community Infrastructure	Sub Categories
Education	<ul style="list-style-type: none"> ● Early Years / Childcare ● Primary

2 Introduction

	<ul style="list-style-type: none"> • Secondary • Further • Higher
Health Care	<ul style="list-style-type: none"> • Primary Care (Health Centres, GP Surgeries and Dentists) • Hospitals
Social Care	<ul style="list-style-type: none"> • Housing Related Support and Care (For people with Physical, Learning, Mental Health disabilities and Older People)
Children's Services	<ul style="list-style-type: none"> • Children's Centres
Leisure Services	<ul style="list-style-type: none"> • Sports Centres and Halls • Swimming Pools
Cultural Services	<ul style="list-style-type: none"> • Museums/Galleries • Theatres • Cinemas
Community Services	<ul style="list-style-type: none"> • Community Centres and Meeting Halls • Youth Services • Libraries • Places of Worship • Cemeteries and Crematoria • Post Offices
Emergency and Essential Services	<ul style="list-style-type: none"> • Police • Fire • Ambulance • Emergency Planning
Green Infrastructure	Sub Categories
Parks and Open Spaces	<ul style="list-style-type: none"> • Parks • Country Parks • Children's Play Areas • Sports Pitches • Allotments
Lee Valley Regional Park	
Waterways	

Table 2.1 Scope of Study

Methodology

2.2.2 The infrastructure costs stated within this document do not take account of land values and, unless otherwise stated, relate to build costs only.

2.2.3 The starting point for this review has been to contact again those infrastructure and service providers who contributed information used to inform the previous IDP in 2010. These included: Council services such as education, libraries, leisure and neighbourhood regeneration; as well as providers external to the Council such as the NHS, colleges, utility providers and emergency services.

2 Introduction

2.2.4 A list of known relevant agencies / bodies who provide infrastructure is provided in Appendix A of this document. The aims of this engagement was to establish existing infrastructure capacity as well as future requirements to accommodate the levels of growth being proposed. Providers were asked how future provision is planned, funded and delivered and what standards are used to assess future needs. This engagement also sought to inform providers of the spatial strategy contained within the Core Strategy and associated AAPs so that they could be aware of its aims when planning future infrastructure and developing their strategies and programmes.

Monitoring and Review

2.2.5 This IDP forms the baseline from which the monitoring of the delivery of infrastructure schemes can be assessed. The nature of projects detailed and the timing and funding sources for schemes contained within the document is likely to change over time as more detailed information becomes known regarding the various infrastructure priorities within the emerging Masterplans, Area Action Plans and other strategies. The IDP and its accompanying schedule should therefore be regarded as 'live' documents.

2.2.6 The IDP will continue to be updated on a regular basis to reflect changing circumstances, investment plans and strategies as the Core Strategy moves through its time line to 2026 and other Local Plan documents are produced. In this revised IDP the information given in the chapters for the different infrastructure categories have been reviewed. In the supporting schedules, schemes that have been completed since the previous IDP was produced in 2010 have been deleted. Information given on other schemes has been updated and amended as appropriate and details of a number of new proposals added.

Limitations of the Review IDP

2.2.7 A number of infrastructure service providers only plan on a 3-5 year time cycle, while others such as some of the utility providers, tend to react when proposals are at the planning application stage. This provides obvious limitations in terms of planning ahead within the Local Plan time-frame of 2026. Emphasis has therefore been placed on ensuring a detailed understanding of infrastructure requirements for early phases of Plan delivery and the further work needed to inform requirements for later phases.

2.2.8 As far as possible the information in this review IDP has been checked to ensure that it is accurate at the time of writing and based on the best available evidence. It should be noted, however, that responses have not been received from all of the infrastructure providers and others were unable to provide the full information details sought in the schedule of proposals.

2.3 Policy Context

National Planning Policy Framework

2.3.1 In March 2012 the Government issued the National Planning Policy Framework (NPPF)⁽¹¹⁾ which sets out the Government's economic, environmental and social planning policies for England. Local authorities should set out the strategic priorities for their area in their local plans. The NPPF (para 156) advises that this should include strategic policies to deliver:

- The homes and jobs needed in the area;
- The provision of retail, leisure and commercial development;
- The provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
- The provision of health, security, community and cultural infrastructure and other local facilities; and
- Climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including landscape.

2 Introduction

2.3.2 The NPPF states that the Local Plan should be based on adequate, up to date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. A wide section of the community should be proactively engaged, so that Local Plans, as far as possible, reflect a collective vision and a set of agreed priorities for the sustainable development of the area. Crucially, the NPPF advises (para 157) that Local Plans should: plan positively for the development and infrastructure required in the area to meet the NPPF's objectives, principles and policies; be drawn up over an appropriate time scale, preferably a 15 year time horizon; take account of longer term requirements and be kept up to date; based on co-operation with neighbouring authorities, public, voluntary and private sector organisations; allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide detail on form, scale, access and quantum of development where appropriate.

Community Infrastructure Levy

2.3.3 The Community Infrastructure Levy (CIL) came into force in April 2010. It allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area. The money can be pooled and used to fund a wide range of infrastructure that is needed as a result of development. The Planning Act 2008 provides a broad range of infrastructure facilities which can be funded by the levy; including transport schemes, flood defences, schools, hospitals, and other health and social care facilities, leisure centres, play areas, parks and green spaces, cultural and sports facilities, district heating schemes, police stations and other community safety facilities. Local authorities and neighbourhoods have flexibility to choose what infrastructure they need to deliver for their area. In London, the regulations allow the Mayor of London to charge CIL to fund transport facilities. On 1 April 2012 the Mayor implemented a CIL Charging Schedule to raise funds for the construction of Crossrail.

2.3.4 Charging authorities should normally implement the levy on the basis of an up to date Core Strategy / Local Development Plan. The Enfield levy will be based on the Core Strategy adopted in 2010 and other emerging Local Plan documents. Authorities wishing to charge the levy must produce a charging schedule setting out the levy's rates in their area. Government guidance⁽¹²⁾ advises that in setting their proposed rates for the levy, charging authorities should consider known and expected infrastructure costs and the other sources of possible funding available to meet those costs. This process will identify a Community Infrastructure Levy infrastructure funding target. Charging authorities should use the infrastructure planning that underpinned their development plan to identify a selection of indicative infrastructure projects. They should set out at examination a draft list of the projects or types of infrastructure that are likely to be funded by the levy.

2.4 Enfield in Context

2.4.1 Population growth, age structure, socio-economic profile and the economy are important factors which shape the approach to infrastructure planning. It is recognised that these factors can change over time and updates to the IDP will allow flexibility in planning for any future trends. This section provides the local context for planning infrastructure in the borough.

Population Projections and Assumptions

2.4.2 The 2011 Census population figure for Enfield was 312,500 making Enfield the fourth most populous London borough. It should be noted that the GLA's latest population projections⁽¹³⁾ make use of the 2011 Census results but is still dependent upon assumptions for which there is little contemporary evidence or analysis as yet. It estimates that in mid 2011 there were 313,900 people living in the borough which is significantly higher than the mid 2009 estimate of 291,200 (estimated by the Office for National Statistics⁽¹⁴⁾)

12 Community Infrastructure Levy Guidance - Department for Communities and Local Government December 2012

13 GLA's 2012 round of demographic projections - borough Preferred Option

14 <http://www.ons.gov.uk/ons/index.html>

2 Introduction

Mid - year of:	Total Population
2011	313,900
2016	317,600
2021	330,100
2026	335,500
2031	347,700

Table 2.2 GLA Population Projections for Enfield

2.4.3 Enfield's child and older people population is proportionately above the London average. Between 2007 and 2011 the average annual number of births in the Borough was 4,942. The figure of 22.4% of residents aged 15 or under is also large compared to the national average.

Social Deprivation

2.4.4 Enfield ranks 64th most deprived of 326 local authority districts in England according to the Index of Multiple Deprivation (IMD). The IMD brings together seven different indicators which cover specific aspects of deprivation: Income, Employment, Health and Disability, Education, Skills and Training, Barriers to Housing and Services, Living Environment and Crime. These indicators are weighted and combined to create the overall IMD.⁽⁵⁾

2.4.5 Enfield is amongst the most highly deprived Outer London boroughs, ranking 14th most deprived out of 32 in London (16th in 2005). The most deprived wards are Edmonton Green, Upper Edmonton, Lower Edmonton, Ponders End and Turkey Street.

Growth Scenario of the Core Strategy

2.4.6 The level and phasing of planned housing growth up to 2026 is set out in Core Policy 2 of the Core Strategy and the supporting Housing Trajectory and this is reflected in table 2.3 below.

2 Introduction

Location & total dwelling numbers [figures have been rounded]	Short term	Medium term	Long term	Very long term
	0-5 years (2010/11 -2014/15)	6-10 years (2015/16 - 2019/20)	11-15 years (2020/21 - 2024/25)	16-20 years 2025/26 - 2029/30 (beyond current Core Strategy time frame)
Central Leaside <i>Up to 5000</i>	100	650	2,250	Up to 2,000
Enfield Town <i>500</i>	200	300	-	-
North Circular <i>1500 - 2000</i>	450	550	500	Up to 500
North East Enfield <i>1000</i>	250	750	-	-
Other large sites (=0.5ha) borough wide <i>1030</i>	480	550	-	-
Small sites (<0.5ha) <i>3,950</i>	1,210	1,370	1,370	-
Time frame totals	2,690	4,170	4,120	Up to 2,500
Cumulative totals	2,690	6,860	10,980	13,480

Table 2.3 Approximate Phasing for New Housing Development

2.4.7 Throughout the document reference is made to the following terminology:

- Short term - refers to the first 0 - 5 years of the IDP - 2013/14 - 2018/19
- Medium term - refers to years 6 - 10 of the IDP - 2019/20 - 2023/24
- Long term - refers to years 11- 15 of the IDP - 2024/25 - 2028/29

2.4.8 Housing growth will be focused within four areas as follows:

- Central Leaside - proposals for c5,000 new homes in the medium to long term at Meridian Water (the area around Ikea);
- North East Enfield - proposals for c1,000 new homes in the short to medium term, largely in Ponders End
- North Circular - proposals for c2,000 homes in the short to long term, along the A406, the Ladderswood Estate and New Southgate
- Enfield Town - mixed use developments in the medium term for c500 homes proposed around a relocated Enfield Town Station.

2.4.9 A further area at Edmonton has been identified as a focus for growth and regeneration is the subject of a Masterplan.⁽¹⁵⁾

15 The boundaries of the Masterplan area are indicated in the Edmonton Green Masterplan Issues and Options Report - April 2012 www.enfield.gov.uk/edmontongreenplan

2 Introduction

Promoting Economic Prosperity and Locations for New Jobs

2.4.10 GLA employment projections (February 2007) indicate that Enfield will see a growth of at least 6,000 jobs during the Core Strategy period up to 2026, with 4,000 jobs in the Upper Lee Valley and another 2,000 provided in other town centres and the Regeneration Priority Areas. These numbers are considered to be the minimum level of anticipated growth in the borough, as they do not include retail employment or other town centre uses such as leisure and entertainment, public and community uses, or for the housing growth planned in the Core Strategy.

2.5 Structure of Document

2.5.1 The IDP is comprised of two components: the IDP itself and the accompanying Schedule. The IDP is structured as follows;

- Chapters 3 to 5 look at physical infrastructure (transport, utilities, etc.), social and community infrastructure (education, health etc.) and green infrastructure (parks, children's play areas etc.) that is required to deliver growth.
- Chapter 6 identifies the infrastructure necessary to deliver growth within each of the Regeneration Priority Areas. It largely brings together information from the preceding themed chapters and provides an area based focus.

3 Physical Infrastructure

3.1 Transport

- 3.1.1** Ensuring transport infrastructure is adequate to support strategic growth in the borough is a key part of the Infrastructure Delivery Plan and its subsequent implementation.
- 3.1.2** Transport infrastructure involves more than providing extra capacity on the road and public transport network, it is also about improving accessibility for all residents including by foot, bicycle and interchange between travel modes, especially in areas of strategic growth. Table 6.1 of the Mayor's London Plan⁽¹⁶⁾ gives an indicative list of transport schemes that are needed to support projected growth whilst meeting the Mayor's wider environmental, safety, quality of life and accessibility objectives. Additional investment over and above committed schemes will be required. Key schemes in the medium to long term include four tracking of the Lee Valley mainline. The prioritisation of key schemes and programmes for the longer term will be subject to planning processes and investigations of funding mechanisms and will be reflected in future updates of the Mayor's Implementation Plan.
- 3.1.3** The Core Strategy's transport policies cover four themes in order to achieve its strategic objective 8 - *Transport and Accessibility*, these are:
- Road Network
 - Pedestrian and Cyclists
 - Public Transport
 - Freight
- 3.1.4** Transport policy recognises the need to improve the road network to serve the borough and support its growth, with improvements to public transport and infrastructure in growth areas. The policies promote sustainable travel choices to enable a modal shift away from the car.
- 3.1.5** The IDP identifies the key transport infrastructure projects needed to implement these policies.
- 3.1.6** In relation to congestion in the Upper Lee Valley the transport infrastructure consists predominately of fast radial connections to and from central London. A projected growth in population of 24% and in employment of 20% between 2007 and 2031 will generate a large number of additional trips to, from and within the valley, especially during peak times. Adding these trips to the existing transport network, much of which operates at or near capacity, would, without network enhancements, lead to increasing congestion.
- 3.1.7** The Upper Lee Valley therefore presents a challenge to deliver sustainable transport connections as part of planned growth. There is a need to avoid increases in road congestion on both the local strategic road networks, enhance the local bus network to provide better public transport connections and exploit the opportunities around enhancing rail services.
- 3.1.8** A Transport Study supporting the Upper Lee Valley Opportunity Area Planning Framework (OAPF) sets out a package of transport interventions that best support the development scenarios taking account of:
- Mayoral and borough policy objectives;
 - Identified challenges for transport; and
 - Mitigation of transport impacts arising from the development.
- 3.1.9** Some of the early headlines from the study are:
- The planned growth in the OAPF area (56,000 people and 15,000 jobs to 2031) is predicted to result in some 50,000 additional trips in the morning peak;

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- Committed transport interventions deliver mode shift away from car use but there are still some 9% more car trips in 2031 than at present. This is predicted to result in a reduction in traffic speeds across the area by 3.4%;
- Train and Underground crowding persists and highway congestion continues.

3.1.10 The analysis of junctions shows that several in North East Enfield, (particularly the A10/A1055 junction), remain congested.

Highway Network

3.1.11 The road network is dominated by two orbital routes; the M25 to the north and the A406 to the south; and two radial routes between these; the A10 and Mollison Avenue / Meridian Way. In addition to these the A1010 Hertford Road provides a strategic north-south route as well as serving local traffic. Given the barrier effect of the reservoirs, local east-west movement is constrained to three 'crossings'; at Lea Bridge Road, Forest Road and Lee Valley Road.

3.1.12 In places, the level of traffic within the opportunity area exceeds planned network capacity, not helped by indirect access to the M25 along the A1055 (Bullsmoor Lane) and congestion on the A406 North Circular Road. To the south, the single carriageway nature of the A10 and A107 also restricts traffic flow in and out of central London. Such restrictions on traffic movement have the effect of disconnecting the Upper Lee Valley from surrounding growth areas at Stratford and in the Lower Lee Valley.

Bus Network

3.1.13 The bus network in the Upper Lee Valley is extensive. It provides both radial and orbital connections and the mode share for buses is the highest of any London sub region. The A1010 corridor from Tottenham Hale to Edmonton Green and Turkey Street has particularly high bus usage and this correlates closely with the opportunity area's pockets of high population density and relatively low car ownership.

3.1.14 Whilst there are some areas that are less well served, these largely consist of low density industrial areas or undeveloped sites where demand is not currently perceived to justify increased service provision. Despite this, there is a need to improve orbital movement which can be restricted in some areas due largely to the limited number of roads crossing the valley.

Freight

3.1.15 The Upper Lee Valley comprises one of the largest clusters of industrial estates in London and this is one of the area's major assets. Much activity is anchored to the strategic north-south routes into London from the wider east of England. Heavy peak hour traffic flows can delay freight movements, as can limited access to/from the M25.

3.1.16 There is a need to ensure that freight journeys are efficient and rationalised to reduce the total number of trips and to avoid critical times on the road network. The River Lee offers the opportunity to exploit water based transport where appropriate, and similarly there may be potential to divert some existing road trips onto the West Anglia Main Line. In this respect, however, expansion is constrained by capacity limitations and the high passenger service demand.

Rail Network

3.1.17 The rail network serving the area is predominately radial, providing services to Stratford,

3.1.18 Liverpool Street and to the West End via the Underground interchange at Tottenham Hale. The West Anglia Main Line runs through the central length of the study area with services from London Liverpool Street to Cambridge, Stansted Airport and Hertford East. Although serving high-speed services as well, the twin-tracked nature of the line constrains the frequency and capacity of stopping services. As a result many stations receive a low frequency service and peak period overcrowding, though they are well placed

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geographically to service not just the Upper Lee Valley opportunity area but also adjacent areas around Tottenham Hale and Stratford. This is most obvious at Angel Road, where no weekday services stop outside of the peak hours. This serves to limit rail accessibility, placing further pressure on alternative modes. There is only a relatively infrequent thirty minute service to Stratford on most days, which serves to limit rail accessibility, placing further pressure on alternative modes. This is a major constraint on growth. The crowding is highest south of Brimsdown to Tottenham Hale.

Growth up to 2031 without any interventions

3.1.19 By 2031, the opportunity area sees an overall increase in trips of 22% and an overall mode share of 38% public transport, and 33% walk/cycle and 30% car. The scenario demonstrates that:

- Issues of crowding on the West Anglia Line will have returned and will be severe in places north of Tottenham Hale.
- On the Victoria Line, crowding will increase to levels above those in 2007;
- Conditions on the highway network will worsen; there will be a 7% overall increase in traffic and a 4% reduction in average speed. There will be a notable worsening of junction performance.

3.1.20 By 2031 therefore, growth in the Upper Lee Valley is not being adequately supported by the existing transport and highway network, indicating that some interventions would be necessary.

3.1.21 A major part of delivering regeneration in the Lee Valley Corridor is investment in infrastructure, including transport, energy and technology:

- Rail upgrades: See details given below.
- Road upgrades: Traffic levels on the highway network are, on several links, already greater than the planned capacity. This situation is not helped by the very unsatisfactory current indirect access to the M25 via Bullsmoor Lane (A1055). Indeed, some of the work undertaken by TfL as part of the on-going A1010 corridor study recognises that congestion is a serious problem at the A1010 / A1055 junction .

3.1.22 This has been a long standing issue for the Council and, in line with the policy set out in the Council's Core Strategy and the North East Enfield Area Action Plan, Enfield Council are also working with partners to re-look at the proposed Northern Access Gateway Package (NAGP), including a possible new road link between the A1055 and the A121 to connect to junction 26 of the M25.

3.1.23 The ULV Transport Study also assessed a package of potential bus enhancements:

New routes:

- From Brimsdown to Tottenham Hale Down Meridian Way / Watermead Way with a frequency of 5 buses per hour
- From Tottenham Hale to Walthamstow via Watermead Way, Angel Road, North Circular, Chingford Road and Hoe Street with a frequency of 5 buses per hour

Extensions to existing routes in Enfield:

- 476 extension from Northumberland Park to Angel Road Via Willoughby Lane;
- 377 extension from Southbury to Chingford along Nag's Head Road, Lea Valley Road and Station Road;

Frequency changes to existing routes in Enfield:

- 491
- 149
- 34

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Walking / Cycling Enhancements:

- 3.1.24** A walk/cycle mode share of 38%. There is significant scope to improve walk/cycle mode share through development. This is important to both reduce the number of short car trips and also to relieve congestion on public transport services. New development must identify local routes and connections between sites and town centres which are either missing or under-used and provide robust travel planning measures to enhance the 'web of connections'. As such, an increase in the average walk/cycle mode share across the Upper Lee Valley up to 38% (an increase of 6% points) must be an aspiration of this framework and is considered realistic, considering the future targets in the Performance Management Plans each of the boroughs' Local Implementation Plans. (Enfield 32%, Waltham Forest 42%, Haringey 40% and Hackney 55%).
- 3.1.25** If most of the mode shift would be away from car based trips, a 38% walk/cycle mode share would deliver noticeable improvements to highway performance: traffic would reduce by 2.5%, average network speed would increase by 8.5% and there would be a notable improvement to junction performance. To achieve a 38% mode share is not only important to relieve highway congestion, but would also serve to deliver health benefits, reduce levels of carbon dioxide and improve air quality. This can only be delivered if the existing pedestrian and cycle realm is improved and the excellent natural resources of the Upper Lee Valley are fully exploited.
- 3.1.26** New development must look beyond existing constraints and establish innovative ways of connecting and enhancing routes between areas, and encourage Walking & Cycling. Solutions should be examined to reduce the poor quality environment around many of the existing connections as well as to create new links between social infrastructure and community facilities. Access to the Lee Valley Regional Park should be improved through development proposals and masterplans, drawing on the asset of the strategic walking routes in the area and encouraging walking and cycling as a leisure activity. Such measures should be brought forward with development proposals which must include robust travel plan measures.
- 3.1.27** Where longer journeys on foot are not possible, connections to public transport nodes must be enhanced through improved signage and legibility, incorporating improved pedestrian crossings and well lit waiting areas. The many cycle routes in the Upper Lee Valley, as well as quiet local roads which are suitable for cyclists should be identified. Development proposals should contribute to improving the perception and convenience of cycling by incorporating legible cycle routes through their sites and connecting them to the existing wider cycle network, much of which is badly neglected.
- 3.1.28** With or without large-scale interventions, development must exploit the enormous opportunities that the natural assets of the water ways and the Lee Valley Regional Park have to offer. These have the potential to be at the core of transforming the way people move around the area. Creating the 'web of connections' could make this area one of the most walk and cycle friendly areas in London; this can be delivered through relatively simple interventions, many of which can come forward on the back of planning proposals. The Upper Lee Valley could become an exemplar of green transport development

The A1010 Corridor:

- 3.1.29** Key development opportunities have been identified along the A1010 corridor.
- 3.1.30** The A1010 corridor stretches approximately 400 metres on either side of the A1010 from the M25 to Stamford Hill. It is a historic route into London that has become a diverse and varied mixed-use high street linking a series of north London communities. It is a vital part of the UpperLeeValley. The corridor offers key infrastructure provision to the existing communities such as town centres, transport, education and health facilities. It contains many distinctive communities and town centres including Angel, Edmonton Green and Ponders End.
- 3.1.31** The area is subject to major development proposals, which taken together with the other growth areas has the potential to improve hugely the social, physical and environmental infrastructure of the area and provides homes, jobs and quality of life for all.

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ROAD NETWORK

Review of Existing Provision and Assessing Future Needs

3.1.32 The Borough's road network operates on two levels:

- Strategic road network:
 - A406 North Circular Road providing east-west connectivity
 - A10 Great Cambridge Road providing north-south connectivity
 - M25 in the north of the Borough
- The local road network (A and B routes, local distributor roads and local access roads), which includes:
 - A1010 Hertford Road
 - A1055 Meridian Way/Mollison Avenue/Bullsmoor Lane/Conduit Lane
 - A110 Lea Valley Road/Southbury Road/Cecil Road/Windmill Hill/Enfield Road/Cat Hill

3.1.33 The existing road network provides relatively good connectivity, however a combination of the West Anglia Main Line, the River Lee Navigation, the Lee Valley Regional Park and reservoirs severely limit east-west connectivity in the east of the Borough.

3.1.34 The Enfield Core Strategy Transport Assessment (TA) highlights a number of existing junction capacity constraints that will be exacerbated by growth proposed in the Core Strategy, as listed below. However, it should be noted that the Core Strategy TA analysed only a selected number of junctions of strategic significance and it is known that other key sections will also be affected by growth.

- A406 North Circular to the West of the A10
- A1055 Meridian Way/ Conduit Lane/ Montagu Road
- A10 Great Cambridge Road heading towards the M25 (however, proposed development will not have a material impact on the M25 and it's approaches)
- Southbury Road on the approaches to the A10

3.1.35 Enfield's objective, as detailed in the Enfield Local Implementation Plan (LIP), are to manage and maintain the road network, and its use, to ensure the safe and optimum flow of vehicle and pedestrian traffic in the Borough while improving journey time, the built and natural environment and road safety.

3.1.36 Most of the junctions are in built up areas and would require some land-take in order to increase capacity. Therefore, measures that maximise the performance of the existing network need to play a significant factor in accommodating growth on the Borough's roads and smoothing traffic flow. Table 3.1 below sets out the range of practical measures that will be employed to make the most out of the existing road capacity, as well as other initiatives to reduce congestion.

Workstreams in the Council's LIP relating to demand management, improving cycling and walking infrastructure and initiatives to smooth traffic flow

In addition to the various LIP workstreams are several programmes also aimed at reducing congestion, including:

1. The London Permit Scheme - for road and street works
2. The TfL Lane Rental Scheme on the Transport for London Road Network (TLRN)
3. The Northern Gateway Access Package (NGAP) - the needed for improved links to the M25

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Workstreams in the Council's LIP relating to demand management, improving cycling and walking infrastructure and initiatives to smooth traffic flow

from North East Enfield

4. Issues and requirements in the Upper Lee Valley
5. The Mayor's Roads Task Force, including A406 and A10/A1010/1055 case studies
6. Pedestrian Countdown at signals project.

Table 3.1

3.1.37 However, there is a limit to what can be achieved and some interventions on the strategic network will be needed to support growth both in Enfield and/or the wider North London sub-region.

3.1.38 The Core Strategy (Core Policy 24 – The Road Network) identifies priorities for improvements to the road network which will need to be examined and brought forward through more detailed analysis and further study in conjunction with Transport for London (TfL). These are:

- A406 North Circular Road
- A1055 Bullsmoor Lane/Mollison Road/Meridian Way
- A110 Southbury Road including the one way system in Enfield Town
- A10 Great Cambridge Road
- A1010 Hertford Road/High Street Ponders End

3.1.39 The above priorities for improvement are at varying stages of development at various timescales, and therefore the specific elements within them have not been fully defined or costed at this stage. The feasibility and costings work will be updated through the review of the Infrastructure Delivery Plan.

3.1.40 Two major projects which, in particular, require further consideration and analysis are:

A406 North Circular Road

3.1.41 The A406 North Circular is the most significant east-west link in North London and a key strategic route for London as a whole. The operation and capacity of the North Circular between Green Lanes and Bounds Green Road has been a longstanding concern to residents and businesses and there is an acute need to improve the environment and address issues of blight in this part of the Borough. Transport for London's A406 Safety and Environmental improvements Scheme between Bounds Green Road and Green Lanes was completed in 2012. This created at least two traffic lanes in each direction, widened key junctions, improved pedestrian crossings and created a dedicated cycle track.

3.1.42 Although Transport for London's Safety and Environmental Scheme addresses some issues, it does not deal with the fundamental lack of capacity, which limits the scope of the A406 to fulfil its role as the main strategic orbital route serving North London. The road also continues to cause local severance and leads to traffic rat-running through local streets. Building on the work of the Roads Task Force, further options for smoothing traffic along this part of the A406 therefore need to be investigated by TfL in conjunction with the Council and the local community.

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Northern Gateway Access Package

- 3.1.43** Access to the Strategic Road Network is vital for businesses already located in Brimsdown and the Upper Lee Valley, particularly those involved in logistics, it is also critical to support the development of Brimsdown as one of London's major business centres. For the area to realise its full potential, a fully integrated package of transport measures to improve accessibility for all, not only those using a car, known as the Northern Gateway Access Package (NGAP) is continuing to be considered by the Council.
- 3.1.44** The Enfield Core Strategy TA and the Upper Lee Valley Transport Study note that the junction of the A10 and Bullsmoor Lane and other key junctions in the area already operating above capacity and that significant delays occur at peak periods. Queues will worsen with additional development trips, even though the additional traffic travelling through the junction as a result of the development is forecast to be relatively low. This provides further justification for the continued consideration by the Council and Transport for London of NGAP, which seeks to provide an integrated package of transport measures to improve accessibility for all. The package could include:
- The construction of new access roads;
 - Junction improvements;
 - The protection of local residential areas from any increase in traffic due to any development;
 - A package of restraint measures to limit general traffic growth and discourage car trips towards central London;
 - Improve access to local Railway Stations;
 - Improved rail services on the Lee Valley Line;
 - New or improved bus routes providing penetration of the development sites;
 - Measures to assist buses, pedestrians and cyclists;
 - Promotion of Workplace Travel Plans.
- 3.1.45** TfL's enhanced Highway Assessment Model will be used to test the need for, requirements, deliverability, and implications of NGAP in conjunction with the Highways Agency, Transport for London and regional partners.

Phasing and Programming

Further Analysis

- 3.1.46** Road network infrastructure is detailed in Table A1 of the accompanying IDP Schedule.
- 3.1.47** In the short term (0 - 5 years) the Council will review the work of the Roads Task Force and develop route management strategies for the priority routes identified, to maximise the efficiency of the highway network and to ensure that a holistic approach is developed in partnership with Transport for London and regional partners.
- 3.1.48** Further analysis and study of the road network priority improvements are required to determine the appropriate measures to be put in place. The A406 North Circular Road and NGAP require further consideration by the Council, Transport for London and the regional partners. In particular, further analysis of the future performance of the North Circular Road and routes in North East Enfield leading to and from the M25 will be undertaken using TfL's sub-regional Highway Assessment Models.
- 3.1.49** With regard to the A406 North Circular Road, the need for a detailed investigation into further capacity enhancements has been highlighted by a recent modelling study undertaken by the Council. This modelling study was based on the North London Highway Assignment Model (NoLHAM) and highlighted an increase in delays at a number of key junctions.

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- 3.1.50** The Core Strategy TA recognises that further growth in the Borough is not dependent on the implementation of NGAP, due to the limited scale of additional congestion caused by projected development trips, however NGAP is relevant to the growth of North London as a whole.
- 3.1.51** TfL's enhanced HAM model will also be used to obtain a better understand of the impact of the planned growth at Meridian Water on the surrounding highway network and, the routes to and from the A406 in particular.
- 3.1.52** The Upper Lee Valley Transport Study will address the cumulative impact of growth in the Upper Lee Valley, informing the North East Enfield and Central Leaside Area Action Plans. More detailed masterplans for the place shaping priority areas will provide further detail on the physical enhancements required to improve junction capacities in each area.

Road Maintenance

- 3.1.53** Maintenance will continue to be required on the Borough's roads and structures. The programme for Enfield's road network maintenance is set out in Enfield's Highways Asset Management Programme as detailed in Workstream 4, Chapter 3 of Enfield's LIP.
- 3.1.54** Enfield's Highway Asset Management Plan also provides for the maintenance of the Borough's bridges, highway structures and assets.

West Anglia Main Line Level Crossings

- 3.1.55** Any assessment of enhancements to the West Anglia Main Line through the Upper Lee Valley (see Public transport - rail section below) must include an assessment of the associated implications on the surrounding transport network, including the potential for NGAP. In turn, the deliverability of NGAP and associated travel behaviour changes relies on public transport improvements in North East Enfield including increased frequencies on the West Anglia Main Line.
- 3.1.56** The Department of Transport have indicated that the future of the level crossings in Green Street and Ordnance Road will need to be considered in the medium to long term, irrespective of a major infrastructure upgrade package to the West Anglia Main Line, as any increase in train services on the line (e.g. to Stansted) will make their continued use unviable.
- 3.1.57** The closure of the level crossings will have a significant impact on both vehicular and pedestrian flows in the east of the Borough and requires further assessment of the need to make adequate alternative provision which must be provided. The Council is therefore committed to working with the DfT, Network Rail, TfL and other regional partners to ensure that the needs of the local community are fully recognised. In particular, a review and redesign of bus access will need to be implemented.

Widening of M25 between Junctions 23 and 25

- 3.1.58** The Highways Agency have commenced the implementation of a Managed Motorway Scheme between Junctions 23 and 27, which will involve 24/7 use of the hard shoulder by traffic. The Highways Agency estimates that the £165m scheme should be complete by December 2014.

Road Network Infrastructure Phasing

Short Term

Introduction of Managed Motorway scheme on that section of the M25 within Enfield (between Junctions J23-J25).

Investigation of impact of growth at Meridian Water and potential mitigation measures

Review outputs from the Mayor's Roads Task Force and development of route management strategies for the priority routes

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Road Network Infrastructure Phasing
Short Term
Continued maintenance of road network and associated structures.
Assessment of the impact of level crossings in the east of the Borough on the road network.
Medium - Long Term
Implementation of recommendations emerging from the studies undertaken in the short term.

Table 3.2 Phasing and Programming Summary - Road Network

Funding Sources, Timescales and Responsibilities for Delivery

- 3.1.59** The Highways Agency is responsible for the M25 motorway and slip roads. The management and maintenance of the A10 and A406 are the responsibility of Transport for London as part of the Transport for London Road Network (TLRN). The Council is responsible for all other roads in the Borough.
- 3.1.60** The majority of highway maintenance funding is provided directly by Enfield from its capital programme.
- 3.1.61** Transport for London contributes to the structural maintenance costs (capital funding) of principal roads (non TLRN roads classified as 'A' roads) through the LIP. Revenue funding is provided by Enfield Council for the day-to-day maintenance of the highway infrastructure.
- 3.1.62** TfL's Business Plan includes a proposed doubling of planned spending on London's roads over the next 10 years rising from a planned £1.9bn to £3.8bn. Funding will be used to deal with a range of measures, including the maintenance of major highway structures, removal of gyratory schemes and better technology at traffic signals to smooth traffic flow and assist pedestrians. In addition, the Roads Task Force will inform how investment for major highway interventions are prioritised
- 3.1.63** Enfield has processes in place for agreeing and implementing schemes that are funded by developers through s106 agreements. It has also progressed a variety of improvements schemes, particularly to industrial estates through a cocktail of funding including government and European grants, the London Development Agency (LDA) and private businesses.
- 3.1.64** The Council's LIP is a key funding source for a range of transport projects in the Borough and is critical to the delivery of the Mayor's Transport Strategy. Further discretionary funds can be bid for Major Schemes related to town centres, station access and streets for people.
- 3.1.65** In terms of major projects the Government has committed £165m to the introduction of a Managed Motorway Scheme to be introduced between J23-J27 of the M25 by December 2014.

Identified Risks / Contingencies

- 3.1.66** Reduced public funding for major road and rail infrastructure projects.

3 Physical Infrastructure

PUBLIC TRANSPORT

Rail

Review of Existing Provision and Assessing Future Needs

- 3.1.67** There are eighteen national rail stations within Enfield which perform a service of high importance to the residents and visitors of Enfield, by providing access to opportunities that would be very difficult to secure by any other means. Particularly, residents in the east of the Borough need improved services because of the inadequacy of other modes of public transport in the area.
- 3.1.68** The national rail stations, served by the West Anglia Main Line and Great Northern Line, are described below:
- The West Anglia Main Line in the east of the Borough runs from Liverpool Street to Cambridge and Kings Lynn, and Stratford to Broxbourne. There is a parallel route (the Southbury Loop) between north east London and Cheshunt used for local suburban services, freight and diversions with connections to Enfield Town and Hertford East.
 - The Great Northern Line has branches from Moorgate / Kings Cross serving both Hertford North / Stevenage (Palmer's Green, Winchmore Hill, Grange Park, Enfield Chase, Gordon Hill and Crews Hill) as well as Welwyn Garden City (New Southgate and Hadley Wood).
- 3.1.69** The Main Line rail network plays an important role in Enfield providing for the majority of radial commuter trips into central London. There are generally low service frequencies on all lines, increasing slightly during the peak. The Network Rail Strategic Business Plan notes that the current network is already operating at or close to capacity in terms of train paths.
- 3.1.70** Access to, and the environmental conditions of, stations vary greatly across the Borough. In particular, there are concerns that some of the busiest stations (such as Edmonton Green) do not have adequate access for people with disabilities. In addition, Angel Road station, which is critical to the success of growth in Central Leaside, not only suffers from a low level of service but also has extremely poor connectivity with the surrounding area.
- 3.1.71** Currently the West Anglia Main Line has two tracks and there are considerable capacity constraints as it is used for both local stopping services from Enfield into Central London, as well as high-speed links along the London-Stansted-Cambridge-Peterborough Corridor. These track capacity issues mean that the frequency of the local stopping service is very low at certain stations along the line, in particular Angel Road station. The different requirements of markets (local-suburban, regional, and Stansted Express) lead to compromises in the way rail services are offered to passengers and rail freight due to the two-track configuration and at-grade junctions. There are few options for increasing the number of train paths at peak times without providing additional infrastructure.
- 3.1.72** The West Anglia Main Line serves one of the fastest growing regions in the country. The London-Stansted-Cambridge-Peterborough Corridor is expected to accommodate an additional 240,000 homes by 2026. Passenger growth of around 30% has been experienced over the past ten years with a further 31% predicted between 2009 and 2014. This could be considerably exceeded if route capacity is increased to relieve on-train crowding, improve performance and reduce journey times.
- 3.1.73** The Council and TfL consider that four trains per hour on local services is essential to fully deliver improvements to accessibility in the Upper Lee Valley and will seek to secure commitment for implementation at the earliest possible stage. The Core Strategy Transport Assessment indicates a significant reduction in congestion growth in conjunction with a four trains per hour service with the proportion of rail users in Central Leaside to increase from 5% to 12%, and in North East Enfield from 9% to 12%.

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- 3.1.74** TfL have been asked by the Department for Transport to review the safeguarded line of the original Chelsea-Hackney Line. At this stage it appears that two alternative options provide a greater benefit:cost ratio than the original scheme:
- 3.1.75** Option A is a freestanding automatic metro-type service running between Clapham Junction and Seven Sisters
- 3.1.76** Option B is similar to Crossrail 1 in that it would partially run on Network Rail track outside the core area, including potentially up the Lee Valley and into Hertfordshire.
- 3.1.77** Option B would result in a step-change in the accessibility of the Upper Lee Valley and do most to support regeneration in Enfield and beyond.
- 3.1.78** TfL plan to formally consult on the new alignment in 2013/14 prior to developing a detailed scheme design in 2014/15. If funding can be identified, TfL's current estimate is that the bulk of the construction would take place between 2021-2029 and the scheme open in 2031.
- 3.1.79** The suite of planned investment projects will create direct jobs of the order of 20,000 in the ULV opportunity area and 18,000 new homes. There is also the potential for some 15,000 additional jobs through the release of key strategic sites in neighbouring districts.
- 3.1.80** In its submission to the Department for Transport in advance of HLOS2 the Council and other Upper Lee Valley partners identified a set of 6 conditional outputs:
- **Output 1: Provide a core four trains per hour (4tph) service at local stations in the Upper Lee Valley, linked to major developments, including Angel Road**
 - Funding: Some capital funding is available from national High Level Output Specification (HLOS2). Additional funding from CIL and other sources will be required.
 - **Output 2: Provide a 4tph service from the Upper Lee Valley via Tottenham Hale and Stratford**
 - Funding: Some capital funding is available from national High Level Output Specification (HLOS2). Additional funding from CIL and other sources will be required.
 - **Output 3: Reopen Lea Bridge station (with a 4 trains per hour service)**
 - Funding: Funding has been secured by LB Waltham Forest, through Section 106 agreements, for Station Reopening Work
 - **Output 4: Remove Northumberland Park level crossing and provide alternative facilities for cyclists and pedestrians**
 - Funding: Expected to be funded from HLOS2 Level Crossing Funding
 - **Output 5: Address timetable shortcomings (resilience / stopping patterns / improved journey times)**
 - Funding: No new capital funding is expected for Output 5.
 - **Output 6: Provide an improved passenger experience**
 - Funding: This will require funding from HLOS2, current & future franchise commitments, from future Section 106 agreements and CIL payments from developers.
- 3.1.81** The objective of the proposed outputs is to build the foundations for improvements that can facilitate and enable the unlocking of the massive potential for investment and regeneration in the Lee Valley. HLOS2 references the need for improvements to the West Anglia Line and Network Rail's Strategic Business Plan includes £44m to bring forward a significant part of the infrastructure needed to enable a 4tph service between Stratford, Tottenham Hale and Angel Road (STAR). A London Growth Fund bid has been made for the additional £25m needed to complete the scheme.
- 3.1.82** Station access improvements are required at a number of stations including Angel Road, Edmonton Green, Ponders End and Silver Street Station. Improvements will include access, safety and environmental works to make these more attractive and welcoming.

3 Physical Infrastructure

3.1.83 It is noted that the Mayor's Transport Strategy (May 2010) identifies Seven Sisters as a potential key strategic interchange outside Central London. Interchange improvements are required at Angel Road, Enfield Town, Edmonton Green, Ponders End and New Southgate to facilitate better integration between modes, including provision for taxis and cycle parking and storage. These priorities are supported by those identified in Enfield's LIP. Community consultation associated with the Enfield Town Area Action Plan identified an integrated transport interchange as vital to town centre improvements.

Phasing and Programming

3.1.84 The Core Strategy Transport Assessment indicates that enhancements to local bus services and improved linkages to existing interchanges will support some growth. However improvement to local rail services, particularly in Central Leaside, are critical to supporting higher levels of growth in the long term.

3.1.85 Rail infrastructure schemes are detailed in Table A.2 of the accompanying IDP Schedule. In the short term the Borough will work with DfT and Network Rail to bring forward the infrastructure needed to enable a 4tph service to be provided between Stratford and Angel Road. In addition, work with Network Rail will be undertaken to examine the best alternatives to the existing level crossings to maintain local connectivity. There will also be some secondary benefits from both the Crossrail and Thameslink projects.

3.1.86 In the medium to long term Core Strategy growth will need to be supported by the provision of a local four trains per hour service on the West Anglia Main Line north of Angel Road, providing additional capacity at Angel Road, Ponders End, Enfield Lock and Brimsdown.

3.1.87 In the long term, in addition to the above additional rail capacity, further enhancements will be assessed as part of future Long Term Planning studies undertaken by Network Rail.

Rail Infrastructure Phasing
Short Term
Study to assess alternatives to the existing level crossings at Green Street and Ordnance Road to maintain local connectivity
Additional track, signalling and associated works to enable a 4tph service between Stratford and Angel Road
Station access improvements to Ponders End, Silver Street, Edmonton Green and Angel Road
Medium - Long Term
Implementation of the replacement of level crossings in the Lee Valley by Network Rail
Provision of a four trains per hour service on the West Anglia Main Line north of Angel Road to increase capacity along the Upper Lee Valley
Assessment of further enhancements of the rail network as part of Network Rail's long term planning studies

Table 3.3 Phasing and Programming Summary - Rail

Funding Sources, Timescales and Responsibilities for Delivery

3.1.88 Network Rail's Strategic Business Plan includes provision for £44m to provide much of the additional track and associated works necessary to provide the STAR scheme to be implemented during Control period 5 (2014-2019). A further £25m is being sought from the GLA's London Growth Fund.

3.1.89 The London and South East Route Utilisation Strategy (July 2011) indicated that approximately £280m would be required to provide the track and associated works necessary to provide a regular 4 tph service between Brimsdown and Stratford. (Option C2b). The STAR scheme would provide the first phase of this larger scheme, which could be implemented during Control Period 6, after 2019.

3 Physical Infrastructure

- 3.1.90** Accessibility improvements to stations will be sought from the Government's Access for All fund, as part of the future West Anglia Main Line Enhancements and from contributions from developments in the vicinity of the stations. Future Major Scheme bids will be developed to improve the quality of links to stations in the growth areas. The Department for Transport's preliminary assessment indicates that the West Anglia Main Line enhancements could cost in the region of £700m. Whilst funding is available for Control Period 4 to allow Network Rail to bring forward options, funding for implementation of the scheme will need to be considered as part of the delivery of schemes for Control Period 5 (2015-2019).
- 3.1.91** Accessibility improvements to stations will be sought from the Government's Access for All fund, as part of the future West Anglia Main Line Enhancements and from contributions from developments in the vicinity of the stations. A Station Access Area Based Scheme is being prepared for Silver Street Station and similar schemes will be developed to improve the quality of links to stations in the growth areas.

Identified Risks/Contingencies

- 3.1.92** The current low frequency of local services on the main line is a constraint to the growth potential of the Upper Lee Valley. Across the opportunity area, the scale and density of long-term growth should be matched by an increase to the public transport accessibility of development sites brought by the delivery of a regular four trains per hour (4tph) service calling at all stations. This is an agreed goal, which is consistent with the Mayor's vision for London's suburban rail network. Ultimately, this is most likely to be achieved through the introduction of additional tracks on land to the east of the existing tracks (a combination of 3 and 4 tracking) which would allow more frequent local trains to operate independently of the faster longer distance services. Given the need for significant investment in track and stations to achieve this, the rail industry, in consultation with stakeholders, is working to develop a phased programme of enhancements, starting at the south end with a scheme to improve connectivity between Angel Road, Tottenham Hale and Stratford and working north across the opportunity area. To facilitate growth the 4tph stopping service needs to operate between Angel Road (Meridian Water) and Stratford as early as possible in the next railway control period (2014-2019), thus strengthening the link to the growth areas of the Lower Lee Valley, Olympic Park and Isle of Dogs. Current estimates suggest that this would cost in the region of £78 million. Interchange at Tottenham Hale would provide access to the City (Liverpool Street) and the West End (via the Victoria Line). This track could be further extended in later years to Brimsdown or even further north.
- 3.1.93** Proposed growth in the Borough will be phased to ensure that necessary transport infrastructure is in place to serve new development. The outcomes of Department for Transport and Network Rail decisions will be reflected in subsequent reviews of the Infrastructure Delivery Plan, and if required to, the phasing of development in the Borough.

Underground

Review of Existing Provision and Assessing Future Needs

- 3.1.94** The Piccadilly Line has stations at Arnos Grove, Southgate, Oakwood and Cockfosters and provides direct access to opportunities in Central London.
- 3.1.95** Enfield residents also access the Underground network via a number of locations just outside the Borough boundary in the London Borough of Haringey: Seven Sisters via the Enfield Town Line and Finsbury Park via the Hertford North Line.
- 3.1.96** Transport for London has carried out a business case (2003), which precedes planned strategic growth in the Core Strategy, examining the costs and benefits of extending the Victoria Line as far north as Northumberland Park. A number of options were considered however none were considered to offer value for money, mainly as a result of the high cost and limited demand.

3 Physical Infrastructure

- 3.1.97** The Core Strategy Transport Assessment notes that were the line to be extended further into Enfield, and in particular Central Leaside, the catchment area could make the scheme more viable. However, extending the scheme further would also significantly add to the infrastructure costs and the impact on existing services between Tottenham Hale and Walthamstow would have to be fully considered. Improvement to local services on the West Anglia Main Line remains the most viable option to support growth in Central Leaside. However, other ways of improving connectivity to the Underground network will need to be considered should the West Anglia Main Line local service enhancements not be brought forward, including reassessing the case for extending the Victoria Line.
- 3.1.98** Station accessibility improvements are a core element of London Underground's line upgrade programme. Works typically include features for the mobility impaired, CCTV, electronic information screens, new seating and lighting.
- 3.1.99** The North Circular Area Action Plan identifies the need for station accessibility enhancements at Arnos Grove Station. This scheme is identified in Table A.3 of the accompanying IDP Schedule. Further detail on station upgrade requirements will be identified through the place shaping master planning process.

Phasing and Programming

- 3.1.100** The planned upgrade of the Piccadilly Line will deliver more spacious and faster trains and new signalling, which will allow a higher service frequency. Overall journey times are expected to be cut by around 19% and capacity will increase by 24%. However, the upgrade is currently unfunded and unprogrammed.
- 3.1.101** The Victoria Line upgrade is now complete. In addition to new trains, signalling, track, accessibility and communication systems up to 33 trains per hour now operate during the peak hours, with journey times estimated to be cut by 16% and capacity increased by 21%.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.1.102** The above Underground line upgrades are committed within Transport for London's latest Business Plan.
- 3.1.103** The Piccadilly Line upgrade is currently unprogrammed within Transport for London's latest Business Plan.

Buses

Review of Existing Provision and Assessing Future Needs

- 3.1.104** The Core Strategy TA notes that whilst there is relatively good connectivity by bus between the key town centres in the Borough (Enfield Town, Edmonton Green, Palmers Green and Southgate) connectivity to the priority areas is relatively poor, particularly from the town centres.
- 3.1.105** The rail and Underground services provide good radial routes into Central London. Bus services are essential to orbital movements and local public transport accessibility within the Borough. East-west connectivity is currently restricted to a limited number of bus services. These tend to run along the main radial routes with poor penetration into either the proposed development areas or the existing town centres.
- 3.1.106** There are three main infrastructure requirements for bus operation:
- Stops / Stations / Interchanges – providing facilities for passenger to board, alight and transfer between routes.
 - Garages – depots for parking, maintenance, driver facilities and support staff
 - Stands – waiting areas (either on or off street) at either end of routes to allow for recovery time and driver facilities.
- 3.1.107** There are three bus garages in Enfield (Green Lanes / Regents Avenue, Harbet Road & Southbury Road / Ponders End), all owned and operated by Arriva.

3 Physical Infrastructure

- 3.1.108** The Core Strategy TA Public Transport Accessibility Levels analysis demonstrates how good penetration of bus services into priority areas can significantly improve public transport accessibility. The requirement for additional services will be developed with TfL to identify viable enhancements and diversions to existing bus services as part of the masterplanning exercise for the Regeneration Priority Areas. Transport Assessments for individual sites should also identify the need for additional / amended routes.
- 3.1.109** A significant increase in services in the Central Leaside Area has been identified, particularly in the short to medium term in the absence of improvements to local services on the West Anglia Main Line.
- 3.1.110** The Core Strategy TA has also identified the requirement to improve the frequency of services and to reduce journey times between the following locations:
- Central Leaside and Edmonton Green
 - Central Leaside and Angel Edmonton
 - Ponders End and Edmonton Green
 - Ponders End and Enfield Town
 - Palmers Green and Angel Edmonton
 - New Southgate and Palmers Green
- 3.1.111** Whilst buses provide a flexible and cost effective way of improving connectivity by public transport, the feasibility of alternative options (such as guided buses etc) will also be explored as part of the development of the Area Action Plans and master planning of the Regeneration Priority Areas.
- 3.1.112** Growing congestion throughout London has particularly affected reliability of bus services since they are routed along many of the most congested roads and, unlike private vehicles, cannot divert onto other roads to avoid congestion. If buses are to remain attractive to passengers, further investment is needed to secure improvements to public transport generally and in particular to undertake measures to mitigate the effects of congestion of the road network.
- 3.1.113** To assist with the planning of future bus services in Enfield, the Council has commenced a comprehensive Bus Service Review, working in conjunction with TfL to look at a range of issues, including access to health service, access to leisure and access to employment. The outcome of the review will inform future priorities for bus service improvements.
- 3.1.114** The need for bus garages is assessed on a pan-London basis, and London Buses do not envisage a need for additional garages within the Borough.
- 3.1.115** The lack of bus standing facilities in Enfield Town has been identified as a constraint on the provision of additional services to the town centre. Due to capacity constraints at the existing stands in Little Park Gardens a new facility with improved rail and taxi interchange will be developed as part of the Enfield Town Area Action Plan. Once determined, the scheme will be included in a future update of this IDP.
- 3.1.116** Developments that require additional / amended services to penetrate the priority areas will be expected to provide appropriate bus stop and bus standing facilities.

Phasing and Programming

- 3.1.117** Network planning for buses does not necessarily require long-term forward planning as additional buses and new services can be implemented within a shorter timescale compared to other modes.
- 3.1.118** London Buses have indicated that they are willing to amend or expand existing routes and provide new routes where demand is demonstrated. Transport Assessments are required to accompany development applications for large commercial and residential developments. The impact upon existing services and the need for additional or expanded services should be identified at this stage in consultation with London Buses.

3 Physical Infrastructure

- 3.1.119** In the short term the Council will work with TfL to complete the Bus Service Review and improve bus services to residential and employment areas, particularly by strengthening orbital bus services between the Borough's main centres and the Regeneration Priority Areas.
- 3.1.120** As new development occurs in the medium term additional north-south bus provision will be required along the A1055 corridor benefiting both Central Leaside and North East Enfield. The Upper Lee Valley OAPF identifies a number of possible options for new routes and route enhancements.
- 3.1.121** In the medium to long term significant enhancements to public transport connectivity to and from Central Leaside will be required to support phased growth in the Core Strategy. The Upper Lee Valley Transport Study, Area Action Plan and master planning processes will assess the requirement for high quality public transport services to support growth, including a possible public transport hub in Central Leaside.

Bus Infrastructure Phasing	
Short Term	
Work with TfL to complete the Bus Service Review and improve existing bus services.	
Preparation of the Area Action Plans and Place Shaping Priority Area masterplans.	
Medium - Long Term	
Implementation of recommendations of Upper Lee Valley Opportunity Area Framework.	
Provision of additional north-south buses along the A1055.	
Work with London Buses to support phased growth in the Borough.	

Table 3.4 Phasing and Programming Summary - Buses

Funding Sources, Timescales and Responsibilities for Delivery

- 3.1.122** New infrastructure to enable buses to serve the Regeneration Priority Areas will primarily be funded by development contributions. Funding from development may also be needed to pump prime new services while patronage becomes established.

Identified Risks/Contingencies

- 3.1.123** The delivery of enhanced bus services in the Borough are dependent on their implementation by TfL. Phased growth in the Borough will enable the delivery of the required services to support future growth. The Infrastructure Delivery Plan will be reviewed in line with the preparation of the Area Action Plans and master planning processes to ensure that the requirements are identified to support growth.

PEDESTRIAN ROUTES AND RIGHTS OF WAY

Review of Existing Provision and Assessing Future Needs

- 3.1.124** Enfield has an extensive network of pedestrian routes including 64 kilometres of Public Rights of Way. The bulk of the network is made up of short urban paths located for the most part in the southern and eastern wards of the Borough.
- 3.1.125** Enfield has two Strategic Walk Network routes as designated by Walk London:
- London Outer Orbital Loop (LOOP) is part of an orbital footpath which passes around Greater London. The LOOP passes across the Borough's green belt land through Cockfosters, Chase Farm, Turkey

3 Physical Infrastructure

Street, Trent Country Park and Enfield Lock. Part of the footpath in Enfield is through permissive paths.

- The Lee Valley Walk extends from Luton to London's East End following the tow path of the Lee Navigation. The route runs adjacent to the King George and William Girling Reservoirs, crossing the London LOOP at Enfield Lock, and the Pymmes Brook Trail at Pickett's Lock.

3.1.126 Other important leisure routes in Enfield include:

- Pymmes Brook Trail
- Lee Valley Country Path
- Trent Country Path
- Forty Hill Path
- Whitewebbs Park Country Path
- New River Path
- The Jubilee footpath

3.1.127 Although some parts of the Borough are very pleasant to walk and cycle in, particularly in parts of the northwest, other parts are difficult to navigate on foot or on bike. In the east, the West Anglia Main Line, strategic north-south roads and the A406 North Circular Road act as significant barriers to local movement making the Lee Valley Park relatively inaccessible by foot.

3.1.128 The emerging Mayor's Transport Strategy and wider Mayoral strategies place increasing emphasis on the role of walking and cycling as a viable journey to work mode that can help reduce congestion.

3.1.129 Enfield's Rights of Way Improvement Plan (RoWIP) investigates the needs and preferences of users and non-users of Rights of Way, and makes recommendations on the future management and maintenance of local RoW routes.

3.1.130 The Council will build upon the Rights of Way Improvement Plan to develop and implement the 'Enfield Walking Action Plan' to improve the condition of existing footpaths and complete missing links. The Action Plan will set out local and strategic level networks, particularly seeking to overcome barriers to movements and improve east-west links in the Upper Lee Valley. Section 3.5 of chapter 3 of Enfield's LIP details the activities to be undertaken as part of the LIP programme input to the Rights of Way Improvement Plan.

3.1.131 The Area Action Plans will consider infrastructure improvements to promote walking and cycling. Initial plans for the North East Enfield Area Action Plan and Central Leaside Area Action Plan identify a series of east-west 'green corridors' that link residential areas to the River Lee waterways and park, including improved pedestrian crossings over the railway line. Section 3.6 of chapter 3 of Enfield's LIP details the activities to be undertaken as part of the LIP programme input to development of cycling routes.

3.1.132 The Council will work with Department for Transport, Network Rail and Transport for London to ensure that West Anglia Main Line infrastructure improvements address the barrier to east-west movements for pedestrians and cyclists caused by the railway line in the east of the Borough including identification of alternative crossing points and the provision of footbridges.

3.1.133 The Council, working with the Canal & River Trust (formerly British Waterways) and Lee Valley Regional Park will investigate the potential to utilise towpaths for pedestrian and cycle use.

Phasing and Programming

3.1.134 Pedestrian and cycling schemes are identified in Table A.5 of the IDP Schedule. The Rights of Way Improvement Plan contains a variety of short, medium and long term proposals. Proposals to reduce severance caused by the closure of the level crossings in Ordnance Road and Green Street will be developed in the short term so that they can be implemented as part of the West Anglia Main Line Enhancements.

3 Physical Infrastructure

- 3.1.135** Measures to enhance connectivity to the Lee Valley Park and to improve access to new development in Ponders End will be developed as part of the detailed master planning of the area.
- 3.1.136** The long lead in time for track possessions needs to be factored into the programming of any new bridges and structures over the West Anglia Main Line.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.1.137** Improvements to pedestrian facilities, including footpaths, are eligible for LIP funding, particularly those forming part of strategic walking routes. In addition, the Council invests its own resources to enhance the rights of way network.
- 3.1.138** Maintenance of footways, footpaths and associated structures is mainly funded from the Council's own revenue budgets.
- 3.1.139** The Canal & River Trust works with Local Authorities to maintain public towpaths and waterway access points. In the past, public partners such as the Millennium Commission and Heritage Lottery Fund as well as Landfill Tax Credits, European Funding, and Department of Environment, Food and Rural Affairs (Defra) have provided additional funding.
- 3.1.140** The Council will seek funding assistance from Network Rail and the Department for Transport to construct new footbridges across railway lines associated with the closure of level crossings.
- 3.1.141** Improvements needed to enhance pedestrian access in the Regeneration Priority Areas will be identified as part of the master planning and be funded by development. In addition, major infrastructure projects could be eligible for future Growth Area Funding and / or Community Infrastructure Funding.

Identified Risks/Contingencies

- 3.1.142** The main risks to improvements to pedestrian connectivity either side of the A1055 / West Anglia rail corridor are the unknown details and timescale for the upgrade to the West Anglia Main Line.

CYCLE ROUTES

Review of Existing Provision and Assessing Future Needs

- 3.1.143** Within Enfield there is a network of local cycle routes comprising a mixture of cycle lanes, cycle tracks and off road cycleways. In addition, two routes on the National Cycle Network (NCN) pass through the Borough: NCN1 runs north-south through the Lee Valley and NCN12 passes through Hadley Wood.
- 3.1.144** The Council's Greenway Network is planned to provide a safe and attractive series of routes linking residential areas to key open space and recreational facilities. Although not primarily aimed at commuter cycling, the network will be extended into the Regeneration Priority Areas to promote cycle use. This network complements the Greenways network being developed in partnership with Sustrans and TfL.
- 3.1.145** Cycle parking will continue to be pursued at all stations, major trip attractors and in all town centres. Section 3.6 of chapter 3 of Enfield's LIP details the activities to be undertaken as part of the LIP programme input to development of cycle parking and the promotion of cycling.
- 3.1.146** Although not formally a Biking Borough, the Council has identified Enfield Town as a cycle hub and is implementing a range of physical and demand management measures to promote cycling. This is supported by LIP funding and may be supplemented by additional funding available from TfL to assist the Mayor deliver his Vision for Cycling.

3 Physical Infrastructure

Phasing and Programming

- 3.1.147** The Council is currently developing and implementing its Greenways Network and has prioritised an east-west strategic route connecting NCN1 and NCN12.
- 3.1.148** Additional work is underway to implement further phases of the network, starting with a route linking Town Park, Grovelands Park and Arnos Park.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.1.149** New cycle links can be secured through a combination of funding sources including the LIP, developer contributions, additional funding from TfL and Council budgets.
- 3.1.150** Cycle parking will be required to support all new development.

OTHER SUSTAINABLE TRANSPORT MODES

- 3.1.151** Although less critical to enabling growth, there is a variety of local infrastructure needed to support sustainable growth including taxi ranks, electric charging points and on-street car club bays. This type of infrastructure will be delivered in line with the development of a Demand Management Strategy for the Borough to encourage sustainable travel patterns, including potential measures such as workplace / residential / leisure travel plans and personalised travel planning.

Review of Existing Provision and Assessing Future Needs

- 3.1.152** There are currently some 25 taxi rank spaces in 7 locations across the Borough to support licensed hackney carriages. The first electric charging points have recently been introduced on-street in the borough and many more are delivered as part of the planning process. In addition, there are currently seven car-club bays in the Borough and others are planned.
- 3.1.153** Additional taxi ranks will need to be provided in each of the Regeneration Priority Areas to ensure that taxis can operate effectively and provide an alternative to private car use. The number of ranks will be determined as part of the master planning process in conjunction with the Public Carriage Office and the taxi industry.
- 3.1.154** A network of electric charging points will need to be provided to promote the wider use of electric vehicles and thereby improve air quality. Guidance on the number and design of such charging points will form part of the Parking Standards set out in the Development Management Document. Enfield's contribution to the development of Electric Vehicle Charging points is detailed in section 3.9 of chapter 3 of Enfield's LIP.
- 3.1.155** Access to car club vehicles will be expanded as demand increases and it is anticipated that each of the Regeneration Priority Areas will need to have access to a number of dedicated car club bays.

Phasing and Programming

- 3.1.156** Existing taxi ranks will be reviewed in the short term and the need for additional ranks considered as part of the master planning process in each of the Regeneration Priority Areas.
- 3.1.157** Electric vehicle charging points will be provided in conjunction with new developments, future car park refurbishments and potentially on-street in town centres. In the initial years, a peak injection of new electric vehicle charging bays will be required to both provide for existing demand and catalyse those members of the community who invest in electric vehicles as a more sustainable option. The criteria to be applied for selecting locations are detailed in section 3.9.3 of chapter 3 of Enfield's LIP.
- 3.1.158** Future refurbishments of Council owned car parks will provide further opportunities for additional publicly available charging points.

3 Physical Infrastructure

3.1.159 Further car clubs will be introduced where there is sufficient demand to make them commercially viable. In addition, new car clubs will be provided in conjunction with new development.

Funding Sources, Timescales and Responsibilities for Delivery

3.1.160 The provision of taxi ranks in existing town centres will be funded from either LIP funding or the Council's own budgets. Taxi ranks will be provided in conjunction with development.

3.1.161 The Mayor of London is supporting the installation of 25,000 charging points by 2015 to help achieve his objective of having 100,000 electric vehicles in use as soon as possible. Funding via the LIP could be used to introduce further charging points in Enfield as detailed in section 3.9 of chapter 3 of Enfield's LIP. However, the majority of charging points in Enfield are likely to be supplied via the application of the London Plan car parking standards.

3.1.162 The emerging Development Management Document DPD will require new development to make provision for Car Club vehicles and to help fund the extension of car clubs where viable. The Council will support such clubs by providing on-street bays in controlled parking zones, Council owned car parks and other locations subject to the defined hierarchy of parking need described in section 3.16.3 of chapter 3 of Enfield's LIP.

Sustainable Transport Infrastructure Phasing	
Short Term	
Implementation of the Rights of Way Improvement Plan proposals	
Measures to enhance connectivity to the Lee Valley Park as part of masterplanning for Ponders End	
Implementation of the east-west strategic cycle route connecting NCN1 and NCN12	
Extension of the Greenway cycle network	
Implementation of the Council's Cycle Action Plan, focussed on promoting cycling in Enfield Town.	
Review of existing taxi ranks and consideration in place shaping priority area masterplanning processes	
Implementation of car club schemes	
Medium - Long Term	
Implementation of the Rights of Way Improvement Plan proposals	

Table 3.5 Phasing and Programming Summary - Sustainable Transport Modes

FREIGHT

Review of Existing Provision and Assessing Future Needs

3.1.163 A considerable amount of freight passes through Enfield, particularly along the Lea Valley corridor to and from the M25. Overnight and weekend lorry controls, weight limit restrictions and width restrictions are in place to safeguard local communities from the impact of freight movements.

3.1.164 Freight movements are expected to grow, with the number of light goods vehicles forecast to increase by 30% between 2008 and 2031, accounting for 15% of traffic on London's roads. Although freight tonnage carried by rail is also expected to increase, some 85% of all freight movement will be by road.

3 Physical Infrastructure

3.1.165 Brimsdown Industrial Estate is one of the largest industrial areas in London and has been identified as a 'major freight node' in the Mayor's Transport Strategy. The efficient movement of road freight is heavily reliant on adequate highway capacity. However, the Core Strategy Transport Assessment notes that roads such as Mollison Avenue, Bullsmoor Lane, Meridian Way and the Great Cambridge Road, which are critical links to and from the strategic road network, already experience high levels of congestion. This further growth in the Upper Lea Valley will compound the situation and NGAP therefore needs to be developed to ensure the long-term viability of Brimsdown and the rest of the Upper Lee Valley.

3.1.166 However, in order to minimise freight's contribution to increasing congestion levels, yet ensure the efficient delivery of goods to the right location, there must be a progressive shift from freight to rail and waterborne modes wherever practicable.

3.1.167 Enfield's key industrial locations are located adjacent to the River Lee, which provides an opportunity to promote waterborne freight movements. Work is currently being undertaken to determine the feasibility and viability of making greater use of the River Lee to transport freight along this corridor, including identifying associated infrastructure. The Core Strategy identifies two general areas for securing commercial wharfs:

- Picketts Lock
- Edmonton Ecopark

3.1.168 There is little scope for major infrastructure provision of rail freight terminals in the Borough. However, the Council will continue to work with the Department for Transport, Network Rail, Transport for London to ensure that the West Anglia Main Line enhancements maximise the potential to transport freight by rail.

Phasing and Programming

3.1.169 In the short term, provision of Delivery and Serving Plans and Construction Logistics Plans will be sought. NGAP will also be developed in the context of the Upper Lee Valley Transport Study.

3.1.170 In the medium to long term, opportunities for new wharf facilities in the River Lee corridor will be developed as part of the Area Action Plan and master planning process. Freight infrastructure is identified in Table A.6 of the accompanying IDP Schedule.

Funding Sources, Timescales and Responsibilities for Delivery

3.1.171 The LIP provides some scope to fund small scale schemes to assist freight movements and to support other initiatives.

3.1.172 The Canal & River Trust and Freight by Water can also work in partnership with companies and local authorities to access European and government grant incentives. In particular, the Freight Facilities Grant (FFG) is a Department for Transport scheme designed to help increase the amount of freight transported by water in the UK.

Identified Risks/Contingencies

3.1.173 Enfield's rail lines are already operating close to capacity with passenger services. Thus, the use of rail lines for freight movement is heavily reliant on large-scale infrastructure capacity enhancements, such as the West Anglia Main Line Enhancement project.

3 Physical Infrastructure

3.2 Utilities and Renewable Energy

ELECTRICITY TRANSMISSION

Review of Existing Infrastructure Provision and Assessing Future Needs

- 3.2.1** National Grid, as the holder of a licence to transmit electricity under the Electricity Act 1989, has a statutory duty to develop and maintain an efficient, co-ordinated and economical transmission system of electricity and to facilitate competition in the supply and generation of electricity.
- 3.2.2** National Grid owns and 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. Key transmission infrastructure includes the high voltage power lines / cables and the substations that reduce the voltage for further distribution by the Distribution Network Operators (DNOs). The DNOs develop and maintain their network of cables and substations at voltages from 132kV to 230 volts including the connections to the end users. National Grid therefore do not distribute electricity to individual premises, but serve the wholesale market to ensure a reliable and quality supply of electricity.
- 3.2.3** To facilitate competition in the supply and generation of electricity, National Grid must offer a connection to any proposed generator, major industry or distribution network operator who wishes to generate electricity or requires a high voltage electricity supply. Often proposals for new electricity projects involve transmission reinforcements remote from the generating site, such as new overhead lines or new development at substations. If there are significant demand increases across a local distribution electricity network area then the local network distribution operator may seek reinforcements at an existing substation or a new grid supply point. In addition, National Grid may undertake development works at its existing substations to meet changing patterns of generation and supply.
- 3.2.4** In the London region demand for power has been increasing. To plan for future demand, National Grid Electricity Transmission plc, as a Great Britain System Operator (GBSO), are required to produce a Seven Year Statement (SYS) covering the Great Britain transmission network on an annual basis. The current SYS covers the years 2010/2011 to 2017/2018'. National Grid is consulting on a new Electricity Ten Year Statement (ETYS) which will replace the previous SYS and was due to be published at the end of 2012. For further details on this please refer to: <http://www.nationalgrid.com/>
- 3.2.5** Known as the North London Reinforcement Project, National Grid's plans focus on the upgrading of a power line that runs from Waltham Cross substation in the Lee Valley Regional Park close to Waltham Abbey to Tottenham Substation in Haringey. The project is defined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 and therefore requires a DCO from the Planning Inspectorate's National Infrastructure Directorate. Permission has been sought from the National Infrastructure Directorate to upgrade this power line to 400 kV(kilovolts). At present it operates at 275 kV which is not sufficient to meet future demands.
- 3.2.6** The upgrade works entail replacing the wires along this power transmission route and making improvements to, or near, each of the three electrical substations connected to it. The works listed are to replace two 275/132kV transformers at Brimsdown (on ZBC route and located off Mollison Avenue next to the Enfield Energy Centre) with two 400/132/V super grid transformers connected into the new Waltham Cross - Hackney route overhead line circuits, and replace the two 275/66kV transformers at Hackney with two 400/66kV SGTs tee connected into the Waltham Cross- Hackney route. The National Grid submitted its application for a Development Consent Order (DCO) for the project in autumn 2012. If the application is successful construction is anticipated to begin in early 2014 (or earlier, depending on the timing of the DCO consent), with the removal and replacement of the overhead wires taking place during 2015 and 2016.

3 Physical Infrastructure

- 3.2.7** The 2011 SYS does not envisage the need for major infrastructure improvements in the Borough at present. However, it indicates the need for additional planned developments on the GB Transmission System in Enfield that are beyond the scope of the 2011 SYS. The schemes are either planned for beyond 2017/18, or are associated with new customer connections which are due to connect beyond 2017/18. National Grid demand forecasts are provided by the DNO who would estimate any increase in demand for energy that would result from the 11,000 homes proposed within the Core Strategy. However, assuming domestic load is all electricity serviced this would equate to about 11kW per house which would result in an additional 95MW total in the Enfield area.
- 3.2.8** The local DNO would assess whether the level of the forecast demand would exceed their capacity to supply at any Grid Supply Point and they would approach National Grid for additional capacity if capacity is exceeded. The majority of load within the Enfield area would be observed at the Brimsdown 275/132kV Grid Supply substation where there is adequate capacity to absorb this level of demand growth at their Grid Supply point with UK Power Networks.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.2.9** Funding is generated by charging for connections to the GB transmission system. These charges are to recover, with a reasonable rate of return, the costs involved in providing the infrastructure which allows the connection and also include a maintenance component and an overhead component.
- 3.2.10** In addition to this, separate Transmission Network Use of System (TNUoS) charges are in place to charge customers for the cost of installing, operating and maintaining the transmission system. The charges are to recover the allowed revenue and are based on a set approved methodology. The TNUoS charge is calculated annually.

ELECTRICITY DISTRIBUTION

Review of Existing Infrastructure Provision and Assessing Future Needs

- 3.2.11** UK Power Networks (UKPN) deal with the lower voltage local distribution networks (132kV down to 400/230V) in Enfield. They take their supply off various exit points from higher voltage networks (400kV and 275kV) that National Grid are responsible for.
- 3.2.12** The Enfield Council area is fed via the following substations:
1. Primary Substations (33kV/11kV) - Bury Street, Central Edmonton, Cockfosters, East Enfield, Ladysmith, Lonsdale Drive, North Enfield, Ponders End, The Cross and Tapster Street.
 2. Direct Transformation Substations (132kV/11kV) - Brimsdown South 11, Palmers Green 11, Tottenham Grid 11 and Waltham Park 11.
 3. Grid Substations (132kV / 33kV) - Brimsdown North Grid, Palmers Green Grid 33 and Tottenham Grid 33.
 4. Supergrid Substations (400kV/132kV) - Brimsdown Main and Tottenham Main.
- 3.2.13** General local load growth is catered for in the UKPN Planning Load Estimates (PLEs). Any specific developments are factored into UKPN's development plans once the developer has requested and accepted a formal quote to supply the required load. Reinforcement projects generally take the form of either increasing the available capacity on existing substations and infrastructure, or installing new substations and infrastructure.
- 3.2.14** The PLEs are produced using regional housing projections for domestic demand growth and regional employment projections for industrial and commercial demand growth. The housing and employment figures are used as follows to translate them into demand figures:

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- Translate number of dwellings into demand - Domestic demand Regional consumption differences - DTI's regional energy consumption statistics - National annual average consumption / dwelling → 3300 kWh/yr.
- Translate number of jobs into demand - Industrial and Commercial demand - Regional consumption differences - DTI's regional energy consumption statistics - Duration of use: 8 hrs/day | 6 days/wk | 50 wks/yr.

3.2.15 The demand figures are then used to calculate Primary Load Growth by distributing district growth across Secondary substations within each district and then aggregating the Secondary substation growth back to their relevant Primary substations.

North East Enfield

3.2.16 In the North East Enfield Area Action Plan (AAP) area, UKPN identified that there is a reasonable amount of spare capacity on Waltham Park 11 substation and some spare capacity on The Cross substation (Waltham Cross) and Brimsdown South 11. There is some capacity on East Enfield but very little on Ponders End substation which is nearing capacity. In order to accommodate growth it is likely to need future work, especially if major development is planned. An upgrade to the existing substation is possible.

Central Leaside

3.2.17 Although there is some capacity on Central Edmonton and Tottenham Grid 11 the UKPN network may reach capacity and require either an upgrade of an existing substation or a new substation to support new development in the Central Leaside AAP area. Potential problems are envisaged if upgrade of the Tottenham Grid substation site is required as part of development at Central Leaside development as there is currently no space on site to accommodate any additional infrastructure. A new site may be required for this work. Whether a new substation is required can only be determined when a definitive application is received from a developer. The total additional load and the physical locations of any loads will determine if and where any new substation is required.

North Circular Road and Enfield Town

3.2.18 There is some spare capacity on Palmers Green 11 and Bury Street Substations and in the North Circular Road AAP area there seems to be adequate capacity to cope with additional load. However, local reinforcement may be required if loads appear in areas where the existing cables are near capacity.

3.2.19 There is very little spare capacity on Lonsdale and no spare capacity from Ladysmith Road substation which provides the local supply for the Enfield Town AAP area. There is also very little spare capacity at the nearby substation in North Enfield. There are currently plans to carry out reinforcement at Ladysmith (currently planned for 2015) to provide additional capacity but it is uncertain whether this will go ahead. In order to accommodate the planned growth some network rearrangement may be needed which could require off-site works.

3.2.20 In the west of the borough there is no spare capacity at Tapster or Cockfosters substations. Whilst there are plans to carry out reinforcement at Cockfosters (currently planned for 2013) to provide additional capacity it is not certain whether this will go ahead.

Funding Sources, Timescales and Responsibilities for Delivery

3.2.21 Due to the uncertain nature of proposed developments, UKPN can only provide indications of the possible need for upgrades to existing or new energy infrastructure until a formal quote for a connection has been received.

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- 3.2.22** An overall Network Asset Management Plan (NAMP) is prepared which sets out projects which may be required in the future, however these are not implemented according to fixed timescales rather they are acted upon when necessary. In that way, future projects can be moved forward or pulled back depending on the prevailing conditions.
- 3.2.23** All energy distribution network operators (DNO) are regulated by OFGEM and every 8 years all DNO undergo a distribution price control review (DPCR) where an extract of the network plan (NAMP for UKPN) for the period ahead is submitted for consultation. No major works are proposed for Enfield in the proposals accepted by OFGEM for major reinforcement and asset replacement works in the period between April 2010 and March 2015.
- 3.2.24** An eight year plan evolves from this NAMP, then a relatively fixed two year Production Plan. There are no significant UKPN schemes set out in the Production Plan for Enfield. Any future developments are only factored into the UKPN planning cycles once they have received a definitive application from developers.
- 3.2.25** UKPN are responsible for funding general maintenance and work required to accommodate gradual increments in demand or 'natural' growth. However, costs are charged for new connections and work required (i.e. upstream reinforcements/upgrades) to supply energy to major 'step change' developments.
- 3.2.26** Once the developer commits to developing a scheme there is a minimum lead in time of two years to set up facilities needed to supply major developments where significant new infrastructure is needed (for example new 33/11kV substation). For smaller developments where only local work is needed the timescale is proportionately smaller and can vary.

GAS

Review of Existing Infrastructure Provision and Assessing Future Needs

- 3.2.27** National Grid owns and operates the high pressure National Transmission system which transports gas from terminals to Local Distribution Zones and is responsible for gas transmission in the Borough. They do not envisage that any major infrastructure improvement works will be required to underpin the broad strategy for growth outlined in the Core Strategy.
- 3.2.28** National Grid indicate that 'local' reinforcement of the supply network may be required. The extent and nature of the work required will be assessed once development schemes come forward. National Grid has a significant mains replacement programme in place over the plan period, however further details on this programme were not provided.

RENEWABLE ENERGY

Review of Existing Infrastructure Provision and Assessing Future Needs

- 3.2.29** Tackling climate change is one of the most important issues facing spatial planning, and enabling infrastructure which can provide renewable energy is an important way of addressing carbon emissions. In the light of CO2 reduction targets and a range of challenges and uncertainty surrounding the UK's electricity supply. Decentralised energy opportunities, feeding into the DNO's lower voltage networks such as large scale heat networks, Combined Heat and Power (CHP) plants and microgeneration such as photovoltaics on buildings are rapidly gaining importance as well as energy from waste plants.
- 3.2.30** To achieve the Mayor's decentralised energy target the development of decentralised heating and cooling networks as well as large-scale heat and electricity transmission networks is essential. Planning authorities are encouraged to focus on area or site-specific infrastructure opportunities of decentralised energy provision, in particular through medium and large-scale heat networks fed initially by combined heat and power generation and sources of waste to serve new development. The cost of infrastructure for such

3 Physical Infrastructure

large-scale projects such as the Upper Lee Valley Energy Network tends to exceed £100 million. In order therefore to support the Mayor's decentralised energy target public money needs to be invested initially to mitigate underlying risks and to create opportunities for private investment and to develop markets in the decentralised energy sector.

Decentralised Energy Network Study for the Upper Lee Valley

- 3.2.31** The Council working with neighbouring authorities, district authorities to the north and other partners are exploring ways to implement a sub-regional decentralised energy network to serve new and existing development in the Upper Lee Valley Opportunity Area with potential expansion to other parts of the borough in order to contribute towards the Mayor's targets of delivering 25% of London's energy through decentralised energy by 2050.
- 3.2.32** A decentralised heat network is a system of pipes that move energy in the form of hot water and/or steam from where it is created, to where it is needed, much like an electricity network. LVHN will initially use hot water and steam from the Energy from Waste (EfW) facility at the Edmonton EcoPark. This facility already generates enough heat to kick-start a strategic network.
- 3.2.33** The aim of the Lee Valley Heat Network (LVHN) is to provide a new city-scale decentralised energy (DE) network to capture affordable low carbon heat (hot water and steam) from Energy from Waste (EfW) facilities and dedicated Combined Heat and Power (CHP) plants. The heat will be supplied to buildings and industry across the Lee Valley for use in space heating and hot water production, which in turn will facilitate inward investment and jobs, provide affordable low carbon heat, help tackle fuel poverty and reduce London's carbon footprint.
- 3.2.34** A pre-feasibility study into the viability of a decentralised energy network in the Upper Lee Valley (ULV) is complete. It has suggested that there is an opportunity to deliver a sustainable decentralised energy network across North London, which would put the ULV at the forefront of the low carbon economy through efficient production of energy from waste and waste heat and give it a competitive advantage over other areas.
- 3.2.35** Two immediate strategic development opportunities can be pursued based on the availability of low cost, low to zero carbon heat with initial development of the decentralised energy network based on heat from the existing Edmonton Incinerator to serve an area including Edmonton, Commercial Road / Silver Street, Northumberland Park, Marsh Lane, Central Leaside and Pickett's Lock. The approach would assist in the initial kick-start of network growth without the upfront costs of primary plant investment, deliver a project without reliance on third party project development and enhance land values.
- 3.2.36** Additionally, viable local satellite networks based on new investment in gas-fired combined heat and power plant that would support development of the strategic network have been identified at Blackhorse Lane, the Tottenham Town Hall area, Waltham Forest Town Hall / Wood Street area, and Walthamstow Town Centre. These schemes are envisaged to be based around local gas-fired CHP plant initially, which would be superseded by the strategic network supply as the DE network expands to these areas. These schemes will complement other existing and emerging communal systems, including the Tottenham Hale Village network supplied by gas fired CHP and biomass boilers.
- 3.2.37** Given that this is the first step in the project cycle, the project had not been possible to develop anything beyond a high-level view of the physical constraints imposed on network design. There are a series of linear constraints aligned north-south consisting of railway lines, reservoirs and a major road that must be crossed to link between the heat sources identified at the western demand clusters.
- 3.2.38** The next stage of the project will be through the identification of cost-effective crossing points to these barriers in suitable locations to link the network load clusters. Emerging findings have suggested a third potential strategic network with North Middlesex Hospital, the housing estates (Shires, Joyce and Langhedge) and Deephams STW acting as supply hubs.

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- 3.2.39** A full feasibility study is underway which will inform the basis for discussions with the GLA and to develop the results of feasibility study into a business plan and progress to implementation. It is proposed that the feasibility study would form the basis of a bid for support from GLA's ELENA (European Local Energy Assistance) facility. ELENA would support viable projects to develop their business plan to take the project forward. The business case for the network is still being worked up but is expected to be finalised this year.
- 3.2.40** Phase 1 providing a strategic link between the current Ecopark facility and the potential Kedco scheme with the proposed development at Northumberland Park but also bringing forward a number of satellite schemes including Alma Estate, Ladderswood and Walthamstow is currently envisaged to cost a little under £40m but it is anticipated that this figure will change.

3.3 Water and Drainage

- 3.3.1** Water and drainage includes waste water, water supply and quality, drainage and flood defences. The majority of London's public water supply is abstracted from the rivers Thames and Lee and is stored in reservoirs located in west London and the Lee Valley. The rest of London's water is supplied from groundwater sources.
- 3.3.2** Thames Water supplies approximately 75% of London's water. The other water company that supplies Enfield is Veolia Water (formerly Three Valleys Water). The water companies have a statutory duty to develop and maintain efficient and economical water supply systems. They are responsible for managing the water supply network including the reservoirs, boreholes, pipes and water treatment works which make up London's water supply infrastructure.

WASTE WATER

Review of Existing Provision and Assessing Future Needs

- 3.3.3** Thames Water is the sewage undertaker responsible for sewerage services for the whole borough. They have a duty to ensure that adequate sewer infrastructure is in place to accommodate development. London's sewage is treated at eight major sewerage treatment works – one of these is Deephams Sewage Treatment Works (STW) located in the east of the borough.
- 3.3.4** The majority of Enfield's foul sewerage drains to Deephams STW that serves a population of approximately 870,000 people in the boroughs of Enfield, Epping, Waltham Forest and Haringey. The Deephams STW that exists today was largely constructed in the 1950s and 1960s.
- 3.3.5** The Environment Agency is concerned about the quality of effluent being discharged into the River Lee during storms and are setting new consents for the sewage treatment works. For Thames Water to meet the new consents a major upgrade to Deephams STW is required to significantly improve the quality of the treated wastewater that flows into the Salmon's Brook, a tributary of the River Lee. As well as improving river water quality it is also necessary to increase the amount of sewage the works is able to treat so that it can cope with predicted population growth in the area. Deephams STW currently treats the sewage from about 885,000 people and the upgraded works will need to serve a future population of 941,000. A further reason why the upgrade is needed is because the existing Deephams STW is becoming old and worn out; the upgrade will be designed and built to modern standards and will be more energy efficient and easier to manage and maintain.
- 3.3.6** Thames Water considered a range of alternatives when choosing the best options for achieving the required improvements considering that the most appropriate options would be either:

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- Rebuild and upgrading the treatment facilities on the existing Deephams site; or
- Building a new sewage treatment works on a new site elsewhere.

3.3.7 Thames Water considered 22 potential sites within an area approximately 3km from the existing site and concluded that their preferred option is to redevelop the sewage treatment process within the boundaries of the existing Deephams Sewage works site. As it will be necessary to keep the works running during the construction period, this option will entail building the upgrade in two or three main phases that is likely to take up to seven years to complete from 2015 when construction is expected to start. However, no decisions have yet been made on the upgrade and Thames Water has undertaken the first of two consultation periods on their proposals. It will then be necessary to submit a planning application to the Council for permission to build the upgrade. Table A.8 of the Infrastructure Schedule provides details of the scheme. It is important to note that the level of development proposed in the borough will have a minimal impact on the capacity of the sewage treatment works.

3.3.8 Discussions with Thames Water indicate that waste water infrastructure in the short to medium term is capable of accommodating the levels of growth proposed, provided that the growth is a redevelopment site rather than greenfield, and that developments ensure the separation of foul water from surface water.

3.3.9 Local upgrades to the sewerage system may be required but cannot be determined at this stage until more detailed proposals are drafted regarding the location and size of sites.

Funding Sources, Timescales and Responsibilities For Delivery

3.3.10 The investment plans of the water companies are based on a five year cycle; Thames Water's business plan covers the period 2010-2015 and has been approved by the water and sewage regulator OFWAT. As part of its Business Plan for 2010-2015 Thames Water is developing and implementing a proposal for a major upgrade of Deephams STW to provide sufficient capacity to accommodate growth up to 2026. The extent of the required works and likely planning issues mean that whilst the work will be started in the current business plan period 2010-2015, it will not be completed until the 2015-2020 period. The Thames Water business plan allocates funding, approved by OFWAT, for the proposed upgrade to the Deepham's STW which is expected to cost several hundred million pounds. No other upgrades are proposed to Enfield's waste water infrastructure.

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

WATER SUPPLY

Review of Existing Provision And Assessing Future Needs

3.3.12 Climate change is expected to result in hotter drier summers and higher intensity rainfall events which will make it more difficult to retain rain water for utilisation. This combined with an increased demand for water from a rising population has lead the Environment Agency to classify the London region as an area of 'water stress'.⁽¹⁷⁾

3.3.13 Water supply is provided to the majority of the borough by Thames Water, with Veolia Water (formerly Three Valleys Water) supplying water to the north west of the borough. Each company has a statutory duty to provide a water supply to new development.

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- 3.3.14** Veolia Water advise that the network of infrastructure and pipes has been designed to be suitable for existing developments with a limited amount of spare capacity to accept incremental growth. Where large scale development is required, the network may need infrastructure improvements to be made to ensure that the new developments have an appropriate supply network, and that existing customers do not see a deterioration in service. Veolia Water indicate that they only cover a small part of the borough, and as this area is not one where significant growth is anticipated above the London Plan housing requirement, they are reasonably confident that a physical water resource can be supplied to new developments.
- 3.3.15** Thames Water indicate that there are currently no major proposed changes to the water supply infrastructure in the borough. Thames Water are aware that North East Enfield and Enfield Town are subject to poor water pressure, and that further development may reduce this. A new pumping station may be required, although there are no plans for this in the draft business plan. The development trigger point that would require the building of a new pumping station has not been reached. Thames Water assesses this by reviewing planning applications for ten or more dwellings, proposals contained within the Core Strategy and Area Action Plans. Notwithstanding, Enfield Town may require a local upgrade to accommodate the development being proposed.
- 3.3.16** In addition, both water companies are actively promoting water conservation and efficiency measures in all new developments, and where possible via a retrofitting process in existing developments as a means to conserve water.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.3.17** Thames Water and Veolia Water have produced draft Water Resource Management Plans (WRMP) for their respective areas that set out how the demand for water will be balanced against supply; both plans look forward 25 years, but are reviewed every five years. In addition, both companies submit proposals to the industry regulator OFWAT every five years via the business plan cycle, to determine customer price limits. The Water Resource Management Plan therefore establishes the measures required to provide a reliable water supply, and the business plan process seeks to secure funding every five years to undertake the necessary infrastructure projects.
- 3.3.18** Thames Water's preferred programme of options to ensure security of supply in London includes a variety of both demand management and supply schemes involving programmes that include leakage reduction, metering, water efficiency and resource development. Following the Public Inquiry into Thames Water's draft WRMP (2009) and consideration of the Inspector's recommendations, in June 2012 the Secretary of State approved Thames Water's WRMP covering the period 2010 - 2035. Thames Water have published their work programme for WRMP 14 and will publish their draft plan in April 2014 for public consultation, to understand the views and priorities of customers and other stakeholders.
- 3.3.19** Veolia Water has a number of resource development schemes in its preferred options list including source optimisation schemes, treatment schemes and new sources. Details of the company's preferred programme for London but can be found in Veolia Water Central's final WRMP ⁽¹⁸⁾

Identified Risks and Contingencies

- 3.3.20** The Thames Water Business Plan 2010 to 2015 has no specific proposals to upgrade the local water supply infrastructure. Any local upgrades that may be required to serve developments proposed prior to the next Business Plan may either have to be funded from developer contributions, or such developments may need to be phased until 2015-2020 so that the necessary upgrades can be included in the Business Plan for that time period.

18 Veolia Water Central Final Water Resource Management Plan 2010
<http://www.veoliawater.co.uk/uk-water/ressources/documents/1/9033,VWC-FWRMP-Version-3.0-Website.pdf>

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3.3.21 Veolia Water's current WRMP indicates that across its three water resource zones there is a small surplus of water available over the plan period. This means that the total water available to put into supply is higher than the total forecast demand. Veolia Water plan for new infrastructure as new development sites are planned and applications made. The company then works with developers to ensure that new infrastructure needed is appropriate for the developments proposed and that developers help to fund the new infrastructure needed. Veolia Water advise that it is impossible to give accurate information on the type and cost of infrastructure needed until detailed plans for new developments have been completed.

DRAINAGE

Review of Existing Provision and Assessing Future Needs

3.3.22 In Enfield, the two major organisations responsible for drainage infrastructure are Enfield Council and Thames Water. Information is provided in the London Borough of Enfield Strategic Flood Risk Assessment (2008), which indicates that a number of incidents of surface water flooding have been the result of insufficient capacity of existing drainage infrastructure. Further information about areas at risk from surface water flooding is contained in the Areas Susceptible to Surface Water Flooding maps, which have been produced by the Environment Agency. These issues are likely to become more widespread as the effects of climate change in combination with increased urbanisation (and the resulting increase in the extent of impermeable surfaces) lead to additional pressure on drainage assets. Recorded incidents of surface water flooding have generally been highly localised although it should be noted that in recent years the borough has not experienced the kind of extreme rainfall event that would be expected to result in widespread surface water flooding. Thames Water have stated that initial investigations indicate that there is currently no evidence of major problems with their assets in Enfield, further investigations may be needed to confirm this.

3.3.23 Surface water and groundwater is, with the production of the Surface Water Management Plans, becoming better understood. Surface Water Management Plans represent key evidence for Local Flood Risk Management Strategies which boroughs have a duty to produce under the Flood and Water Management Act 2010. The Act 2010 designates Unitary Authorities such as Enfield as Lead Flood Authorities (LLFAs) with new responsibilities for management of local flood risks such as surface water, groundwater and ordinary watercourses. The Drain London project is continuing to support boroughs in this role and is currently implementing a £1.5 million programme of demonstration and investigation projects including Community Flood Plans, green roofs, flood storage and drainage measures to mitigate surface water flood risk.

3.3.24 Currently the Council has no major Capital works planned. However, funding will be sought through Defra's Flood Defence Grant Aid budget and the Thames Regional Flood and Coastal Committee's Local Levy which fund studies to investigate whether large scale capital projects are desirable. Defra announced in February that construction would begin on the 93 schemes later this year and that, for the first time, additional funding has been provided for projects that would unlock economic growth. Working with the Drain London Forum⁽¹⁹⁾, the Council has prepared a Surface Water Management Plan (SWMP) for Enfield.⁽²⁰⁾ This identifies local flood risk zones and associated opportunities for capital works which may help to address surface water flooding within the borough. Such works would most likely include potentially large-scale projects such as flood alleviation schemes as well as small-scale measures such as retrofitting of Sustainable Drainage Systems (SUDS) to reduce the rate at which runoff is discharged into the existing drainage system and thereby mitigate potential flooding. Preliminary proposals for possible capital works in the highest priority flood risk zones identified by the SWMP are provided in Table A.10 of the IDP schedule. Further investigation work is required before these proposals and associated costs can be refined.

19 The *Drain London Forum* was created by the GLA to bring together representatives from organisations with the information and/or responsibility for managing surface water drainage in London including: the Department of Environment Food and Rural Affairs; the Environment Agency; the Greater London Authority; London Boroughs; London Councils; London Development Agency; Thames Water; and Transport for London

20 http://www.enfield.gov.uk/info/100003/environment_waste_and_transport/1851/surface_water_management_plan

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- 3.3.25** Smaller maintenance schemes are carried out regularly throughout the year, ranging from minor cleaning operations to full refurbishment of fairly extensive piped systems. Thames Water have stated that in order to assess the infrastructure needed to support planned growth, they would need details of the site conditions, as well as the type and size of development planned. These details are not available at this time and will therefore need to be added to the Infrastructure Delivery Plan as masterplanning work progresses.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.3.26** The responsibility for the delivery and maintenance of drainage infrastructure falls on a number of organisations including the Council, Thames Water and individual property owners. The Environment Agency act in an advisory capacity on the planning of drainage infrastructure, but are not responsible for implementing drainage infrastructure projects. They do, however, use their powers to deliver flood risk management schemes. The Council has received £129k of Defra Flood Defence Grant Aid funding for 2013/14 to use for feasibility/design work.
- 3.3.27** The Salmons Brook Flood Alleviation Scheme is a major drainage-led infrastructure project that has recently received planning approval and for which construction works are being undertaken this year. Ongoing maintenance of Council drainage assets will continue, with works being prioritised and subject to allocation of funding as part of the yearly budget. Future projects identified by Thames Water will be funded as part of their Asset Management Plan 6 (2015-2020).
- 3.3.28** Drainage infrastructure for new developments will be designed and constructed in accordance with good practice, funded by the developer and secured through planning conditions and section 106 agreements⁽²¹⁾. This is likely to include an increasing number of SUDS. Infrastructure would need to be delivered ahead of planned development.

Identified Risks and Contingencies

- 3.3.29** At present, there are insufficient details regarding the need for drainage infrastructure to allow for the identification of risks and contingencies. However, these will be identified as part of individual development proposals and as more detailed information regarding planned development in the Council's Regeneration Priority Areas becomes available.

FLOOD DEFENCES

Review of Existing Provision and Assessing Future Needs

- 3.3.30** Enfield contains a variety of flood management assets. Many of these are older engineered defences including the the Lee Flood Relief Channel and a large number of culverts and water-level control structures. It is now understood that these heavily engineered solutions are not always sustainable in the long-term. They can increase flood risk elsewhere and over time their effectiveness can decrease while their maintenance costs increase. In some locations, heavily engineered solutions are necessary, but the long-term aim is to make best use of more natural flooding regimes such as restoring floodplains and providing storage areas for flood waters. However, in the interim it will be necessary to maintain and, where necessary, renew the defences in the borough to ensure continued protection of people and property⁽²²⁾. Even with the retention of existing defences, a number of properties will remain at risk of flooding and this risk is likely to increase as a result of climate change. Therefore, a number of additional flood storage areas are proposed on the Lee tributaries, (for example as part of the Salmons Brook Flood Alleviation Scheme described below), and the feasibility of a greater number still is being investigated.

21 (Developers should have regard to the Mayor's drainage hierarchy as set out in the London Plan, 2011)

22 As set out in the emerging Thames Catchment Flood Risk Management Plan (TCFMP) and Lower Lea Flood Risk Management Strategy (LLFRMS)

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- 3.3.31** In order to decrease the risk of flooding from artificial sources not covered elsewhere, improvements (including works to embankments and trees) required at the Council assets of Trent Park Lower Lake and Grovelands Park Lake were completed in 2012. There are no major works planned to reservoirs owned by Thames water (see *water supply* section above).
- 3.3.32** Further development in the flood plain is necessary in order to deliver the growth and regeneration aims of the Core Strategy, particularly at Meridian Water and Ponders End in the Lee Valley. These developments must not increase flood risk elsewhere and will need to be made safe⁽²³⁾ by minimising the risks and consequences of flooding. Through appropriate layout, design, resistance and resilience measures, these developments provide an opportunity to reduce flood risk overall. Options for achieving this will be investigated as part of the masterplanning work being undertaken at each of the growth areas, and informed by the Level 2 Strategic Flood Risk Assessments undertaken. However, the final flood risk management measures will need to respond to the details of proposed development and it is therefore not possible to give further detail at this time.

Funding Sources, Timescales and Responsibilities for Delivery

- 3.3.33** Maintaining existing infrastructure to ensure the ongoing protection of properties within the flood plain is an objective of the emerging Thames Catchment Flood Management Plan and Lower Lee Flood Risk Management Strategy. Maintenance is the responsibility of the owners of individual assets. However, the Environment Agency have permissive powers to intervene to carry out construction and maintenance works on Main Rivers and Enfield Council have similar powers for Ordinary Watercourses.
- 3.3.34** The Environment Agency have a number of projects planned which will increase the protection to existing properties at risk of flooding. However, it is difficult to give costs, details and timescales for these projects because the Environment Agency's funding cycle is relatively short, (and therefore only contains limited detail for future projects), and most projects are only in the early stages of development. Table A.9 of the IDP schedule provides detail of flood defence infrastructure schemes. The Environment Agency's maintenance activities are funded through a limited revenue budget, which is allocated based on an assessment of potential risk. Therefore, maintenance is reduced on some of the lower risk flood management infrastructure and assets.
- 3.3.35** Funding sources for Environment Agency led schemes vary, but tend to originate from the Department of Environment, Food and Rural Affairs (Defra), or through local Levies imposed by the Regional Flood and Coastal Committees (RFCCs) (collected as part of council tax)⁽²⁴⁾. Schemes that have multiple benefits (e.g. flooding, biodiversity, recreation) can have more complicated funding streams depending on the key stakeholders and partnerships responsible for pushing the scheme forward.
- 3.3.36** The only Environment Agency led project which currently has approved funding allocated is the Salmons Brook Flood Alleviation Scheme, which currently proposes flood water storage at Enfield Golf Course and Montagu Road Recreation Ground. However, even in this case, the design of the components is still being finalised and therefore only estimated costs are available. Details of this scheme are provided in Table A.9 of the accompanying IDP Schedule.
- 3.3.37** Using funds secured from the Council's capital budget, the cost of works to the Council-owned assets at Trent and Grovelands Park (described above) completed in 2012 were £300,000.
- 3.3.38** Flood management infrastructure necessary to protect new development in the floodplain will need to be funded by developers through securing Section 106 agreements and in the future CIL, when the Council has its CIL Charging Schedule in place. Maintenance will be carried out by the Environment Agency, Enfield Council or other agency depending upon ownership and will require agreement of appropriate funding mechanisms. This infrastructure will be directly related to the details of the proposed development.

23 as set out in part C of the Exception Test (National Planning Policy Framework March 2012, Paragraph 103)

24 RFCCs are made up of representatives from a number of local authorities and other external organisations. They can allocate funding for projects that do not meet Defra's criteria, but that may be important locally

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Identified Risks and Contingencies

3.3.39 Projects led by the Environment Agency only proceed when funding is secured. Schemes progress on a staged basis, (feasibility, detailed design, implementation etc), with funding being approved and allocated, or deferred, at each stage. If funding for a scheme is deferred, the scheme will not progress to the next stage until funds are allocated to that scheme again. Therefore no contingencies are in place, other than the postponement of a project.

3.4 Waste

Review of Existing Provision and Assessing Future Needs

- 3.4.1** Enfield currently accommodates approximately 24 waste management and waste transfer sites, with the capacity to treat over 1 million tonnes of waste per year. This includes the energy from waste plant located at the Edmonton Eco-Park, which is one of the largest waste processing plants in the country.
- 3.4.2** The North London Waste Authority (NLWA) are responsible for managing the treatment and disposal of municipal solid waste (MSW) collected by the seven north London boroughs of Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest. Recyclables are taken to a variety of treatment facilities, while the residual waste is managed at the Edmonton Eco Park or disposed of via landfill.
- 3.4.3** The Mayor of London's Implementation Plan categorises London's waste into the following three streams:
- Local Authority Controlled Waste (previously known as municipal solid waste) collected by London's waste authorities, principally from households,
 - Commercial and industrial waste, and
 - Construction, demolition and excavation waste.
- 3.4.4** Commercial and industrial (C&I) waste, construction, demolition and excavation (CD&E) waste and hazardous waste are collected and treated separately through private sector contracts. Although the Borough contains a number of facilities that deal with these wastes, detailed information tracking the wastes from source to treatment facility is not available.
- 3.4.5** The London Plan sets out strategic targets for waste management capacity in the Capital to ensure that London has the capacity to become more self sufficient in the management of its own waste and work towards 100% self sufficiency within London by 2031. The London Plan therefore requires that boroughs set aside land to manage waste to meet this target. This is referred to as borough-level apportionment. The same seven north London boroughs within the NLWA area have pooled their apportionment targets to find a more sustainable waste management solution at a sub-regional level.
- 3.4.6** Currently, the London plan requires the seven boroughs to allocate land to accommodate facilities to deal with an additional 2,122,000 tonnes of waste/year in 2031 (the borough-level apportionment). The boroughs are working on a new waste plan to replace the non-adopted North London Waste Plan (NLWP). The waste plan will identify sites across north London to meet identified waste management needs.
- 3.4.7** The NLWA are currently leading on a procurement process to select a contractor to manage the north London borough's waste. The NLWA have prepared an Outline Business Case (OBC). The OBC is currently the main source of information regarding operational and land requirements. As a key delivery partner, the needs of the NLWA will be taken into account in the development of the waste plan.

3 Physical Infrastructure

Funding Sources, Timescales and Responsibilities for Delivery

- 3.4.8** The waste plan will ensure that sufficient land is allocated for waste facilities to manage all types of waste over its plan period, taking into account the needs of the NLWA. Waste management companies, including private organisations and the NLWA, will then be encouraged to develop the required facilities on these sites. Currently, the seven boroughs have sufficient waste management capacity in existing facilities to meet their immediate needs. It is anticipated that planning applications for new waste facilities will then come forward in line with increasing demand. This situation will be kept under review as part of the waste plan and the IDP will be reviewed if necessary in order to help facilitate delivery of the required infrastructure.
- 3.4.9** The construction and operation of private sector waste facilities is the responsibility of developers and waste management companies. The NLWA have produced the North London Waste Strategy, which outlines how they will meet the requirements for collection and disposal of MSW including the need for new facilities. The NLWA have developed an Outline Business Case to demonstrate how they intend to facilitate the delivery of this Waste Strategy. Funding for these developments is likely to be obtained through a Private Finance Initiative (PFI) bid and funding from the seven partner boroughs.
- 3.4.10** The London Plan Implementation Plan identifies London Waste and Recycling Board funded and committed waste infrastructure projects. Included is a plastics reprocessing project sponsored by Green Tech with the capacity of 25,000 tonnes per year.

Identified Risks and Contingencies

- 3.4.11** The NLWP will be reviewed regularly to monitor the uptake of allocated waste sites. Should sites prove unpopular, the reasons for this will be investigated and site allocations reviewed if necessary.

3.5 Telecommunications

Review of Existing Provision and Assessing Future Needs

ADSL Broadband Provision

- 3.5.1** The most common form of broadband available in the UK today is ADSL.⁽²⁵⁾ British Telecom have deployed this 'first generation' broadband technology to almost all of their telephone exchanges across the UK, while a number of alternative internet service providers have deployed a mixture of this and the newer ADSL2+ technology to a significant proportion of the UK. The original ADSL technology offers up to 8 Megabytes per second (Mbps) downloading speed and up to 800 Kilobytes per second uploading capacity. The newer ADSL2+ is capable of up to 24 Mbps downstream with some broadband service providers offering up to 2.5 Mbps upstream. However, the speed customers will actually experience depends heavily on the length and quality of their telephone line; recent research undertaken by Samknows and Ofcom⁽²⁶⁾ demonstrated that the average broadband speed experienced by UK customers was 4.1 Mbps (4.6 Mbps in urban areas and 3.3 Mbps in rural areas).
- 3.5.2** Research undertaken by Samknows on behalf of the Council⁽²⁷⁾ stated the average broadband speed in Enfield to be around 5Mbps. There are variations within this with around 26% experiencing speeds of at least 6 Mbps, well above the national average, around 4% falling below the 2 Mbps proposed by the Government's Universal Service Commitment (see below); with a smaller percentage of areas in the Borough having no access to alternative broadband solutions, such as Virgin Media's cable network. These access variations are illustrated in Figure 3.1 below.

25 Asymmetric Digital Subscriber Line.

26 www.ofcom.org.uk/research/telecoms/reports/broadband_speeds/broadband_speeds/broadbandspeeds.pdf

27 Samknows Broadband Report: London Borough of Enfield (November 2009)

3 Physical Infrastructure

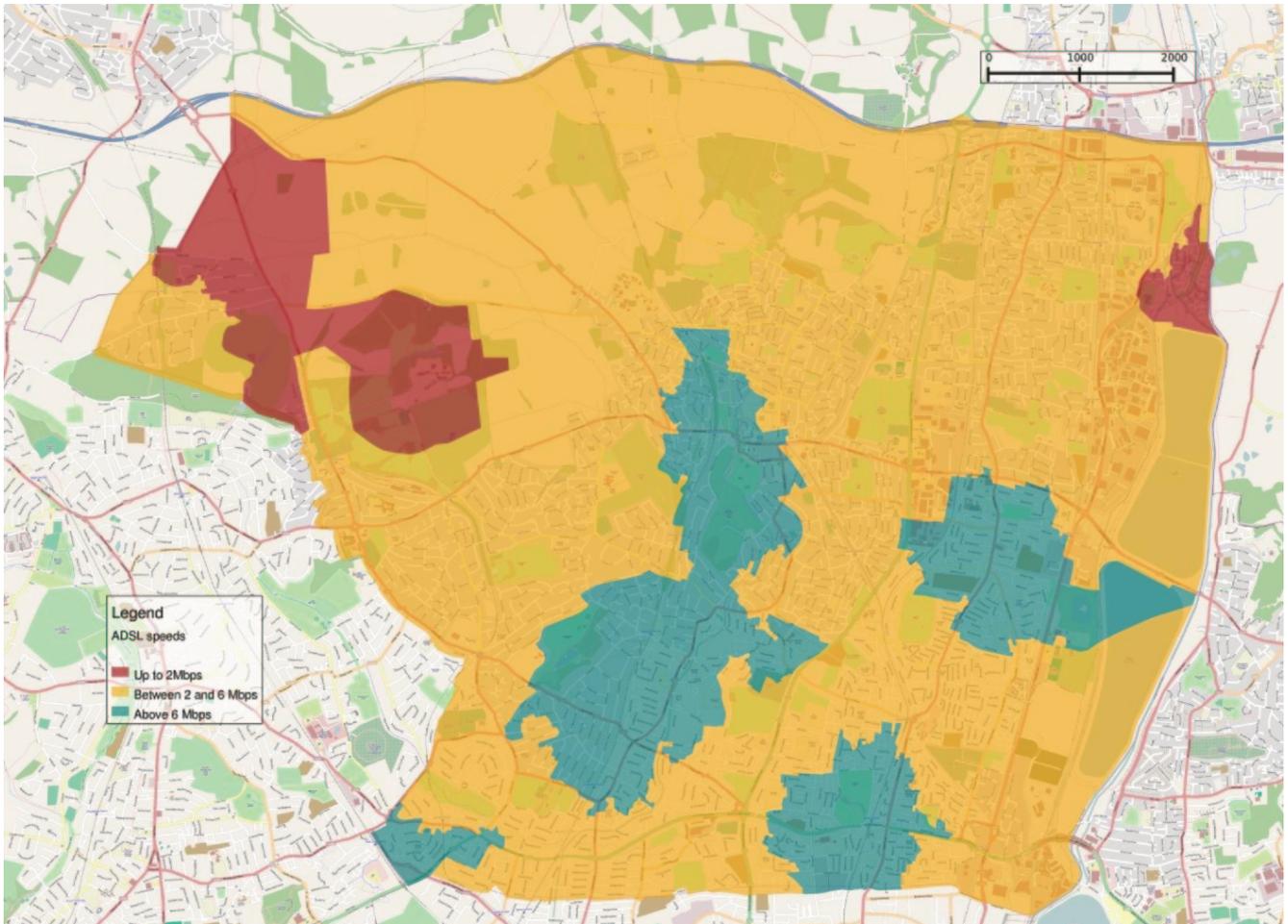


Figure 3.1 Enfield ASDL Access Speeds (Source: SamKnows, 2009)

Cable Coverage

- 3.5.3** An alternative to ADSL broadband is cable. Samknows advise that there has been considerable consolidation in the cable market in recent years to the point where there are just two cable operators in the UK: Virgin Media is the main operator with coverage of about 50% of the UK, with Smallworld Media offering services in a number of locations in the North of England and in parts of Scotland. Both companies are deploying technology which supports up to 200 Mbps download speeds, although both are currently offering up to 50 Mbps.
- 3.5.4** Cable coverage can be very localised but Samknows advise that across the borough around 82% of properties are able to receive a service from Virgin Media – considerably above the UK average – with the remaining 18% outside Virgin areas. As noted before, a small number of areas are unable to find an alternative service. These access variations are illustrated in Figure 3.2 below.

3 Physical Infrastructure

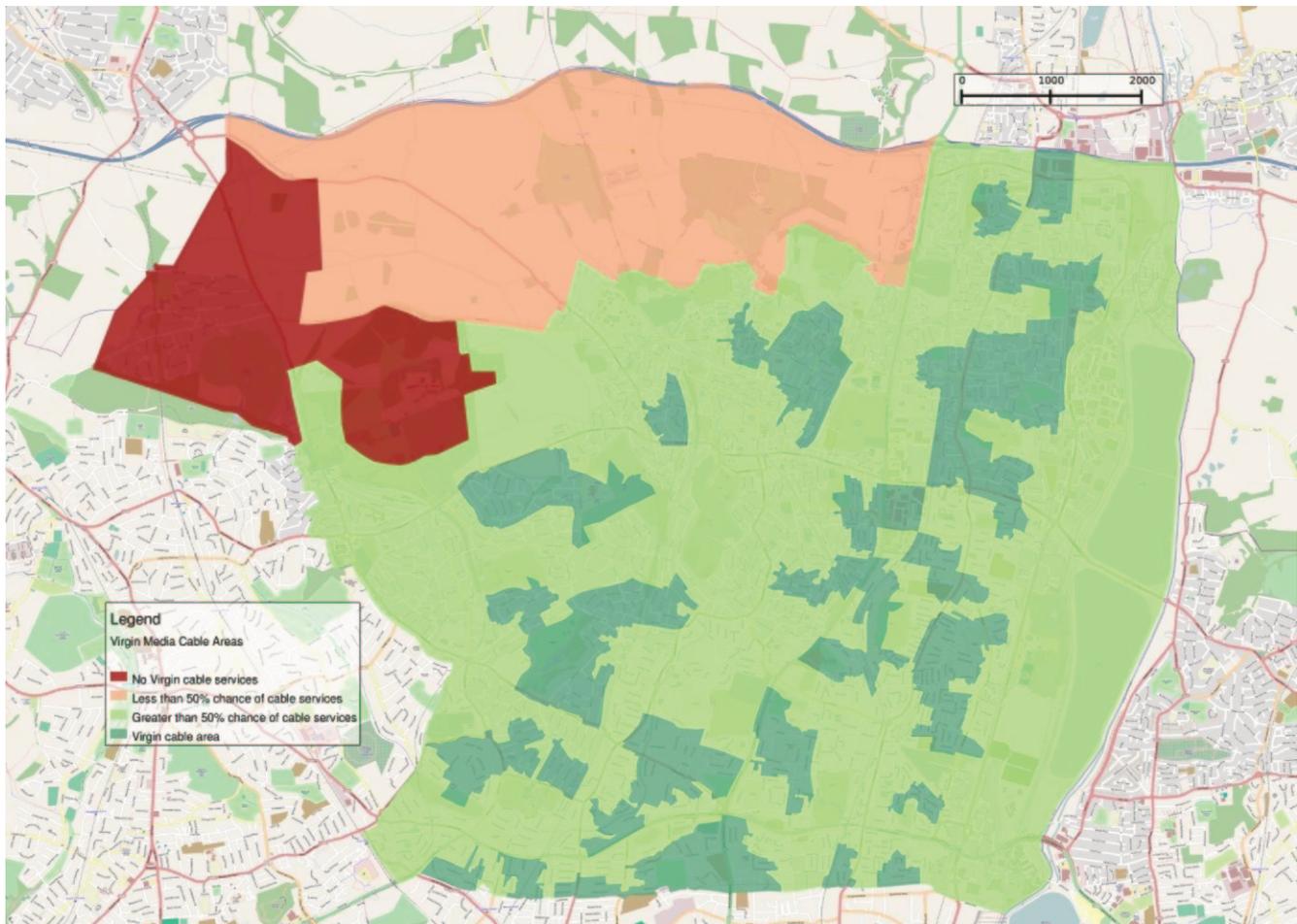


Figure 3.2 Enfield Virgin Media Cable Access (Source: SamKnows, 2009)

Digital Britain: Universal Service Commitment

3.5.5 On 16 June 2009 the Government published the Digital Britain Report⁽²⁸⁾, its strategic vision for ensuring that the UK is at the leading edge of the global digital economy. The Report proposed a Universal Service Commitment that all households would have access to 2 Mbps by 2012. While Enfield generally has good coverage of first generation broadband, there are a number of areas in the Borough which may fall below this minimum level. As highlighted in section 3.5.2, there are a number of areas which are expected to receive less than 2 Mbps, and where there is no access to alternative solutions such as Virgin Media's cable network. Delivery of the Universal Service Commitment will help to eradicate the broadband access and download speed problems experienced in parts of the Borough.

Funding Sources, Timescales and Responsibilities for Delivery

British Telecom - Next Generation Access

3.5.6 In July 2009 British Telecom announced that they will be commencing a £1.5bn investment plan to provide 'super-fast' broadband to 40% of the UK (the equivalent of 10 million homes) by 2012. BT have announced that this investment will increase download speeds for the targeted areas to up to 40 Mbps, with the potential for speeds to rise up to 60 Mbps in the future.

3 Physical Infrastructure

3.5.7 As part of this investment programme BT will include broadband infrastructure enhancements at its Enfield, Edmonton, Ponders End, Lea Valley and Barnet exchanges. This will allow for enhanced broadband services for the following areas of the borough: Enfield Town, Crews Hill, Bullsmoor, Brimsdown, Hadley Wood and Edmonton. Work commenced at the end of 2009, with enhanced services expected by the summer of 2010.

3.6 Public Realm

Review of Existing Provision and Assessing Future Needs

3.6.1 The public realm consists of streets, squares, parks⁽²⁹⁾, bridges and hard and soft landscaping between buildings. It is where public activity takes place; where people walk, drive, cycle, meet and interact. The public realm plays a vital role in the connectivity and legibility of a place and an attractive, efficient and good quality public realm can help to facilitate an area's regeneration and growth.

3.6.2 The specific components that make up and define the public realm in Enfield include:

- Traffic management features (including traffic calming, pedestrian crossings, bus and cycle facilities, roundabouts and traffic signals);
- Footways and footpaths (including footway surfaces and paving, crossovers, kerbs, and paving for mixed use surfaces);
- Signs (including traffic and pedestrian signs and street nameplates);
- Street furniture (including railings, fences, bollards, litter bins, seats and benches);
- Street lighting;
- Soft landscaping (including street trees, grass verges, shrubs and hedges, hanging baskets and planters);
- Water features;
- Carriageways (including carriageway surfacing and coloured and texture surfacing);
- Footbridges;
- Historic features (especially in conservation areas);
- Public art and sculpture; and
- Street greenery.

3.6.3 The London Borough of Enfield Characterisation Study identified a number of broad issues affecting the quality of the built environment that relate to the public realm in parts of the borough, such as the loss of street greenery, poor highway quality and poor quality street furniture. This baseline work needs to be developed further to identify priorities for public realm improvements. Once this work has been undertaken it will inform the Council's Area Action Plans and the Enfield Design Guide.

Phasing and Programming

Current and Future Public Realm Improvements

3.6.4 The Council's Highways Service undertakes an annual conditions survey of the footways and carriageways in the borough. The survey covers half of the borough per year and is carried out as a rolling programme. The results of the survey inform the maintenance requirements and infrastructure investment priorities for each financial year, and as priorities are set and a programme of works is developed there may be the opportunity to modify, enhance and add value to the public realm.

29 Details of parks are covered in the Green Infrastructure section of this Plan

3 Physical Infrastructure

Decluttering

3.6.5 As part of its public realm maintenance and improvement programme the Council is focused on rationalising signs and street furniture and reducing street clutter. The Council maintains a database of the location, type and condition of all its street furniture and will, through a risk assessment process, consider the removal of unnecessary street furniture as part of its highway asset management. The Council will also work with utility companies to minimise their apparatus placed on the highway.

Improvements Around Stations

3.6.6 Site-specific surveys have been undertaken regarding decluttering, public realm improvements and pedestrianisation around the borough's national rail and underground stations. This work will help to inform a programme of works for a number of the borough's stations, subject to negotiations with Network Rail and London Underground.

3.6.7 The Council has undertaken a public realm improvement project at Southgate Circus, based around Southgate underground station. This project was split into two phases. Phase 1, a £150,000 Council Capital Programme funded project that included the removal of obsolete street furniture, footway improvement works and street light enhancement. Phase 2 of the project involved wider public realm improvement works informed by the completion of a Southgate Circus Comprehensive Townscape Review, further details of Phase 2 of the project are included in Table A.11 of the infrastructure Schedule.

Gateway Enhancements and Greening the Public Realm

3.6.8 As part of the maintenance of the public realm in the borough, the Council seeks to protect existing trees, green highway open space and wildlife habitats.

3.6.9 In the 2008/09 financial year the Council allocated increased capital funding for a three year period for improvements to entrances (Gateways) to the borough and for the greening of the public realm. These projects were established to help support the Council's Regeneration agenda and support its key aims for a Cleaner Greener Enfield.

3.6.10 In 2008/09 the Council planted and re-planted 1,000 trees, including 350 as part of the greening of Hertford Road, and sought to complete the planting and replanting of 1,400 trees in 2009/10.

Public Realm Improvements within the Regeneration Priority Areas

3.6.11 Public Realm improvement opportunities will be identified as the Council's Area Action Plans are developed and through the Council's Neighbourhood Regeneration Programme. A number of potential public realm improvement schemes were identified as part of the extensive consultation work undertaken for the development of the Ponders End Framework For Change, including Ponders End High Street de-cluttering and South Street public realm improvements to support the delivery of the Oasis Hadley Academy. Future public realm improvement schemes will be incorporated into future versions of this Plan as they are developed and costed.

3 Physical Infrastructure

Funding Sources, Timescales and Responsibilities for Delivery

Council Capital Funding Programme

3.6.12 A large proportion of public realm maintenance and improvements works in the borough are funded through the Council's Capital Programme. The Council's Environment and Streetscene Department currently have an annual budget of £9.75m allocated for a range of maintenance and improvements works, such as carriageway⁽³⁰⁾ and footway renewal, signage installation and renewal, soft landscaping and other street scene improvements, including de-cluttering. Additional capital funding may also be allocated for area specific public realm improvement works, such as the Southgate Circus Conservation Area.

Street Lighting Private Finance Initiative

3.6.13 The Council's street lighting is maintained under a Private Finance Initiative (PFI), which is a performance contract running for 25 years. The PFI contract was signed on 30th April 2006, and specifies a 5 year Core Investment Programme under which approximately 16,000 lamp columns out of 19,600 in the Borough as a whole will be replaced. Maintenance of street lighting was expected to cost £23.7m over 5 years and be fully funded through the PFI.

3.7 Historic

HISTORIC INFRASTRUCTURE

Review of Existing Provision and Assessing Future Needs

3.7.1 While heritage assets of the future will be created through the Council's commitment to excellent design, the borough is already rich in existing assets including:

- 5 scheduled monuments and 1 local monument
- 25 areas of archaeological interest
- 451 statutorily listed and 93 locally listed buildings
- 22 conservation areas
- 5 nationally registered and 26 locally registered historic parks and gardens

3.7.2 Their maintenance and protection is, in part, the responsibility of their respective owners. However, the Council also has a responsibility to protect these assets and maintain the contribution that they make to our culture and quality of life. Regrettably, a number of our heritage assets have suffered from neglect or inappropriate alterations, but fortunately, the Council has a number of tools and powers available to help remedy the situation. These include the planning and legal systems, grant opportunities and partnership working.

3.7.3 Many of these mechanisms necessarily involve ongoing and ad hoc actions by the Council, for example in the assessment of planning applications, provision of advice to owners of historic assets, maintenance of the public realm and enforcement action to cease or remedy inappropriate alterations. However, there are also a number of specific projects which the Council have identified that aim to proactively improve heritage assets. These are detailed below and in Table A.12 of the accompanying Infrastructure Schedule.

Forty Hall and Estate

3.7.4 The Council successfully bid to the Heritage Lottery Fund (HLF) for £1.8 million as part of a conservation and restoration project for Forty Hall; a Grade I listed building in the heart of the borough. In addition the Council committed £4.7 million to the project over five years. The refurbishment works to Forty Hall have recently been completed, restoring the historic fabric of the building as well as providing a range of new

30 Council Capital Funding is not allocated to Principal Road carriageways as their maintenance is funded by Transport for London

3 Physical Infrastructure

services for visitors; permanent displays to explain the history of the hall and its owners; a full programme of workshops, exhibitions, events, family activities and education opportunities to ensure the widest public access to Enfield's landmark Grade I Listed heritage building. The Hall reopened to the public in July 2012.

- 3.7.5** A further bid to HLF for restoration of the 18th century landscape features in the parkland and grounds of Forty Hall has also been successful. Forty Hall Park - A Landscape of Plenty Project will help the park realise its full potential as one of London's most historically significant cultural landscapes. Forty Hall park is a rare example within Greater London of a complex, relatively unaltered 17th and 18th century country estate landscape and represents an important piece of the jigsaw in our understanding of English history. Although the park and gardens consist of elements individually common in 18th century landscaping schemes (e.g. pleasure gardens, a lawn, an avenue and groves), the presence of so many elements and the relatively complete survival of them, ensures that as a whole the park and garden is of national importance as an illustration of landscaping in this era. The survival of the original Pleasure Grounds surrounding the Hall is an extremely rare example in Britain. Although not included in the HLF Project, this much loved public park is also home to the site of the lost Elsyng Palace, which was once owned by Henry VIII and which is a scheduled ancient monument. External funding for the estate project amounts to £1.8 million, with a £200,000 contribution from the Council. Now approved, the landscaping works are scheduled to take place during 2013 - 2014.
- 3.7.6** Forty Hall and Estate will become a regional visitor centre and the focus for arts and cultural events both in the Hall and across the landscape. Crucially, it will become a valuable education resource which will help deliver stable and sustainable communities as well as being an important leisure asset.
- 3.7.7** Delivery of the projects are the responsibility of the Forty Hall Board, which consists of Senior Council Officers and the Chief Executive of Capel Manor College.

Queen Elizabeth II Stadium

- 3.7.8** A restoration of the Queen Elizabeth II Stadium was completed in late 2011. The facility includes a refurbished community athletics track, long / triple jump, high jump and shot. The area inside the athletics track has become a football pitch and the site is now home to Enfield Town Football Club. All internal areas have been improved to provide high quality changing rooms and the first floor of the facility has become a bar/ café.

The Crescent Regeneration and Improvement Scheme (Hertford Road, Edmonton)

- 3.7.9** The scheme aims to act as a stimulus to regeneration through investment and restoration of the historic environment and will deliver the reinstatement of dwarf brick wall and railings to the original design on the front boundary, management of overgrown vegetation, repair and redecoration to front elevations and improvements to Bounces Lane to enable refuse collection from the rear. The project is funded from £448,000 from the Council capital funds, with additional support from the Highways Services budget.

Broomfield House

- 3.7.10** Broomfield House has been severely damaged as the result of a number of fires and has subsequently remained derelict for over 20 years. Heritage consultants have assessed the surviving special interest of the building and have confirmed that restoration of the earlier core structure is potentially desirable and have identified options which might present a viable future for the building. The bid to the GLA to secure funding for the restoration of the house, stables and kitchen garden, including part-conversion to housing fell due to cuts in funding. Efforts to develop a composite funding approach involving heritage sources of grant aid continue.

Further Work and Contingencies

3 Physical Infrastructure

- 3.7.11** As discussed in the London Borough of Enfield Heritage Strategy (2009), further projects are needed to enhance heritage assets, for example to address those issues highlighted in the conservation area character appraisals, conservation area management proposals and the Heritage at Risk Action Plan (which identifies the steps that are being taken to protect assets on English Heritage's Heritage at Risk Register and identifies where more needs to be done). The Council will continue to review these documents; address any new issues that might emerge and is currently developing new projects that once sufficiently advanced may be listed in future revisions of this infrastructure planning document.
- 3.7.12** Contingencies have not been identified for the above projects. Although failure to deliver these projects will not stifle planned housing and employment growth within the borough, the Council is committed to protecting and enhancing the historic environment. We will therefore continue to identify projects for heritage protection and restoration, and to prioritise funds as these become available, in order to achieve the aims of the Core and Heritage Strategies.

3 Physical Infrastructure

4 Social and Community Infrastructure

4.1 Education

EARLY YEARS

Review Of Existing Provision and Assessing Future Needs

- 4.1.1** Under the Statutory Guidance for Local Authorities on the Delivery of Free Early Education for Three and Four Olds and Securing Sufficient Childcare, September 2012, local authorities are required by legislation to:
- Secure sufficient childcare, so far as is reasonably practicable, for working parents, or parents who are studying or training for employment, for children aged 0-14 (or up to 18 for disabled children);
 - Assess the sufficiency of the childcare in their area at least every three years.
- 4.1.2** The 2011 CSA Enfield Childcare Sufficiency Assessment 2011 shows that just over a third of parents, were using some form of childcare to enable them to work, study or train, more than in the survey carried out for the 2008 CSA. Just over half of parents who used some form of childcare paid for it.
- 4.1.3** Taking into account the levels of reported demand in the borough, there is currently no overall shortage of formal childcare available for children under five years of age as a whole, although a comparison of data between the 2008 and 2011 show that the 0 to 4 years population has increased by 7.8%, whilst the number of available places has only increased by 4.8% over the same period. Overall, the 0 to 19 years population in Enfield is set to rise from 82,646 in 2011 to 93,282 in 2021, representing a significant increase overall of 11.3%. Alternatively, considering the projected growth for five years only, the figures are 88,179 in 2016, a rise of 6.7%.⁽³¹⁾
- 4.1.4** Whilst currently there is still spare capacity within the existing childcare market due to parents not taking up places for a variety of reasons, the projected rise in numbers suggests that pressure/demand for places will increase in the future, particularly when the targeted growth in the new entitlement for disadvantaged two year olds has an impact over the next few years.
- 4.1.5** This pressure on places will be felt particularly in the east and south of the borough, (mirroring the Area Partnerships), where the current ratio of places to children is lower than the more affluent areas of the borough and being where the majority of the targeted disadvantaged two year olds live.
- 4.1.6** In respect of the two year old entitlement, from September 2013, Enfield has been targeted by the Department for Education (DfE) to provide 1,316 places for disadvantaged two year olds, rising to an estimated 2,000 to 2,500 from September 2014, with each eligible child being entitled to access up to 15 hours per week of free childcare, over 38 weeks per year. These targets are beyond the ability of existing eligible daycare and pre-school providers to accommodate and it is anticipated that by 2014/15, the equivalent of 1,000 additional full-time childcare places may be needed in the borough, predominantly in the east and south, to accommodate both the increased target set by the DfE for providing childcare to disadvantaged two year olds and to meet the projected growth in the uptake of the free entitlement for three and four year olds.
- 4.1.7** At present it is not known how the need for the additional places will be met. There is the possibility that the private sector will be willing to meet some of the additional need although the prohibitive cost of land / development may be a discouraging factor. Certainly a comparison of data between the 2008 and 2011 CSAs, as detailed above, shows that growth in the number of childcare places falls short of actual growth in the 0 to 4 year old population and the authority may need to take action to stimulate further growth in the number of available childcare places.

31 This data are the sole copyright of the © Greater London Authority, 2012. This must be clearly stated when the data are reproduced such as in publications or presentations.

4 Social and Community Infrastructure

- 4.1.8** It is also anticipated that changes to the benefits system, particularly the Housing Benefit, will result in a migration of families out of inner London boroughs to find more affordable housing. The Child Poverty Action Group anticipates that Enfield, as an outer London borough, will continue to provide affordable housing which will result in increased numbers of families moving into the borough. This will further increase demand for childcare places, particularly around the two year old offer and the free entitlement for three and four year olds.⁽³²⁾
- 4.1.9** The DfE continue to assess the impact of the projected growth in two year old places and how authorities are able to meet this demand through capital funding. In Autumn 2012, the DfE announced that £100 million would be made available nationally to support the growth in two year old places. Within Enfield, this capital grant is to be used to create additional two year old places.
- 4.1.10** Apart from this capital grant, capital costs are considered neutral at the moment for the above initiatives although should Enfield fail to have sufficient supply to meet demand in the future, there is the possibility of needing to offer financial incentives to providers to encourage them to develop childcare facilities in areas of high demand.
- 4.1.11** Additionally, there are some gaps in the provision of childcare for disabled children. Enfield provides services to 770 disabled children and young people and anticipates that between 800 and 840 may require services and support in future, which equates to 1.2% of the local childhood population.
- 4.1.12** As well as the increase in the birth rate and the impact this will have on 0 to 4 year old numbers in the medium term, the development of the two year old offer, the projected increase in the take up of the free entitlement by three and four year olds and the migration into the borough of families due to changes in the benefits system, further pressure for places will also appear in the next few years as proposals for major residential redevelopment schemes such as Meridian Water and the Ladderswood Estate / North Circular Road Action Plan progress.
- 4.1.13** The impact of such schemes has not yet been factored into the projections model as the exact numbers and types of units have yet to be confirmed. The situation remains very dynamic and the assessment can only reflect the most recent information available.
- 4.1.14** Based on the expansion of primary schools in the borough 300 additional part time nursery places are being provided as follows:
- NE Enfield AAP - 60 part time nursery places at Relocation of Oasis Academy, Ponders End
 - Enfield Town / Bush Hill Park – up to 60 part time nursery places
 - North Circular AAP - provision of up to 60 part time places
 - Central Leaside - 2 x 60 part time nursery places at two new schools.
- 4.1.15** The 300 additional places are part time places based on 15 hours a week for 38 weeks provision for three to four year olds. This provision does not meet the additional growth in demand for childcare places of children aged 0 to 4, either full time, or sessional through the two year old offer and the free entitlement for three and four year olds. Nor does this allow for those families that require full time childcare of up to 50 hours per week, for the whole year.
- 4.1.16** It is also suggested that funding arrangements going forward need to include arrangements for in-year increases in pupil numbers. In the past, funding from the DfE has supported this by providing local authorities with funding for the free entitlement at 90% of their three / four year old population, even where actual participation was below this level. This has meant that Enfield has been able to support in-year increases. However, from 2013/14, this guaranteed funding floor is being reduced to 85%, before being withdrawn from 2014/15. In future years, Enfield will be funded on actual numbers as based on the January census. Enfield will therefore need to provide additional funding for any future in-year increases which occur between the annual censuses.

4 Social and Community Infrastructure

4.1.17 This reflects a significant additional factor. For the years 2007/08 to 2009/10, growth in the take-up of the free entitlement has been fairly consistent at around 5% per annum. However, 2011/12 showed a significant up-lift in the take-up of free entitlement of 9.9% over the previous year. Given the continuing projected growth in children numbers over the next few years, coupled with the growth in the two year old offer, it is anticipated that the take up of the free entitlement will continue to increase, particularly as Enfield's penetrations rates for take-up is currently one of the lowest in London at only 76% of three year olds.

Play Development

4.1.18 Throughout Enfield there is a need for inclusive play opportunities, especially adventure playgrounds. It is recommended that the model for adventure play should be based on the successful development of the Florence Hayes Adventure Playground. Local people employed; training and development opportunities provided through volunteering; and the site should foster a sense of community through the development and implementation of local projects.

4.1.19 Through various initiatives at Florence Hayes, there has been a drop in reported anti social behaviour for the age group the centre is working with. This could be replicated in other crime hot spot wards. Children and young people from all parts of the borough should be able to interact at their own level. In particular, due to its position, Florence Hayes has seen children from Edmonton and Haringey developing together, made possible by having a team of qualified, local playworkers.

4.1.20 From consultation already carried out within Enfield, The Play Development Team (Community Access, Childcare & Early Years) is aware of the need for children and young people to be involved in positive activities. An Adventure Playground adopts a sense of community, offers opportunities for children and young people to interact with each other within a safe environment.

4.1.21 Centres can also be used as community hubs, providing facilities for community meetings, training and development classes, coffee mornings, and crèches. Centres also have the potential to become a social enterprise for the children and young people.

4.1.22 Enfield has recently refreshed the Play Strategy 2012-15. The vision of the strategy being "An Enfield where every child and young person has access to a wide range of enjoyable, safe, sustainable and inclusive play opportunities"⁽³³⁾

4.1.23 There is a significant need within Enfield for Inclusive play provision. The Play Development Team, in partnership with the Joint Services for Disabled Children have developed an inclusive facility at The Raglan Junior School, the success of this model has been recognised nationally as good practice and as a model that should be developed throughout the borough.⁽³⁴⁾

4.1.8 Children's Services

4.1.24 The supply of childcare places in the borough has been enhanced through the provision of day care and nursery facilities within 9 of the 23 Children's Centres which are organised in 12 clusters. (see section 4.4 Children's Services).

Phasing and Programming

4.1.25 Details of schemes are provided in Tables B.1 and B.2 of the accompanying supporting infrastructure schedules.

33 www.enfield.gov.uk/.../id/54/play_strategy_and_action_plan_2012-2015
34 <http://www.c4eo.org.uk/themes/disabledchildren/vlpdetails.aspx?lpeid=117>

4 Social and Community Infrastructure

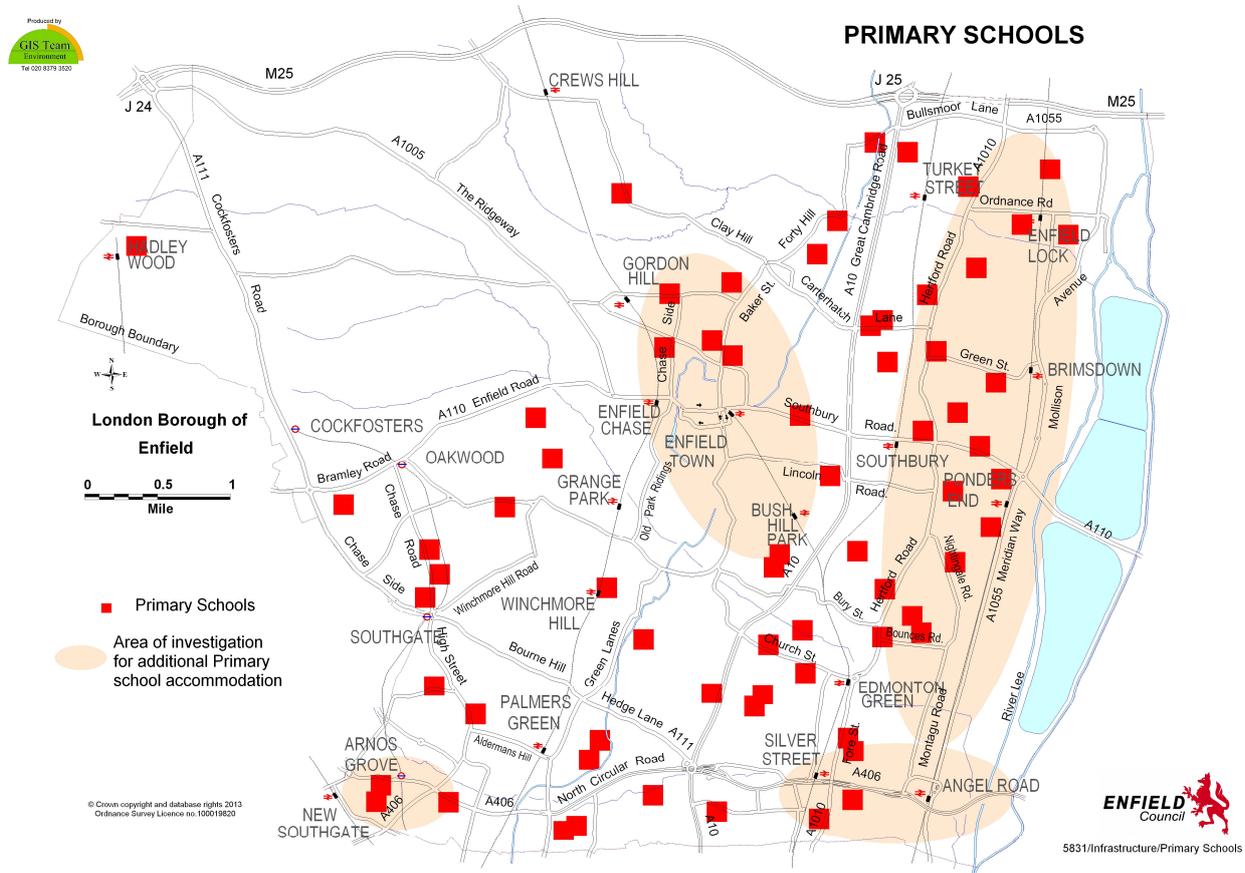
Provision of School Places

- 4.1.26** GLA demographic projections show the total numbers of primary age children are set to rise by 20.7% by 2021. In addition, the numbers of children seeking secondary school places is expected to increase rapidly with the number of eleven year olds up 22.4% by 2021. ⁽³⁵⁾In common with the majority of London Councils, Enfield subscribes to the GLA's School Roll Projections Service to assist in the planning of school places. The basic components of the GLA's projections are population data from the Office of National Statistics, particularly relating to births, together with information on new housing and trends in national and international migration. The projections are reviewed annually following the January Schools Census.
- 4.1.27** Funding for all schools is undergoing reform. In 2011 the Government allocated an extra £260 million to the capital to address the serious shortage of places in primary schools. London authorities can use the capital funding they receive from the DfE to establish new schools, with a statutory presumption that these should be Academies or Free Schools. Free School groups can also access capital funding through the Free School application process run by the DfE, however many are struggling to find suitable sites in their area of choice.
- 4.1.28** In relation to Free Schools the proposer is responsible for finding and purchasing a suitable site and obtaining any necessary planning permissions. DfE provides capital funding for construction costs and any site remediation costs are paid for by the proposer using DfE funds. On-going running costs are also funded direct from DfE, therefore, the Council has no role in terms of contributing towards either capital or revenue funding costs of free schools.
- 4.1.29** For Academies the Council retain responsibility for finding suitable sites, purchasing the land and paying for any site remediation costs to make it suitable for the construction of a school. Academy sponsors / proposers are responsible for securing any necessary planning permissions. Academies receive revenue funding direct from DfE therefore bypassing Local Authorities.
- 4.1.30** Extensions (both temporary and permanent) to existing Local Authority schools are still funded by the Council.

PRIMARY SCHOOLS

- 4.1.31** There are 68 infant, junior and primary schools in Enfield. Of these, 18 are voluntary aided (5 Catholic schools, 12 Church of England schools, 1 Jewish school) and 4 are free schools/academies. In addition, primary education is provided at an all-through academy and ARK John Keats Academy will offer similar provision from 2013. The January 2013 Schools Census recorded 29,333 pupils on roll in Enfield's primary schools.

4 Social and Community Infrastructure



Map 4.1

4.1.32 Between 2005 and 2012, the demand for Reception places increased by 25%. The main factors contributing towards this increase have been:

- Migration (national and international).
- Regeneration Projects.
- New housing.
- Perceived and actual lower cost rental accommodation in Enfield (when compared to neighbouring boroughs).
- Overcrowding in privately rented accommodation.
- Increase in birth rate.
- Increase in overall population.
- Increase in population levels when compared against “child yield” projections in relation to new housing.
- Economic situation resulting in families less able to relocate into adjacent boroughs and counties.
- Popular and successful schools.
- Impact of welfare reforms, although these will not fully come into effect until April 2013.

4.1.33 The demand for school places has exceeded earlier projections and the additional flexibility of 3% of places previously agreed by Cabinet has not provided sufficient contingency. Previous projections had indicated that, excepting the demand generated by the Meridian Water Development, the demand for reception places would peak in September 2012 and September 2013.

4 Social and Community Infrastructure

4.1.34 However, the most recent projections received in Spring 2012 shown in the table below indicate that the demand for Reception places will continue to increase until September 2018 when 4969 children will require a school place. The next set of projections is due in Spring 2013 and will incorporate initial data from the National Census of March 2011 for the first time. These figures will therefore shortly be subject to change.

Year	Demand	Current agreed capacity
2013/14	4544	4549 ^c
2014/15	4586	4459 ^d
2015/16	4687	4429
2016/17	4847 ^a	4429
2017/18	4895	4429
2018/19	4969 ^b	4429
2019/20	4954	4429
2020/21	4932	4429
2021/22	4902	4429

Table 4.1

4.1.35 Table Notes: ^a includes additional 60 pupils from Meridian Water development ^b includes further 60 pupils from Meridian Water development ^c includes 30 places at Houndsfield, Prince of Wales, St Matthew's Annex and Worcesters Schools, plus a further 30 permanent places at Kingfisher and 60 places at Bell Lane Academy ^d includes 30 places at Worcesters School.

4.1.36 Other than for Meridian Water, it is not possible for the Council to publish funding information for individual school projects / schemes. However, in relation to primary school expansions table B.1 in the IDP Schedules shows that of the planned £38m expenditure on new school places in 2013/14 and 2014/15 only £21m is funded by specific government grants (Basic Need Grant) with a further £17m capital resources required to fund planned expenditure in these two years alone. To meet the projected increase in demand, from September 2013 proposals for permanent expansion are proceeding at the following primary schools:

- Houndsfield – 2 to 3 Form Entry (FE)
- Prince of Wales – 2 to 3 FE
- Worcesters – 2 to 3 FE
- Garfield – 2 to 3 FE
- Highfield – 2 to 3 FE
- George Spicer – 2 to 4 FE
- GrangePark – 3 to 4 FE
- EdmontonCounty (secondary) – 2 FE primary provision.

4.1.37 As a contingency measure, further opportunities to provide primary places on secondary school sites are being explored.

4.1.38 An additional 2 FE is also proposed to meet the anticipated demand from the Meridian Water development from 2016/17, rising to 4 FE provided within two new schools from 2018/19 onwards. These timescales will be revised should the delivery of the Meridian Water scheme deem this to be necessary.

4 Social and Community Infrastructure

Identified Risks

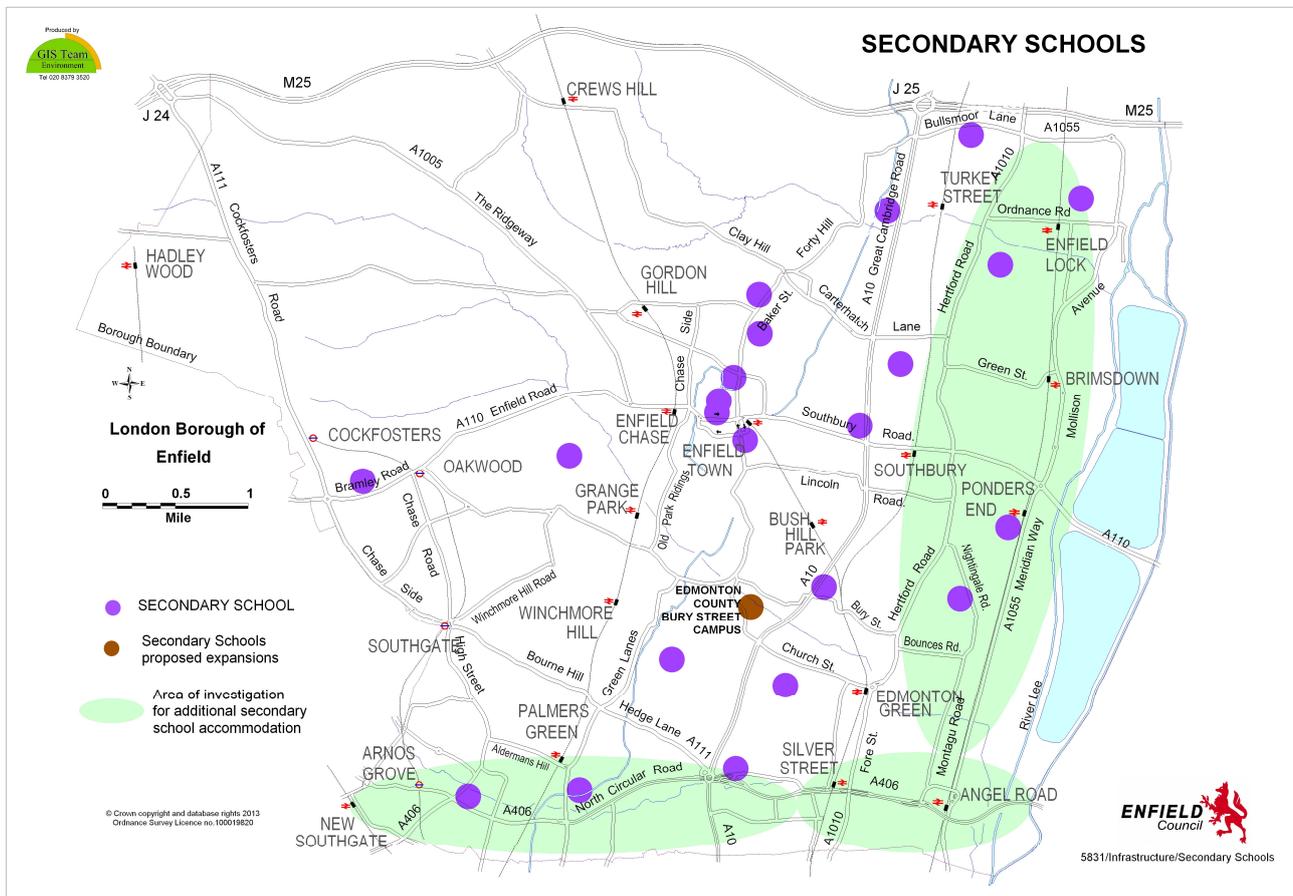
- 4.1.39** Although the current strategy aims to provide a school place for every child that needs one, it will deliver a programme of works at schools that provides additional capacity of up to 13% over base projections. Whilst this improves parental choice, and minimises the risk of providing insufficient pupil places, there is a key risk that this may over provide capacity in some areas. This could have a detrimental effect on neighbouring schools, and increase mobility as additional vacancies become available in year. Actual pupil numbers will therefore be very carefully monitored against projections to ensure that the Council provides places in the actual areas of demand (i.e. local places for local children) and also minimises the risk of creating unsustainable classes.
- 4.1.40** There is also a risk that any over-provision of capacity will require significant up-front capital investment that will then remain vacant until the classes are filled.
- 4.1.41** The annual submission to the Department for Education (DfE) is based on identifying existing capacity in the system. There is a risk that over-provision of capacity at this stage may present a misleading set of data to the DfE. As the Local Authority would have already provided the capital (through existing basic need allocations) to create the additional places, this is unlikely to be funded retrospectively by the Education Funding Agency. This approach therefore bears a risk of minimising future opportunities to secure basic need funding.

SECONDARY SCHOOLS

Review Of Existing Provision and Assessing Future Needs

- 4.1.42** There are 19 secondary schools in Enfield. Four of these are voluntary aided, one of which is a Church of England school, and two are single sex Catholic schools. Seven of the remainder are academies, and one other is a foundation school. The January 2013 Schools Census recorded 22,515 pupils on roll in Enfield's secondary schools.

4 Social and Community Infrastructure



Map 4.2

4.1.43 The level of pupils imported from other local authority areas into Enfield’s schools has declined in recent years as boroughs such as Haringey in particular have increased and improved their secondary provision, which has resulted in more of their pupils remaining in-borough.

4.1.44 The most recent Year 7 projections are shown in the table below. New projections incorporating data from the National Census of March 2011 will be available shortly and so these figures will be subject to change.

Year	Demand	Current agreed capacity
2013/14	3727	3860
2014/15	3803	4040 ^a
2015/16	4015	4040
2016/17	4117 ^b	4040
2017/18	4465 ^c	4040
2018/19	4652	4040
2019/20	4760	4040
2020/21	4766	4040
2021/22	4767	4040

Table 4.2

4 Social and Community Infrastructure

- 4.1.45** Table Notes: a includes additional 6 FE capacity at Bell Lane Academy, b includes additional 60 pupils in relation to Meridian Water, c includes additional 60 pupils in relation to Meridian Water
- 4.1.46** Secondary pupil numbers have remained relatively static in recent years, but as can be seen from the table, demand begins to exceed the current agreed capacity from 2016/17 onwards as the larger primary year groups transfer into the secondary sector at Year 7. Secondary projections have demonstrated a high degree of accuracy in the past as the overwhelming majority of the pupils due to transfer are already in the primary sector.
- 4.1.47** Oasis Academy Hadley is now located in new purpose built accommodation in South Street, Ponders End, and the accommodation thus vacated at Bell Lane will re-open as ARK John Keats Academy, an all-through academy. This will initially admit 2 FE of primary accommodation in 2013 and secondary aged pupils from September 2014.
- 4.1.48** Two free school applications have received approval from the DfE to open in September 2013, (heron Hall and St Andrew The Apostle), but sites have yet to be identified. If these schools were not to proceed, current projections indicate that provision equivalent to a further four secondary schools will be required to meet demand, including the school proposed for the Meridian Water development. Sponsor groups have expressed an interest in opening new secondary academies from 2014. Negotiations continue in respect of these and the Authority awaits notification from the Department for Education.

Identified Risks

- 4.1.49** It cannot be guaranteed at this stage that all of the potential new academies will proceed. A revised pupil place strategy to include primary, secondary and special schools will be developed mid 2013 to ensure that there is planned and phased provision to meet anticipated demand. This may be met through new schools, rationalisation of existing sites and/or expansions of schools.

Special Needs Provision

- 4.1.50** There are six special schools and a Pupil Referral Unit in Enfield providing approximately 600 pupil places. Alternative provision is also available in mainstream schools.
- 4.1.51** Waverley and Russet House Schools have recently been expanded to each provide an additional seven places but further places will be required in the future. A strategy is being developed for the provision of additional pupil places in Special Schools and alternative provision in mainstream schools. The natures of the various needs of pupils will determine the location of any additional places as much as geographical demand.
- 4.1.52** The relocation of the Pupil Referral Unit from the current two separate sites in Edmonton is also under consideration.
- 4.1.53** A revised pupil place strategy that will include special schools will be developed mid 2013 to ensure that there is planned and phased provision to meet anticipated demand. This may be met through new schools, rationalisation of existing sites and/or expansions of schools.

FURTHER AND HIGHER EDUCATION

Review Of Existing Provision and Assessing Future Needs

- 4.1.54** There are three further education colleges which have campuses within the Borough: Barnet and Southgate College, The College of Haringey, Enfield and North East London, and Capel Manor College. Middlesex University no longer has campuses located within the Borough having vacated in 2012 its last remaining campus in the Borough, at Trent Park. The University's main campus is in Hendon, within the London Borough of Barnet, where it has now consolidated its academic facilities.

4 Social and Community Infrastructure

Barnet and Southgate College

- 4.1.55** The colleges of Southgate and Barnet merged in November 2011. The College has a number of planned property developments but insofar as the Southgate campus is concerned, the main site will be redeveloped in a targeted fashion with public and private funds to strengthen its specialist vocational activities.
- 4.1.56** The Minchenden site will be prepared for disposal and the College is working with the local authority to establish a co-ordinated plan of regeneration which will stimulate increased participation in education and enterprise plus wider community involvement.
- 4.1.57** The College also operates a specialist motor vehicle body and paint workshop in Enfield Retail Park as well as a dedicated ESOL training centre in the North Mall, Edmonton Green. Both these sites will continue to develop and provide services to Enfield.

College of Haringey, Enfield and North East London

- 4.1.58** Enfield College and Conel merged in 2009 to form the College of Haringey, Enfield and North East London. The new college now has plans for rationalisation and improvement of the Enfield Campus despite the post LSC funding gap. Following the preparation of a strategic property review, the college has identified the following priorities for development:
- Creation of a new purpose built construction training facility which will be complete for the summer of 2012.
 - Extension and refurbishment of the college refectory (to be complete by the summer of 2012).
 - Refurbishment of the Park building fronting Hertford Road and development of a new enclosed entrance/link building.
 - Improvement to the existing site access and parking facilities.
 - Development of a co-located specialist training facility to expand and improve current SEN teaching opportunities.

Capel Manor College

- 4.1.59** Capel Manor College is a specialist pan London land based education college, which has its head office at Bullsmoor Lane, in the north of the Borough, a farm at Forty Hall, and ancillary sites outside of the Borough at Regent's Park, Gunnersbury Park, Crystal Palace Park and Barking College. As part of the overall Master Plan, the College identified a number of capital developments which would upgrade the quality and appearance of its facilities at Bullsmoor Lane. Subject to identifying capital funding it would be the aspiration to consolidate a number of activities spread across the estate to the north east corner of the site, including the refocusing of existing animal enclosures currently spread across the site to create a new small animal stockyard.
- 4.1.60** The Master Plan is a long term project and is subject to capital funding and would be delivered over a number of phases. Phase 1 would include the development of animal care facilities and a small animal zoo; phase 2 would involve the development of a consolidated arboricultural workshop; phase 3 would involve the re-planning of the existing Hessayon visitors centre, followed by the southern extension of the existing 'Duchess of Devonshire' building on the site. In total, the proposed new facilities would increase the College's capacity in Enfield from the equivalent of 1,140 full time students to 1,240.
- 4.1.61** The Master Development Plan was submitted to the Planning Authority for the planning approval in September 2011 after extensive consultation with the Conservation Advisory Group. The Planning Committee resolved to approve the Master Plan on the 20 December 2011 subject to a number of conditions being requested by the Mayors Office. The Animal Stockyard development received full planning approval (subject to conditions) and is proposed to be progressed later in 2012.

4 Social and Community Infrastructure

4.2 Health Care

PRIMARY HEALTH CARE

Changes to the Provision of Health Care

- 4.2.1** The start of 2013/14 heralds a significant change for the way in which NHS services are commissioned. Changes outlined by the coalition government are explained below. As a consequence of these changes, it has been necessary to considerably revise and update this section of the Infrastructure Delivery Plan.
- 4.2.2** In July 2010 the Government published its White Paper 'Equity and Excellence: Liberating the NHS' setting out plans to restructure the NHS. The Health and Social Care Act brings about the transfer of responsibility for commissioning most health care services to consortia of GPs, known as clinical commissioning groups, and the establishment of an NHS Commissioning Board for commissioning primary care services and specialist acute services. In addition, the Primary Care Trusts' (PCT) public health function has transferred to local authorities. The strategic health authority NHS London and the 31 London PCTs have now been abolished and the new clinical commissioning groups became the statutory commissioning bodies from April 2013.
- 4.2.3** Primary care is the provision of basic health care and is usually the place where a patient first makes contact with the health service. Primary care professionals facilitate the delivery of patient treatment and care, providing the link between the patient and other services, including hospitals and mental health and social care. Prior to their abolition the PCTs were arranged into six clusters to reduce management and operating costs and to support the development of GP commissioning. The clusters produced Quality, Innovation, productivity and Prevention (QIPP) plans to improve the quality of care and deliver efficiency savings. QIPP priorities include providing services closer to home, reducing avoidable admissions and re-admissions to hospitals, reducing length of stay and implementing new pathways for urgent care.
- 4.2.4** From April 2012 Prop Co has managed buildings owned by commissioning organisations within the NHS. Where GP providers own their own building or lease their building from a private landlord they have no direct input from Prop Co. All health care providers in the new system will be assessed by the Care Quality Commission (CQC) for quality and to ensure premises are fit for purpose in delivering the specific services on offer.

Assessing Future Needs

- 4.2.5** The regeneration of individual areas will require a comprehensive assessment of health and wider social infrastructure requirements including site opportunities and options for integrated provision of services. Housing development in the regeneration and growth areas of the borough will place significant pressure on existing health services and many of the areas currently have limited or no existing health provision. Therefore, new primary health care facilities will be required to cater for the new population. An increase and change in the composition of Enfield's population will impact on future health care requirements across the borough. The greatest population growth is expected in the south and east of the borough, where existing problems of economic deprivation and social inequality are greatest.
- 4.2.6** The planning of new facilities will take account of local commissioning priorities which in turn are influenced by current and future health needs and demand for services. London continues to experience significant population growth and an increasingly ageing and ethnically diverse population. Increased demand for services together with moving care closer to home and out of hospitals will place greater pressure on primary and community care. Since 2007, local authorities and health, initially through the Primary Care Trusts (PCT's) and now through the Clinical Commissioning Groups (CCGs) have had a duty to prepare a Joint Strategic Needs Assessment (JSNA) to inform the way in which decisions about health, wellbeing and social care services are planned and arranged. Enfield published its first JSNA in 2009 after extensive consultation with residents and partners. It identified key priorities to guide the council and local health services in their planning and decision making.

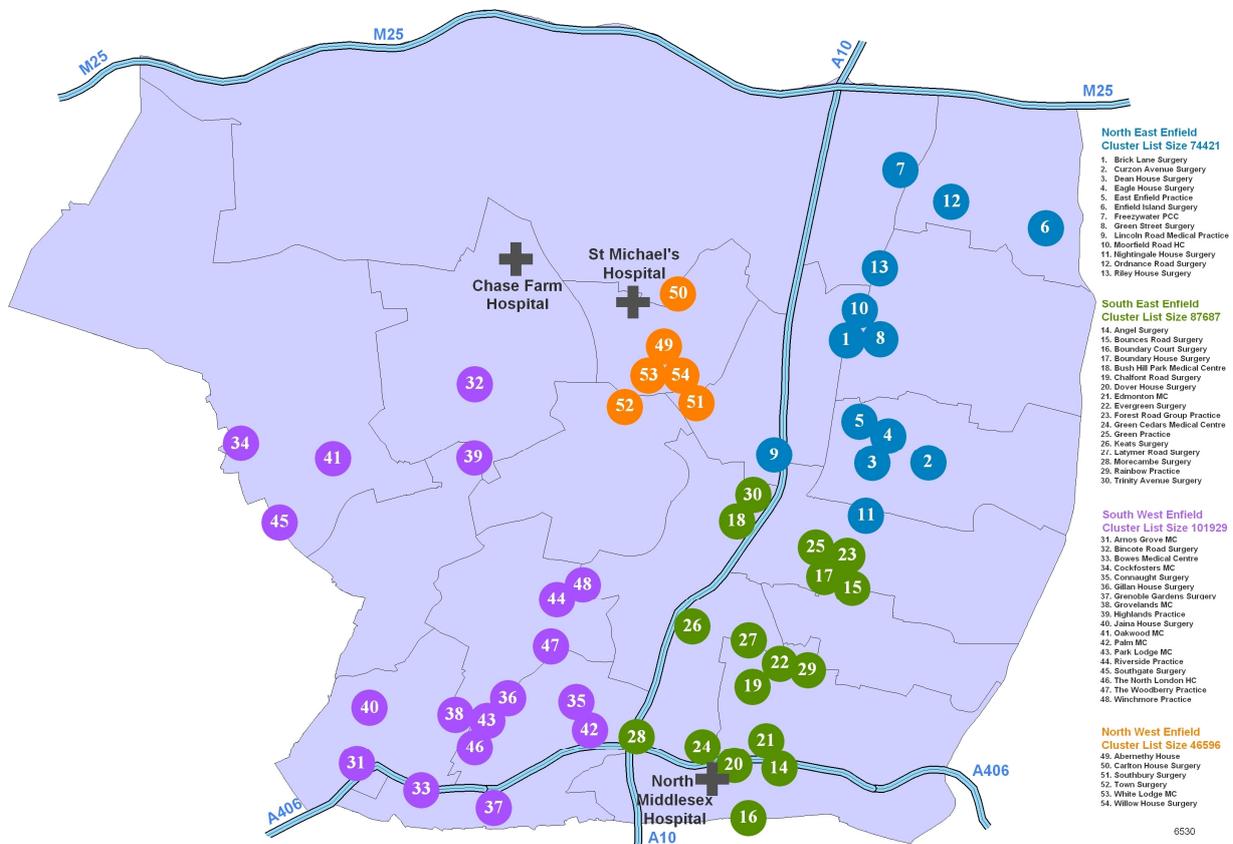
4 Social and Community Infrastructure

- 4.2.7** The Health and Social Care Act 2012 has made changes to the scope of the JSNA. The new statutory Joint Health and Wellbeing Boards (HWB) are now responsible for developing the JSNA and for using this information and intelligence to develop and then publish a Health and Wellbeing Strategy. This strategy, not the JSNA, will agree the key local priorities. Also the strategy and therefore the JSNA that underpins it, must more clearly than before link into the process by which spending plans are developed and implemented -the 'commissioning process'. Consequently this new JSNA does not attempt to decide the health and wellbeing priorities, its focus is rather the collection and collation of information and intelligence about the health and wellbeing needs of the local community. This includes information about what are referred to as the 'wider determinants' of health, like housing, income, employment, social and recreational needs and provision.

Modern GP Practices

- 4.2.8** The British Medical Association (BMA) standard for the number of GP's required is 1 per 1800 people. There are currently 63 practices (144 GP Principals and 76 salaried GP's) within 53 premises in the borough of Enfield predominantly made up of small single or two-handed GP practices. A significant number (143) work part time. The spatial distribution is illustrated in Figure 4.3. The existing number of GP's broadly meets the current NHS standard. However, the projected increase in population, taking account of the growth agenda, will result in a need for approximately an additional 25 GP's, nurses and other primary care staff within the plan period.
- 4.2.9** Service provision is not uniform across Enfield. Improvements are needed in terms of access to services, quality and quantity of infrastructure provision and to meet the differing health needs of the borough's diverse population. An approximate size of 850m² would be needed for these "spoke" facilities. Over time it is anticipated that Enfield will see a reduction in the number of small practice sites as these are steadily replaced by larger, fit for purpose premises.

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Picture 4.1

4.2.10 New premises should deliver sufficient capacity to meet the needs of existing and future patients, delivering care closer to home investing in out of hospital services. Whilst the local NHS will not actively shape improvements to GP providers estate, where providers wish to relocate or improve their premises the local NHS will consider proposals in view of set criteria where practices can demonstrate significant improvements in the quality of services following an increase in the amount the NHS pays to the practice for an increase in the size and quality of their premises. The following three schemes are currently being considered:

Ordance Road (Joint Services Centre)

4.2.11 Working in partnership with Enfield Council, the local NHS will be re-locating the Ordance Road Surgery in to a new purpose built GP surgery. The surgery, along with a Dental suite, Library and community hall will make up a range of services offered to people living in or around the Enfield Lock area. The new centre will be named officially by local people, but at present the centre is named the Joint Services Centre.

Southgate Town Hall

4.2.12 Two GP practices operating from three practice premises currently housed in sub standard accommodation in the Southgate area of Enfield have presented a proposal to merge as a single practice and to relocate into a new development on the Southgate Town Hall site. GP services will share the site with a Library. The existing facilities can no longer support the increasing and diverse needs of the practices' patient population and this has restricted the potential for expanding the range of services provided.

4 Social and Community Infrastructure

4.2.13 The proposed provision of a new modernised medical facility at such a location would, however, alleviate the existing facility problems experienced by the group practice and provide new opportunities to expand and grow the service in response to changing needs of the local population. One of the key aims is to ensure the long term sustainability of healthcare services in the area, and address key issues such as population growth and the needs of a diverse population. Increased premises space will also provide an opportunity for the group practice to work collaboratively with the LBE, community, clinicians, support agencies and other partners to improve the health outcomes of the community and to improve integration of services, leading to better continuity of care for patients.

Highmead (Green Cedars Medical Centre)

4.2.14 The Green Cedars Medical Centre is set to re-locate to the Highmead Development. The development is in the Angel Edmonton area of Enfield.

4.2.15 The Council's vision is for Highmead to be a catalyst for change, to improve perceptions of the area, and for it to re-enforce its place in the community by responding to and connecting physical and social networks and as part of this relocation the Council proposes to enhance and complement local services to ensure local need is addressed.

4.2.16 It is expected that developments will not only facilitate the delivery of health care but also help to encourage healthy lifestyles.

Urgent Care Centres

4.2.17 As part of a Barnet, Enfield and Haringey (BEH) Clinical Strategy, the PCT planned provision of two urgent care services. One centre is expected to be located on the Chase Farm Hospital site with the other co-located with the A&E at North Middlesex University Hospital. The former PCT consulted on these proposals and developed detailed implementation plans with local clinicians from primary and secondary care. It is expected that these services will be fully in place by 2013. Proposals are detailed on Table B.4 of the accompanying Schedule.

Future Primary Care Provision Within the AAP and Regeneration Priority Areas

4.2.18 The table below highlights schemes identified in the Core Strategy that were proposed by the former PCT within the Area Action Plan and Regeneration Priority areas. Further details of these and other schemes proposed borough-wide are detailed in the Infrastructure Schedule.

IDP Timeframe	Location	Scheme
	Edmonton Masterplan area	Edmonton Green & Forest Road health centres. Improvements to facilities to create a Neighbourhood Health Centre
	North East Enfield Area AAP	<ul style="list-style-type: none"> - Potential expansion of Eagle House surgery - Neighbourhood Health Centre in Ponders End - Modern GP Practice facility Ponders End High Street - Modern GP Practice at Innova Park
	North Circular Area AAP	Amos Grove potential for a Modern GP Practice
	Enfield Town AAP	Neighbourhood Health Centre
	Central Leaside AAP	Modern GP Practice facility at Meridian Water.

Table 4.3 Former PCT Proposals Within the Area Action Plan and Regeneration Priority Areas

4 Social and Community Infrastructure

Funding Sources, Timescales and Responsibilities for Delivery

- 4.2.19** The Spending Review 2010 reduced NHS capital funding by 17% with the expectation that NHS organisations will achieve £20 billion savings through quality and productivity improvements by 2014. The Operating Framework for the NHS in England states that there will be no automatic capital allocations for PCTs, with necessary funding being granted on a case-by-case basis. The priority for capital funding will be on maintenance and essential smaller improvement schemes. It is likely that capital funding for new build schemes will be tightly constrained. Also, additional demand for health care services generated by rapid population increases and transient populations will generate significant revenue costs which are not immediately picked-up in PCT allocations.
- 4.2.20** The BCIS (RICS Build Cost Information Service) have been used as the basis for estimating health sector build costs. The BCIS indices, which are updated quarterly, show median figures which include preliminaries (site set up overheads) they do not include external works for which an allowance of 20% has been added. An additional 15% has also been added to allow for build cost contingencies and professional fees. Finally, a locational index of 105 (compared to national base of 100) is currently applied by BCIS for Enfield build price levels. Having regard to the above for the construction of health centres, clinics and group practice surgeries the IDP has estimated a build cost of £2,200 per square meter of gross internal floor area.

DENTISTS

- 4.2.21** In 2009 there were 45 dental practices operating in the borough. Changes to dentistry services will be driven by the future plans for Enfield's dentists that the Enfield PCT published in 2010.

ACUTE HEALTH CARE

- 4.2.22** Specialist hospital services are being centralised and plans are in progress to reconfigure hospital services in north London. Enfield has two hospitals dealing with acute health care needs: North Middlesex Hospital in the south east of the borough, and Chase Farm Hospital in the north west of the borough. Barnet Hospital, located in the London Borough of Barnet, also provides acute care for Enfield residents. The Council supports the continued use of these sites for appropriate health provision. Proposals for acute health care are detailed in Table B.4.

North Middlesex

- 4.2.23** The NorthMiddlesexHospital has undergone redevelopment that replaced approximately half of the existing buildings on the hospital site and now provides state-of-the-art facilities for accident and emergency services, diagnostics, inpatients and operating theatres.
- 4.2.24** The new building incorporates:
- An Emergency Care Centre;
 - An Acute and Critical Care Centre;
 - A Diagnostic and Treatment Centre.
- 4.2.25** In addition to the new hospital building which opened in 2010, the North Middlesex University Hospital NHS Trust is engaged in supporting the BEH Clinical Strategy. The impact of this on the NorthMiddlesexHospital site is an increase in acute beds, which will be provided in fully refurbished accommodation, and the construction of a new building to provide a brand new state-of-the-art maternity unit to accommodate the increased number of births, as well as the existing activity.
- 4.2.26** The new building comprising two storeys (plus a plant floor) to the east of the podium, includes a new Consultant Led Delivery Suite with 15 delivery rooms, a midwife-led Birthing unit with eight delivery rooms, two new theatres and recovery area, a high dependency unit and a new neonatal unit. It will also house maternity outpatients and a maternity day unit, together with all assessment facilities. The new building linked to the podium where the new maternity ward is re-provided via a bridge corridor.

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- 4.2.27** Demolition of surplus buildings on the east side of the site will release space for the additional car parking required to support the increased levels of activity.

Chase Farm

- 4.2.28** Chase Farm hospital is managed by Barnet and Chase Farm Hospitals NHS Trust. Barnet Hospital currently has 459 acute beds and Chase Farm Hospital has 421 acute beds. Changes are being planned to the acute health care services offered at the Chase Farm site. The changes are part of a £110 million investment across health services in Barnet, Enfield and Haringey, which will go into expanding the Barnet & North Middlesex Hospital buildings to accommodate additional capacity, as well as rebuilding and refurbishing parts of Chase Farm Hospital, while transferring some services off the Chase Farm site.
- 4.2.29** At the Chase Farm site, together with inpatient planned (elective surgery) care, there will be a clinically led Urgent Care Centre, operating at Chase Farm at least 12 hours a day along with a Paediatric Assessment Unit and an Older People's Assessment Unit.
- 4.2.30** The Maternity block will be refurbished to accommodate a new Outpatients Department. There will also be Ante Natal and Post Natal Outpatients at Chase Farm, along with a Maternity Day Unit.
- 4.2.31** There will be a full range of rehabilitation and diagnostic services at Chase Farm, including therapy services, blood tests, x-ray and MRI.
- 4.2.32** Emergency services, inpatient maternity services and inpatient children's services will be relocated to Barnet Hospital and North Middlesex University Hospital. Transfer of Emergency services and Women's and Children's inpatient services from Chase Farm Hospital will take place from November 2013.

4.3 Social Care

HEALTH & ADULT SOCIAL CARE SERVICES

Review of Existing Provision and Assessing Future Needs

- 4.3.1** From April 2013 public health matters officially became the responsibility of Enfield Council. The role of Council's Public Health is to lead the Health and Wellbeing agenda and reduce health inequalities. This is achieved by analysis of information working with communities developing partnerships and ensuring evidence based action plans are delivered by the partnerships. The information of the independent statutory annual public health report supports this aim.
- 4.3.2** The Council's Health and Adult Social Care Department provides information and social care services for people aged over 18 whose assessed needs and associated risks to their independence mean that they are eligible for Council funded social care services.

The Transformation Agenda

- 4.3.3** "Our health, Our care, Our say"⁽³⁶⁾ confirmed that people want support when they need it, and they expect it quickly, easily and in a way that fits into their lives. They want adult social care services to consider their needs with a greater focus on preventative approaches to promote independence and wellbeing. To make this happen the social care sector has developed a shared vision referred to as 'personalisation', which includes the strategic shift towards early intervention and prevention which will be the cornerstone of public services. This means that every person who receives support, whether provided by statutory services or

4 Social and Community Infrastructure

funded by themselves, will be empowered to shape their own lives and the services that they receive in all care settings. Local authorities, government departments and partners from the independent, voluntary and community organisations will all play a vital role in transforming social care services, taking into account housing, benefits, leisure, transport and health needs⁽³⁷⁾.

4.3.4 To truly deliver this vision of personalised services for all, the Council must work closely with the private, and third sector organisations to develop flexible, universal services in accessible and inclusive communities.

4.3.5 Health and Adult Social Care priorities are set out in Enfield's Joint Strategic Needs Assessment (JSNA) 2010-2012⁽³⁸⁾ These have been identified as

- Poverty
- Health Inequalities
- Obesity
- Infant Mortality
- Long-Term Conditions
- Mental Health
- Healthy Lifestyles
- Feeling Safe
- Access to Health and Wellbeing Information.

4.3.6 Detailed commissioning priorities, are set out in Enfield's emerging portfolio of Health and Adult Social Care commissioning strategies and documents, including:

- A Future for All: Older People's Mental Health Joint Commissioning Intentions for Enfield (2009)
- Getting Personal: Older People Joint Commissioning Intentions for Enfield (2009)
- Doing it Your Way: A Strategy for Physical Disability Services in Enfield (2009)
- Enfield's Health and Wellbeing Strategy (2010)
- Joint Dementia Strategy (2011 – 2016)
- Delivering Choice in End of Life Care (2012-2016)
- Enfield Joint Stroke Strategy (2011 – 2016)
- Joint Intermediate Care & Re-ablement Strategy (2011- 2014)
- Supporting People Strategy
- Commissioning Intentions for Specialist Accommodation Services.

4.3.7 Infrastructure development must reflect the current and emerging strategic commissioning priorities of Health and Adult Social Care to ensure Enfield Council delivers local services that meet the changing demands of local people.

Understanding Local Population Changes

Adults with Physical Disabilities, Sensory Impairment and HIV / AIDS

4.3.8 The number of people predicted to have a moderate or serious physical disability is projected to increase by 2,052 to 19,413 by 2030. The number of people requiring personal care due to their disability will also increase and service capacity must change to reflect this.

4.3.9 There is predicted to be only a slight increase in the number of people aged 18 to 64 with a serious visual impairment living in Enfield, however by 2030 there will be a marked increase in the number of people predicted to have a moderate or severe hearing impairment.

37 <http://www.dh.gov.uk/en/SocialCare/Socialcarereform/Personalisation/index.htm>

38 The JSNA is currently being reviewed and refreshed for publication later in 2013. It is a document in which the Local Authority describes current and future health and social care needs of local populations.

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4.3.10 Enfield currently has a sufficient supply of residential care home provision to meet the needs of adults with physical disabilities. The number of people requiring residential and nursing care, purchased or provided by the borough, is predicted to remain relatively low and stable, as increasingly people with a physical disability or sensory impairment are helped to live at home. It is estimated that in 2010 over 900 people with an HIV / AIDS diagnosis were living in Enfield.

4.3.11 The Infrastructure Schedule includes details of infrastructure requirements to meet the needs of adults with physical disabilities, sensory impairment and HIV / AIDS. Additional priorities that may require infrastructure to support delivery include:

- The development of supported accommodation options for people with physical disabilities who require support to live independently within a community setting;
- Improved access to universal services including the provision of modern, flexible day opportunities;
- Services that support parents who have physical and sensory disabilities; and
- Services that support people with physical and sensory disabilities into employment.

4.3.12 Services that support people with physical and sensory disabilities into employment include:

- Supported accommodation options for people with physical disabilities who require support to live independently within a community setting;
- Wheelchair accessible general needs accommodation – particularly for families requiring suitably adapted properties;
- Wheelchair accessible accommodation across tenure – Lifetime Homes standards within social housing development and private sector development;
- Services that support people with physical and sensory disabilities into employment;
- Improved access to universal services including the provision of modern, flexible day opportunities; and
- Services that support parents who have physical and sensory disabilities.

Older People

4.3.13 Enfield has an over 65 population which is predicted to remain stable over the next few years and then to rise significantly in the long term. It is predicted that there will be a particular rise in the oldest of those classed as old, leading to an increased demand of health and social care support, in addition to an increase in the number of 'new old'. This presents a challenge of providing more responsive preventative services, whilst improving the range of care and support services provided to an increasing 85 and over population.

4.3.14 The population of Enfield aged 65 and over is a projected to increase by 41% by 2030. The largest increase will be in the 65 to 69 bracket (56% increase). The population of older people aged 65 years and over as a proportion of the local population will also increase slightly.

4.3.15 The number of people aged 65 years and over, who are unable to self care will also increase, from 12,927 (2009) to 18,045 (2030).

4.3.16 The number of people aged over 65 in some black and minority ethnic communities is set to double in the next 10 years. There is an increased demand for care and support for those older people from these communities who can experience an earlier onset of chronic diseases such as coronary heart disease, stroke and diabetes.

4.3.17 In 2030, 19,374 people are predicted to be living alone compared to 14,192 in 2009. Though this is a 36.5% increase in the number of people predicted to be living alone, as a percentage of the projected population this is actually a slight decrease in the proportion of the projected population living alone. In 2009, it is predicted that 37% of the total 65 and over population lives alone compared to 36% of the total 65 and over population in 2030.

4 Social and Community Infrastructure

4.3.18 It is projected that 511 more people aged 65 and over will be in a care home in Enfield by 2030. The 2009 population projection of people living in a care home is 2.7% of the total population. By 2030 it is projected that 2.9% of the total 65 and over Enfield population will be living in a care home. Health and Adult Social Care services will work with partners to minimise this predicted increase by developing a range of alternative independent living options for older people that facilitate independence, choice and control.

4.3.19 Table B.5 includes details of infrastructure requirements to meet the needs of older people with support and care requirements. Additional priorities that may require infrastructure to support delivery include the need for:

- Good quality, accessible and flexible sheltered accommodation, across tenure, offering well designed 2-bedroom homes with good links to transport and amenities to suitably reflect the changing needs of older people and their carers;
- Development of specialist accommodation services to effectively meet the needs of older people with dementia, including those with challenging behaviours. It is expected that provision of this nature could be developed within existing capacity;
- Good quality, accessible accommodation to meet the needs of older people with specialist requirements including substance misuse support needs and mental health support needs.

4.3.20 Table B.5 of the Infrastructure Schedule also provides information on capital schemes currently programmed to meet the needs of older people. Additional infrastructure requirements to support the future needs of older people include:

- Good quality, wheelchair accessible sheltered accommodation (mixed tenure) that offers high quality design and has good links to transport and social amenities.
- Accommodation services that meet the specialist support and care needs of older people with dementia. To meet this rising demand, an increase in the number of quality residential and nursing care home units that specialise in dementia care may be required. It is expected that provision of this nature could be developed within existing capacity.
- Specialist supported accommodation services for older people with Learning Disabilities and dementia care needs.
- Supported housing to meet the needs of older people with specialist needs including substance misuse support needs and mental health support needs.
- A range of flexible day, home based and residential respite options.
- Intermediate care and re-ablement services.
- Rehabilitation services.

Adults with Learning Disabilities

4.3.21 Population estimates indicate that by 2030 there will be 4,725 people with a learning disability in Enfield. Although the number of younger adults with a learning disability is set to remain fairly stable or reduce, the number of people aged between 45 and 64 with a learning disability is set to increase from 1559 (2009) to 1690 (2030).

4.3.22 Similar increases are forecast in the number of people aged 18 to 64 predicted to have a moderate or severe learning disability and therefore likely to require services.

4.3.23 The total population aged 65 and over with a learning disability is also predicted to increase from 781 in 2008 to 981 in 2025. The number of people aged 65 years over predicted to have a moderate or severe learning disability, and therefore likely to be in receipt of health and social care services, is anticipated to increase from 105 in 2008 to 131 in 2025.

4.3.24 The number of people aged 18 to 64 with autistic spectrum disorders is also predicted to increase to 1,929 by 2030. There is a marked increase in the number of older adults aged 55 to 64 predicted to have autistic spectrum disorders rising from 280 in 2009 to 377 in 2030.

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4.3.25 There is a substantial amount of residential care home provision in the borough for people with learning disabilities and supply currently exceeds local demand. Health and Adult Social Care will work closely with planning services to monitor new development and ensure that supply of the following accommodation options are aligned with the needs of local people.

4.3.26 Table B.7 includes details of infrastructure requirements to meet the needs of people with learning disabilities with support and care requirements. Additional priorities that may require infrastructure to support delivery include the need for:

- respite provision for people who have learning and physical disabilities and require wheelchair accessible respite accommodation;
- appropriate specialist accommodation services for people who are married / co-habiting and require support to live independently due to a learning disability; and
- advocacy services for people with learning disabilities.

People with Mental Health Support Needs

4.3.27 By 2030 it is estimated that 46,168 people aged 18 to 64 will have a mental health problem in Enfield, which can be split into the following categories:

	2009	2015	2020	2025	2030
People aged 18-64 predicted to have depression	4,663	4,745	4,805	4,872	4,915
People aged 18-64 predicted to have a neurotic disorder	30,088	30,605	30,988	31,411	31,688
People aged 18-64 predicted to have a personality disorder	8,037	8,191	8,301	8,427	8,503
People aged 18-64 predicted to have a psychotic disorder	1,005	1,024	1,037	1,052	1,062

Table 4.4 People with Mental Health Needs

4.3.28 The majority of people with mental health needs are able to live at home in the community - but a small proportion of people are placed in residential or nursing care. In 2007 / 2008, Enfield Council mental health services supported 94 people in residential or nursing care.

4.3.29 The number of people aged 18 to 64 with a mental health problem that are helped to live at home is predicted to gradually increase and the number of people placed in residential care home settings is predicted to remain relatively stable.

4.3.30 There is a significant amount of residential care home development in Enfield which is surplus to service requirement. Less than a third of CQC registered residential care homes for adults with mental health needs are used by Health and Adult Social Care services.

4.3.31 Table B.6 includes details of infrastructure requirements to meet the needs of adults with mental health support and care requirements. Additional priorities that may require infrastructure to support delivery include the need for:

- Short stay crisis accommodation for adults with mental health support needs;
- Primary care and community based prevention, early intervention and support;
- Services and support for people with multiple needs, including mental health, substance mis-use, learning disabilities, autism, long-term physical health conditions; and
- Joint initiatives to support community safety, suicide prevention and domestic violence.

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Drug and Alcohol Services

- 4.3.32** The number of people aged 18 to 64 predicted to have a moderate to severe alcohol dependence is predicted to increase from 7,300 in 2009 to 7,746 in 2030.
- 4.3.33** The number of people aged 18 to 64 predicted to be dependent on illicit drugs is predicted to increase from 6,845 in 2009 to 7,259 in 2030.
- 4.3.34** Services for adults with drug and alcohol related support needs must be developed to meet the requirements of the increasing numbers, in line with local strategy, to include targeted prevention through the development of wider family services to support children affected by parental substance misuse.

Supporting Carers

- 4.3.35** Enfield Council provided support to 680 carers aged 65 and over in 2008/09. This was above the London average of 446. Enfield was the 7th highest performing Local Authority in London in this area. There are currently 29,000 carers in Enfield of which 11% identify themselves as being in poor health. The number of carers aged 65 and over is estimated at 7,800, with half of them caring for someone over 75 years of age.
- 4.3.36** The role of carers in delivering support and care services to the vulnerable people of Enfield cannot be underestimated. Table B.9 of the Infrastructure Schedule includes details of infrastructure requirements to meet the needs of carers.

Young Vulnerable People

- 4.3.37** Table B.8 of the Infrastructure Schedule provides details of the proposals in the Ponders End area to meet the requirements of young vulnerable people in the borough. The aim is to reduce homelessness and address the educational, personal and housing needs of the individuals.

Supporting People

- 4.3.38** The Council's Supporting People Team have in place a five year strategy for delivering housing related support services. Table B.8 of the Infrastructure Schedule also includes details of infrastructure requirements to meet the needs of adults with housing related support needs under the Supporting People Programme. Additional priorities that may require infrastructure to support delivery include the need for the development of move-on accommodation across service user groups.
- 4.3.39** In line with the Transformation Agenda, Supporting People will increasingly consider the development of core and cluster accommodation models for most Supporting People client groups. Other priorities for Supporting People include:
- Accommodation for young offenders or those at risk of offending;
 - Supported accommodation for teenage mothers with high level needs; and
 - The development of move-on accommodation.

Summarising Population Changes

- 4.3.40** Table 4.5 below provides a summary of population growth predictions for key service user groups up to 2030. Please note that the 2030 figures given are an estimate of future growth and do not take account of the need arising from the borough's growth agenda. A future revision of the Infrastructure Delivery Plan will take this into account once the Area Action Plans are further advanced.

	2009	2030
Total population aged 18-64 with a physical or sensory disability helped to live at home	873	921

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	2009	2030
Total population aged 18-64 with a physical or sensory disability supported by social care in residential or nursing care homes.	50	53
Total population aged 65 and over living in a care home with or without nursing	1,026	1,537
Total people aged 65 and over predicted to have dementia.	2,714	3,914
Total population aged 65 and over predicted to have a longstanding health condition caused by a stroke.	874	1,261
Total population aged 65 and over predicted to have a longstanding health condition caused by a heart attack.	1,859	2,639
Total population aged 18-64 predicted to have a learning disability.	4,461	4,725
Total population aged 18-64 predicted to have a mental disorder.	43,793	46,168
Total population aged 18-64 predicted to have moderate to severe alcohol dependence.	7,300	7,746
Total population aged 18-64 predicted to be dependent on illicit drugs.	6,845	7,259

Table 4.5 Summary of population growth predictions for key service user groups

4.3.41 Additional infrastructure priorities to meet the needs of future populations across population groups include:

- Move-on accommodation.
- Flexible and innovative new models of supported housing that facilitate use of Personal Budgets.
- The expansion and development of accessible office accommodation and community space to ensure the availability of quality accommodation options for voluntary and community organisations to run valuable services, including day services and drop-ins.
- The programmed development of 'poly systems' provides a real opportunity to strategically develop joint services and integrate primary care and social care services within the borough. Assessment, care management and therapeutic services for social care client groups could feasibly be co-located with Neighbourhood Health Centre to provide accessible, inclusive services. Health and Adult Social Care worked closely with the former PCT to explore and develop opportunities in Enfield Town, North East Enfield and Southgate.

Future Provision Within the Strategic Growth Areas

4.3.42 New housing in the four regeneration priority areas will increase the requirements for adult social care services, including home based support services, supported housing and community services. These requirements are still to be determined and will be developed in partnership with the Council's Neighbourhood Regeneration and Planning Policy teams as part of the Area Action Plans and Masterplanning process for each respective area.

4.4 Children's Services

CHILDREN'S SERVICES

Review of Existing Provision and Assessing Future Needs

4.4.1 Enfield currently has 23 Children's Centres within the borough established within 12 cluster arrangements. Many of the Centres are based on Primary School sites, with 9 offering fee paying and free entitlement daycare. Children's Centres are a community hub delivering a variety of services, offering access to and information for a number of statutory and commissioned partners.

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4.4.2 In addition, Children's Centres have an outreach service which include some commissioned partners supporting access to targeted services for those families most in need. Ofsted have a duty to inspect Children's Centres under the current 'core purpose' to ensure they are delivering services to meet the needs of their local community.

4.5 Community Services

COMMUNITY HALLS AND SPACES

Review of Existing Provision and Assessing Future Needs

4.5.1 A desk based study of community halls and spaces for hire has identified 110 Council registered sites, which contain approximately 250 halls and rooms available for hire in the borough⁽³⁹⁾. Whilst it is recognised that there are likely to be more sites available for hire in the borough, the data presented is that which has been registered through the Council's local library information service. The registered sites consist of Council owned and operated premises, Council owned premises rented out to independent groups and independently owned premises, which are distributed throughout the borough. Broken down by type of premises, they comprise:

- 27 faith and faith associated halls, including church associated halls, halls in other religious establishments and community halls or centres associated with religious organisations though not necessarily in the same building;
- 5 function or banqueting rooms;
- 36 school sites, including school halls and classrooms for hire managed by the Council-run schools letting service;
- 7 community centres;
- 3 library community rooms at Enfield Town, Oakwood, Fore Street, John Jackson and Edmonton Green libraries;
- 4 sporting facility halls;
- 14 community halls, including 13 halls operated through Enfield Homes, the Council's arms length management organisation, 10 of which are managed by the Federation of Enfield Community Associations (FECA));
- 2 training and business / conference centres;
- 3 hotel related halls;
- 6 leisure and culture related sites, such as theatres or arts centres;
- 1 youth centre related space at Ponders End Youth Centre; and
- 2 sports / members clubs.

4.5.2 The data available suggests that the halls and rooms available range in size from large halls, which can accommodate up to 250 people, to smaller rooms, which can accommodate up to eight people.

4.5.3 Whilst the Council does not have comprehensive costing data for all sites, Enfield Homes' guide to Community Halls and how to hire them lists costs of £21.50 per hour / £215 per day for commercial groups and organisations and £12 per hour / £120 per day for 'not for profit' activities established by or for residents. The Council's schools letting service has confirmed that the Governors of each school set the prices for the use of their premises, and as such, costs vary. However, a selective review of charges suggests that costs range from £10 per hour for smaller rooms and halls to £60 per hour for larger halls; prices also vary depending on the day of the week, with weekends, and particularly Sundays, being the most expensive. Income generated from the hire of school space is reinvested to assist the upkeep and maintenance of the spaces that are let.

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4.5.4 Further research is required to ascertain the level of usage, capacity, and demand for the meeting halls and spaces across the borough before levels of future borough-wide demand can be determined. Similarly, the Council does not have borough-wide data for the age and condition of registered facilities, nor the level of user satisfaction. Conditions surveys undertaken in 2009 for Enfield Homes identified the need to carry out a range of refurbishment works to the community halls they manage, including Disability and Discrimination Act 1995 (DDA) compliance works, electrical upgrades and a range of other internal and external renewals and repairs. Evidence from FECA records suggests that the five community halls they manage are well used, with higher usage levels at halls that have been recently refurbished. Details from the Council's schools letting service suggest that the schools' premises are regularly used but that use can vary considerably from school to school and from day to day.

Future Community Hall Space to Accommodate Borough-wide Growth

4.5.5 It is recognised that further research is required before levels of future borough-wide demand for community space can be determined. Following the survey work undertaken for Enfield Homes, the Council is carrying out a range of refurbishment and construction works to 13 of its community halls over a 3 year period, up to 2012. The programme of works will be delivered in three phases and will improve heating and facilities at the halls as well as ensuring that they are DDA compliant. The Council has completed phase 1 of the works, which has involved the refurbishment of Kempe Hall, Memorial Hall and St Hellier Hall. Phases 2 and 3 will deliver the refurbishment of the remaining 10 halls, and will include the major refurbishment of Boleyn Hall to bring it back into use to meet an identified demand for an additional community hall in the North East of the borough. Further details of the programme of works are provided in Table B.10 of the Infrastructure Schedule.

Future Community Hall Space Provision within the Regeneration Areas

4.5.6 Consultation on the Council's Area Action Plans and the Council's Neighbourhood Regeneration Programme provide opportunities to identify demand for community space within the Neighbourhood Regeneration Areas. For example, consultation on the North Circular Area Action Plan has identified potential demand for a new community and youth facility that would be generated as part of the redevelopment of the Ladderswood Estate, and the Council will explore this potential through its Regeneration Programme.

4.5.7 Similarly, the extensive public consultation undertaken as part of the Ponders End Framework for Change programme has identified a lack of space for use by community groups. In response, the Council is now exploring opportunities to provide community spaces to meet identified demand through the refurbishment of existing buildings and, where this is not possible, through the provision of new buildings. Additional opportunities for community space are also likely to arise through the refurbishment of Ponders End Youth Centre and the development of the Oasis Hadley Academy. Details of new and refurbished community space provision within the Regeneration Areas will be included in revised editions of the IDP as they come forward.

PLACES OF WORSHIP

4.5.8 A desk based study of places of worship has identified that there are 99 places of worship in the Borough, which include:

- 81 Christianity based places of worship (including 27 Church of England, 10 Methodist, 7 Baptist, 7 Roman Catholic and 7 Evangelical);
- 5 Mosques (including 3 in Fore Street, Edmonton, 1 in Palmers Green and 1 in Ponders End);
- 5 Synagogues (including 3 Orthodox, 1 Liberal and 1 Reform);
- 3 Spiritualist churches;
- 3 Hindu temple / centres (2 in Edmonton and 1 in Palmers Green);
- 1 Sikh temple (in New Southgate); and
- 1 Buddhist Meditation Centre (in Edmonton).

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4.5.9 In addition to the places of worship identified there are known to be additional congregations held in the borough's community halls, schools and at a number of business units in the borough. FECA have advised that there are high levels of demand from faith groups for the use of the five community halls that they manage. The Council's schools letting service have advised that spaces available on Sundays are let to faith groups. Other anecdotal evidence has indicated that many of the borough's places of worship have a number of additional faith groups meeting within their premises. However, the exact number of faith groups that use these places and 'spaces' of worship is not currently known. Further research would be required to provide a more accurate picture of the level of demand for space, as well as satisfaction with current space arrangements, and worship space aspirations.

CEMETERIES AND CREMATORIA

4.5.10 Section 214 of the Local Government Act empowered councils to become burial authorities to provide and maintain cemeteries, either within or outside their defined boundaries. However, it should be noted that this is a power rather than a duty, and it is up to each individual authority to decide whether to exercise such power. Should a Council decide to become a burial authority, the nature of burial provision is regulated by the Local Authorities Cemeteries Order 1977 (as amended in 1986).

4.5.11 In 2000 the government convened a Select Committee Inquiry into cemeteries, the resulting report published in 2001 stated that the public should have access to local and affordable burial space. London Plan Policy 7.23 states that 'Boroughs should ensure provision is made for London's burial needs, including the needs of those groups for whom burial is the only option. Provision should be based on the principal of proximity to local communities and reflect the different requirements for types of provision'.

Review of Existing Provision and Assessing Future Needs

4.5.12 The Council has five cemeteries across the borough at Edmonton, Lavender Hill, Strayfield Road, Southgate and Hertford Road.

4.5.13 There are other burial grounds within the borough not under the Council's control. These are: Trent Park at Cockfosters (London Borough of Islington), Enfield Crematorium, including Enfield Lawn Cemetery (private ownership but previously London Borough of Haringey), Tottenham Park Cemetery (private ownership), and three Jewish cemeteries (private ownership).

4.5.14 There are four churches (St. Andrews, Christchurch, All Saints and St. James), which have closed burial grounds, but still have the facility to bury cremated remains within their grounds. There are also burial grounds in the neighbouring boroughs of Broxbourne, Haringey and Barnet.

Availability of Council Managed Burial Space

4.5.15 The diminishing stock of new burial space in London has been recognised for some time, and this was highlighted in the London Planning Advisory Committee's report entitled 'Burial Space Needs for London' (1997). Similarly, it is acknowledged that Enfield's cemetery provision has been in decline for many years in terms of the amount of burial space and the range of burial options that it can offer.

4.5.16 Of the five cemeteries that the Council manages only Strayfield Road can provide 3,000 usable new burial spaces for 5-10 years. Approximately 700 of these spaces have been earmarked for Muslim burials.

4.5.17 Strayfield Road was chosen as an extension to the existing cemetery in Lavender Hill in 1980. As part of the planning consent that was granted to develop the cemetery a condition was imposed that the graves should be of the 'lawn grave' concept (i.e. non-traditional / without a kerb) in order to minimise visual impact, particularly as the site is designated as Green Belt land.

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Demand for Burial Space

- 4.5.18** Council figures indicate that the number of burials and cremated remains in Enfield's Council managed cemeteries has gone down in the last 15 years. However, this has been due to the limited availability of, and design restrictions on, available Council managed burial space in the borough, whilst demand for burial space continues to be high.
- 4.5.19** Due to the limited space and burial options available, residents have been turning to the independently managed burial spaces at Tottenham Park Cemetery on Montagu Road and New Southgate Cemetery in the London Borough of Barnet. Residents have also chosen to use available burial space provided by neighbouring boroughs; however, this comes at a price, as they are required to pay non-parishioner fees for the space, which can cost up to two or three times as much⁽⁴⁰⁾. The supply of burial space in these alternative locations is not unlimited. It should be noted that the pressure for burial space would increase further should these resources become exhausted, or where choice becomes restricted as has been the case with the London Borough of Haringey where only high cost vault graves are now available.

Phasing and Programming

- 4.5.20** The Council's Cemetery Service has commissioned a report by the Institute of Cemetery and Crematorium Management concerning "The Provision of new Burial Space within the Authority's Cemeteries". The report recognises that the Council has two options for expanding the provision of burial space in the borough: 1) increase the area of land available; and 2) the re-use of existing graves.

Cemetery Extensions

- 4.5.21** A number of options have been considered regarding the extension of the land allocated for Council's cemeteries. However, these have not been pursued because of a number of physical constraints, such as being bound by residential areas and in one case an underground culvert.

Grave Recycling and Re-Use

- 4.5.22** During 2011, the Future of Cemetery Space in Enfield Working Group sought to address the shortage of burial space. It concluded that no new provision was readily available and that, in the short term, the re-use of graves should be taken forward.
- 4.5.23** The Council agreed to re-use the area of common graves in which no human remains have been interred for over 75 years in consecrated ground in two defined areas in Edmonton Cemetery with effect from 1 April 2012, with a view to widening the re-use programme across other cemeteries in the borough.

Funding Sources, Timescales and Responsibilities for Delivery

- 4.5.24** Funding for the administration and maintenance of the Council's cemeteries is provided through the Council's revenue funding streams and will continue to be so for the foreseeable future.
- 4.5.25** The Council's Cemetery Service is currently operating at a loss. Average annual cemeteries gross income of £532,000 has to be offset against private interment and contractor digging costs, annual maintenance costs of £416,000 and annual administrative costs of around £138,000. Whilst the Council makes a small profit on interment and digging the largest income to be generated is from the sale of new graves.
- 4.5.26** Failure to provide new burial space will continue to result in existing cemeteries being a financial burden on the Council. It will also require council tax paying residents to seek burial space outside of the borough where higher fees could be applied. The provision of additional space through re-use in Edmonton Cemetery will help to re-balance revenue costs and continue to provide a sustainable service.

⁴⁰ To qualify for parishioner rates in Enfield, the deceased is required to have lived in the borough for at least 10 years and not moved away from the borough more than 10 years prior to their death or have been the registered owner of the grave.

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YOUTH FACILITIES AND SERVICES

Review of Existing Provision and Assessing Future Needs

- 4.5.27** Enfield has a broad network of youth facilities and services in the borough, which are provided by a range of statutory, voluntary and faith organisations. The Council seeks to retain existing youth activities in Enfield and develop a more integrated approach to communicating with young people through the further development of new media.
- 4.5.28** There are four youth centres owned by the Council, which are run by its Youth Support Service: Craig Park and Croylands in Edmonton, the Allan Pullinger Centre in Southgate and Ponders End Youth Centre. These offer a range of activities from street dance to sports. The Council also runs a youth inclusion project at Brigadier Hall on the Four Hills Housing Estate, Cedar Road.
- 4.5.29** There are 'Connexions' centres which operate from the Enfield Highway Library which offers advice on issues related to young people aged 13-19, including careers. The Council's Young People's information and advice centre at Ponders End, called Two-'e', has now moved and merged with the Connexions Centre on the first floor of the Enfield Highway Library. It provides an advice, information and support service for young people aged 13 to 21 who live, work or study in Enfield. Information advice, guidance and support on work, housing, drugs, money, health and leisure youth activities are also provided at all of the four full time Youth Centres in the borough and through the Council's work with partner providers such as at Enfield Island Village Youth Centre and at Council owned Ark and Angel community centres in Edmonton.
- 4.5.30** There are multi-activity youth clubs in the borough run by the faith, voluntary sectors and Oasis Academy. A community centre run by Trinity at Bowes (TaB) Methodist Church near Palmers Green, provides a range of youth activities. There are also youth clubs at Enfield Island Village and Kettering Hall in Enfield Lock, which are managed by Oasis Community Learning in partnership with a number of voluntary sector organisations with the support of the Council.
- 4.5.31** Other statutory services that provide activities for young people include Millfield Arts Centre, the Sports Development Service, Leisure Services and the Metropolitan Police. Activities for young people are provided through Enfield's schools outside of school hours through the Council's Extended Schools Offer. Enfield's libraries also provide a number of activities and services for young people.
- 4.5.32** There are 11 community halls in the borough, including Brigadier Hall and Kettering Hall, which are managed by Enfield Homes and FECA, which provide space for a number of youth activities including sports, dance and music. The borough is also host to a Summer University which provides a broad range of courses for young people, during the summer holidays. The Summer University is a programme run by young people for young people with support from the Council's Youth Support Service.

Developing Youth Facilities and Services

- 4.5.33** Enfield's Youth Strategy and Action Plan 2009-12 sets out the Council's plans to improve services for young people in the borough. It includes a needs analysis and a review of "things to do" and "places to go". In assessing need the Council have undertaken a number of youth orientated consultation exercises and reviewed the responses received within the context of the youth facilities and services it knows to be available. The Strategy notes that previous mapping exercises in parts of the borough indicate that there is a wealth of activities run by the statutory and voluntary sectors but that young people have informed the Council that they are not fully aware of what activities are on offer. Young people have also informed the Council that they would like more sports and cultural activities to be available.
- 4.5.34** Through the implementation of the Youth Strategy the Council will seek to ensure that more young people are able to take part in high quality activities. To achieve this, the Council will:

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- Improve its knowledge of activities available and communicate what is on offer more effectively to young people and their parents both through traditional leaflets and using electronic methods such as social networking sites;
- Increase the range of activities available to young people, by utilising existing physical capacity and opportunities for co-location of services, such as extending opening hours at existing youth centres and developing provision for young people in libraries, schools, and the Millfield Arts Centre;
- Improve joint planning and commissioning of activities so that resources can be used in the best way to deliver a wide range of activities through both statutory and voluntary sectors to meet the needs of young people;
- Increase the number of venues that are high quality so that existing public owned buildings are more attractive to young people and there are more places for young people to go where they live.

Phasing and Programming

- 4.5.35** Table B.11 of the Infrastructure Schedule provides details of youth facilities and services programmed to be delivered over the first five years of the Core Strategy.
- 4.5.36** Ponders End Youth Centre was to have been upgraded using Building Schools for the Future funding but as this was withdrawn by the Coalition Government the Youth Service has used some of its' own resources to upgrade some parts of the centre, which continues to operate very effectively as a stand alone provision.
- 4.5.37** Working together with young people and partners, the Council secured £3.015 million of 'Myplace' funding in December 2009 to create a world-class youth facility on the site of the existing Craig Park centre in Edmonton. The Craig Park Youth Centre was completed in March this year and has now opened. The innovative design of the new facility means that the centre can offer a wider range of learning opportunities and positive leisure activities for young people, as well as advice, guidance and support services. It will also benefit the whole community through a cafe, meeting spaces and volunteering opportunities. The Council is also in negotiations with Tottenham Hotspur Football Club regarding the provision of two football academies through Broomfield and Chace Community schools.
- 4.5.38** Consultation on the North Circular Area Action Plan has identified an opportunity for the provision of a new community / youth facility as part of the redevelopment of the Ladderswood Estate, and the Council will explore this potential through its Regeneration Priority Areas Programme. Details of the scheme will be provided in future editions of this IDP as the scheme is progressed. Over the last year a youth club based in St Paul's Church Hall has been piloted on the estate. Although attracting young people, future plans to make the best provision for the area are still under consideration. Outreach work with young residents is ongoing and activities for young people on the estate are ongoing.
- 4.5.39** Trinity at Bowes (TaB) was awarded £2.2million of "Myplace" funding in January 2009 to refurbish its community centre to provide a sports hall with a semi-sprung floor, an interactive gym space and a sprung floor dance studio. It is now operational with new changing rooms, computer facilities and a sound proof media suite for singing, drama and photography. TaB also provides counselling and advice sessions for young people as well as courses in sports leadership and volunteering opportunities. The Youth Offer at TaB is integrated with the other provision at Alan Pullinger centre and Ladderswood to form the South West Youth Partnership.
- 4.5.40** A new Youth Club is proposed at the Florence Hayes Adventure playground at Fore Street Edmonton; the building costs are estimated to be up to £1.3 million including children play equipment and building a sports court (MUGA). The running costs are around 150k-180k dependent on opening hours with the bulk comprising staffing costs and the remainder comprising general maintenance, cleaning, equipment etc.

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Funding Sources, Timescales and Responsibilities for Delivery

4.5.41 There is a range of funding sources that are potentially available for the delivery and improvement of youth facilities and services in Enfield. At the time of writing the following sources have been utilised, and will continue to be so provided they continue to be relevant and available.

Council Revenue Funding

4.5.42 Funding for the operation of the Council's Youth Support Service (including the provision of staffing for the running of Council youth centres and council run advice centres) is provided through the Council's annual revenue programme. The delivery of the Youth Support Service is also maintained with the assistance of a network of adult and youth volunteers. Council revenue funding is used to commission youth facilities and services in the borough, including the Oasis managed youth clubs at Enfield Island Village and Enfield Lock.

Positive Activities for Young People Funding

4.5.43 Positive Activities for Young People (PAYP) funding is a Council based funding stream used by the Council to provide and / or commission activities for the most vulnerable young people in the Borough. PAYP funding is used to commission a new youth club at the Oasis Academy Hadley to ensure all Youth Offending service clients are offered and encouraged to participate in positive activities, to fund a full summer programme of courses and activities for all young people under the Futureversity name, and make positive provision in the most needy areas of the borough. The programme targets the most vulnerable young people, including young offenders, those who are not in employment, education or training (NEET), persistent absentees from school, looked after children, teenage parents etc.

LIBRARIES

4.5.44 The public library service is a statutory service, governed by the Public Libraries Act 1964. The Act requires library authorities to provide a "comprehensive and efficient library service to all those desiring to make use thereof". Since the Act was passed the emphasis in people's use of libraries has continued to evolve and the library service is now increasingly providing value added services which reach well beyond the loan of books and other printed material.

Review of Existing Provision and Assessing Future Needs

4.5.45 Enfield has a network of 17 public libraries spread across the borough. Edmonton Green Library, Enfield Town and Palmers Green libraries are the three busiest libraries. In addition, the Council provides a mobile library, serving outlying parts of the borough not within easy reach of a static library and a number of schools and areas with no viable public transport. A library service for housebound people is also provided. Edmonton Green Library is the borough's biggest library, followed by Enfield Town and Palmers Green libraries. In addition, the Council provides a mobile library, serving outlying parts of the borough in the Green Belt, parts of the borough not within easy reach of a static library and a number of schools and areas with no viable public transport. A library service for housebound people is also provided.

4.5.46 The Council sought to improve Library facilities and performance through the implementation of its Library Strategy and Development Plan 2007-12. As part of this, the Council opened a new library at Enfield Island Village in December 2008 to address an identified service deficiency in the north east of the Borough.

4.5.47 In January 2009, the Council relocated Weir Hall Library, in the south of the borough, to a former Blockbusters shop in Fore Street in Edmonton. This improved library facilities, accessibility, and the visibility of the library service in this area of the borough. In 2010 the Council completed major refurbishment works at Bush Hill Park Library (now John Jackson Library) and Enfield Town Library. The Council has developed a small library provision in Millfield House which, funded via the Residents Priority Fund, opened in May 2012.

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4.5.48 Since the 2007 to 2012 Library Strategy was published, Local Authorities have seen a period of substantial change and development and a new Library Strategy 2012 to 2015 outlines how over the next 3 to 5 years the Council will realise its ambition to create dynamic libraries which play a key role in supporting the delivery of the Council's Corporate Plan. Traditionally, the core of the library service has been within stand alone library buildings across the borough. This physical presence will remain central but with the focus on libraries as an integral part of Community Hub facilities. Development proposals for Ponders End High Street include a new library facility with improved frontage as well as an efficient approach to delivering a locally tailored facility which could also benefit from co-location with other cultural, commercial and community services as part of the development. A decision has already been made to redevelop Palmers Green Library as part of the reconfiguration of the Southgate Town Hall buildings. This is in line with the previously stated position in the 2007-2012 Library Strategy to provide a modern, fit for purpose library on the existing site. Ordnance Road Library is also being redeveloped on its existing site as part of a new Joint Service Centre which will house a GP Surgery (including Dentistry), community space and a small number of additional housing units.

Phasing and Programming

Future Library Provision to Improve Existing Facilities and Accommodate Borough-wide Growth

4.5.49 Table B.13 of the Infrastructure Schedule provides details of future library facilities programmed over the first five years of the Core Strategy.

4.5.50 The Council's existing public libraries have the overall capacity to accommodate projected borough-wide population growth, and the focus for the Service will be on the quality and efficiency of the service on offer. Service improvements will be driven through the implementation of the existing and subsequent library strategies and development plans.

4.5.51 Service improvement measures will include the use of information technology (IT) to enable library services to be provided from non-traditional access points, in addition to purpose built libraries. The Council will shape services so that they better meet the needs of their users, with particular focus on the needs of people who do not currently use libraries but would benefit from the services on offer. The quality and range of books will be extended and the Council will seek to reshape opening hours at a number of its service points to better suit the needs of their users. It is envisaged that the use of IT and self-service will free up resources and allow opening hours to be extended and reshaped further in response to local needs. The Council will use consultation exercises to help inform the development of the library services and will use promotional exercises to raise awareness of the services on offer.

4.5.52 The Council is seeking to enhance the visibility and accessibility of library services and to maintain the previously stated position to seek opportunities where appropriate to relocate libraries to more prominent positions, thus increasing visitor numbers. Libraries are perceived as neutral havens in a way that other public buildings are not and the social contact provided through libraries is often as valuable as the services themselves. As a consequence visitors will generally be more relaxed, feel more at ease and more inclined to try out what is on offer. With this in mind, the Council wants libraries to support access, so that they become both a face-to-face and 'front door' or 'electronic portal' through which people access a range of other council, community and partner agency provision. The Council is committed to developing new models of provision based on partnership working to support the local economy and regeneration and to ensure that our resources are used as efficiently and effectively as possible.

Future Library Provision within the Regeneration Priority Areas

4.5.53 Table B.13 of the Infrastructure Schedule details proposals for future library provision in the Regeneration Priority Areas.

Enfield Town and the North Circular

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4.5.54 The refurbishment of Enfield Town Library was completed in March 2010 and offers enhanced library services for the Enfield Town Area Action Plan. In the North Circular Area Action Plan area, Palmers Green Library is to be redeveloped or refurbished on its existing site as part of plans for the Southgate Town Hall site where there is a proposal to also relocate three GP practices currently in sub standard accommodation in the Southgate area.

North East Enfield

4.5.55 In North East Enfield, the Council is seeking to relocate Ponders End Library from its existing site to provide a new high street style library and community space on Hertford Road. The library was refurbished in 1998 and has an attractive interior, however, the exterior is considered to be unappealing and it is set back some distance from the high street. The Council is undertaking a site feasibility study as part of the North East Enfield Area Action Plan review and the Council's regeneration programme.

Central Leaside

4.5.56 Based on the existing location of the Council's public libraries, a number of the planned 5,000 new homes within the Central Leaside Area Action Plan area may have restricted access to library services as a result of the railway line and major roads running through the area. The Council will therefore assess the need for a new library in this area through the Central Leaside Area Action Plan review and the Council's Regeneration Priority Areas. The provision of a new library would also be considered as part of the production of an updated Library Strategy at an appropriate time in the future.

Funding Sources

4.5.57 Funding for the operation of the Library Service is provided through the Council's annual revenue programme, which provides for staffing, premises and their up-keep, and library resources.

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POST OFFICES

Review of Existing Provision and Assessing Future Needs

- 4.5.58** Enfield has a network of 24 post offices spread across the borough, including one Crown, four franchise post offices 18 sub post offices and one post office local. The range of services on offer at an individual post office will depend on the size of the office itself.
- 4.5.59** The Post Office is the country's largest retail network with over 11,500 branches right across the UK; 93% of the population, and 99% of those living in towns and cities live within one mile of a post office. The Post Office faces some significant demographic, commercial and technological challenges.
- 4.5.60** The Post Office network is more than a purely commercial entity. It operates in places where other retailers do not including many deprived urban communities. It offers services that other retailers do not and is often a social hub of communities. In view of this distinct social purpose, the Government considers it necessary to treat it differently from the Royal Mail and believes that the Post Office and Royal Mail will prosper apart. In time the Government proposes that Post Office Ltd could be converted into a mutual structure with the ownership and running of the Post Office handed over to employees, sub postmasters and communities.

Falling customer numbers

- 4.5.61** Over the last decade the number of customer visits has fallen at an accelerating rate. In 2000 the Post Office had around 28 million customer visits each week. By 2006 this had fallen to 25 million and now stands at just under 20 million. Looking at the demographics of the Post Office's customers, there is a general rule that the older the customer, the more likely he or she is to use the Post Office regularly; 40% of over-55s use the Post Office weekly, whereas under 20%⁽⁴¹⁾ of 16-34 year olds do so.

Falling revenues

- 4.5.62** Post Office Ltd has been facing falling revenues, a major reason why the Post Office has been loss-making since 2000. Many services traditionally delivered exclusively by the post office are now also available through alternative channels. People can now choose to have their pension or benefit paid directly into a bank account, renew their vehicle tax online, or pay their bills by direct debit rather than visiting their local post office.

Fewer branches

- 4.5.63** The number of post office branches has fallen over the last decade from over 18,000 in 2001 to around 11,500 now. Between 2003 and 2009, 5,000 branches, or 28% of the network, were shut under closure programmes. The analysis behind the closure programmes was that falling customer numbers and revenues should be addressed by removing capacity from the post office network. The current Government has stated that it will maintain the network at around its current size.

Phasing and Programming

Future Post Office Provision

- 4.5.64** Under the Post Office's Network Transformation Programme the objective is to transform the current offer to give customers an improved service with extended opening hours at the transformed branches. Details of the branches to be transformed are not known at this stage as it is a voluntary programme that has not yet started. The Post Office has however confirmed that following the implementation of the Network

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Change Programme there are no further planned closures in Enfield or nationally. If unplanned closures occur in the future the Post Office would be required to review the effect of the closure to ensure that performance against the Government's Access Criteria is maintained and that the appropriate level of service is in place for the affected community.

Future Post Office Provision within the Strategic Growth Areas

4.5.65 The Post Office are continually reviewing their network of post offices and have confirmed that they would consider making appropriate changes to the network as part of a major regeneration scheme or concentrated housing growth. This could take the form of post office relocation or additional service provision and the Council will seek to engage with the Post Office to discuss how the network could respond appropriately to the growth planned in the borough.

Funding Sources, Timescales and Responsibilities for Delivery

4.5.66 Other than a recent limited modernisation and improvement programme for the small network of 373 Crown Post Offices, there has been no structured investment in the larger end of the network for the past 13 years. Many of the existing main post offices are no longer fit-for-purpose, and do not deliver the standard of service that the public expect. Post Office Ltd will make significant investments in main post offices in partnership with those who own the businesses to bring them up-to-date and to meet these higher standards of service.

4.5.67 The Government committed to a subsidy for the Post Office of £180 million in 2011/12 and made the decision to make sure that Post Office Ltd will have the money it needs to modernise, committing £1.34 billion of funding over the four years of the Spending Review period to March 2015. This package averages over £330 million a year, which is more than double the subsidy paid to the Post Office for the past two years.

4.5.68 The Post Office has three main sources of revenue – postal services, government services and financial services – which each contribute around a third of the Post Office's total income. The Government has encouraged Post Office Ltd to focus on how it will grow revenues. A more flexible lower cost network, (as described above), will be a significant asset to the Post Office, making it much more competitive.

4.6 Leisure Services

Review of Existing Provision and Assessing Future Needs

4.6.1 There is a broad range of leisure and sports facilities in the borough that are provided by the local authority, the private sector and voluntary community organisations. There are seven local authority managed leisure centres in the borough. All Enfield Leisure Centres have recently been refurbished as part of an £8.9 million programme of improvements. The facilities provided at these centres are set out in the table below.

Leisure Centre	Facilities
Albany Leisure Centre Hertford Road	<ul style="list-style-type: none"> ● 6 Lane x 25m Main Pool ● Teaching Pool ● Sauna & Steam Room ● Fitness Studio ● Dance studio ● Associated Wet & Dry Changing Facilities ● Childcare / meeting room ● Spinning Studio ● Café
Aspire Fitness Centre Church Street	<ul style="list-style-type: none"> ● Fitness Studio

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Leisure Centre	Facilities
	<ul style="list-style-type: none"> • 4 Court Sports Hall • Access to other school facilities by agreement (including standard school gymnasium and outdoor tennis courts)
Edmonton Green Leisure Centre The Broadway	<ul style="list-style-type: none"> • 6 Lane x 25m Competition Pool • Teaching Pool with movable floor • Children's fun pool • 2 flumes • Spectators Gallery for the main pool – Seating Capacity for 100 people • Fitness Suite • Easyline Gym • Spinning area • Dance Studio • 6 court sports hall • Meeting Room • Café/ IT area • Adventure Play – Indoor Play Facility • Sauna and steam room • Associated Wet & Dry Changing Facilities
Arnos Pool Bowes Road	<ul style="list-style-type: none"> • 4 Lane x 22m Main Pool • Meeting / Club Room
Southbury Leisure Centre Southbury Road	<ul style="list-style-type: none"> • 8 Lane x 25m Competition Pool with Colorado Electronic Swim Timing System) • Teaching Pool • Sauna & Steam Room • Spectators Gallery – Seating Capacity for 400 people • Crèche • Fitness Studio • Dance Studio • Meeting Room • 4 Court Sports Hall • Adventure Play - Indoor play Facility • 2 x full size Synthetic Turf/ Sports Pitches • Associated Wet & Dry Changing Facilities for Leisure Centre & Synthetic Pitches • Spinning Studio • Café
Bramley Bowls Centre Chase Side (Currently managed by Southgate Leisure Centre)	<ul style="list-style-type: none"> • 2 x Bowls Rinks
Southgate Leisure Centre Winchmore Hill Road	<ul style="list-style-type: none"> • 33.3m Main Pool • Spectators Gallery – Seating Capacity for 200 people • Two Dance Studios • Meeting Room • Crèche • Sauna & Steam Rooms • Associated Wet & Dry Changing Facilities • Spinning Studio • Fitness Suite • Café

Table 4.6 Facilities Provided at Enfield's Public Leisure Centres

4.6.2 There are a number of private health and fitness centres in the borough including the following national operated centres:

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- David Lloyd Centre on Carterhatch Lane, including a health and fitness centre, badminton, squash and tennis courts, and a indoor and outdoor swimming pool;
- Esporta Health and Fitness in Enfield Town, including a health and fitness centre and a swimming pool); and
- LA Fitness Centre in Southgate, includes a health and fitness centre and a swimming pool.

4.6.3 There are two athletics centres in the borough: the Council run Queen Elizabeth Stadium on Carterhatch Lane, which includes a grass football pitch which is home to Enfield Town FC; and the Lee Valley Athletics Centre at the Picketts Lock Leisure Complex, which includes indoor and outdoor running tracks. There is also an indoor bowls club, which is part of the Leisure Complex.

4.6.4 There are a number of publicly accessible sports facilities provided through the borough's schools and education sites. These include:

- Swimming pools at: St. Ignatius College in the north of Enfield, Waverley School in Ponders End and Middlesex University; and
- Sports halls at: Lea Valley High, Albany, Enfield Grammar, St. Johns, Southgate, Winchmore, Chase Community, Middlesex University (Trent Park campus), Aylward, Edmonton County (Aspire Fitness Centre) and Turin Grove schools.

4.6.5 In addition, sports facilities and fitness classes are provided through a range of community venues, including community centres, community halls, scout huts, church halls and youth centres. The range of activities on offer at these venues includes football, tennis, fitness and yoga classes, karate, judo and dance.

Enfield's Open Space and Sports Assessment Report (2006)

4.6.6 Enfield's Open Space and Sports Assessment Report (2006) provides an audit of indoor leisure facilities in the borough, including swimming pools, sports halls and health and fitness centres. The audit identifies the adequacy of existing provision, including accessibility, the extent to which provision can meet the demands and needs of the borough's existing and future population, and the opportunities that exist to improve the range and quality of provision in the borough up to 2016.

4.6.7 The Assessment is to be reviewed to take account of recent leisure developments in the borough and revised population projections beyond 2016, including development assumptions for the borough's Strategic Growth Areas.

Sports Halls Provision and Need up to 2016

4.6.8 The Assessment identified that there was sufficient unmet demand in the borough to justify the provision of an additional 11 and a quarter four court sports halls, equivalent to 45 badminton courts, up to 2016. More recent sports hall demand modelling took place in 2010 which identified approximate unmet demand of six courts. A need to improve access to sports halls to residents living further than a 20 minute journey time from existing facilities was also identified, with large areas of the south west and east of the Borough outside of a 20 minute pedestrian catchment.

4.6.9 Since the Assessment was undertaken in 2006 a number of sports hall developments have come forward to significantly contribute to addressing the sports hall deficiency in the east of the borough. Edmonton Leisure Centre opened in August 2007 and sports halls have become available for public use at two schools in Edmonton: Edmonton County School and Nightingale Academy, with four courts provided in each.

4.6.10 Based on the Assessment's original calculations the recent sports hall developments have the potential to reduce the need for sports hall provision to seven and a quarter 4 court halls (29 badminton courts) up to 2016. There is also the potential for sports halls to become available for public use at the Oasis Academy Enfield School in Enfield Lock, The Latymer School in Edmonton and Broomfield School in Palmers Green,

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all of which have four court sports halls on site. Based on the Assessment's original calculations, public access at these school sites could further reduce need to four and a quarter four courts halls (17 badminton courts) up to 2016. However, it is recognised that a more accurate picture of need would be available once the Assessment has been reviewed.

Swimming Pool Provision and Need up to 2016

- 4.6.11** The 2006 Assessment projected that there would be a level of unmet demand equivalent to 323 sq.m of swimming pool space, (about 1 standard 25 x 12.5m pool), by 2016. However, the Assessment calculated that there were no sufficient concentrations of unmet demand in the borough to justify the development of an additional swimming pool.
- 4.6.12** Since the Assessment's publication Edmonton Green Leisure Centre has been rebuilt and now provides a smaller modern pool, which has resulted in a reduction in total water space provision in the borough.⁽⁴²⁾ After consideration of the total reduced water space, it is still expected that there will be no sufficient concentrations of unmet demand in the borough to justify an additional swimming pool up to 2016. Further calculations of need beyond this period will be undertaken when the Assessment is reviewed.

Health and Fitness Centres

- 4.6.13** The Assessment calculated that, whilst the existing facilities had the capacity to accommodate an increase in usage by up to 30%, growth in demand would increase to an extent that would justify the provision of additional health and fitness facilities in the borough⁽⁴³⁾.
- 4.6.14** Since the Assessment was undertaken, the Council has opened the Aspire Fitness Centre on Church Street in Edmonton which provides approximately 25 stations. Further work has been undertaken by Nathaniel Lichfield and Partners (2007),⁽⁴⁴⁾ which has identified that there may be emerging scope for further health and fitness club provision in Enfield in the future.

Provision for Artificial Turf Pitches

- 4.6.15** Based on Sport England's Facilities Planning Model there is unmet demand of approximately 2.5 pitches. In 2010 there were eight sites, two of which have two pitches - Southbury Leisure Centre and Southbury Hockey Centre.

Phasing and Programming

Future Leisure Provision to Accommodate Borough Wide Growth

- 4.6.16** A key target of Everybody Active, Enfield's Sport, Physical Activity and Physical Education Strategy 2009 to 2014, is to provide excellent, accessible sports and leisure facilities. To ensure that the Council achieves these targets the following actions are being undertaken:
- Refurbish and improve the Queen Elizabeth II Stadium and Enfield Playing Fields;
 - Explore how more flexible use of existing school, college and community facilities can be made for sport and physical activity;
 - Ensure that all new provision on school sites provides quality facilities that meet both school and community needs.

42 There is now a total of 3,490 sq.m of water space, which equates to 12.2 sq.m of water per 1,000 population

43 Major refurbishment of Southgate Leisure Centre (an increase of 50 to 80 stations) and Albany Leisure Centre (an increase of 50 - 70 stations) both of which were completed in 2012 have increased the health and fitness provision. Estimated demand for health and fitness centre usage was based on applying existing participation rates to the 2016 population projections, and on the assumption that the health and fitness centre market would grow by a compounded rate of 3% per annum in addition to demand generated by population growth rates.

44 Nathaniel Lichfield and Partners, London Borough of Enfield: A Study of Town Centres (2007)

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- Undertake a facility audit and review of long term leisure facility needs.
- Contribute to the Regeneration Priority Area delivery plans by providing information on current provision and modelling anticipated demand for sport and physical activity as the priority areas develop.

Queen Elizabeth II Stadium Refurbishment

4.6.17 A restoration of the Queen Elizabeth II Stadium was completed in late 2011. The facility includes a refurbished community athletics track, long / triple jump, high jump and shot. The area inside the athletics track has become a football pitch and the site is now home to Enfield Town Football Club. All internal areas have been improved to provide high quality changing rooms and the first floor of the facility has become a bar / café.

Sports Facilities Provision Through Schools and Community Facilities

4.6.18 The Council recognises that there is potential for the more flexible use of existing school, college and community facilities for the purposes of sport and physical activity, and it will produce an options appraisal of facilities. In particular, the Council recognises the potential for sports halls to become available for public use at three of the borough's schools (see section 4.6.10 above) and will explore the potential for facilities to be brought forward for public use at other schools in the borough.

4.6.19 The Council explored the potential to deliver a Gymnastics Centre of Excellence at Edmonton County Upper School and was seeking to deliver the Centre by 2012 /13, with funding provided by the BSF programme and other partners (which could include British Gymnastics and Sports England). However, as BSF is now cancelled this scheme is no longer taking place.

Leisure Facility Audit and Review

4.6.20 Everybody Active states that the Council will undertake a leisure facility audit and a review of long term leisure facility needs in the Borough. The findings of the review will help the Council to plan and prioritise the delivery and improvement of leisure facilities in the borough so that they meet the needs of existing and future populations.

Picketts Lock Sports Node

4.6.21 The Council is supporting the Lee Valley Regional Park Authority (LVRPA) in the development of its Park Development Framework, which, amongst other things, will identify the mix of additional recreation and leisure facilities in the east of the borough. In particular, the Council will work with the LVRPA to identify the best options for the future development of a Pickett's Lock Sports Node, which will build on the existing leisure provision at Pickett's Lock, namely the Lee Valley Athletics Centre and Lee Valley Golf course. Future versions of the Infrastructure Plan will be updated to reflect the development of the proposals for the Sports Node as they come forward.

Third Generation Sports Pitches

4.6.22 At the time of writing the Council is exploring the opportunity to develop third generation synthetic sports pitches (also referred to as 3G pitches) across the borough. Unlike standard 'astro-turf' pitches the artificial grass used for third generation (3G) pitches is in-filled with a rubber crumb instead of sand, which ensures that the pitch surface is abrasive free and can be used all year round. Upon delivery the pitches would be available for local authority access before 4pm and commercial access thereafter. The Council is working with Edmonton County School to consider the possibility of introducing an outdoor synthetic pitch development at the school. A third generation pitch has been introduced at Southbury Leisure Centre and is used by Kingsmead School during school hours and is available to the community beyond these hours.

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Future Leisure Provision within the Strategic Growth Areas

4.6.23 The Council will contribute to the delivery of plans for the borough's Regeneration Priority Areas by providing information on current leisure facility provision and modelling anticipated demand for sport facilities and physical activity as the priority areas develop. This will be achieved through the utilisation of Sport England's planning modelling tools, (such as the Facilities Improvement Service, Facilities Planning Model, Sports Facilities Calculator and Active Places Power⁽⁴⁵⁾), which are able to provide data relating to demand for a range of leisure facilities including sports halls, swimming pools, synthetic turf pitches and indoor bowls centres. The data from this work will be incorporated into future editions of this Plan as it becomes available. Arnos Pool is being considered as a site for improving and increasing leisure provision.

Funding Sources, Timescales and Responsibilities for Delivery

4.6.24 There are a number of funding sources that may be potentially drawn from for the development of the borough's leisure facilities infrastructure. Given the nature of leisure facility provision in the borough funding may be obtained directly for leisure facility development or may be utilised as part of a broader development that includes a leisure element, such as a school or community centre.

Council Revenue Funding

4.6.25 Funding for the operation of Council's Leisure Services is provided through the Council's annual revenue programme, which provides for staffing, premises and their general up-keep. An operator for the Council's leisure centres was appointed in July 2010 on a 20 year contract to operate and maintain the borough's centres.

Council's Capital Programme

4.6.26 Funding for the development of Council capital projects is obtained through successful bids to the Council's Capital Programme - £1.8m of Council Capital funding was approved for the refurbishment of the Queen Elizabeth II Stadium running track and listed stand.

Grant Funding

- 4.6.27** There are a number of sources of grant funding that may be bid for the development of leisure facilities. These include:
- The National Lottery funded Sport England Community Investment Fund, (now closed replaced by Places People Play funding programme), which provides funding for refurbishing existing sports facilities or building new facilities and developing programmes and initiatives that use sport to support community cohesion, improve health and raise education levels.
 - London Marathon Charitable Trust grant funding, which provides match funding for the development of community facilities for the purposes of recreation and leisure.
 - The Football Foundation, which provides grant funding for the development of football facilities through its Facilities Scheme, Football Stadia Improvement Fund, Goalpost Safety Scheme and Community Large Grant Scheme.
 - London Mayor's Sports Legacy Funds.

Private Sector Investment

4.6.28 Private sector partners may also come forward with funding to help the development of leisure infrastructure in the borough. An example of this can be seen at Edmonton Green, where St Modwen's, the owners of the shopping centre, have contributed resources to the redevelopment of Edmonton Green Leisure Centre. Further opportunities of this nature will be explored as the Council seeks to develop and improve its leisure services infrastructure.

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4.7 Cultural Services

CULTURAL FACILITIES IN ENFIELD

Review of Existing Provision and Assessing Future Needs

4.7.1 Enfield has a broad network of cultural facilities and services in the borough, which are provided by a range of organisations from the statutory, voluntary and commercial sectors.

Arts Centres and Performance

4.7.2 There are three professional arts venues in the borough The Chickenshed Theatre in Southgate, The Dugdale Centre in Enfield Town and Millfield Arts Centre in Edmonton, near the North Circular Road. Chickenshed is a purpose built theatre which runs youth theatre workshops, education courses and community outreach projects. Millfield Arts Centre comprises of purpose built and recently refurbished Millfield Theatre and the recently refurbished grade II* listed Georgian villa, Millfield House, which is used as a centre for arts and learning; and the purpose built studio theatre, borough Museum, temporary exhibition spaces, café and ice-cream parlour at The Dugdale Centre; conference facilities opened in November 2012.

4.7.3 The borough also has an arts and crafts learning centre at the Grade II listed Salisbury House, Bury Street West, in the Edmonton area, and 'The Intimate Theatre' at St. Monica's Hall in Palmers Green, which hosts entertainment shows for education and charitable purposes. Liberty's Live Room recently opened in Palmers Green, and will provide performance space for musicians, actors and comedians.

Galleries and Studio Space

4.7.4 There are gallery spaces, (some pop-up / temporary and some more long term), at the following venues in the borough: the Platform Gallery, a converted waiting room in Palmers Green Station, and Gallery Fore, which is a converted shop in Fore Street, Edmonton. There is also a larger arts space, ArtZone, in Market Square, Edmonton Green, which offers a gallery, artist studio and a theatre. Renaissance Studios, in Claverings Industrial Estate, Edmonton, provides 16 purpose built studios for artists and small community groups and offers tenants the opportunity to be part of an artists' cooperative to help support the development of their businesses.

4.7.5 Additionally, events such as Edmonton Festival and Carnival and Enfield Town Autumn Show host exhibitions. In partnership with local arts and design organisations the Council provides gallery space at The Dugdale Centre gallery in the foyer; the Enfield Museum, at The Dugdale Centre; the pop-up Gallery organised by Urban Futures in Ponders End and Millfield Arts Centre exhibition spaces in the house and theatre buildings. The Council are working to secure shop space and shop windows as exhibition space in Enfield Wash / Highway for temporary use.

4.7.6 Opportunities will be identified to work with the community to deliver creative and arts projects as part of project planning and delivery in priority regeneration area. In Ponders End a 'meanwhile' strategy and pilot project known as the Ponders End Spark Project, is in development. This will support delivery of the Electric Quarter (Ponders End High Street Regeneration) proposals through the delivery of short, medium and long term cultural interventions to enliven the High Street and wider area.

4.7.7 Forty Hall, a 17th Century Grade I Listed Building set within a 273 acre Estate in the north of Enfield has been refurbished to a high standard and reopened on 30th June 2012. The Hall also contains a café, banqueting suite and a range of exhibition spaces. There is a permanent exhibition about the Hall and its owners and also spaces for hire.

Museums and Local Studies

4 Social and Community Infrastructure

4.7.8 The borough's local studies collection and archive is currently based at Dugdale Centre in Enfield Town, managed by the Council. A selection from the borough's Museum collection is on display at the Dugdale Centre in Enfield Town. Other museums in the Borough are: Whitewebbs Museum of Transport, at Crews Hill and the Royal Small Arms Visitor Centre, at Enfield Island Village. Details of the borough's libraries are covered in the Community Services section of this document.

Cinemas

4.7.9 There are two large multiplex cinemas in the borough: A 14-screen Cineworld multiplex cinema at Southbury Corner Leisure Park, near Ponders End, and a 12 Screen Odeon Cinema in the Lee Valley Leisure Complex at Picketts Lock in Edmonton.

Edmonton Green

4.7.10 Since 2006 Edmonton Green Shopping Centre has developed as a centre for the arts and cultural activities and hosts a programme of activities including performances, parades and art installations, with a number of shop units temporarily converted into galleries. The area is also home to a number of small creative organisations, including Face Front Inclusive Theatre Company and CEPO (Community Environment Project Office), an environment and arts organisation. At Claverings Industrial estate there are further creative organisations: Art Start, SCRAPP, (a recycling and arts group), and DAZU, (a performing arts group for young people).

Use of Cultural Facilities and Potential for Cultural Facility Development

4.7.11 Enriching Enfield: Enfield's Leisure and Culture Strategy and Action Plan 2005-08, and the draft "Creative Enfield" - Enfield's Arts and Creativity Strategy and Action Plan 2009-13, provide details of the usage of local venues, participation levels in events and arts projects, as well as the characteristics of culture facility provision in the borough and an analysis of the gaps in the provision for arts and culture in the borough. Together the Strategies highlight the following:

- Engagement in the Arts in Enfield has increased year on year over the last six years, with a 5% increase in 2008-09 to 118,240 people visiting / attending cultural venues, activities, events, projects organised by the Council.
- A number of the key strategic cultural facilities are positioned on the borders of the borough (Millfield Arts Centre in the south, Chickenshed Theatre, in the west) making it more difficult for them to fulfil a strategic role for the arts in the borough.
- Space for the development and rehearsal of performance work (dance, theatre, music) is limited
- The number of small scale music events is modest for the size of the borough, and there is the potential for the development of pubs, halls and community venues to stage small scale music events.
- There is no professional gallery space and there are only a handful of small temporary spaces to exhibit and sell work; the borough could sustain a professional visual arts organisation with gallery premises.
- There is the potential to use shop and commercial premises for creative enterprise and / or studio space.
- There is potential for arts and cultural facilities and services to be provided for and through the boroughs schools.
- There is currently a lack of the following:
 - An arts / cultural venue in the east of the borough, and in particular, the north east of the borough.
 - Strategic cultural facilities in the borough's town centres, including Enfield Town, Arnos Grove, Southgate, Ponders End, Enfield Highway and Edmonton Green;
 - An arts / cultural venue in the south west of the borough;
 - Screens to show independent films and films made by local people; and
 - a resource for film, digital work, and TV and music production.

4 Social and Community Infrastructure

Phasing and Programming

- 4.7.12** Enriching Enfield 2005-08 outlined the Council's objective to ensure the improvement and development of leisure and cultural infrastructure in Enfield, with a particular focus on the promotion and development of the borough's creative and cultural industries sector.
- 4.7.13** In the short term, the Council will seek to improve and develop the borough's cultural infrastructure through the implementation of:
- "Creative Enfield" - Enfield's Arts and Creativity Strategy and Action Plan 2009-13; and
 - A revised leisure and culture strategy and action plan for Enfield, due to be published in 2010.
- 4.7.14** Cultural infrastructure improvement and development in the medium to long term will be delivered through the implementation of subsequent culture related Council strategies.

Creative Enfield and Cultural Infrastructure Development

- 4.7.15** Creative Enfield will contribute to the development of the borough's cultural infrastructure over the next three to four years through the delivery of the following aims:
- Developing the capacity and resources of all those engaged in the arts sector through increased partnership working; and
 - Increasing the number and improving the quality and attractiveness of facilities for the arts to ensure that they are fit for purpose and able to support increased participation.

Developing Capacity and Resources

- 4.7.16** There is existing infrastructure in the borough that has the capacity to be developed to contribute to the Borough's cultural offer. To develop this capacity the Council will:
- Work with its Property Services and Sustainable Communities teams to review the number of empty properties that the Council owns and assess their suitability for use by the arts and creative sector;
 - Audit libraries to identify spaces for exhibition and installation work by artists;
 - Make contact with private and voluntary sector music entrepreneurs and small scale venue owners to discuss partnership potential with the aim of developing a strong network and marketing support for small scale music presentation;
 - Exploring the potential for professional arts organisations to use school buildings more often for their own work and to support the Council's 'extended schools' programme; and
 - Develop Edmonton Green as a cultural centre, with an annual arts and events programme including the use of empty shop units, the architecture of the centre, and the walkways as venues for the arts.
- 4.7.17** The Council will seek to develop partnership working to increase the number of independent screens for showing films and will develop funding bids to achieve this. It will also develop a strong partnership with Chickenshed Theatre to ensure that their contribution to the borough's cultural offer achieves its potential, especially for the south west of the borough where there is an identified lack of cultural facilities and services.

Number and Quality of Facilities

- 4.7.18** At the time of writing the Council is working on a number of capital projects that will enhance the borough's cultural infrastructure. These are detailed in Table B.15 of the accompanying Infrastructure Schedule.
- 4.7.19** Improvement works completed at the Millfield Arts Centre included the refurbishment of Millfield Theatre auditorium, along with improved toilet and access facilities and new café bar in September 2009. Restoration works to the Grade II* Listed Millfield House have also been completed.

4 Social and Community Infrastructure

- 4.7.20** Refurbishment works completed in 2012 in partnership with Heritage Lottery Fund at Thomas Hardy House enhanced the cultural facilities available in Enfield Town. The Dugdale Centre, provides facilities for community, business, recreation, arts and cultural uses, including an exhibition area, space for the museum collections, flexible studio performance space and a tourist information point.
- 4.7.21** The Council has also refurbished and developed the Grade I Listed Forty Hall & Estate as the 'Jewel in the Crown' of the borough, and as a major cultural visitor attraction in London. The Forty Hall project was completed in June 2012; reopening events and programme of arts, heritage and ecology as one integrated site to contribute to the cultural offer in North East Enfield which is currently limited.

Funding Sources, Timescales and Responsibilities for Delivery

- 4.7.22** There are a number of funding sources that may be potentially drawn from for the development of the borough's cultural services infrastructure. Given the nature of cultural services provision in the borough, this funding may be in the form of direct Council funding, government grants and private sector funding.

Council Revenue Funding

- 4.7.23** Funding for the operation of Council's Cultural Services is provided through the Council's annual revenue programme, which provides for staffing, premises and their general up-keep.

Council's Capital Programme

- 4.7.24** Council funding for the development of Council cultural capital projects is obtained through successful bids to the Council's Capital Programme. Council capital funding has been used for the development and refurbishment of The Dugdale Centre and Millfield Theatre, and for the conservation and refurbishment of Forty Hall and Millfield House.

Heritage Lottery Funding

- 4.7.25** The Heritage Lottery Fund (HLF) was set up by Parliament in 1994 to give grants to a wide range of projects involving the local, regional and national heritage of the United Kingdom, including buildings, museums, natural heritage and the heritage of cultural traditions and language. The HLF has an annual budget of £180m a year to invest in new projects nationwide, which is secured until 2013. HLF capital funding was used for the conservation and refurbishment of Forty Hall and the Council will seek to bid for HLF grants for other culture related projects where appropriate.

Other Grant Funding

- 4.7.26** There are other sources of funding and grant funding that may be bid for for the development of arts and culture in the borough. These include the Arts Council for England's Grants for the Arts, which are aimed at individuals and arts organisations and other people who use the arts in their work, and UK Film Council funding, which funds film development, education and festivals and cinemas.

Private Sector Investment

- 4.7.27** Private sector partners may also come forward with funding to help the development of cultural infrastructure in the borough. An example of this can be seen at Edmonton Green, where St Modwen's, the owners of the shopping centre, have contributed resources to the development of an annual arts programme, which has helped the development of Edmonton Green as a cultural centre in the borough.

4 Social and Community Infrastructure

4.8 Emergency and Essential Services

FIRE SERVICE

Review Of Existing Provision and Assessing Future Needs

- 4.8.1** Local fire stations provide emergency cover although vehicles also often come from a number of surrounding stations. The London Fire brigade aims to reach most most emergency incidents in less than six minutes. Within the borough there are three fire stations at: High Street, Southgate; Church Street, Edmonton; and Carterhatch Lane, Enfield. Work has been undertaken to upgrade the fire station at Edmonton. This will result in an advanced function as one of London's five rescue centres; stations where London Fire Brigade group together fire engines and specialist rescue equipment to ensure effective management and maintenance of highly specialised staff skills.
- 4.8.2** The London Fire and Emergency Planning Authority (LFEPA) have an annual budget that is set by the Greater London Authority. The LFEPA then apportion funding to each of the Fire Service boroughs.
- 4.8.3** Enfield Fire Brigade indicates that the existing fire stations are well located to service the growth proposed within the borough. No specific development requirements have been identified by the Fire Service to accommodate the overall growth proposed. The Fire Service indicated in their comments to the Core Strategy that if additional facilities and service requirements are required in the future then these should be part financed from developer contributions.

AMBULANCE SERVICE

Review Of Existing Provision and Assessing Future Needs

- 4.8.4** The Ambulance Service in Enfield operates in two areas; the first is to respond to emergency calls and urgent calls. This service was previously funded by the Primary Care Trust (PCT) via the NHS London. Funding is provided annually based on a business case plan; although a Foundation Trust is due to be set up at the end of the year which will provide funding on a three yearly cycle. The second area of operation is Patient Transport Services, where the Ambulance Service wins contracts to transport patients through competitive tendering.
- 4.8.5** Within the borough there are three ambulance stations at: Ridgeway (within Chase Farm Hospital); Carterhatch Lane, Ponders End and Windmill Lane, Edmonton. All are outdated premises that are no longer suitable for current needs.
- 4.8.6** Future ambulance service provision aims to identify opportunities for co-location with polyclinics (also known as Neighbourhood Health Centres) where opportunities arise with the PCT. The ambulance service therefore seeks, where possible, to have facilities for ambulance personnel and their vehicles located within or adjacent to a Neighbourhood Health Clinic.
- 4.8.7** In addition, the Ambulance Service aim to relocate the Ridgeway and Carterhatch Lane ambulance stations, to one central location within the borough with the benefit of good transport links, ideally along the A10. A decision to relocate was anticipated to be made by the London Ambulance Service Trust Board by Spring 2010.
- 4.8.8** The Ambulance Service is considering relocating the Windmill Lane Ambulance Station to St Ann's Hospital, to create a super station sometime over the next three years, but this has not yet been finalised.

4 Social and Community Infrastructure

POLICE

Review Of Existing Provision

4.8.9 The Mayor's Office for Policing and Crime (MOPAC), formerly the Metropolitan Police Authority, is the statutory organisation that has overall responsibility for the police estate, its management and development. Day to day management of the estate in each of the London boroughs is delegated by the MOPAC to Property Services Department. The Metropolitan police Service and MOPAC are committed to delivering a more efficient, effective and locally focused service with modern facilities.

4.8.10 The policing service for the London Borough of Enfield comprises the borough policing facilities set out in the table below:

BUILDING	POLICE SERVICES BASED THERE
Edmonton Police Station	Custody Cells (16) Senior Management Team 2 Safer Neighbourhood Teams
Enfield Police Station	Custody Cells (5) 4 Safer Neighbourhood Teams
Southgate Police Station	1 Safer Neighbourhood Team Safer Neighbourhoods Parks Unit
Winchmore Hill Police Station	Office Based Function
Patrol Base Great Cambridge Industrial Estate, Lincoln Road	Patrolling

Table 4.7 Metropolitan Police Estate within Enfield

In addition to the above estate, the MOPAC also operate from the following Safer Neighbourhoods bases:

Safer Neighbourhood Bases	
175 Fore Street, Edmonton	1 Safer Neighbourhood Team Safer Transport Team
Edmonton Green Shopping Centre	1 Safer Neighbourhood Team
Unit 11 Centre Way, The Claverings Industrial Estate	1 Safer Neighbourhood Team
70/70A Main Avenue, Bush Hill Park	1 Safer Neighbourhood Team
Chase Community School, Churchbury Lane, Enfield	1 Safer Neighbourhood Team
446a Green Lanes, Palmers Green	2 Safer Neighbourhood Teams
864-866 Hertford Road	2 Safer Neighbourhood Teams
354 Bowes Road, Arnos grove	2 Safer Neighbourhood Teams

Table 4.8 Safer Neighbourhood Bases within Enfield

4 Social and Community Infrastructure

Existing Need and Future Requirements

- 4.8.11** The current Metropolitan Police Estate Strategy considers the existing estate and 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.
- 4.8.12** The Mayor's Office for Policing and Crime have indicated that they would like to establish a police presence in the proposed local centre at Meridian Water as part of the Central Leaside Area Action Plan. There are no other known requirements from the police for additional sites to accommodate future capacity at this stage. However the following may be required as part of the Estate Strategy:
- **Neighbourhood / Transport Team Bases** - additional neighbourhood teams may be required in areas of growth.
 - **Front Counters** - this service is the prime point of interface between the public and the police. These will be in publicly accessible locations and could form part of the Team Bases or other shared facilities.
 - **Office Accommodation** - administrative facilities may need to be relocated as a result of operational requirements.
 - **Patrol Bases** - appropriate locations across London are being sought and could be sited on employment land and serve one or more boroughs. A patrol base serving Enfield has been secured at the Great Cambridge Industrial Estate.
 - **Custody Centres** - appropriate locations across London are being sought to provide centralised custody centres to accommodate between 20-40 cells and associated interview, consultation and search facilities. These could be sited on employment land and serve one or more boroughs.
 - **Strategic Pan-London Facilities** - appropriate pan-London facilities are being sought to accommodate training facilities, offices and forensic laboratories for example, or mix of these.

Funding Sources, Timescales and Responsibilities for Delivery

- 4.8.13** The MOPAC's assessment of need for policing is based on a number of factors including population growth, the nature of development, geographic location, local demographics, accessibility and the prevailing economic conditions. In establishing future policing, an assessment of existing crime levels and a review of existing provision will be carried out on a case by case basis.
- 4.8.14** As a result of all these factors it is extremely difficult for the MOPAC to apply standard ratios in respect of residential development as it is more complex than a straight forward ratio of Police Officers to population levels.
- 4.8.15** The MOPAC's approach is to review proposals for development that give rise to additional policing activity – residential, retail and leisure in particular – together with the existing floor space in the area and to decide what level of additional resources may be required. Due to the nature of the work and the range of local challenges that the MOPAC faces, there is no 'one size fits all' solution for every borough and plans will be adapted in response to individual borough needs and policing demands.
- 4.8.16** As the Estate Strategy is kept under review and decisions about the police estate in Enfield have not yet been finalised, the MOPAC will continue to update the Council.

EMERGENCY PLANNING

Review Of Existing Provision and Assessing Future Needs

- 4.8.17** Emergency planning liaise with other emergency services, the Primary Care Trust, Environment Agency and major utilities to look at the risks that the borough is exposed to; be it the risk from fire, flood, pandemic flu, traffic incidents, chemical hazards, etc.

4 Social and Community Infrastructure

4.8.18 The London Borough of Enfield Emergency Planning Team indicates that in an emergency, existing facilities would be used. There is therefore no specific development requirements identified to accommodate the overall growth proposed within the borough. However, an increase in population would have cost implications in terms of providing additional emergency stores.

5 Green Infrastructure

5.1 Parks and Open Spaces

- 5.1.1** London's Green Infrastructure is identified through the Mayor of London's adopted All London Green Grid Supplementary Planning Guidance (ALGG SPG) and a series of ALGG Area Frameworks. The ALGG SPG provides an overview of strategic Green Infrastructure opportunities for each area. The Area Frameworks describe area objectives and the projects and initiatives that will deliver London's green infrastructure.
- 5.1.2** The Mayor of London in his Implementation Plan⁽⁴⁶⁾ defines Green Infrastructure as the multi-functional interdependent network of open and green spaces and green features, for example green roofs. It includes the Blue Ribbon Network (the network of London's waterways) but excludes the hard surfaced public realm. Green Infrastructure continues across the boundaries of London to the areas beyond and in London's urban fringe, the GLA is working with the Lee Valley Regional Park Authority and Green Arc partnerships of neighbouring counties to identify and create a well-connected and accessible countryside around London.
- 5.1.3** Developer contributions are of high importance to the funding of Green Infrastructure. At the regional level the London Plan Policy 2.18 requires developments in deficiency areas for Regional or Metropolitan Parks to contribute appropriate elements of Green Infrastructure. The Mayor of London in his Implementation Plan states that boroughs may also consider the inclusion of green Infrastructure investment in their local Community Infrastructure Fund (CIL).

PARKS AND OPEN SPACES

Review of Existing Provision

- 5.1.4** Enfield has an extensive and diverse network of open spaces, which includes parks, playing fields, allotments, cemeteries, green corridors and waterways. In the borough, there are 349 open spaces over 0.4 hectares in size, totalling 2,042 hectares of open space. The breakdown of open space and play provision is set out in following tables.

Open Space Type	No. of Sites	Area (Ha)	% Open Space Area
Regional Park	14	486.5	23.8
Metropolitan Park	3	347.5	17
District Park	10	214.6	10.5
Local Park	18	93.5	4.6
Small local park / open space	17	30.8	1.5
Pocket Park	6	3.5	0.2
Linear open space / green corridors	15	14.9	0.7
Public Park Total	69	704.8	34.5
Allotments, community gardens and urban farms	42	77.9	3.8
Amenity green space	76	39.9	2.0
Cemeteries and church yards	12	74.8	3.7
Civic spaces/pedestrianised areas	0	0.00	0.0

5 Green Infrastructure

Open Space Type	No. of Sites	Area (Ha)	% Open Space Area
Greenspaces within grounds of institution	2	16	0.8
Natural or semi-natural urban greenspaces	23	440.3	21.6
Outdoor sports facilities / playing fields (education)	74	126	6.2
Outdoor sports facilities / playing fields (private)	36	417.2	20.4
Outdoor sports facilities / playing fields (public)	11	141.4	6.9
Other	4	3.12	0.2
Other open space total	280	1336.8	65.5
Total Open Space	349	2041.6	100.0

Table 5.1 Open Space Provision by Type*

*Note: 14 spaces are classified as part of the Lee Valley Regional Park in addition to the individual role that each space plays. To avoid double counting, the total area and number of sites of the Regional Park have not been included in the total figures.

5.1.5 Public parks are the most abundant form of open space provision within the borough, representing 34.5% of the total area of assessed open spaces. This figure rises to 58% of the total area of assessed open spaces when the non public park portion of the Lee Valley Regional Park is taken into account.

Existing Need

5.1.6 An Open Space and Sport Assessment was completed in 2006 which assessed the quantity, quality, and accessibility of the parks, play space and playing pitch provision in Enfield. The study found that despite the abundance of and the overall good quality of public open space provision, there are deficiencies in some types of open space and play provision in some parts of the borough.

Parks

5.1.7 Currently, there is 7.01ha of open space and 2.42ha of public park provision per 1,000 population (Open Space and Sports Assessment 2011 update). At present there is 2.42 ha per 1,000 population of public park provision within the Borough. This includes spaces within the Lee Valley Regional Park which, individually, are classified as public parks. The quantity of, and access to open space provision varies between different parts of the borough. The Open Space and Sport Assessment (2011) identified eight zones of Deficiency in Access to public parks. These are mapped below in figure 5.1.

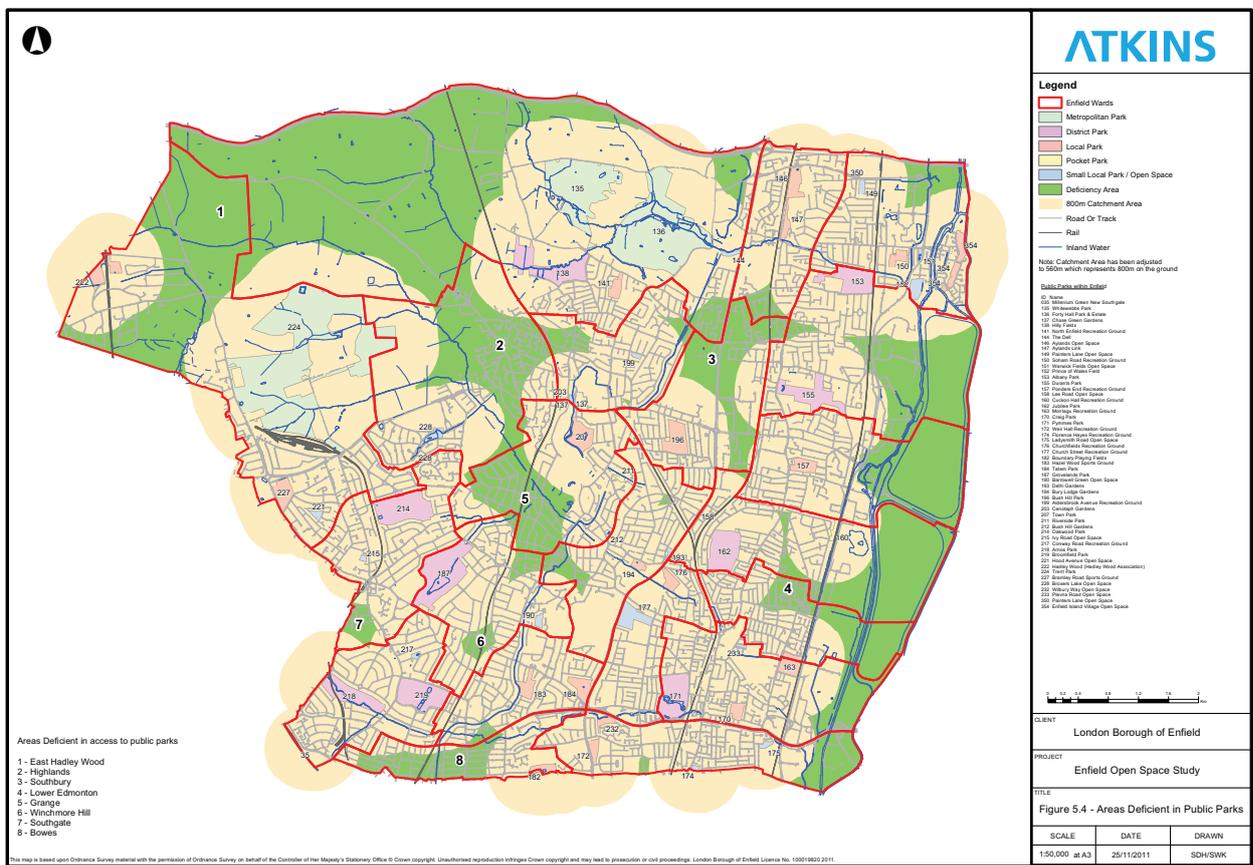
5.1.8 The significance of deficiencies in open space are particularly acute in the south and east of the Borough, in wards which have high deprivation and poor health, high child densities, higher residential densities, (higher proportions of terraced, flats or apartments), and therefore less likely to have access to private garden space. Those deficiency zones in greatest need for open space are Bowes Park, Lower Edmonton and Southbury. Increasing the quantity of public park provision by 16 ha over the Core Strategy plan period would alleviate these existing deficiencies (Open Space and Sport Assessment 2011 update).

5.1.9 Overall, the quality of open space provision across the borough is good, with the majority of open spaces regarded as good or very good, however there is some scope for improvement of those spaces which are identified as currently under-performing in the Open Space Study.

5 Green Infrastructure

5.1.10 To meet the needs of the borough up to 2026 it is recommended that additional public parks are introduced, as far as possible, within the areas of deficiency identified in the Open Space and Sports Assessment. If a small local park, with an average size of 2 ha and with a catchment area of 800m, is introduced in each of the deficiency areas identified, then the total additional public provision that should be provided in order to alleviate all eight access deficiencies is 16ha (eight deficiency areas multiplied by 2 ha park size). It is therefore recommended that the quantity of public park provision should increase by 16 ha, an increase of 2.3% on current public park provision within Enfield.

5.1.11 These new parks may need to be brought forward as new open space sites or through the adaption and redesign of existing spaces. The exact size of parks should reflect development constraints and opportunities. Additional facilities, such as improved children’s play provision and recreational facilities, may also need to be introduced to, for example, site 184 – Tatem Park, to alleviate the access deficiency to District Parks in the centre of the borough.



Map 5.1

Allotments

5.1.12 Allotments were surveyed as part of a site audit (2006). In addition to the information collected on site, Enfield Council provided up to date and detailed information on plots, vacancy and occupancy at each site. Enfield Council own 37 sites of which they are responsible for managing 32. Another five sites are leased by the Council to individual allotment groups Alma Road (Site 52), Aylands (site 47), Clay Hill (site 44), Falcon Fields (site 53) and Gough Hill (site 45). The 32 Council managed sites contain 2,089 plots while the self managed sites contain 766 plots giving a total of 2,855 plots in the borough.

5 Green Infrastructure

- 5.1.13** Most plots have high occupancy rates with the lowest being 93.6% at Green Street Allotments (site 51). The average occupancy rate for all Council managed sites is 97.8% while the same figure for self managed sites is 100%. At present there are 79.2 hectares of actively managed allotment land in the borough, this figure does not include those sites which are currently un-used. An 800 metre catchment area has been used to assess any allotment access deficiencies in Enfield, representing the average distance travelled during a 10-minute walk, as well as the maximum distance that most people are willing to walk before considering other forms of transport.
- 5.1.14** At present, areas of several wards are not well served by the existing distribution of allotment sites including: much of the western part of Town, the northwestern part of Cockfosters, the southern part of Turkey Street, the northeastern part of Southgate, the southern part of Winchmore Hill, the southwestern corner of Southgate Green, the eastern parts of Upper Edmonton and Edmonton Green and the southeastern corner of Jubilee. Two of the twenty one wards have no allotment provision -Turkey Street and Ponders End whilst Chase Ward has the highest provision per household.
- 5.1.15** Existing allotment sites within the borough totalling 79.2 ha and 2,855 plots means that the average plot-size is 0.03 ha or 36 plots per hectare. Based on these figures it is possible that an additional 54.6 ha of allotment land would need to be brought into use to meet existing deficiencies and needs associated with household growth within the borough between 2001 and 2026. It should be recognised that this land requirement assumes that the average size of allotment plots remains the same. Overall it is estimated that between 2001 and 2026 there will be demand for an additional 518 plots arising through demographic changes. It is estimated that 1,010 plots are needed in areas under served by existing provision.

Play Areas

- 5.1.16** Out of a total of 275 open spaces (which does not include school sites) assessed in 2006 and 2011, 46 contain some form of children's play provision and 36 of these sites met one of the criteria for dedicated children's play provision Local Equipped Areas for Play (LEAP) or Neighbourhood Equipped Areas for Play (NEAP); 35 spaces meet FIT LEAP standard and one the NEAP standard.

Type of Children's Play Provision (Excluding Schools)*	No of Open Spaces	% of Total Open Spaces
Local Equipped Areas for Play	35	12.7
Neighbourhood Equipped Areas for Play	1	0.4
Other	10	3.6
No Childrens Play Provision	229	83.2
Total	275*	100

Table 5.2 Formal Children's Play Provision

*Note: Does not include school sites or play pathfinder sites.

- 5.1.17** The London Borough of Enfield was selected as a Pathfinder authority while investment into children's play provision was spread over a two year period. The following table identifies Play Pathfinder sites within the borough.

Year	Pathfinder Play site
Year 1 - Area 1	1. Albany Park

5 Green Infrastructure

Year	Pathfinder Play site
	<ul style="list-style-type: none"> 2. Ponders End Rec 3. Durants Park
Year 1 - Area 2	<ul style="list-style-type: none"> 4. Cuckoo Hall Recreation Ground 5. Craig Park 6. Montagu Recreation Ground
Year 1 Area 3	<ul style="list-style-type: none"> 7. Tottenhall - BoundaryPark 8. Bramley Road 9. Grovelands Park 10. Boxer's Lake
Year 1 - Area 4	<ul style="list-style-type: none"> 11. Bush Hill Park 12. North Enfield Recreation Ground
Year 2 - Area 1	<ul style="list-style-type: none"> 1. Enfield Island Village 2. Radio Marathon 3. Kettering Road 4. Kestrel House - Alma Road
Year 2 - Area 2	<ul style="list-style-type: none"> 5. Pymmes Park 6. Church Street Recreation Ground 7. Wier Hall
Year 2 - Area 3	<ul style="list-style-type: none"> 8. Bury Lodge 9. Hazelwood Sports Ground 10. Arnos Park 11. Hood Avenue 12. High Road Open Space 13. Trent Park
Year 2 - Area 4	<ul style="list-style-type: none"> 14. Four Hills Estate

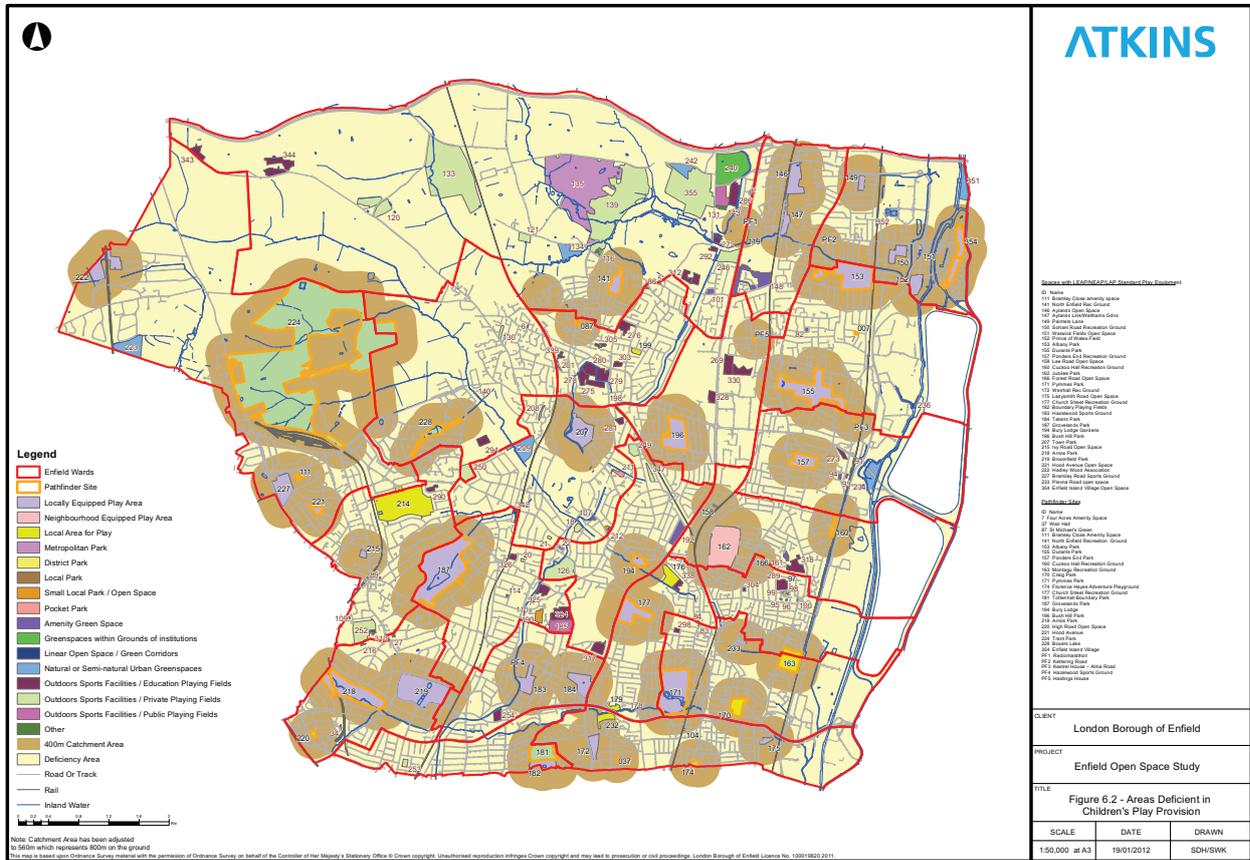
5 Green Infrastructure

Year	Pathfinder Play site
	15. St Michael's Green 16. Hastings House
Adventure Playground	17. Florence Hayes Adventure Playground

Table 5.3 Pathfinder Play Site

- 5.1.18** The present level of children's play provision has been quantified using GLA guidelines for playable space provision i.e. amenity space and informal recreational grassland. Children's play areas are often within another type of green space, for example parks. Therefore, to avoid overestimating the quantity of open space in use as children's play provision, assumptions about the size of play areas have been used. These draw from the 'minimum size' for each formal typology.
- 5.1.19** Based on these assumptions there is currently 16,000 sqm of formal children's play provision within the borough, which is equivalent to 0.27 sqm per child. It should be noted that this figure probably underestimates the true amount of formal children's play provision in the borough as a full site assessment for children's play was not within the scope of this update. Therefore this analysis does not take into account Pathfinder sites. The GLA recommend that open space with an informal recreational role is also taken into consideration. In Enfield this equates to 51.8 sqm per child. Clearly, by taking informal provision into account Enfield is well served by children's play provision when compared to the benchmark standard of 10 sqm per child. However, it is considered that access deficiencies and the low assessed level of formal provision means that there is a need to provide more formal provision in order to meet deficiencies and meet the needs of the future child population, particularly in areas where formal play provision is low. The GLA standard for new development is 10 sqm per child. However, a certain level of formal provision should be included within this 10 sqm standard.
- 5.1.20** To meet the needs of the borough up to 2026 it is recommended that the quantity of formal provision should be increased by some 11,100 sqm. The additional provision is based on maintaining existing formal provision and providing nine new neighbourhood play areas, four new local playable spaces and five new doorstep playable spaces necessary to alleviate those significant deficiencies in access to play provision, illustrated in the Figure below. These may need to be brought forward at new open spaces or through the adaptation / redesign of existing spaces, but should be located to provide maximum benefit in alleviating access deficiencies.

5 Green Infrastructure



Map 5.2

Playing Pitches

- 5.1.21** The 2011 update identified that of the 107 sites assessed, 94 open spaces within the borough had provision for outdoor pitch sports while 84 open spaces had provision for grass pitches.
- 5.1.22** Provision for a range of outdoor sport pitches exists within the London Borough of Enfield, spread across a total of 318 pitches. Provision for football far outweighs other outdoor pitch sports within the borough in quantitative terms. Analysis of the data obtained from site surveys (2011) revealed that there are a total of 248 football pitches, (including full size, junior and mini pitches), 33 cricket pitches (full size and junior), 21 rugby pitches and 15 hockey pitches. It is important to note that this study defines a cricket pitch as the overall cricket 'square' rather than the number of wickets within the 'square'. One pitch was identified with provision for baseball. There is also dedicated provision for junior football, including 69 junior, (6-a-side and 7-a-side), football pitches and 43 5-a-side (mini) pitches, reflecting the relative popularity of junior football within the Borough. However, of the 43 5-a-side pitches identified, only 12 were assessed as having a grass surface.
- 5.1.23** A minimum of 214.5 ha is required to meet the overall playing pitch needs of the borough at 2026. This area is the minimum pitch area required together with an allowance for changing facilities and parking. It should be recognised that some existing playing pitch sites incorporate a greater area of land than this minimum requirement and may include other open space functions and areas not connected to the use of the site for pitch sports, for example areas of scrub, informal grassland, children's play area etc. Playing

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pitches in secure community use is on average fairly good across the borough although the quality of playing pitches could be improved. Improvements are particularly needed in pitch drainage and the provision and quality of changing rooms. Priorities for improvements should be targeted on those strategic sites which support the greatest number of matches.

Assessing Future Needs

- 5.1.24** Future development and underlying population growth in the borough is likely to create an even greater need for forms of open space and sports / play provision, particularly in those identified areas of deficiency. Some of the areas with the greatest deficiencies lie in the south and east of the borough, in areas covered by the North East Enfield, Central Leaside and North Circular Area Actions Plans, where there are also the greatest opportunities for regeneration and the creation of new communities. The creation of new public open spaces and improving existing spaces will therefore be required as part of the regeneration process in these areas.
- 5.1.25** The Area Action Plans provide the most scope for intervention through new development. The Core Policies for Places chapter of the Core Strategy sets out the broad priorities for open space provision in these areas. The Area Action Plans will define the location and manage the delivery of new open space, including their long term funding and management arrangements.
- 5.1.26** Where there are limited opportunities to provide new open space, or when it is more appropriate to consider other options, the Open Spaces Study suggests options for improving the quality, access or adapting other forms of open space for public use.
- 5.1.27** The following strategic opportunities supporting the growth and development proposed in the Core Strategy, have been identified:
- Central Leaside - this area requires a large open space, improved links and access to the Lee Valley Regional Park and for all open spaces in this area to be accessible and of a good quality.
 - North East Enfield - need to improve existing open spaces and create / improve links with the Lee Valley Regional Park.
 - North Circular - need to improve the existing open spaces and create attractive green links.
 - Enfield Town - improve access to existing open spaces.
- 5.1.28** Projects have been identified and are being taken forward within the Regeneration Priority Areas which help contribute towards supporting existing and future community needs by improving and enhancing access to open space. These include:
- The Transformation of Ponders End Park;
 - Columbia Wharf Access to Nature project;
 - New publicly accessible park at Meridian Water; and
 - Improvements to enhance Pymmes Brook.
- 5.1.29** The strategic Green Infrastructure projects are listed in table C.1 of the Infrastructure Schedule. However, further details of schemes within the emerging Area Action Plan and masterplanning areas will be included in an update of this Infrastructure Delivery Plan as and when they are known.

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Open Space Type	Quantity Standard	Area required to meet needs up to 2016	Accessibility Standard	Quality Standard
Public Parks	2.37ha per 1,000 population	724 (including 16ha additional public parks to alleviate deficiencies)	<p>All residents within the borough should have access to a Metropolitan Park within 3.2km from home;</p> <p>All residents within the borough should have access to a District Park within 1.2km from home;</p> <p>All residents within the borough should have access to a Local Park or Small Local Park or Pocket Park within 800m from home;</p> <p>All residents within the borough should have access to an area of public park within 800m from home.</p>	Public parks within the borough should meet the Green Flag 'good' quality standard. Open spaces identified within the Open Space Study for improvement should be prioritised.
Allotment	0.44ha of allotment land per 1,000 population	133.8 ha (including an additional 54.6 ha of allotment land to alleviate deficiencies)	All residents within the borough should have access to an allotment garden within 800m of home.	Allotment sites should be of adequate quality and support the needs of the local community. Allotment sites which under perform in terms of their value to the local community should be improved. Allotment sites identified within the Open Space Study should be prioritised for improvement.
Children's Play	0.44 sqm per child (based on Mayor of London 10 sqm per child)	1.1ha	All residents within the borough should have access to areas of formal and informal play provision for children and teenagers within 400m from home.	Children's play provision within the borough should be of adequate quality and provide the range of facilities associated with the size of the facility.
Playing Pitches	0.7ha of pitch space per 1,000 population	214.5ha	<p>All residents within the borough should have access to a site providing football pitch provision in secure community use within 1.2km from home;</p> <p>All residents within the Borough should have access to a range of other outdoor sports facilities.</p>	Outdoor pitch sports facilities within the borough should be of adequate quality and provide the range of facilities required to meet the needs of sports clubs. Those playing fields identified in the Open Space Study, which either under perform in terms of the range of provision provided or the quality of existing provision, should be improved.

Table 5.4 Open Space Standards

Funding Sources, Timescales and Responsibilities for Delivery

- 5.1.30** The Council has adopted a 10 year Parks and Open Space Strategy that sets out the Council's plans for improving and conserving the borough's parks and open spaces. The Strategy will provide a detailed delivery plan and rolling projects list to prioritise actions, guide Council resources and funding allocations, and identify and deliver projects in order to meet the objectives.
- 5.1.31** A Food Strategy has been produced by the Council to consider aspects of food production and consumption and how they are delivered locally. This Strategy will look at improving existing allotments and new informal growing spaces through the diversification of existing open spaces and new community growing spaces. Opportunities to provide growing space will be considered through the Food Strategy and at a more detailed level in the Area Action Plan and Regeneration Priority Areas.

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5.1.32 Proposals for new development will need to address the additional open space needs generated as a result of the development. Any improvement to open space provision required would be funded by the developer and secured through planning conditions and/ or section 106 agreements.

5.2 Lee Valley Regional Park

Review of Existing Provision and Assessing Future Needs

5.2.1 The Lee Valley Regional Park (LVRP) is a 26 mile long, 10,000 acre linear Park serving a regional catchment including London, Hertfordshire and Essex. In Enfield, the Lee Valley Park spans the length of the eastern boundary. The Park lies within the Central Leaside and North East Enfield Area Action Plan areas of growth identified in the Core Strategy.

5.2.2 The LVRP is a key open space and recreation resource for the borough. The Open Space Study identifies several areas of open space deficiency adjacent to the Park, a situation which is compounded by poor access. The LVRP therefore has a key role to play in providing and enhancing access to open space for local communities and alleviating existing open space deficiencies.

5.2.3 The Lee Valley Regional Park Authority (LVRPA) is a statutory body established by the Park Act in 1966. It has a statutory duty to protect, manage and develop the Lee Valley Regional Park for leisure, recreation, sport, nature conservation and entertainment and for the conservation and enhancement of the Park's natural environment. As part of these responsibilities, the Authority is required to prepare plans for the future use and development of the Park. The plans generally cover a 10 year period. The Authority are in the process of replacing the Lee Valley Regional Park Plan adopted by the Authority in April 2000 with a Park Development Framework (PDF).

5.2.4 Within Enfield, the 2000 Park Plan identifies the need for:

- Pedestrian and cycle links into and across the valley to be clearly defined and enhanced improving access into the Park from surrounding communities.
- The open and green character of the area to be protected and landscape quality throughout to be improved to establish a more attractive character and visual structure to the land bold enough to compete with the scale of buildings and roads.
- Water recreation and waterside activities along the towpath to continue to be developed with visitor services and facilities located at focal points around Rammey Marsh Lock, Enfield Lock and Swan and Pike Pool. Waterway heritage to be conserved and enhanced, particularly at Ponders End conservation area.
- Informal outdoor recreational use and wildlife conservation based on the substantial open space and grassland habitats to be supported on Rammey Marsh. More intensive leisure activities to be accommodated on Rammey Marsh West within an extensive parkland setting.
- King George V and William Girling Reservoirs to be protected and managed as a waterbird reserve of national importance, access to be managed to avoid disturbing the birds.
- Commercial leisure facilities to continue to be developed at Picketts Lock which support sporting excellence and local communities. Ecological interest on the golf course and at Ponders End Lake to be enhanced.
- Land south of William Girling Reservoir to be restored and a comprehensive leisure and recreation scheme achieved for the whole area set within a well landscaped site.

5.2.5 The LVRPA Strategic Business Plan is a key delivery mechanism for the Park Plan, focusing on land and facilities that the Authority owns and manages. This is a 10 year financial and business strategy, and development programme, demonstrating how the LVRPA intend to help deliver its corporate vision. It does not cover the actions of other external partners or interests. The Business Plan undergoes an annual review and is updated every 5 years.

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- 5.2.6** The Strategic Business Plan 2010 - 2020 sits alongside the PDF and identifies a rolling five year programme of projects to deliver the PDF aims, objectives and proposals. This programme is reviewed regularly and represents the Authority's priorities for its land and facilities. All projects undergo a feasibility and business planning process and risk assessment.
- 5.2.7** The first stages of the Park Development Framework have been adopted; the 'Vision Aims Principles (July 2010) and the 'Thematic Proposals' (Jan 2011) which set out broad proposals for the Park's future use and development over the next 10 years. Now the framework is in place, detailed area based proposals are being defined and prioritised in consultation with key stakeholders. The development of area based proposals for the Park in Enfield are underway. Partnership working will be critical to bringing forward projects on land not owned or managed by the Authority and to securing funding for their development and delivery. As proposals are developed through the PDF and stakeholder engagement, the Infrastructure Delivery Plan and Schedule may have to be updated to reflect this.
- 5.2.8** Currently, the Project priorities set out in the emerging PDF within Enfield are focused on:
- Pedestrian and cycle access improvements to and through the Park especially at Swan and Pike Pool close to Enfield Island, at Ponders End and Central Leaside area.
 - Pickett's Lock - proposals include a new primary visitor node, new and enhanced leisure and recreation facilities and new or substantially enhanced visitor accommodation facilities. This project will be delivered through commercial partnership.
 - Resisting the loss of areas of the Regional Park to non park related uses. For example, the site of the existing Camden Aggregates north of the A406 North Circular Road.
- 5.2.9** The Authority's engagement in the Area Action Plans and master planning process for North East Enfield and Ponders End, Central Leaside and Meridian Water masterplan as well as the Upper Lee Valley Landscape Strategy will identify further projects that meet the aims and objectives of the PDF.

Funding Sources, Timescales and Responsibilities for Delivery

- 5.2.10** The main source of finance for the LVRP is from a levy calculated from the council tax base of Hertfordshire, Essex and Greater London. The ceiling for the levy is determined by a formula prescribed in 'The Levying Bodies (General) Regulations 1992 which is adjusted annually to account for inflation. This is reviewed annually through the budget setting process. Other sources of finance include revenue generated from assets / facilities and grant funding, and to a lesser degree, Section 106 agreement contributions.
- 5.2.11** This funding is used both as capital for funding projects and revenue to fund ongoing maintenance of the assets / facilities. The current funding commitments are set out in the Strategic Business Plan and supplementary updates and the rolling projects list. The Strategic Business Plan will be updated through the PDF process and the new financial and business strategy.
- 5.2.12** Projects are only taken forward once grant allocation is confirmed and agreement reached, (as set out in the Authority's Partnership Framework Agreement approved in July 2008). All projects are assessed in terms of their feasibility, funding requirements and the risks associated with development and delivery. The Business Plan, project delivery plans and availability of funding will influence phasing and programming.
- 5.2.13** The LVRPA owns 40% of the land in the LVRP and recognises the importance of partnership working to develop and deliver projects throughout the Regional Park. Key partners include other landowners, government agencies, riparian boroughs, public and private sector bodies and the local community and voluntary sector.

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5.3 Waterways

Review of Existing Provision and Assessing Future Needs

- 5.3.1** Enfield has more water space than any other London borough, including reservoirs, rivers and the River Lee Navigation. This provides a valuable educational, tourism, heritage, transport, leisure and recreational resource for residents, visitors and businesses. A number of organisations have duties to manage, maintain and promote the positive use of waterways. The Environment Agency and the Canal and River Trust (formerly British Waterways) are two key bodies responsible for the waterway environment in Enfield.
- 5.3.2** Under the requirements of the European Water Framework Directive (WFD), the Environment Agency has produced River Basin Management Plans (RBMP). The RBMPs look at pressures facing the water environment, and the actions that will address them, in order to deliver a better water environment. The current RBMPs represent the first of a series of six-year planning cycles. As the RBMP cycles progress, more detailed plans will emerge.
- 5.3.3** The Thames River Basin Management Plan (2009) includes an assessment of the waterways in the London catchment. The London catchment covers the lower River Lee and its main tributaries, including Pymmes and Salmon Brooks. Within the London catchment, the key issues identified are poor water quality and habitat diversity. The key actions to address these issues in Enfield include: pollution prevention projects on Pymmes Brook and Brimsdown Ditch, planned improvements at Deephams waste water treatment works, (discussed further in section 3.3), and working with Natural England to implement the London Rivers Action Plan. As highway authority, the borough plays a lead role in ensuring diffuse pollution from highway run off is managed better through removing silts before they are discharged into Enfield water courses. Discharges of nutrient rich effluent from Thames Water operations in Enfield also has a major cumulative impact upon the health and attractiveness of water bodies for leisure and requires a sustainable plan for water quality improvement on the River Lee Navigation.
- 5.3.4** Work has been undertaken to replace the sluice gates on the River Lee Flood Relief Channel and environmental enhancement (pond creation and restoration) on Ramme Marshes. These works maintain the operation of these sluices, and level of protection which the Lee Flood Relief Channel (LFRC) provides and provide habitat creation in the form of ponds to contribute to Biodiversity Action Plan targets. The Environment Agency has indicated that current project priorities within Enfield are as follows:
- Flood Alleviation Scheme along Salmons Brook to reduce the risk of flooding.
 - The Environment Agency has concluded that the installing of hydro-dynamic separators to improve water quality along Brimsdown Ditch is not feasible due to site constraints and the cost of installation and ongoing maintenance. Alternative potential sites are therefore being investigated.
 - Exploring the potential to undertake feasibility work for a river restoration project along section of Pymmes Brook which goes through Arnos Park. This project is highly dependent on the availability of funding.
 - Potential Pymmes Brook Flood Alleviation Scheme identified in the Lower Lee flood risk management strategy.

River Lee Navigation

- 5.3.5** The Canal and River Trust is responsible for maintaining and managing over 2,000 miles of canals and rivers in England and Wales, including the River Lee Navigation in Enfield. The River Lee Navigation forms part of London's waterway network running from Hertford in the north down to East London, where it joins the Bow Back Rivers (which run through the new Queen Elizabeth Olympic Park), the Hertford Union Canal, Limehouse Cut and the River Thames.

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- 5.3.6** The Canal and River Trust's assets in Enfield include the River Lee Navigation, and its towpath, bridges, locks, weirs and other associated infrastructure. The Trust has operational land including the Enfield Waterways office, and non-operational land such as Columbia Wharf and land adjacent to Pickett's Lock, (the lock itself is operational, but the leased land adjacent to it is not).
- 5.3.7** In terms of forward planning, the Canal and River Trust undertake a thorough rolling inspection programme, which establishes the condition of their waterway assets, and informs the prioritisation of maintenance works.
- 5.3.8** Within Enfield work has been undertaken to the waterway environment adjacent to the Harbet Road Industrial Estate to improve its shared use towpath and the amenity of this resource. However there remains scope to improve the towpath environment, particularly with a more strategic redevelopment / configuration of the industrial estate.
- 5.3.9** Other important planning tools are waterspace strategies, which indicate the Canal and River Trust's and other stakeholders' aims and objectives for a particular canal, river, basin or dockside area. The North London Strategic Alliance's Upper Lee Valley Landscape Strategy includes a waterspace strategy as an appendix which details a number of projects. A waterspace strategy should address social exclusion and sustainability, enhance heritage and ecology assets, and leisure and recreation opportunities, and to influence design of waterside development to help achieve these aims. It should also recognise the towpath as a shared use leisure route, with pedestrian priority. It provides a framework for proposals / actions to be prioritised and implemented over a number of years, and for attracting partnership funding and support. Documents should be designed to be dynamic and adaptable over time, and the solutions offered are therefore not fixed.
- 5.3.10** Key existing issues along the Lee Navigation within Enfield include providing Disability Discrimination Act (DDA) compliant accesses and bridge links, water quality improvements and the general enhancement of the towpath surfacing and waterway environment. An increasing population, as predicted within the Regeneration Priority Areas, will put significant additional pressure on public spaces within Enfield, such as the Navigation and its environment. New residents and occupiers of these regenerated areas will also have increased expectations of the current maintenance of the Canal and River Trust's assets, as experienced elsewhere, which will place an additional burden on their maintenance programme, requiring a borough investment approach, particularly for walking and cycling.
- 5.3.11** The Canal and River Trust will continue to undertake improvements and maintenance works itself and through a borough partnership to benefit Enfield residents, visitors and businesses throughout the River Lee Navigation such as the renewal of locks, mechanical and electrical equipment, improvements to the towpath from Enfield Lock heading north to the M25 and to the towpath in Edmonton.

Funding Sources, Timescales And Responsibilities For Delivery

- 5.3.12** The majority of Environment Agency led project funding comes from government, specifically the Department of Environment, Food and Rural Affairs (DEFRA); the remaining funding comes from various charging schemes. However projects, particularly environmental and river restoration projects, are often delivered in partnership with other stakeholders. Therefore, funding would be drawn from a number of partners.
- 5.3.13** Funding for projects is allocated on a yearly basis, with projects plans being refreshed annually. Funding has been committed for replacement sluice gates and environmental enhancements on Rammey Marshes, Salmon's Brook Flood Alleviation Scheme (discussed further in section 3.3), and for initial feasibility study for work along Brimsdown Ditch.
- 5.3.14** On 2 July 2012 British Waterways became a new charity called the Canal and River Trust. This move to the civil society, in line with the Localism Act's aims to decentralise such public organisations and empower communities, will secure the long-term financial sustainability of the waterways, providing new opportunities for growing income from voluntary giving, new commercial opportunities, through efficiencies and growth in volunteering. A board of trustees have been appointed to govern the new charity as well as establishing

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new strategic priorities which became effective from the end of June 2012. Instead of a grant from Defra, the Canal and River Trust has a 15 year contract for a grant, which although less than previously received by British Waterways, provides longer term security and enables the Trust to plan ahead, whilst becoming a charity opens up other opportunities for fund raising.

- 5.3.15** Projects are generally prioritised in accordance with Major Works or General Works programmes or in response to regeneration strategies. The Major Works three year rolling plans prioritise projects in advance depending on the rate of change, funding required, consequence of failure and other factors; whilst General Works addresses smaller scale, annual maintenance and improvement priorities.
- 5.3.16** Funding for specific projects is dependent on the type of project and its objectives, and what funding is available. Typically, large projects are funded or delivered in partnership with a number of external bodies, including the Council, since local residents, visitors and businesses are the main beneficiaries.

6 Regeneration Priority Areas

REGENERATION PRIORITY AREAS

6.0.1 Within Enfield Borough it is proposed that growth be focused within the following 4 locations;

- Central Leaside, including Meridian Water
- North East Enfield, including Ponders End
- North Circular, including New Southgate
- Enfield Town, including Enfield Town Station

6.0.2 In addition a fifth location, Edmonton Green, has been designated as a Masterplan area. Figure 2.1 identifies the proposed Strategic Growth Areas/Area Action Plan Areas and Regeneration Priority Areas

6.0.3 The Council's proposals for each of these areas are discussed in detail in Chapter 9 of the Core Strategy. Drawing from the information contained in the previous themed sections of the document, this section of the IDP seeks to highlight those infrastructure schemes that will be required to deliver the proposed levels of growth in each of these locations. The infrastructure detailed in the accompanying Infrastructure Schedules are not intended to be an exhaustive list of schemes within each Regeneration Priority Area, but those that are significant in seeking to achieve sustainable communities.

6.1 Central Leaside Including Meridian Water

6.1.1 Development Proposals

6.1.2 Central Leaside Regeneration Priority Area is a large area covering 392 hectares of largely industrial land to the east of the borough, bordering Haringey to the south and Waltham Forest to the east. Located between the established communities of Angel Edmonton, Edmonton Green and Tottenham, it is an area where significant levels of growth are proposed in the medium to long term. The growth proposed in this area will establish a new community and seek to act as a catalyst in delivering transformational change which will benefit the wider area. One of the most significant regeneration opportunities in Enfield and covering Picketts Lock, Deephams Sewage Treatment Works, the Edmonton Eco Park and the industrial estates in between. Core Policies 37 and 38 of the Core Strategy set out the strategic aims to deliver growth within Central Leaside including Meridian Water. Meridian Water, one of the Council's flagship scheme, entails a £1.3 billion redevelopment of the area around IKEA and Tesco in Edmonton to create up to 5,000 new homes and 3,000 new jobs. Meridian Water will therefore be transformed, building a strong and sustainable neighbourhood through the introduction of housing, retail, other town centre uses, schools and new jobs.

6.1.3 Redevelopment opportunities in Central Leaside go beyond Meridian Water. Significant regeneration and redevelopment opportunities include upgrade works to the existing Deephams Sewage Treatment Works and development of the Edmonton Eco Park to provide the next generation of waste services and generate additional community benefits through the provision of heat for a decentralised energy network in the Upper Lee Valley.

6.1.4 Central Leaside suffers from poor internal and external connectivity despite being relatively well served at the strategic level and much of the area has low access to public transport. Enabling movement and improving transport connections between Central Leaside and its surroundings to make the area a joined up place in the Upper Lee Valley will be essential to secure sustainable development for residents, workers and visitors. The area is characterised by employment uses and it will be important to facilitate economic growth through improvements to industrial land while recognising the importance of retaining land available for industrial uses.

6.1.5 In order to facilitate the above development, the following key infrastructure requirements have been identified:

6 Regeneration Priority Areas

1. **Improvements to the road network** -The majority of the housing growth for Central Leaside will be in Meridian Water over the medium to long term. The London Borough of Enfield, together with Transport for London, have commissioned the Upper Lee Valley Transport Study. The study addresses the cumulative impact of growth and is being used to inform the Central Leaside Area Action Plan (AAP). The following roads infrastructure has been identified in order to provide a new east-west connection in the Meridian Water Regeneration Area; construction of a new spine road at an estimated cost of £1.5m and bridge connections across waterways to transport hubs and neighbouring areas (£2.45m) and an upgrade to an underpass (£250k).
2. **Improvements to public transport** - Network Rail has plans to increase the frequency and number of trains to Enfield, Cheshunt and Chingford on the West Anglia Main Line, which will provide additional services between the airport and Liverpool Street and between Stanstead Airport/ Hertford East and Stratford. To improve access to the east of the borough, the Council together with Network Rail, are examining options for the replacement of level crossings on the West Anglia Main Line. Amenity and access improvements to stations, particularly Angel Road (estimated cost £5m) are also planned, together with improvements including a pedestrian bridge spanning the railway line from which access can be made to the station on both sides – cost £2.2m; improvements to the station environment, passenger information and station security. Interchange arrangements with different modes of transport at stations such as taxis and buses, will also be enhanced. In terms of bus services, the Upper Lee Valley Transport Study will address the demand and need for additional services.
3. **New educational facilities** - The Core Strategy refers to a new six-form entry secondary school (including 60 part time nursery places) and two new primary schools will also be needed to facilitate the growth in pupil numbers. Latest indications are that the demand will necessitate provision of one primary school with nursery and one all through school (aged 3 to18). These facilities will be identified in the Central Leaside AAP.
4. **New health facilities** - A new health facility is proposed as part of a community hub at Meridian Water. This will include a modern GP Practice.
5. **New community facilities** - It is proposed that a community hub at Meridian Water includes a new library and a police facility as well as local shops. Access from Central Leaside to Lee Valley Park will be improved with better cycling and walking connections creating identity and prominence for leisure and recreation opportunities. The growth agenda in Central Leaside will also result in the need for an additional public park, the details of which will be contained in the Central Leaside AAP.
6. **Flood Mitigation Works:** Flood prevention and management strategy will include flood storage green space areas with developer contributions for these measures passed to Thames Water.
7. **Low carbon future** - Securing sites in the area as energy generation hubs to kick start a decentralised energy network where businesses and residents will benefit from the availability of cheap and low carbon energy. The North London Decentralised Energy could be the largest network in London.

6.1.6 The planning framework for Central Leaside including Meridian Water will be set out in the Central Leaside AAP. This is currently timetabled for independent examination in the Summer 2013. A Masterplan has also been prepared for the Meridian Water area which will inform the final version of the AAP. The infrastructure needs, costs and delivery arrangements identified through the AAP and Master planning will inform subsequent updates of this IDP.

6 Regeneration Priority Areas

6.2 Edmonton

Development Proposals

- 6.2.1** Edmonton Green is located along the A1010 Growth Area corridor and has huge potential for change. It is a major transport interchange, a district town centre in need of regeneration, and has a number of heritage assets. To the south, Angel Edmonton District Centre, residential areas, commercial and business areas contribute to the character and function of the area. There is a range of complex and persistent social, economic and physical issues facing Edmonton Green and these must be addressed in an integrated way.
- 6.2.2** Since 1997, Edmonton Green has been the focus of extensive regeneration work under the “pathfinder” programme. Under the Edmonton Partnership Initiative, the area has benefited from housing renewal; a new leisure centre; improvements to the shopping centre; a major transport interchange; new health centre and environmental improvements to Salmons Brook. However environmental and socioeconomic issues persist and there is potential to build on the work already undertaken to create a comprehensive planning framework for Edmonton Green.
- 6.2.3** Regeneration will therefore be guided through the preparation of an Area Action Plan which will aim to:
- Clearly define the function and role of Edmonton Green town centre and its relationship with Angel Edmonton, Tottenham Hale, Wood Green and Meridian Water;
 - Improve the shopping environment with a range of different town centre uses such as shops, cafes, evening economy, hotels, restaurants, culture, offices and civic functions and leisure uses;
 - Create new jobs and better links to existing jobs, including linking this to town centre improvements and opportunities;
 - Focus on young people through education, up-skilling, schools, outreach work and job opportunities;
 - Improve the quality of, and access to, open spaces and parks;
 - Improved access to the station through improved pedestrian and cycle links through the area; and
 - Improve the east-west connectivity across the area.
- 6.2.4** As specific detailed site proposals emerge, the IDP and IDP Schedule will contain further updates.

Improvements to the Streetscape and Public Realm

- 6.2.5** Outcomes from the preliminary Edmonton Green Urban Design and Traffic Study present a number of options for meeting the proposed aspirations for Edmonton Green. The first is an Enhanced Existing option. This provides public realm and streetscape enhancements largely within the existing highway layout and maintains the War Memorial in its existing location.
- 6.2.6** The second is the Reduced Roundabout option. This reduces the size of the roundabout but maintains all traffic movements and junction capacity. Significant public realm enhancements can be achieved; however, this does require relocation of the war memorial.
- 6.2.7** The third and final is the Comprehensive Redesign option. This also offers sizable public realm enhancements and involves converting the existing roundabout to a three arm traffic signal junction with pedestrian green man facilities. Although this improves interchange between the town centre / bus station and the rail station, traffic (including buses) will encounter significant extra delay and access to the bus station for buses will be severely compromised.
- 6.2.8** The preferred option for the Masterplan has yet to be defined but when it is known this will be reflected in further updates of this IDP and the accompanying schedule. A package of Streetscape, Public Realm and transport improvements were developed for the wider area that complement those identified for The Broadway / The Green. The key ones are set out below and can be implemented as and when approved and funding becomes available;

6 Regeneration Priority Areas

1. Relocating two stopping buses services from Bus Stop G into the main bus station in order to relieve congestion at the existing bus stop.
2. Creating an all round green man pedestrian stage at The Green / Northern Bus Station Access providing improved facilities for pedestrians.
3. Additional cycle parking near rail station and dedicated cycle track linking station to Toucan Crossing on Fore Street near Bridge Road.
4. Improved bus stop environments.
5. Reallocating road space on The Green to create wider footways and reduce severance.
6. Enhanced public space on entrance to shopping centre.
7. Linking of the traffic signals to reduce delay and generate additional network capacity.
8. Traffic calming and streetscape improvements on Plevna Road;
9. Redevelopment of part of car park on Fore Street;
10. Comprehensive review of street furniture with a view to reducing street clutter – for example, guard railing and signing reviews.
11. Enhancing walking route along Salmon's Brook.

Improvements to Public Transport

6.2.9 Improvements to Edmonton Green Station are progressing and work is about to commence on the provision of two lifts to provide additional accessibility to and from the platforms. As and when developments become inhabited in the Edmonton Green, Ponders End and Meridian Water area, major improvements will be sought in creating brand new station entrances at Edmonton Green and Silver Street to deal with the high number of commuters proposed. Further updates of this IDP and the accompanying IDP schedule will be made as and when the Masterplan is finalised.

New Education Facilities

6.2.10 Pupil number projections for the Edmonton area including Meridian Water indicate the need for a new secondary school and two new primary schools as part of the Meridian Water development. Prior to these schools coming forward, additional primary school places are needed to accommodate the increased population in the Edmonton area generally. These are being provided through a combination of the Authority's Primary Expansion Programme and new academies/free schools, financed through the Council's Capital programme, developer contributions and the Government's Academy Programme.

6.3 North East Enfield Including Ponders End

Development Proposals

6.3.1 The North East Enfield Regeneration Priority Area lies to the immediate north of Central Leaside. The eastern part of this area is defined by prominent employment areas including an important Brimsdown Industrial Estate Strategic Industrial Location (SIL) and Innova Park with the remaining area predominantly characterised by residential development and local centres and neighbourhoods. Central to the area is the Hertford Road (A1010) which acts as a community spine with a diverse mix of neighbourhoods that have, over time, become established around the local shopping centres and community facilities that run along this corridor. Core Policies 41 and 42 of the Core Strategy set out the strategic aims to deliver growth in this area, with the focus for growth proposed in the Ponders End Regeneration Priority Area.

6.3.2 The North East Enfield Regeneration Priority Area will deliver up to 1,000 new homes in the short to medium term. The existing SIL's will be retained, with Innova Park being expanded.

6.3.3 In order to facilitate the above development, the following key infrastructure requirements have been identified:-

1. **Improvements to the strategic road network** - Improving access and movement within North East Enfield is a key task. Options being considered include a Northern Gateway Access Package (NGAP)

6 Regeneration Priority Areas

to improve the link between the local road network and the M25; improvements to bus routes, walking and cycling. In the short term, the objective will be to maximise the efficient use of the existing road network. The Core Strategy Transport Assessment highlighted potential problems along the A1055 Meridian Way/ Conduit Lane/ Montagu Road resulting from the growth scenarios to be addressed in more detail as part of the preparation of the North East Enfield Area Action Plan. A detailed transport assessment will be undertaken to investigate this further and provide options for alleviation.

2. **Improvements to public transport** - Various options were considered in London & South East Rail Strategy 2011 for improvements needed to West Anglia main line in order to accommodate the Stansted Express, as well as improving the frequency of trains stopping at stations to provide a minimum requirement of four stopping trains per hour. Station enhancements are planned at Brimsdown, Southbury, Enfield Lock and Ponders End. The Stratford / Tottenham / Angel Road (STAR) scheme involving the Council / rail operators & TfL is considering various options for meeting list of requirements and subject to Network Rail viability scheme. The north-south bus services will be enhanced, improving access along the A1055 corridor. As part of the preparation for the Upper Lee Valley Opportunity Area Planning Framework the Council and TfL commissioned the Upper Lee Valley Transport Study. The Study addresses the cumulative impact of growth across the Upper Lee Valley.
3. **New cycle routes** - The extension of the National Cycle route 12 from Hadley Wood to Enfield Island village is proposed. This will be a joint venture between the Council and Sustrans. The new development areas will also incorporate cycle tracks with connections to the wider area. This will be developed as part of the master planning approach in Ponders End.
4. **New educational provision** - The Oasis Academy Hadley has been relocated to the former gas holder site, South Street, Ponders End. This new facility comprises a two form entry primary school, 60 part time nursery places, and an 8 form entry secondary school and a sixth form. The accommodation vacated at Bell Lane is to re-open as an all-through academy admitting primary pupils in September 2013 and secondary aged pupils a year later.
5. **Improved access to health care** - Working in partnership with Enfield Council, the local NHS is re-locating the Ordnance Road Surgery in to a new purpose built Joint Service Centre on the existing Ordnance road library site. The GP surgery, along with a Dental suite, Library and community hall will make up a range of services offered to people living in or around the Enfield Lock area.
6. **Housing development opportunities** - There is significant potential for new housing development at Ponders End with sites such as the former Middlesex University site and the Alma Housing Estate renewal project including Academy Street.
7. **Access and amenity improvements to Lee Valley Regional Park** - Cycle and walking routes will be improved within Lee Valley Regional Park, with connections to the wider area. Opportunities to access the Park have been identified at Enfield Lock and Ponders End through the provision of green corridors. Additional routes for people to access Gunpowder Park from Enfield Lock have also been identified. This will result in improved access and recreational facilities. Ponders End Park has been upgraded with new facilities including a running path, outdoor gym, a community orchard and picnic area.

6.3.4 More detailed site specific information on the infrastructure required to deliver growth in the area will be provided in the North East Enfield AAP that will be prepared following analysis of the consultation responses received on the NEAAP Interim Direction Document.

6.3.5 The Infrastructure outcomes arising from ongoing work on the North East Enfield AAP and potential Planning Briefs for Ponders End will inform subsequent updates of this IDP and accompanying schedule.

6 Regeneration Priority Areas

6.4 North Circular Including New Southgate

Development Proposals

- 6.4.1** The North Circular Regeneration Priority Area is in the south west of the borough. It is an area that is predominantly residential in character and one that has suffered from lack of investment, resulting in blight and a poor environment, created by uncertainty relating to Transport for London's (TfL) historical road improvement plans and schemes which, over a period of many years, had been promoted but never delivered along this stretch of the A406 North Circular Road. Core policies 44 and 45 sets out the strategic aims to deliver growth within the area surrounding the North Circular in the vicinity of New Southgate and the Ladderswood Estate.
- 6.4.2** The Council has committed to deliver new housing in the area that matches local need and which is delivered in parallel with the right balance of community facilities and infrastructure that supports the population growth new homes will bring. The Core Strategy envisaged that approximately 2,000 new homes will be delivered across the North Circular Area Action Plan (NCAAP) area within the plan period. The NCAAP reviews the level of housing growth and has identified some 19 sites that would have the capacity to deliver 1,300 new homes.
- 6.4.3** The Ladderswood Estate renewal project and the Western Gateway sites in the New Southgate area provide the most significant opportunity for new homes towards the west of the AAP area. The previously safeguarded land for the historical major road widening plans no longer pursued by TfL and subsequently transferred to Notting Hill Housing Trust in 2010 will now also deliver significant levels of housing, partly through refurbishments and new homes along the Bowes Road NCR corridor.
- 6.4.4** The North Circular, including New Southgate, has eight regeneration areas which will deliver up to 2000 new homes. These are:
- The Ladderswood Estate
 - The Western Gateway – Gasholder Site
 - The Western Gateway – Homebase Site
 - The Western Gateway – Topps Tiles Site
 - New Southgate Station Area
 - Arnos Grove Station Area
 - The Care Home / Bomby Open Space Area
 - Properties facing onto the A406.
- 6.4.5** In order to facilitate the above development, the following key infrastructure requirements have been identified:
1. **Improvements to the strategic road network** - TfL's A406 Safety and Operational Improvement Scheme was implemented in 2012. Although addressing some issues it does not deal with the fundamental issue of lack of capacity. The Council has already evidenced through the Core Strategy that investment in improvements to the A406 beyond those currently being delivered by TfL are not essential to deliver the planned strategic housing growth, i.e. the current capacity of the A406 alongside a shift towards more sustainable travel patterns can support the new population growth. However, further options for smoothing traffic flow along the North Circular Road, especially at critical junctions between Green Lanes and Bounds Green, still need to be investigated.
 2. **Enhanced public transport facilities:** The area between Bounds Green and Arnos Grove benefits from stops on the northern extent of the Piccadilly line and the bus services that support them. It is the AAP's more accessible area given the combination of tube and bus services. Interchange enhancements are planned for New Southgate Station, improving the linkages between different modes of transport. Improvements to bus services/ guided buses are proposed, including the diversion of routes into the development sites. Improvements to the entrance, car parking and general safety

6 Regeneration Priority Areas

of New Southgate Station and Arnos Grove Stations are highlighted as priorities within the New Southgate Master Plan.

3. **New health care provision** - Providing for modern health care facilities is seen as a local priority. Coppicewood Lodge care home is identified as a suitable option for a new walk-in centre once the care home is closed and residents relocated. Additionally, Southgate Town Hall is identified as an appropriate site to potentially accommodate medical provision. Three practices currently housed in sub standard accommodation in the Southgate area of Enfield have presented a proposal to re-locate into a development on the Southgate Town Hall site. The existing facilities can no longer support the increasing and diverse needs of the practices' patient population and restrict the potential for expanding the range of services provided. In addition, the potential of a new shared health facility on the ground floor of Bowes Road Library for Sexual Health / Physiotherapy services is also under consideration, subject to feasibility, access and parking arrangements.
4. **New educational opportunities:** Population forecasts and school places projections will require the creation of additional pupil places at Garfield Primary and Broomfield School. The Council continues to review its Primary School Strategy. Recent studies have confirmed that Garfield Primary School has capacity for additional forms of entry and the Council is in the process of exploring the feasibility of this in more detail. Additional primary age provision is also being explored with the Governing Body of Broomfield School (a foundation school). Temporary works are being undertaken to Bowes Primary School to ensure it can meet current demand and other nearby schools serving the area, Oakthorpe Primary School, and also outside the NCAPP area such as Walker Primary School in Southgate may play a role in ensuring increased demand is met.
5. **New community facilities** - The community centre at Trinity at Bowes Methodist Church already has existing youth facilities. These facilities have now been enhanced with a new sports hall, gym, dance studio, IT and media rooms. The dual use of existing public buildings, including schools, for additional community facilities is also being explored. Garfield School currently provides some dual use functions. Improvements to Bowes Road Library, Arnos Pool and Bowes Clinic are also a local infrastructure priority. The protection and potential expansion of community uses at Southgate Town Hall have been highlighted in the Planning Brief, as explained in point 3 above. In addition, through the redevelopment opportunity at Bowes Road / Wilmer Way, the NCAAP is promoting flexible community provision.
6. **Improved access to public open space:** The local network of open spaces in New Southgate, including Arnos Grove, Millennium Green, High Road, Grove Road, Cheery Blossom Road, Salmons Brook and the Ladderswood Estate will be strengthened through improvements to existing spaces and the creation of new spaces where appropriate.

6.4.6 More detailed site specific information of the infrastructure required to deliver growth in the area will be provided in the North Circular AAP that is currently being produced. The infrastructure outcomes arising from ongoing work on the NCAAP and the Masterplan will inform subsequent updates of this IDP and accompanying Schedule.

6.5 Enfield Town Including Enfield Town Station

Development Proposals

- 6.5.1** Enfield Town is the main destination for shopping, leisure, entertainment and cultural activities within the borough. The Regeneration Priority Area seeks to maximise development opportunities which enhance and maintain the role that Enfield Town centre plays in serving the needs of the borough's various communities. Core policies 42 and 43 of the Core Strategy set out the strategic aims to deliver growth within Enfield Town, including the area around Enfield Town Station.
- 6.5.2** The town centre has the potential to accommodate 500 new homes and deliver 41% (7,810 sqm) of the Borough's comparison shopping and other town centre uses growth. In order to facilitate this development, the following key infrastructure requirements have been identified:

6 Regeneration Priority Areas

1. **Improvements to the strategic road network** - A comprehensive traffic model is being developed for Enfield Town. This will investigate improvements to the traffic flow, pedestrian environment, strategic walking routes, public transport interchanges and street scene.
2. **Encouraging sustainable forms of transport** - The Greenways route, Enfield to New Southgate, will provide a cycle and walking route passing through and connecting parks and green areas. The scheme will include new and improves paths to allow shared use; cycle crossing facilities; improved lighting; signing and junction improvements. Funding for the project has been secured from the Council's Capital Programme and Sustrans.
3. **Improvements to public transport** - Environmental and amenity enhancements are planned at Enfield Station including improved interchange arrangements.
4. **New educational facilities** - The growth agenda will result in the need for up to 'two forms of entry' primary provision, including 60 part-time nursery places. This provision will most likely be provided as an addition to an existing facility although a new school is a possibility.
5. **New health & social care facilities** - A new neighbourhood health centre is planned for the town centre. This facility will serve up to 50,000 patients and could potentially be funded from a variety of sources including developer contributions. A new carers centre will also be developed in Baker Street.

6.5.3 More detailed site specific information on the infrastructure required to deliver growth in the area will be provided in the Enfield Town Area Action Plan. A Masterplan is also being produced for the area surrounding Enfield Town Station; the Masterplan will be adopted as a Supplementary Planning Document following the adoption of the Core Strategy. The timetable for the production of the AAP and Masterplan is set out in the Council's Local Development Scheme. The infrastructure outcomes arising from ongoing work on the Enfield Town Area Action Plan and Masterplan will inform subsequent updates of this IDP and accompanying IDP schedule.

7 Conclusions

7.1 Conclusions

- 7.1.1** This is the second IDP that has been produced by the Council, it identifies the various forms of infrastructure that will be required to support the delivery of the Core Strategy of the Local Development Framework and where known, anticipated timescales, funding sources and responsibilities for delivery.
- 7.1.2** This IDP forms the baseline from which the monitoring and delivery of infrastructure can be assessed. The document is accurate at the time of writing, however, it should be noted that the nature of projects detailed may change, together with funding sources and timings; particularly as more detailed infrastructure information emerges as a result of the Area Action Plans and master planning processes. This IDP highlights those instances where funding and other delivery requirements are unknown or there are likely to be shortfalls. However, the very purpose of this document is to continue, and in some cases begin, a process of dialogue with infrastructure providers, in seeking to align infrastructure priorities within the various plans and strategies. The IDP and accompanying schedule will continue to be updated on a regular basis as part of the preparation of the Council's Monitoring Report. Since the initial 2010 IDP the accompanying Infrastructure Schedule of schemes has been revised. Schemes listed in the accompanying have been updated or added as necessary. Further iterations of the IDP will continue to take account of the various investment programmes of individual infrastructure providers, as the Core Strategy moves through its time-line towards 2026. Schemes that have been completed or are no longer being progressed will be shown on a separate table that will be added to the final version of this IDP.
- 7.1.3** The Council's Strategic Planning and Design Team lead on the development and delivery of the Local Development Framework and the preparation of the IDP to coordinate the phasing of new infrastructure. Working closely with the Neighbourhood Planning team, the Strategic Planning team is the main vehicle by which the Council will manage the relationship with external stakeholders and infrastructure delivery agencies, build the confidence of current and potential investors, and influence and inform at subregional and regional levels.
- 7.1.4** The IDP is used by Council services and infrastructure providers external to the Council in planning for and prioritising future infrastructure investment, and to explore opportunities for co-location in seeking to meet the growth objectives defined in the Core Strategy.
- 7.1.5** In addition, the IDP helps to inform the Council's approach to seeking contributions from developers in terms of setting out the infrastructure needs to deliver growth within an area. The emerging Community Infrastructure Levy (CIL) will enable the Council to seek contributions that can be used to help fund infrastructure where there is an identified funding gap. Revisions made to the IDP has helped in establishing the cost and funding position for infrastructure provision required to support growth. It has clearly identified the existence of a funding gap and as such represents important evidence used as a basis for justifying the Council's proposed CIL levels.

7 Conclusions

List of Consultees

A List of Consultees

External Providers

- Barnet and Chase Farm Hospitals NHS Trust
- Barnet and Southgate College
- Canal and River Trust
- Capel Manor College
- CGMS (on behalf of the Metropolitan Police Authority)
- College of Haringey, Enfield and North East London
- Enfield Ambulance Service
- Enfield Fire Brigade
- Enfield NHS North Central London
- Environment Agency
- FECA (Federation of Enfield Community Associations)
- Lee Valley Regional Park
- Metropolitan Police Authority
- Middlesex University
- National Grid
- North Middlesex University Hospital NHS Trust
- Post Office
- Southgate College
- Thames Water
- Transport for London
- UK Power Networks (formerly EDF Energy Networks)
- Veolia Water

Council Services

- Adult Health and Social Care
- Community Access, Childcare and Early Years
- Corporate Asset Management
- Cultural Services
- ECYPS (Enfield Children and Young Persons Service)
- Education, Children's Services and Leisure (ECSL) Policy
- Emergency Planning
- Environment and Street Scene Asset Management
- Environmental Health
- Highway Service
- Leisure Service
- Library Service
- Museums Service
- Neighbourhood Regeneration
- Parks Business and Development Unit
- Public Health
- School Improvement Service
- Sport and Recreation
- Strategic Planning and Design
- Sustainable Communities
- Urban Design and Heritage
- Traffic and Transportation
- Youth Support Service

Acronyms

B Acronyms

AAP	Area Action Plan
ADASS	Association of Directors of Adult Social Services
ALGG	All London Green Grid
AMR	Authority Monitoring Report
AMP	Asset Management Plan
ADSL	Asymmetric Digital Subscriber Line
AQMA	Air Quality Management Area
BFQP	Brimsgate Freight Quality Partnership
CHP	Combined Heat and Power
CIL	Community Infrastructure Levy
CLG	Communities and Local Government
CQC	Care Quality Commission
CSA	Child Sufficiency Assessment
CSCI	Commission for Social Care Inspection
DCSF	Department of Children, Schools and Families
DCLG	Department for Communities and Local Government
DDA	Disability Discrimination Act
DEFRA	Department of Environment Food and Rural Affairs
DEN	Decentralised Energy Network
DFES	Department for Education and Skills
DfT	Department for Transport
DPD	Development Plan Document
EH	English Heritage
FECA	Federation of Enfield Community Associations
GLA	Greater London Authority
HLF	Heritage Lottery Fund
IDP	Infrastructure Delivery Plan
IMD	Index of Multiple Deprivation
JSNA	Joint Strategic Needs Assessment
LDA	London Development Agency
LFEPa	London Fire and Emergency Planning Authority
LFRC	Lee Flood Relief Channel

B Acronyms

LGA	Local Government Association
LIP	Local Implementation Plan
LOOP	London Outer Orbital Loop
LSC	Learning and Skills Council
LT	London Transport
LVRPA	Lee Valley Regional Park Authority
MPA	Metropolitan Police Authority
MPS	Metropolitan Police Service
MGPP	Modern GP Practises
MR	Monitoring Report
NAMP	Network Access Management Plan
NCN	National Cycle Network
NEET	Not in Employment, Education or Training
NGAP	Northern Gateway Access Package
NGAR	Northern Gateway Access Road
NHC	Neighbourhood Health Centre
NLWA	North London Waste Authority
NPPF	National Planning Policy Framework
OFGEM	Office of the Gas and Electricity Markets
OAPF	Opportunity Area Planning Framework
ONS	Office of National Statistics
PANSI	Projecting Adult Needs Service Information
PAS	Planning Advisory Service
PAYP	Positive Activities for Young People
PCT	Primary Care Trust
PDF	Park Development Framework
PFI	Private Finance Initiative
POPPI	Projection Older People Population Information
PPP	Public Private Partnership
PRU	Pupil Referral Unit
PSICA	Partnership Schemes In Conservation Areas
PTAL	Public Transport Accessibility Level

B Acronyms

QIPP	Quality, Innovation, Productivity & Prevention
RBMP	River Basin Management Plan
RFDC	Regional Flood Defence Committee
SA	Sustainability Appraisal
SUDS	Sustainable Drainage Systems
TA	Transport Assessment
TfL	Transport for London
TLRN	Transport for London Road Network
UCC	Urgent Care Centre
WFD	Water Framework Directive
WiC	Walk in Centre

Table B.1

Glossary

C Glossary

Accessibility	The ability of people, including elderly and disabled people, those with young children and those encumbered with luggage or shopping, to move around an area and reach places and facilities.
Area Action Plan	A document forming part of the Local Plan (which is also a development plan document) which sets out a strategy for the planning of areas having a concentration of proposals for change or where land uses and activities and planning issues are particularly complex. Also known as an AAP.
Asymmetric Digital Subscriber Line	This converts an analogue phone line to a digital line (ADSL) allowing the phone line to simultaneously transmit data at high speed.
Basin	An area of land designed to retain storm runoff for a short period of time to reduce the risk of flooding and to allow the settlement of solids. These can be used as part of the implementation of a Sustainable Drainage System .
Biodegradable Municipal Waste	A type of waste, typically originating from plant or animal sources, which may be broken down by other living organisms. Also known as BMW.
Biodiversity	A measure of the variety of, and number of individuals within different species of plants, animals and other life forms that are present in a defined area.
Brimsdown Freight Quality Partnership (BFQP)	The Brimsdown FQP is supported by the Government's Sustainable Distribution Strategy, the Mayor of London's Transport Strategy and the London Sustainable Distribution Partnership. The Brimsdown FQP aim is to encourage best practice in environmentally sensitive, economic, safe and efficient freight transport in the Brimsdown Business Area. BFQP provides a forum for industry, local and regional government, and other interested agencies to work together to realise this vision. It is supported by the Government's Sustainable Distribution Strategy, the Mayor of London's Transport Strategy and the London Sustainable Distribution Partnership.
Canal & River Trust	Successor body to the British Waterways that is responsible for managing 2,200 miles of the country's canals and rivers.
Community Infrastructure Levy (CIL)	The Community Infrastructure Levy is a new charge introduced from April 2010, which local authorities in England and Wales are empowered, but not required, to charge on most types of new development in their area. CIL charges are based on simple formulae which relate the size of the charge to the size and character of the development paying it. The proceeds of the levy can be spent on local and sub-regional infrastructure needed to support the development of the area.
Combined Heat and Power (CHP)	The combined production of heat, usually in the form of steam, and power, usually in the form of electricity.
Community Strategy	A strategy document required by the Local Government Act 2000 to be prepared and implemented by a local planning authority with the aim of improving the social, environmental and economic well being of its area by co-ordinating the actions of local public, private, voluntary and community sectors. Responsibility for producing a community strategy may be passed to a local strategic partnership , which include local authority representatives. Also known as a Sustainable Community Strategy.
Conservation Area	An area designated for the purpose of protecting the character of an area, and applied to areas of various sizes and characters, ranging from small groups of buildings to town squares or even open spaces. It may include one or more listed buildings.
Control Period 4	Network Rail Delivery Plan (2009-2014).
Core Policy	A short clear statement of the matters which the local planning authority will take into account when it receives an application for planning permission. If the proposed development is not consistent with the policy, the local planning authority is likely to refuse planning permission unless there are exceptional circumstances affecting the site, which would make this particular development acceptable. Core Policies are set out in the Core Strategy . See also development management document for standards the Council will also take into account when determining planning applications.
Core Strategy	A Local Plan documents setting out the long-term spatial vision and strategic objectives for the Local Planning Authority area. It includes a spatial strategy, core policies and a monitoring and implementation framework for achieving them. The Core Strategy has the status of a Development Plan Document .

C Glossary

Crossrail	A new high frequency railway for London and the South East. Crossrail was given Royal Assent in July 2008 giving Crossrail Ltd the authority to build the railway. Construction began in 2010 and is planned to open in 2018.
Decentralised Energy	Local renewable energy and local low-carbon energy usually but not always on a relatively small scale encompassing a diverse range of technologies.
Development Management	The process whereby a local planning authority receives and considers the merits of a planning application and whether it should be given permission, having regard to the development plan and all other material considerations.
Development Management Document	A document that sets out part or all of a council's detailed standards for new developments.
Development Plan	A document or documents that taken together set out policies and proposals for development and use of land and buildings within the area of a local planning authority. This includes adopted Local Plans, neighbourhood plans and the London Plan and is defined in Section 38 of the Planning and Compulsory Purchase Act 2004. In Enfield the Development Plan currently comprises of the Mayor's London Plan, the Enfield Core Strategy and saved policies from the 1994 Enfield Unitary Development Plan.
Development Plan Document	A spatial planning document that is subject to independent examination. In London, together with the London Plan, forms the development plan for a local planning authority area for the purposes of the Act. It can be, but is not limited to, a core strategy, site schedule or area action plan (where needed). Also known as a DPD. DPDs are shown geographically on a policies map. Individual DPDs or parts of a DPD can be reviewed independently from other DPDs. Each authority must set out the programme for preparing its DPDs in its local development scheme.
East London Green Grid Framework	The initiative aims to create a network of interlinked, multi-functional open spaces that connect residential areas, town centres and employment areas to recreational areas and countryside in the urban fringe.
Education Authority	A local government body responsible for providing education for pupils of school age in the area of that local government body.
Energy Efficiency	Using the minimum amount of energy needed to produce a given result.
Enfield Strategic Partnership	The body which produced the community strategy "Enfield's Future" for Enfield Borough. See also strategic partnership .
English Heritage	Statutory Government advisory body with responsibility for all aspects of protecting and promoting the historic environment, and responsible for advising the Government on the listing of historic buildings.
Environment Agency	A public body with responsibility for preventing or minimising the effects of pollution on the environment and which issues permits to monitor and control activities that handle or produce waste. It also provides up-to-date information on waste management and deals with other matters such as water issues, including flood protection advice. Also known as EA.
Equality Impact Assessment	An evaluation tool which analyses the effect that a policy or procedure will have on a particular group of people to highlight whether their needs are being met and if there are any issues requiring further action. The tool promotes equality and aims to ensure there are no discriminatory effects.
Examination-in-Public	see Independent Examination
Freight by Water	A non-profit organisation which promotes the movement of UK domestic freight and near continental import/export by short sea, coastal and inland waterborne transport.
Generic Development Management policies	A suite of criteria-based policies the function of which is to ensure that all development within the area to which they apply meets the spatial vision and spatial objectives set out in the core strategy . They may be included in a development plan document or may form a stand-alone development plan document .

C Glossary

Greater London Authority	A strategic body constituted under the Greater London Authority Act 1999, consisting of the Mayor of London , the London Assembly and staff, which has responsibility for producing regional strategic policy in a number of areas, including transport, economic development, planning, and the environment for the county of Greater London. Also known as the GLA. It produces the London Plan .
Greater London Authority Road Network	see Transport for London Road Network
Green Corridors	Areas identified to promote environmentally sustainable forms of transport such as walking and cycling within urban areas and with the potential to act as vital linkages for wildlife dispersal between wetlands and the countryside. They can link housing areas to the national cycle network, town and city centres, places of employment and community facilities.
Green Industry	An environmentally friendly industry such as renewable energy and material processing and recycling facilities.
Green Infrastructure	This is a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multi-functional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.
Greenways Network	A coordinated city based network of good quality walking and cycling routes.
Growth Area	An area identified for new residential development to accommodate population growth, as outlined in the Government's Sustainable Communities Plan and in the case of London including the London-Stansted-Cambridge-Peterborough Corridor .
Homes and Communities Agency (HCA)	The Government's national housing and regeneration agency (formed as a result of a merger between the Housing Corporation and English Partnerships) funds development of affordable housing, regulates registered social landlords and housing associations in England and brings land back into productive use. In London however, from April 2012 the GLA took responsibility for the HCA's functions, powers, responsibilities and funding in London from 1 April 2012 by virtue of the devolution set out in the Localism Act 2011. The Mayor's housing budget totals £3bn over the current investment round (2011-2015).
Independent Examination	A formal hearing, presided over by an Inspector or a Panel of Inspectors appointed by the Secretary of State, to consider the soundness of the development plan documents of a local planning authority or regional planning authority (eg the Greater London Authority). Also known as an Examination-in-Public (EiP).
Index of Multiple Deprivation	A ward-level index made up of six indicators (income, employment, health deprivation and disability, education, skills and training, housing and geographical access to services) for quantifying the degree of disadvantage in a ward, and which can help to identify areas for regeneration. Also known as IMD.
Joint Strategic Needs Assessment	An evidence based assessment that is used to inform the way in which decisions about health, wellbeing and social care services are planned and arranged.
Joint Waste Development Plan Document	A document setting out the planning policies for waste management and identifying new and expanded waste facilities in North London. Also known as JWDPD. In the case of Enfield Borough this document is usually referred to as the North London Waste Plan (NLWP).
Learning and Skills Council	The LSC is a non-departmental public body responsible for planning and funding high quality education and training for everyone in England other than those in universities.
Lee Valley Corridor	The area of strategically important development opportunities and existing industry either side of the River Lee, in parts of Enfield, Hackney, Haringey, Newham, Tower Hamlets and Waltham Forest Boroughs.
Lee Valley Regional Park	A 4,000 ha (10,000 acre) regional park that stretches for 42 km (26 miles) on both sides of the River Lee, from the River Thames to Ware in Hertfordshire.
Lee Valley Regional Park Authority	A body constituted on 1 January 1967 under the Lee Valley Regional Park Act 1966 with responsibility for the Lee Valley Regional Park and for developing a wide range of leisure, sport and recreation, including nature conservation facilities and the protection and enhancement of the natural environment.

C Glossary

Listed Building	An historic building recorded on a statutory list of buildings of 'special architectural or historic interest' compiled by the Secretary of State for Culture, Media and Sport under the Planning (Listed Buildings and Conservation Areas) Act 1990, on advice from English Heritage , to ensure that the architectural and historic interest of the building is carefully considered before any alterations, outside or inside, are agreed. A building is graded I, II* or II, with grade I being the highest. Listing includes the interior as well as the exterior of the building, and any buildings or permanent structures (e.g. wells) within the curtilage.
Local Development Document	A document which can be adopted and revised as a single entity and includes development plan documents , supplementary planning documents and the statement of community involvement .
Local Plan	The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. It can comprise of either one or a number of development plan documents , drawn up by the local planning authority , which together with the London Plan , forms the development plan for its area.
Local Implementation Plan	A statutory strategic transport plan produced by London boroughs bringing together transport proposals to implement the Mayor of London's Transport Strategy at the local level. Also known as an LIP.
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area. In the case of Enfield Borough, Enfield Borough Council is the local planning authority. Also known as an LPA.
Local Strategic Partnership	A partnership of stakeholders which is usually non-statutory and multi-agency and which develops ways of involving local people from the public, private, community and voluntary sectors in the planning processes which shape the future of their neighbourhood and how services are provided, resulting in the production of a community strategy . The Enfield Strategic Partnership is the local strategic partnership responsible for producing Enfield's community strategy .
London Fire and Emergency Planning Authority (LFEPA)	LFEPA runs the London Fire Brigade, and is responsible for advising about fire safety, enforcing fire safety laws and carrying out various emergency planning activities, including helping the boroughs plan for emergencies. As part of its duties, it has specific responsibility to respond to major emergencies such as acts of terrorism.
London Plan	Also known as the Spatial Development Strategy, this document was originally produced in 2004, the latest iteration was published by the Mayor of London in July 2011 and provides a strategic framework for the boroughs' Local Plan documents. It has the status of a development plan under the Planning and Compulsory Purchase Act.
London-Stansted-Cambridge-Peterborough Corridor	A land corridor covering the areas around and between North London, Harlow, Stansted Airport and Cambridge. Also known as the LSPC. It has been prioritised for development and growth by the Government in its Communities Plan ("Sustainable Communities: Building for the future").
Mayor of London	An elected politician who heads the Greater London Authority and is responsible for budgeting and strategic planning of some governmental functions across the whole of the region of London. These include transport, affordable housing, police, fire and emergency services, economic development and regional spatial planning.
Metronet	Metronet, now managed by TfL is responsible for the maintenance, renewal and upgrade of nine underground lines.
Mixed Use Development	Development for a variety of activities on single sites or across wider areas such as town centres and redundant industrial land.
Monitoring Report	A document Council is required to produce which measures and assesses the implementation of the Local Plan documents, collection and expenditure of Section 106 and Community Infrastructure Levy receipts and demonstration of the Duty to Cooperate. Previously known as an Annual Monitoring Report or AMR.
National Cycle Network	A coordinated national network of cycle routes planned and partially developed by Sustrans, a sustainable transport charity.
National Playing Fields Association	A body charged with responsibility for ensuring that everyone has play, sport and recreation space close to where they live.

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National Planning Policy Framework (NPPF)	Published the Government in March 2012 the NPPF sets out the Government's planning policies for England and how these are expected to be applied. The NPPF replaced the previous national Planning Policy Statement and Guidance notes. It constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications.
Neighbourhood Plan	A plan prepared by a Parish Council or Neighbourhood Forum for a particular neighbourhood area.
Neighbourhood Renewal Fund	A funding scheme to enable the councils of England's 88 most deprived local government areas, in collaboration with their Local Strategic Partnership , to improve services, to help narrow the gap between deprived areas and the rest of the country.
North London Strategic Alliance	The sub-regional strategic partnership for North London established in 1999 which brings together public, private and voluntary organisations working in Barnet, Enfield, Haringey and Waltham Forest. Also known as NLSA.
North London Sub-regional Development Framework	The non-statutory framework providing guidance on Opportunity, Intensification and Regeneration Areas, town centres, suburbs and Strategic Employment Locations produced by the Mayor of London in partnership with boroughs and other stake-holders. Also known as NLSRDF.
North London Waste Authority	Statutory waste disposal authority established in 1986 after the abolition of the Greater London Council to arrange the disposal of waste collected by its seven constituent boroughs: Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest. Also known as NLWA.
North London Waste Plan	see Joint Waste Development Plan Document
Office for National Statistics	The government agency which is the principal provider of official statistics about the UK.
Open Space	All areas free of development. This includes space of public value, such as public landscaped areas, playing fields, parks and play areas, and also including areas of water such as rivers, canals, lakes and reservoirs, which can offer opportunities for sport and recreation or can also act as a visual amenity and a haven for wildlife.
Opportunity Area	One of a number of areas identified in the London Plan for accommodating large scale development to provide substantial numbers of new employment and housing, with a mixed and intensive use of land and assisted by good public transport accessibility.
Outer London Commission	The Outer London Commission (OLC) was established by the Mayor of London to advise how Outer London can play its full part in the city's economic success.
Physical Infrastructure	The basic services necessary for development to take place, for example, roads, electricity, sewerage, and water.
Planning Obligation	A legally enforceable obligation entered into under section 106 of the Town and County Planning Act 1990 to mitigate the impacts of a development proposal.
Play Pathfinder Programme	A Government financed initiative, working with local authorities to transform local areas into innovative and adventurous play spaces.
Policies Map	Previously known as the proposals map, a local development document (which is also a Development Plan Document) which comprises a map of the local planning authority's area, and showing: <ul style="list-style-type: none"> ● The extent of the area in which the planning policies of the local planning authority, that are not borough-wide, apply; ● Sites for particular future land uses or developments; and ● Locations of proposed or existing area action plans.
Preferred Options Document	One of the documents produced as part of the preparation of Development Plan Documents , and issued for formal public participation.
Primary Capital Programme	A national scheme that aims to develop primary schools and primary age special schools across the country.
Primary Care Trust	Statutory body responsible for delivering health care and health improvements to its local area. Also known as PCT.

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Private Finance Initiative (PFI)	The Private Finance Initiative was introduced in 1992 with the aim of achieving a closer partnership between the public and private sectors. It provides a way of funding major capital investments, without immediate recourse to the public sector.
Public Realm	Areas that are accessible to everyone (whether publicly or privately owned). In urban areas, this includes most streets, squares and parks.
Public Transport Accessibility Level	A quantified measure of the extent and ease of access by public transport to facilities and services, and the degree of access to the public transport network. Also known as PTAL.
Regeneration Priority Area	Areas of the borough identified in the Core Strategy as the focus for future growth and for which Area Action Plans (AAPs) are being progressed.
Renewable Energy	Energy derived from sources that can be replenished at the rate at which they are used. For example, energy derived from sustainably farmed trees, the wind, water flow, tides or the sun.
Residential Care Home	An establishment which provides personal care assistance to its residents, such as dressing and washing, where staff can also care for residents during short periods of illness.
Scheduled Ancient Monument	A 'nationally important' archaeological site or historic building, given protection against unauthorized change.
Section 106 Agreement	A legal agreement under Section 106 of the Town & Country Planning Act 1990 between a planning authority and a developer, in order to achieve the aims of relevant planning policies through ensuring that certain extra works related to a development are undertaken.
Strategic Environmental Assessment	Strategic environmental assessment (SEA) is a systematic decision support process, aiming to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and programme making.
Strategic Flood Risk Assessment	The role of a SFRA is an assessment that is intended to inform local plans, feed into the sustainability appraisal and inform the site allocation process in relation to flood risk.
Sheltered Housing	A form of housing provision which offers a range of services to help people to live independently with the added security of having someone to call on in emergencies and different from other housing because a scheme manager or warden lives on the premises or nearby. Some schemes are designed specifically for people with disabilities and may have specialised facilities and specially trained staff to provide care.
Social & Community Infrastructure	The range of activities, organisations and facilities supporting the formation, development and maintenance of social relationships in a community. It includes educational, health and law and order facilities.
Spatial Development Strategy	The Mayor of London is responsible for producing a planning strategy for London, The London Plan is the name given to the Mayor's spatial development strategy.
Spatial Planning	An ongoing process of managing change which goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function. This includes policies which can affect land use by influencing the demands on, or needs for, development, but which are not capable of being delivered solely or mainly through the granting or refusal of planning permission and which may be implemented by other means.
Sport England	A non-departmental public body with a remit to build a world class community sport system. Sport England focusses investment on organisations and projects that will grow and sustain participation in grass roots sport and create opportunities for people to excel at their chosen sport.
Strategic Partnership	A co-operative arrangement set up to bring together major public sector organisations, local businesses, community and voluntary groups, to create a healthy, prosperous, cohesive community living in a borough that is safe, clean and green and responsible for producing a Community Strategy .
Strategic Road Network	see Transport for London Road Network
Strategic Walk Routes	A network of walkways covering the London area, coordinated by Walk London.

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Submission DPD	A stage in the statutory process for the adoption of local development documents that are also development plan documents . The local planning authority must submit the draft DPD, known as the submission DPD, to the Secretary of State for independent examination .
Supplementary Planning Document	A local development document providing supplementary information in respect of the policies in development plan documents and capable of being a material consideration in a planning decision but not forming part of the development plan nor subject to independent examination . Instead the local planning authority can approve the document by formal resolution of the Council, but it must be subjected to full public consultation if it is to be accorded any weight in decisions on development proposals. Also known as an SPD.
Sustainability	see Sustainable Development
Sustainability Appraisal	The examination of a local development document to ascertain whether its policies and proposals reflect sustainable development objectives (i.e. social, environmental and economic factors). Also known as an SA.
Sustainable Community Strategy	see Community Strategy
Sustainable Community	A community which achieves the objectives set out in the Government's "Sustainable Communities: Building for the Future": <ul style="list-style-type: none"> • A flourishing local economy to provide jobs and wealth • Strong leadership to respond positively to change • Effective engagement and participation by local people, groups and businesses, especially in the planning, design and long-term stewardship of their community, and an active voluntary and community sector • A safe and healthy local environment with well-designed public and green space • Sufficient size, scale and density, and the right layout to support basic amenities in the neighbourhood and minimise use of resources (including land) • Good public transport and other transport infrastructure both within the community and linking it to urban, rural and regional centres • Buildings – both individually and collectively – that can meet different needs over time, and that minimise the use of resources • A well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes • Good quality local public services, including education and training opportunities, health care and community facilities, especially for leisure • A diverse, vibrant and creative local culture, encouraging pride in the community and cohesion within it • A "sense of place" • The right links with the wider regional, national and international community.
Sustainable Design and Construction	A philosophy of creating buildings that meet the needs of building users and the wider community and minimises environmental impact by: <ul style="list-style-type: none"> • adopting forms of design and construction that minimise adverse impacts on the environment and that protect and enhance the diversity of nature; • providing buildings that enhance the quality of life of everyone both now and in the future; and • designing and constructing buildings that are high quality working environments that lead to greater productivity.
Sustainable Development	The core principle underpinning contemporary town planning in the UK, based on the ideal of ensuring a better quality of life through development that meets the needs of the present without compromising the ability of future generations to meet their own needs. There are three dimensions to sustainable development: economic, social and environmental. These roles should not be undertaken in isolation because they are mutually dependent. Therefore, to achieve sustainable development economic, social and environmental gains should be sought jointly and simultaneously through the planning system. At the heart of the NPPF is a presumption in favour of sustainable development which should be seen as a golden thread running through both plan-making and decision-taking.
Sustainable Drainage System	A drainage system designed to: <ul style="list-style-type: none"> • control the quantity of run-off from a development;

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	<ul style="list-style-type: none"> • improve the quality of the run-off ; • enhance the nature conservation, landscape and amenity value of the site and its surroundings. <p>Also known as SUDS. SUDS deal with run-off as close to its source as possible and balance all three objectives, rather than focusing only on flood prevention. Two examples are Swales and basins which retain water for a period of time prior to discharge to a natural watercourse.</p>
Sustainable Transport Modes	Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport.
Thames Gateway	The area comprising a corridor of land on either side of the Thames extending eastwards from Deptford Creek and the Royal Docks to Sheerness in Kent and Southend-on-Sea in Essex, with the part within London including parts of the lower end of the Lee Valley around Stratford. It includes parts of the boroughs of Barking & Dagenham, Bexley, Greenwich, Havering, Lewisham, Newham and Tower Hamlets as well as limited parts of Hackney and Waltham Forest.
Thameslink	National Rail cross-London link between Bedford and Brighton building on the existing Farringdon-Blackfriars line.
Transport Assessment	A comprehensive and systematic process that sets out transport issues relating to a proposed development. Provides an assessment of the availability of, and levels of access to, all forms of transportation from a site.
Transport for London	One of the GLA group organisations, accountable to the Mayor of London , with responsibility for delivering an integrated and sustainable transport strategy and operation for London. Also known as TfL.
Transport for London Road Network	The mayor's term for the Greater London Authority Road Network as described in the Greater London Authority Act 1999 and comprising 550 km of London's red routes and other important streets. Also known as the TLRN.
Upper Lee Valley Opportunity Area	see Opportunity Area
West Anglia Route Modernisation Enhancements	A project designed to provide significant capacity and other performance improvements on the London-Stansted-Cambridge-Peterborough rail route. Also known as WARME.

Table C.1

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