

Epping Forest District Council
Epping Forest District Council
Draft Local Plan
Draft Infrastructure Delivery Plan

Final | 30 September 2016

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 248921-02

Ove Arup & Partners Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

ARUP

Contents

	Page
1 Introduction	1
1.1 Purpose of the Infrastructure Delivery Plan	1
1.2 Structure of this Report	1
2 Policy Context for Infrastructure Delivery	3
2.1 National Policy Context	3
2.2 Sub-Regional Context	4
2.3 Local Policy Context	5
3 Social and Economic Portrait of Epping Forest District	6
4 Methodology	8
4.1 Assessment Scope	8
4.2 Overview of Methodology	9
4.3 Development Quantum	11
4.4 Forecast modelling	12
5 Transport	16
5.1 Highways	16
5.2 Rail and Underground Network	22
5.3 Bus Network	25
5.4 Walking and Cycling	30
6 Education	36
6.1 Early Years and Childcare	36
6.2 Primary Schools	44
6.3 Secondary Schools and Post 16 Education	52
6.4 Special Educational Needs and Disability	60
6.5 Adult Community Learning	62
7 Health, Social Care and Emergency Services	65
7.1 Primary Healthcare Overview	65
7.2 GP surgeries	65
7.3 Dentists	72
7.4 Pharmacies	76
7.5 Secondary healthcare overview	80
7.6 Hospitals	81
7.7 Mental Health	83
7.8 Community Nursing	84
7.9 Adult Social Care	85

8	Emergency Services	92
8.1	Ambulance	92
8.2	Police Services	93
8.3	Fire and Rescue Services	94
9	Community and Sports Facilities	96
9.1	Libraries	96
9.2	Youth Services	98
9.3	Village and Community Halls	98
9.4	Sports Facilities	104
10	Green Infrastructure	117
10.2	Allotments	130
10.3	Burial Provision	135
10.4	Funding	138
11	Utilities	140
11.1	Water	140
11.2	Wastewater Treatment and Sewage	143
11.3	Electricity	148
11.4	Gas	150
11.5	Telecommunications	151
12	Flood Protection and Drainage	154
12.1	Flood Protection and Drainage	154
13	Infrastructure Delivery Schedule	158
13.1	Epping Forest District Council Infrastructure Requirements and Investment	158

Figure 1: Employment locations for Epping Forest residents.....	7
Figure 2: Scope of IDP.....	8
Figure 3: Housing growth by settlement.....	11
Figure 4: Traveller pitches / yards growth by settlement.....	12
Figure 5: Modelling assumptions.....	13
Figure 6: Highways provision.....	19
Figure 7: Train loading in Epping Forest district.....	23
Figure 8: Bus services in Epping Forest District	26
Figure 9: Peak morning bus routes	27
Figure 10: Peak evening bus routes	28
Figure 11: Priority allocation for future bus provision based on public consultation	29
Figure 12: Cycle parking spaces at stations in Epping Forest District	32

Figure 13: Breakdown of childcare provision in Epping Forest District. Source: Essex County Council.....	37
Figure 14: Existing childcare provision.....	38
Figure 15: Early years and childcare standards	39
Figure 16: Childcare additional demand (newly arising only) – by settlement groups.....	40
Figure 17: Deficit of FEEE for 2-year olds by ward.....	41
Figure 18: Deficit of FEEE for 3-4 year olds by ward.....	42
Figure 19: Pre-school additional demand (newly arising only) – by Forecast Planning Group (FPG)	43
Figure 20: Forecast Planning Groups and primary schools	45
Figure 21: Primary school capacity figures, academic year 2014/15, by Forecast Planning Group (FPG)	46
Figure 22: Forecast primary school capacity figures, academic year 2019/20, by Forecast Planning Group (FPG).....	47
Figure 23: Forecast primary school capacity figures for Harlow, academic year 2014/15, by Forecast Planning Group (FPG).....	48
Figure 24: Forecast primary school capacity figures for Harlow, academic year 2019/20, by Forecast Planning Group (FPG).....	48
Figure 25: Recent primary school expansions and refurbishments	49
Figure 26: Primary school place standards	50
Figure 27: Primary schools additional demand (newly arising only) – by Forecast Planning Group (FPG)	50
Figure 28: Primary schools additional demand (newly arising and existing capacity/shortfall) – by Forecast Planning Group (FPG).....	51
Figure 29: Forecast Planning Groups and secondary schools.....	54
Figure 30: Capacity figures for secondary schools, academic year 2014/15, by Forecast Planning Group (FPG).....	55
Figure 31: Capacity figures for secondary schools, academic year 2019/20, by Forecast Planning Group (FPG).....	55
Figure 32: Forecast secondary school capacity figures (Harlow), academic year 2014/15, by Forecast Planning Groups (FPG)	56
Figure 33: Forecast secondary school capacity figures (Harlow), academic year 2019/20, by Forecast Planning Group (FPG).....	56
Figure 34: Capacity figures for Epping Forest College	57
Figure 35: Further Education	57
Figure 36: Secondary school place standards	58
Figure 37: Secondary schools additional demand (newly arising only) – by Forecast Planning Group (FPG).....	58
Figure 38: Secondary schools additional demand (newly arising and existing capacity/shortfall) – by Forecast Planning Group (FPG).....	58
Figure 39: SEND facilities within Epping Forest District	61
Figure 40: GP provision in Epping Forest District	67
Figure 41: GP surgeries in Epping Forest District.....	68
Figure 42: GP standards.....	70

Figure 43: GP additional demand (newly arising only).....	70
Figure 44: GP FTE converted to floorspace requirements	71
Figure 45: Dentist provision in Epping Forest District.....	74
Figure 46: Dentists in Epping Forest District	75
Figure 47: Dentists standards.....	76
Figure 48: Dentist additional demand (newly arising only)	76
Figure 49: Pharmacy provision in Epping Forest District	78
Figure 50: Pharmacies in Epping Forest District.....	79
Figure 51: Available and occupied bed capacity for Princess Alexandra Hospital NHS Trust	82
Figure 52: Demand and current provision for independent living units.....	87
Figure 53: Residential care within the District	87
Figure 54: Adult social care standards.....	89
Figure 55: Adult social care additional demand (newly arising only).....	90
Figure 56: Adult social care additional demand (newly arising and existing capacity/shortfall).....	90
Figure 57: Library provision in the District.....	96
Figure 58: Essex mobile library stops in Epping Forest District	97
Figure 59: Community and village hall provision in the District	99
Figure 60: Village and Community Halls in Epping Forest District	101
Figure 61: Community floorspace standards	102
Figure 62: Community floorspace additional demand (newly arising only)	103
Figure 63: Current indoor sports facility provision	105
Figure 64: Sports facilities identified for allocation	106
Figure 65: Indoor Sports Facilities in Epping Forest District.....	107
Figure 66: Indoor sports facilities current capacity / shortfall	108
Figure 67: Indoor sports facilities standards	108
Figure 68: Indoor sports facilities additional demand (newly arising only).....	109
Figure 69: Indoor sports facilities additional demand (newly arising and existing capacity/shortfall).....	109
Figure 70: Current outdoor sports facility provision	111
Figure 71: Outdoor sports facilities in Epping Forest District.....	112
Figure 72: Outdoor sports facilities current capacity / shortfall	113
Figure 73: Outdoor sports facilities standards	113
Figure 74: Outdoor sports facilities additional demand (newly arising only)	113
Figure 75: Outdoor sports facilities additional demand (newly arising and existing capacity/shortfall).....	114
Figure 76: Outdoor tennis courts additional demand (newly arising only) – by settlement groups	114
Figure 77: Managed Open Space in Epping Forest District	120
Figure 78: Informal Recreation Grounds in Epping Forest District	122
Figure 79: Woodland and Semi-Natural Areas in Epping Forest District	124
Figure 80: Children’s Playgrounds in Epping Forest District.....	126
Figure 81: Open space standards	127

Figure 82: Open space additional demand (newly arising only)	127
Figure 83: Open space additional demand (newly arising only) – by settlement groups.....	127
Figure 84: Children’s play demand (newly arising only) – by settlement.....	128
Figure 85: Allotment provision in the District.....	130
Figure 86: Allotments in Epping Forest District.....	133
Figure 87: Allotment standards.....	135
Figure 88: Allotment additional demand (newly arising only) – by settlement groups.....	135
Figure 89: Burial Provision in Epping Forest District	137
Figure 90: Water Resource Zones in the Thames Water Supply Area	141
Figure 91: Map of Affinity Water eight Water Resource Zones	141
Figure 92: Thames Water supply-demand balance in each Water Resource Zones (deficits shown in red).....	142
Figure 93: Population projections within WRZ 5.....	142
Figure 94: Average surplus and deficit available to each WRZ in 2015. Stort WRZ (which EFDC falls within) show a deficit of 1-10MI/d.....	143
Figure 95: Waste Water Treatment Works serving the District.....	144
Figure 96: The current and future of Waste Water Treatment Works in Epping Forest District.....	147
Figure 97: Elstree and Rye House Grid Supply Point	149
Figure 98: Current and planned for broadband provision in Epping Forest District	153
Figure 99: Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan.....	155
Figure 100: Flood alleviation schemes	156

Appendices

Appendix A

Stakeholder List

Appendix B

Housing Delivery Trajectory 2016/17 – 2032/33

Appendix C

Primary School Capacity Figures

Appendix D

Secondary School Capacity Figures

Appendix E

Draft Infrastructure Delivery Schedule

1 Introduction

1.1 Purpose of the Infrastructure Delivery Plan

Epping Forest District Council is currently progressing a Local Plan for the District, which will provide the policy framework up to 2033.

The National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) require Local Plans to positively plan for development and the infrastructure required in the area to meet spatial objectives. Local planning authorities must progress a proportionate evidence base for infrastructure which assesses the quality and capacity of various forms of infrastructure.

Epping Forest District Council has commissioned Arup to prepare an Infrastructure Delivery Plan (IDP), to form part of the Local Plan evidence base. The purpose of the IDP is to set out the infrastructure that will be required to deliver the planned level of housing and employment growth in the district to 2033.

More specifically, the IDP seeks to:

- Understand the current baseline of provision in relation to physical and social infrastructure types;
- Determine infrastructure need across the District to support planned growth;
- Estimate cost, funding sources and phasing of delivery;
- Identify key bodies with responsibility for delivering infrastructure;
- Inform the selection of sites and drafting of policies to be included in the emerging Local Plan; and
- Inform further work being undertaken by the Council in relation to Local Plan viability and implementation.

As part of the Local Plan preparation, Regulation 18 of the Town and Country Planning Regulations (2012) requires the local planning authority to notify the public and consultation bodies of the plan preparation and invite them to make representations. The local authority must then take into account any representations made in response. This draft of the IDP has been developed to support and inform the draft Local Plan for Regulation 18 consultation. The IDP will be updated following consultation to provide a more detailed evidence base to support the submission version of the Local Plan.

1.2 Structure of this Report

The Infrastructure Delivery Plan is structured as follows:

- **Section 2** outlines the national, sub-regional and local policy context for the delivery of infrastructure.
- **Section 3** provides a social and economic portrait of the District.

- **Section 4** summarises the methodology used to complete the Infrastructure Delivery Plan.
- **Sections 5 to 11** cover current and future infrastructure provision on a topic-by-topic basis:
 - Transport (**Section 5**);
 - Education (**Section 6**);
 - Health, social care; (**Section 7**)
 - Emergency services (**Section 8**);
 - Community and sports facilities (**Section 9**);
 - Open space and green infrastructure (**Section 10**);
 - Utilities and telecommunications (**Section 11**); and
 - Flood protection and drainage (**Section 12**).
- **Section 13** summarises the priorities for infrastructure delivery over the Plan period, in the form of an Infrastructure Delivery Schedule.

2 Policy Context for Infrastructure Delivery

This section of the Infrastructure Delivery Plan (IDP) provides a summary of the national and local policy context relating to infrastructure delivery.

2.1 National Policy Context

The National Planning Policy Framework (NPPF) states that local planning authorities must prepare a robust and evidence-based Local Plan which seeks to deliver sustainable development. As part of the statutory requirement to produce a Local Plan, national policy has placed a greater responsibility on local planning authorities to plan for the delivery of infrastructure. This includes infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (NPPF Paragraph 156). NPPF Paragraph 157 emphasises the importance of infrastructure in Local Plans, stressing the need to “*plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of the Framework.*”

The NPPF also emphasises the need for the Local Plan to be based on adequate, up-to-date and relevant evidence. Paragraph 162 sets out the infrastructure evidence base required for Local Plans. This states that local planning authorities should work with other authorities and providers to:

- Assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, water, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and
- Take account of the need for strategic infrastructure, including nationally significant infrastructure within their areas.

The Planning Practice Guidance (PPG) paragraph 018, reference 12-018-201403036 further explains the role and function a Local Plan in delivering infrastructure, stating:

- The Local Plan is an opportunity for the authority to set out a positive vision for the area, but the plan should also be realistic about what can be achieved and when, including in relation to infrastructure. This includes identifying what infrastructure is required and how it can be funded and brought on stream at the appropriate time, as well as ensuring that the requirements of the plan as a whole will not prejudice viability.
- Early discussion with infrastructure and service providers is important to help understand their investment plans and critical dependencies.
- The Local Plan should make clear, for at least the first five years, what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development.
- For the later stages of the Plan period, less detail may be provided as the position regarding the provision of infrastructure is likely to be less certain.

- Where the deliverability of critical infrastructure is uncertain, the Plan should address the implications of this, e.g. possible contingency arrangements and alternative strategies.
- Whilst the detail concerning planned infrastructure provision can be set out in a supporting document (e.g. an infrastructure delivery programme that can be updated regularly), the *key* infrastructure requirements on which delivery of the Plan depends should be contained in the Local Plan itself.

National policy therefore requires a full understanding of the likely infrastructure requirements to facilitate growth to ensure a deliverable Local Plan.

2.2 Sub-Regional Context

The NPPF sets out the duty for local authorities to co-operate, recognising the crucial need for co-ordinated growth and infrastructure delivery. This means that a range of organisations at a sub-regional level have a role in infrastructure planning and delivery.

Local Enterprise Partnerships are partnerships between local authorities and businesses, and seek to decide the priorities for investment in roads, buildings, and facilities. The South East Local Enterprise Partnership (LEP) is currently the largest LEP outside of London and is made up of partnerships between East Sussex, Kent and Medway, Essex and Thames Gateway South Essex. The South East LEP determines strategic economic priorities including investments and activities to drive growth and create local jobs.

The South East Growth Deal (2015) sets aims and objectives for the lifetime of the Deal from 2015-2021. Specific emphasis is on investing in transport infrastructure and skills development. . The four key priority areas in the LEP's Strategic Economic Plan are to:

- Enhance transport connectivity
- Increase business support and productivity
- Raise local skills levels
- Support housing and development

More specifically, key aims are to secure investment for the timely provision of infrastructure to ensure sustainable development in the future. South East LEP priorities are to:

- Create 45,000 new jobs
- Build 23,000 new homes
- Generate £700m of public and private investment
- See significant investment along key road and rail routes, to improve journey times and open up new site for jobs and homes
- Develop new business parks
- Invest in colleges and training providers.

The London Stansted Cambridge Consortium is a partnership of public and private organisations. Its objective is to promote growth and economic development within the corridor including making the case for the strategic pieces of infrastructure required, such as M11 junction 7a.

Essex County Council (ECC) is responsible for delivering and maintaining highways, transport, and schools infrastructure, in addition to providing libraries, adult social care and youth services. The County Council is also responsible for waste and is the Lead Local Flood Authority. ECC is working with the local planning authorities to assist in identifying the additional infrastructure that is needed to support growth set out in separate Local Plans.

Essex County Council has commissioned the county-wide Greater Essex Growth and Infrastructure Framework (GIF) which seeks to identify the scale of the growth, existing capacity, and an assessment of future infrastructure requirements to support the identified level of housing and economic growth to 2036. The study is due to be complete in autumn 2016. Where appropriate, the approach to modelling taken within the IDP is consistent with the GIF work.

Epping Forest District has also been working with neighbouring authorities within the same Strategic Housing Market Area to develop and test options for meeting housing need across the Housing Market Area and to determine the best spatial options for growth and the quantum that could be delivered to support the regeneration of Harlow. An independent study was commissioned to by the group to assess the most suitable sites for allocation in and around Harlow. These sites give rise to particular cross-boundary issues in relation to infrastructure provision, which requires a collaborative approach.

2.3 Local Policy Context

Epping Forest District Council is currently producing the Local Plan for the District. The timetable in the adopted Local Development Scheme (July 2016) provides for a Plan to be adopted by autumn 2018 and will have a Plan period until 2033. Once adopted, it will replace the Combined Local Plan 1998 and Alterations 2006 Policy Document, and set out the spatial strategy for employment, homes, services, and infrastructure provision.

This Draft IDP provides the infrastructure evidence base on which to make planning and investment decisions for the District in the future. It provides an in-depth understanding of current provision and capacity, using anticipated population and employment growth to inform future needs and funding implications.

3 Social and Economic Portrait of Epping Forest District

This section provides a brief overview of some of the key socio-economic characteristics of the District which have direct implications for infrastructure planning.

Epping Forest District is in the south-west of Essex and borders Greater London on the southern edge. The District has a mix of rural and urban areas, with the population centred largely in the towns of Loughton/ Debden, Chigwell, Chipping Ongar, Epping and Waltham Abbey. For the most part the rural areas of the District are in the Green Belt (93% of the District is covered by Green Belt) which poses a challenge for accommodating growth and the required supporting infrastructure.

Parts of the District have good transport links into London, connected by the Central Line (London Underground). In the west of the District Roydon is on the mainline into Liverpool Street and both the M11 and M25 motorways run through the District. More rural parts of the District have poor public transport connections. Providing services which meet the needs of a dispersed rural population outside the main settlements is a challenge for infrastructure planning in the District.

The District is largely affluent with few areas of deprivation (English Indices of Deprivation, 2015). This indicates that there are few barriers to employment, education, housing and services, and the area demonstrates few issues around poor health and high crime levels.

The total population of the District in 2014 was 128,800 (ONS 2014-based sub-national population projections). Whilst the number of people aged 0-15 has remained almost consistent, there has been a significant rise in those aged 65 and over, increasing by almost 4% to 36,000 people. This will continue to put pressure on services to support elderly communities, and will have significant implications for future priorities in health, social care and housing. The number of people in single person households is also expected to rise from 52,000 people to 66,460 by 2033.

Residents in Epping Forest District are slightly below the Great British average in terms of qualification levels. Around 55,950 residents (70.9%) have achieved an NVQ2 and above (compared with the Great Britain average of 73.6%) and 27,500 residents (34.9%) have achieved an NVQ4 and above (compared to 37.1%) (ONS Annual Population Survey Jan 2015-Dec 2015). However, Epping Forest District has a below national average of the number of residents with no qualifications, with only 7.2% with no qualifications against the British average of 8.6%.

The number of economically active residents is high in Epping Forest District, with 69,400 residents in employment or seeking work, equivalent to 80.4% of the population and higher than the British average of 77.8%. Conversely, unemployment rates are low, at only 2,400 people out of work, representing 3.4% of the population (and lower than the British average of 5.1%).

The ONS Annual Population Survey indicates that the occupation category that employs the greatest number of residents in Epping Forest District is Professional Occupations (11,600 employees, or 14.8%). The percentage of residents employed in the Managers, Directors and Senior Officials category is higher than the British average, employing 14.8% of the population compared to 10.4% British average (ONS Annual Population Survey April 2015 – March 2016). Gross weekly pay is estimated at £541.10, which again is slightly higher than the British average of £529.00 (ONS Annual Survey of Hours and Earnings, 2015). However, job density – the ratio of total jobs to population aged 16-64 – is low at 0.67, compared to the British job density of 0.82 (ONS Job Density, 2014).

Data shows that residents are most likely to travel to London for their place of work, with 25,826 commuting to London (representing 54%) (Census Travel to Work, 2011). Other places of work are within Epping Forest District (26%), and other locations in the rest of Essex (10%). The final 10% travel to others areas of Great Britain (Figure 1).

Figure 1: Employment locations for Epping Forest residents

Place of work	Address whilst working: Epping Forest District (number)	Address whilst working: Epping Forest (percentage)
Epping Forest District	12,582	26%
Essex	4,763	10%
London	25,826	54%
Rest of Great Britain	4,862	10%

The high levels of out-commuting to London and destinations in Essex and Hertfordshire is a significant issue for infrastructure planning in the District.

4 Methodology

4.1 Assessment Scope

The IDP covers the types of infrastructure set out in Figure 2.

Figure 2: Scope of IDP

Category	Infrastructure
Transport	Highways
	Rail
	Bus network
	Walking and cycling
Education	Primary schools
	Secondary schools
	Further education
	Adult community learning
Health and Social Care	GPs
	Dentists
	Pharmacies
	Hospitals
	Mental health
	Community nursing
	Adult social care
Emergency Services	Ambulance
	Police
	Fire
Community and Sport	Libraries
	Youth centres
	Village and community halls
	Indoor sports facilities
	Outdoor sports facilities
Open Space and Green Infrastructure	Managed open space
	Informal recreation grounds
	Woodland and semi natural open space
	Allotments
	Burial provision
Utilities	Water
	Waste water
	Electricity

Category	Infrastructure
	Gas
Telecommunications	Broadband

4.2 Overview of Methodology

The assessment is based on a three stage process to understand current and future infrastructure provision, set out below.

A combination of quantitative and qualitative sources have been utilised. Discussions were held with relevant Epping Forest District Council and Essex County Council officers as well as with contacts from a range of external providers throughout each stage of the assessment. A list of all the stakeholders that have been contacted is provided in Appendix A.

The demand forecast set out in this IDP is based on the level and distribution of housing development identified in the Draft Local Plan published for consultation under Regulation 18. The IDP is an iterative document and further work will be undertaken to inform the submission version of the Local Plan. In particular, transport modelling of the preferred sites will be undertaken by Essex County Council and further consultation on the implications of growth with utility providers will be carried out.

Employment and other types of development clearly have implications for some types of physical infrastructure, most notably transport and utilities. The Council with its Housing Market Area authority partners jointly commissioned economic evidence, which identified a need in Epping Forest District over the Plan period of between 8,800 and 10,010 new jobs. This equates to between 400 and 455 new jobs per annum. The Joint Economic Report concluded that in order to meet the upper end of the employment projections that in addition to the existing land supply identified in the Employment Land Review the following land supply would be required:

Class B1a (offices), there is gross demand of up to 13 hectares of land.

Classes B1b, B1c, B2 and B8 (industrial and warehousing) there is a gross demand for up to 18 hectares of land.

However, the review was undertaken in 2010 and the Council has identified the need to update the Employment Land Review to better understand existing employment land supply with the District. Once updated, the site selection process will be completed to identify the employment sites, which may result in revisions to the size of land required and the spatial distribution of sites. The anticipated level and distribution of employment will therefore be considered in more detail in the next iteration of the IDP, when specific employment sites have been selected. Infrastructure typologies that are likely to be impacted by the pressure of the additional employment communities will be assessed, for example on highways, and the model re-run to reflect the additional numbers and generated demand for new infrastructure provision.

For many types of infrastructure, it is appropriate to consider the cross-boundary implications of growth, particularly in relation to strategic sites around Harlow.

4.2.1 Stage 1: Scope and review existing information

Stage 1 of the assessment focussed on understanding the current infrastructure provision across Epping Forest District and whether it is adequate to meet the needs of the current population. This stage also identified any planned improvements in infrastructure provision.

Stage 1 qualitative and quantitative assessment of current infrastructure and its spatial distribution was principally undertaken through a review of secondary data sources. This analysis was supplemented by discussions with key stakeholders and local service providers to understand if existing facilities were ‘fit for purpose’.

4.2.2 Stage 2: Assess infrastructure needs and deficits

The purpose of Stage 2 is to understand future demand for infrastructure on the basis of the agreed development quantum and trajectory (summarised in Section 4.3) and identify existing shortfalls in provision and future deficits based on planned growth.

For certain infrastructure sectors it has been possible to set infrastructure benchmark ‘standards’, which can be used to derive estimates of the amount of provision that is required.

Where standards for infrastructure were found, future demand for these services has been modelled – more details are provided in Section 4.4. The remaining types of infrastructure have not been subject to forecast modelling, and have instead been considered in a qualitative manner, based on conversations with providers and the District and County Council.

This stage therefore provided an indication of whether current, planned and committed infrastructure would be sufficient to meet the District’s future needs and demands in line with the proposed growth objectives of the Local Plan. This assessment therefore highlights where there may be gaps in future infrastructure provision.

Infrastructure need has been reported at a range of spatial scales, depending on the infrastructure type. The spatial scales include at the District, or wider regional level, or at the settlement level, or grouping of settlements where appropriate. For schools infrastructure, Forecast Planning Group¹ areas have been used to best reflect how pupil planning is carried out.

¹ Forecast Planning Groups are sub-district spatial areas used to collectively plan for accommodating future pupil yields.

4.2.3 Stage 3: Prepare delivery plan

Stage 3 draws together the infrastructure assessment information from the above stages to prioritise and cost the additional infrastructure required.

The aim of this stage of the work is to identify sources of funding including any shortfalls. This will inform understanding of the level of funding that needs to be sourced through CIL/S106 in order to support the level of growth anticipated through the Local Plan. As outlined above, some further work is to be undertaken to inform the next iteration of the Local Plan. At this stage there is still some uncertainty around some of the key infrastructure items such as transport and utilities. It is therefore proposed that detailed costing work will be undertaken to inform the next stage of the IDP.

The final part of Stage 3 is the prioritisation and broad phasing of infrastructure provision. This will be summarised within the Infrastructure Delivery Schedule, (provided in Section 13) after all the information has been finalised.

4.3 Development Quantum

The IDP has taken the quantum of development from the proposed housing allocations in the Regulation 18 consultation draft of the Local Plan, phased over the Plan period as per the trajectory. It also takes into account commitments (planning permissions) and a windfall allowance of 35 dwellings per year which has been split indicatively across the District, with a weighting towards rural areas given that many windfall developments are expected to be rural exception sites (refer to Section 4.4). A summary of the quantum of housing and traveller pitches / yards growth which has been tested in each settlement is shown in Figure 3 and Figure 4. As outlined above, the implications of proposed employment sites will be considered in the next iteration of the IDP.

Figure 3: Housing growth by settlement

Settlement	Housing units on allocated sites	Housing commitments (at 31 March 2016)	Total homes
Buckhurst Hill	~ 90	32	~ 140
Chigwell	~ 430	170	~ 618
Chipping Ongar	~ 600	135	~ 753
Epping (including Coopersale)	~ 1,690	94	~ 1,802
Fyfield	~ 90	8	~ 116
Harlow Strategic Sites	~ 3,900	-	~ 3,900
High Ongar	~ 10	9	~ 37
Loughton/Debden	~ 1,190	282	~ 1,490
Lower Nazeing	~ 220	85	~ 323
Lower Sheering	~ 30	14	~ 62

Settlement	Housing units on allocated sites	Housing commitments (at 31 March 2016)	Total homes
North Weald Bassett	~ 1,360 ²	56	~ 1,434
Roydon	~ 40	24	~ 82
Sheering	~ 120	15	~ 153
Stapleford Abbots	~ 10	30	~ 58
Theydon Bois	~ 360	8	~ 386
Thornwood	~ 130	8	~ 156
Waltham Abbey	~ 800	118	~ 936
<i>Rural (rest of District)</i>		106	~ 398
Total	~ 11,070	1,088	~ 12,844

Figure 4: Traveller pitches / yards growth by settlement

Settlement	Pitches / yards on allocated sites	Pitches / yards commitments	Total pitches / yards
Harlow Strategic Sites	5		
Lower Nazeing	5	4	9
North Weald Bassett	5		
Waltham Abbey	5		
<i>Rural (rest of District)</i>	2		
Total	22	4	26

Further detail on growth and expected phasing is set out in Appendix B.

4.4 Forecast modelling

As part of Stage 2 of the assessment, demand forecasting has been undertaken for the following types of social infrastructure:

- **Education:** children's clubs; nurseries; pre-schools; primary schools; secondary schools (including sixth form and further education; and adult community learning.
- **Health and social care:** GPs; dentists; hospital beds; independent living; nursing care; residential care; and extra care.
- **Community and sport:** libraries; youth centres; community centres; sports hall courts; swimming pools; squash courts; health and fitness facilities; indoor bowling rinks; and indoor tennis courts.

² In addition to this number, the Council considers it may be possible to accommodate around 225 homes on parts of the airfield identified for residential use in the Study subject to more detailed testing.

- **Outdoor sports and recreation:** artificial grass pitches; tennis courts; athletics tracks lanes; golf courses; and children’s play.
- **Green infrastructure:** natural/semi-natural open space; managed open space; informal recreation grounds; and allotments.

In order to understand the demand created by growth in population over the Plan period, the standards set out in the subsequent topic-specific sections were applied to the additional population arising from future housing.

The outcomes from the forecasting modelling are reported at different spatial scales, depending on the type of social infrastructure:

- **District wide:** total requirements within Epping Forest District
- **Schools Forecast Planning Groups:** mirroring the planning areas used for primary and secondary schools by Essex County Council, including an apportionment of demand from ‘rural’ areas (i.e. outside the top two tiers of the Local Plan settlement hierarchy).
- **Settlement groups:** groups of settlements which might be expected to share certain types of services (e.g. GP surgeries, dentists), plus an apportionment of demand from nearby ‘rural’ areas (i.e. outside the top two tiers of the Local Plan settlement hierarchy). This rural apportionment has been done using a professional judgement around where people currently access this type of service/facility, or where they might choose to in the future if the service/facility were available.
- **Settlements:** demand for individual settlements, where it would be expected that services would be delivered locally (e.g. children’s play).

The forecast modelling is based on the 2014-based population and household projections, which were released in 2016 and are currently the most up-to-date source of information at the local authority level. The draft Local Plan is based on the 2015 SHMA, which used the 2012-based data available at the time of preparation. It is anticipated that data sources will be aligned as the Local Plan is further progressed. Figure 5 below sets out the assumptions that have been used for the forecast modelling.

Figure 5: Modelling assumptions

Assumption	Reason
Overall average household size for the District to be taken from 2014-based household projections. Average household size assumptions will be altered across the sites depending on High, Medium and Low density categories.	To estimate the likely additional population arising from households.
Current housing and population levels by settlement has been calculated using the following method: <ul style="list-style-type: none"> • Ward-level and parish-level housing and population for 2011 were taken from the 2011 Census and applied to the settlements using a ‘best fit’ approach, consistent with the Settlement Hierarchy Technical Paper (2015). 	To understand infrastructure needs on a sub-District level.

Assumption	Reason
<ul style="list-style-type: none"> To estimate the population growth in the period 2011-2016, additional population from completions was derived using the present-day average household size taken from the 2014-based household projections³, and added to the 2011 base. Settlement populations were then adjusted to be consistent with the 2014 Mid-Year Estimate and 2014-based household projections for the District as a whole. 	
<p>Future housing and population levels by settlement have been calculated using the following method:</p> <ul style="list-style-type: none"> To estimate the population growth in the period 2016-2033, additional population from proposed allocated sites, commitments and a likely level of windfall development (see below) was derived using the forecast average household size taken from the 2014-based household projections⁴, and added to the 2016 base. No average household sizes for traveller pitches is currently available. There is no official definition as to what constitutes a single traveller residential pitch; travellers require various sizes of accommodation, depending on the numbers of caravans per pitch which varies with different families living at different densities. The convention used in the site selection methodology is that a pitch accommodates a single household and typically contains enough space for one or two caravans. For the purposes of forecasting, an average of two caravans per pitch was assumed, and the forecast average household size taken from the 2014-based household projections was applied to each caravan (acknowledging that multiple caravans would still be considered to be a single household). 	<p>To estimate the likely number of additional population arising from households. To understand infrastructure needs on a sub-District level.</p>
<p>Traveller pitch trajectories have been calculated in phases across the Plan period rather than yearly – delivery has been taken to be within the last year of the phase in question as it is unlikely that pitches would be phased over more than one year.</p>	<p>To estimate the phasing of traveller pitch delivery.</p>
<p>The windfall allowance of 35 dwellings per year has been split across settlements, based on current population levels and expected areas of windfall development. There will be a weighting towards rural areas given that many windfall developments are rural exception sites.</p>	<p>It is impossible to predict where windfall development will occur; however, this provides an indication based on scale of the settlement and historic trends.</p>
<p>Windfall development assumed to be houses rather than flats.</p>	<p>To apply standards to likely windfalls where they differ between houses and flats.</p>
<p>Commitments assumed to follow the same proportional split between houses and flats as occurring between 2011/12 and</p>	<p>To apply standards to commitments where they differ between houses and</p>

³ 2014-based household projections, DCLG (2016)

⁴ 2014-based household projections, DCLG (2016)

Assumption	Reason
2015/16.	flats.
Form Entry (FE) : Pupils ratio assumed to be: <ul style="list-style-type: none"><li data-bbox="284 376 893 443">• Primary schools: 1 FE : 210 pupils (30 pupils across seven years)<li data-bbox="284 461 893 562">• Secondary schools (including post 16 and further education): 1 FE : 210 pupils (30 pupils across seven years)	To derive future demand on education provision over the Plan period.

5 Transport

5.1 Highways

Highways infrastructure covers both the strategic road network and local roads within the District. Highways England is responsible for providing and managing the strategic network, whilst the local road network is managed by Essex County Council, which is the highways authority.

At the District level, Local Highways Panels (LHP) are responsible for setting local priorities in their areas. LHPs cover a broad scope, including traffic management, tackling congestion, road safety, passenger transport, cycling schemes and major improvement schemes.

5.1.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Consultation with Essex County Council
- Essex Transport Strategy: the Local Transport Plan for Essex (2011)
- Local Bus Service Assessment and Priority Policy 2015 to 2020, Essex County Council (2016)

The Essex County Council Local Transport Plan was published in 2011, and sets out the future vision and approach to transport within the county. The Plan covers a 15 year period to 2026 and is supported by an Implementation Plan, which is refreshed every three years along with a three year rolling investment programme. The Plan is strongly focused on long-term planning and ‘whole life costs’, and seeks to achieve five key outcomes:

- Provide connectivity for Essex communities
- Reduce CO2 emissions and improve air quality
- Improve safety on the transport network
- Maintain transport assets to an appropriate standard
- Provide sustainable access and travel choice for Essex residents

Essex County Council maintains an extensive infrastructure network, however there is limited available funding for major new infrastructure investments. Significant levels of growth are planned for the District, which will place increasing pressure on existing transport services and create increased demand for new infrastructure.

The Essex Transport Strategy sets out a series of priorities for West Essex. These focus on maintaining strong transport links with London, providing greater connectivity for rural communities, and improving the sustainable transport offer.

In order to support the levels of growth anticipated, especially around Harlow, significant investment in the strategic road network is required. Epping Forest

District Council is working with the other Housing Market Area authorities (Harlow, Uttlesford and East Hertfordshire), as well as Essex County Council, Hertfordshire County Council and Highways England to resolve key issues with the strategic highways network. A Memorandum of Understanding is being prepared which will commit the parties to working together to resolve key highways issues, including improvements to M11 Junction 7 and the proposed new 7A near Harlow.

All growth locations in Harlow would increase the need for a major intervention to improve access to the M11 highways network, though growth to the East of Harlow is particularly reliant on the provision of Junction 7a.

5.1.2 Existing Provision

Within Epping Forest District, there are two major motorways. The M25 London Orbital Motorway cuts east-west throughout the District, near to Waltham Abbey and Stapleford Tawney. The M11 runs north-south through the District and has an interchange with the M25, passing Sheering, Hastingwood, North Weald Bassett, and Chigwell. The A414 cuts across the north east of the District, passing through Chipping Ongar.

5.1.3 Shortfalls in Current Provision

The high levels of out-commuting across the District places significant pressure on the road network, particularly during peak times. In addition, access to Harlow is currently limited due to only one link to the strategic road network, via Junction 7 of the M11. A number of the inter-urban routes within the district are operating at or near to capacity. Congestion is common on sections of the A414 and is a particular issue at peak times.

Congestion is an issue within towns throughout the District. Discussions with ECC have highlighted in particular that the road through the centre of Epping (B1393) currently experiences significant congestion problems, particularly around Ivy Chimneys/Bell Common traffic lights and Wake Arms roundabout. This is partly due to the significant flow of residents to London, and to the town centre. The B181 between North Weald and Epping also experiences significant pressure. Similarly, routes through Loughton are congested. Congestion around Loughton is exacerbated by the fact that Junction 5 of the M11 has no northbound slip road, which subsequently draws traffic into the surrounding areas to access the motorway.

A range of studies have identified current capacity constraints on the road network, which present a range of challenges in supporting the proposed levels of growth for the area. The Highways England London to Leeds (East) Route Strategy 2015-2020 identifies significant congestion at Junction 7 of the M11, and poor network connectivity particularly near Harlow.

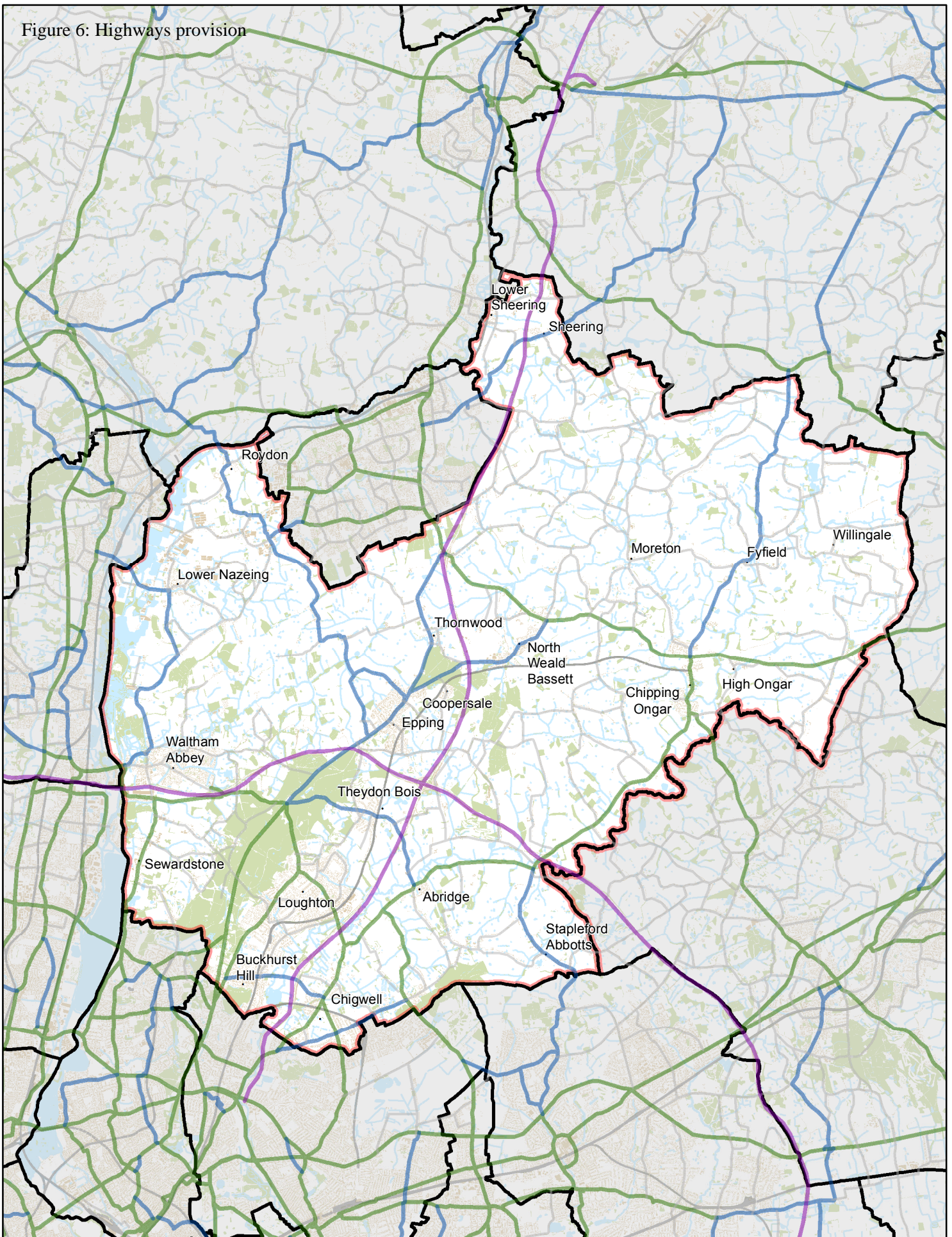
Epping Forest District and Essex County Council have commissioned several pieces of work in recent years to understand the existing highways issues, including detailed junction modelling.

The *Epping Local Plan Highway Impact Assessment (Technical Notes 1-8)* (2013-onwards) used a ‘scenario-based’ approach to understand the impact that different quantum of growth in the District might have on highways infrastructure, and in particular on junction capacities. The assessment (2013-onwards) found that the following junctions have arms operating noticeably above capacity:

- Wake Arms PH (A104 / A121 / B1072 / B1393) – Epping
- Thornwood Road (B1393 / B181) – Epping
- Station Road (B1393 / Station Road) – Epping
- St. John's Rd (B1393 / St. John's)– Epping
- M25 J26 Southern RAB) (M25 Off Slip / A121 / Honey Lane) - Waltham Abbey
- Station Road - Waltham Abbey

The *Epping Local Plan Highway Impact Assessment* (2013-onwards) modelled future impacts for the period up until 2026 and 2036. By 2036, the majority of junctions across the District had at least one arm operating above capacity. The impacts of development against this background growth analysis is likely to result in an increasingly congested and unreliable road network. Work was also done to understand opportunities for mitigation at particular junctions. Following this work it was recognised that a shift in modal share towards public transport will be required to support growth in a sustainable way.

Figure 6: Highways provision



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0001

Date: September 2016

Scale: 1:150,000

Content

Highways infrastructure

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Motorway
- A Roads
- B Road
- Minor Road
- Surrounding Authorities
- Epping Forest District Boundary

N



5.1.4 Highways Infrastructure Requirements

EFDC will shortly commission detailed modelling work which will assess the impacts of specific housing and employment sites on the highways network in Epping Forest District and immediately adjoining areas. The findings will inform the next iteration of this IDP and the submission version of the Local Plan. Due to the significant level of investment and long timescales involved in increasing road capacity, the strategy for growth within Epping Forest District seeks to concentrate growth within areas with better public transport accessibility and opportunities for walking and cycling, as well as improving public transport and active travel opportunities.

Accessibility work undertaken as part of Local Plan preparation in 2014 assessed proposed housing sites in relation to the public transport network (road and rail), and their proximity to local services including schools and GP surgeries. This work has enabled sustainable locations to be prioritised in subsequent site selection work. The findings concluded that Loughton contained the largest number of sites with a high level of sustainability access, followed by the urban areas of Debden, Buckhurst Hill, Theydon Bois and Epping. Of the towns and villages with limited levels of sustainable transport accessibility, it identified that Chipping Ongar and North Weald Bassett have the largest existing populations and are therefore most likely to support the provision of additional sustainable transport. Better bus provision was proposed to accommodate the potential demand from large development proposals. However, it was identified that the economic viability of providing better sustainable travel infrastructure to rural villages is limited. This has informed the site selection exercise to determine the site allocations taken forward as part of the Draft Local Plan.

One of Essex County Council's ongoing priorities for West Essex involves lobbying the Government for improvements to journey time reliability in the M11 corridor. Discussions regarding the proposed new Junction, 7a, on the M11 are at an advanced stage and a planning application for the works is anticipated by the end of 2016. Essex County Council considers the introduction of a new motorway junction crucial in order to deliver the strategic growth planned for the area.

Department for Transport (DfT) and Highways England's *Road Investment Strategy (RIS): 2015 to 2020* sets out the long-term approach to improve major roads and motorways in England. The RIS outlines a commitment to provide extra capacity on junction 7 of the M11, to release additional capacity for the growth of Harlow and Epping Forest District. An expected cost of £25-50m is committed to fund significant road upgrades and make greater use of technology to improve traffic conditions including smart motorways. Discussions are ongoing with a view to prioritising the provision of Junction 7a in advance of further improvements to Junction 7 as this would provide greater gains in terms of additional capacity.

Consultation with Essex County Council has highlighted that there are limited options for local highways interventions within Epping and other key settlements within the District, partly due to the protected land in Epping Forest and the high risk of diverting traffic to residential areas. The focus for these areas is therefore to encourage sustainable transport modes such as walking and cycling. Growth

located in Epping, Loughton, Chigwell, Chipping Ongar and Waltham Abbey is likely to be accommodated through improving links to public transport services, including extensions and improvements to the existing bus services and improved walking and cycling. At Waltham Abbey, improved access to train services from Waltham Cross and Cheshunt may be required. Bus, walking and cycling are covered in more detail in the following sections.

The impact of the strategic sites around Harlow on the transport network is the subject of on-going work by Essex County Council in partnership with the Districts. There is ongoing consultation regarding the development of north-south and east-west sustainable transport corridors within Harlow. Plans for the north-south corridor are less advanced, and achieving this route would require greater investment. The proposed route of the north-south corridor land runs through land owned by Harlow Council and comprises area designated as green wedge.

Future transport infrastructure needs in this area will also be affected by the potential relocation of the Princess Alexandra Hospital, to the site proposed for allocation to the East of Harlow. This will be modelled and considered in more detail in the next iteration of the IDP.

Modelling work undertaken by Essex County Council also identified the need for some key improvements to the A414, including further crossings of the River Stort. This is considered as part of an overall approach to the A414 corridor between the M11 and A1, and is expected to be part funded by developers over the next six to ten years.

5.1.5 Funding Mechanisms

Funding sources will be considered further once the future highways infrastructure requirements are better known. Limited opportunities for funding major infrastructure will mean that additional growth in the District will be largely accommodated by making better use of existing transport networks. The focus of Essex County Council will be on identifying packages of measures to implement on the existing network that will improve integration and connectivity. Essex County Council have a budget of £196m for the 2016/17, which represents an increase of £20m from the previous year's budget. At the District level, the Epping Forest LHP has almost £450,000 available in capital funding for the year 2016/17, including match funding. This funding stream is available for range of highways schemes in the District such as congestion, signage and other minor improvements.

The RIS is funded by Government, through a five-year fixed capital settlement, with strategic decisions set by the Secretary of State. The Government has committed £15.2bn of investment to improve the road network over the five-year period from 2015 to 2020, with Highways England leading delivery. The RIS: 2015-2020 commits financial resources to support the upgrade of junction 7, however there are ongoing discussions regarding the need to prioritise junction 7a. It is expected that developer contributions from the strategic sites (through either CIL or S106) will be required to make up any shortfall in funding. The level of contribution and how these will be apportioned between respective developments will be determined in consultation with Essex County Council as part of the next

iteration of the Local Plan and supporting evidence base. Developer contributions will be expected to fund local highway improvements necessary to bring site forward for development.

5.2 Rail and Underground Network

Epping Forest District contains only one mainline railway station, at Roydon. Roydon Station is on the London Liverpool Street to Cambridge line via Harlow Town and Bishops Stortford. There are other stations adjacent to the District's boundaries, including Cheshunt, Broxborne, Harlow Town, Sawbridgeworth and stations in Brentwood and Romford.

Crossrail 1 is to the south of the District with stations at Romford, Gidea Park, Brentwood and Shenfield.

Epping Forest District is also served by the Central Line (main line and Hainault via Newbury Loop) with eight London Underground stations within the District:

- Buckhurst Hill Station
- Loughton Station
- Debden Station
- Theydon Bois Station
- Epping Station
- Roding Valley
- Chigwell Station
- Grange Hill

5.2.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Rolling Origin and Destination Survey (RODS), TfL (2014)
- Fit for the Future, TfL (2014)
- London Travel Demand Survey, TfL (2014)
- Essex Transport Strategy, Essex County Council (2014)
- Consultation with TfL

TfL's *Fit for the Future* report includes four priorities for London transport that are relevant to infrastructure in Epping Forest District:

- Safety and reliability
- Maximising capacity from the existing network
- Growing the network, including through Crossrail and Overground expansion

5.2.2 Existing Provision

The Central Line runs using a partially automated system, and in 2013 TfL increased services on the core section of the line to 34 trains per hour. However, trains within Epping Forest District are less frequent than this. TfL's RODS data from 2014 shows a peak hour train frequency on the five stations at the end of the Central line (Epping, Theydon Bois, Debden, Loughton and Buckhurst Hill) of between ten and 13 trains per hour.

It is understood that there are complex station usage patterns in the District where some commuters choose to use a station which is not geographically proximate in order to access parking, childcare facilities etc.

Two trains per hour stop at Roydon rail station in each direction during weekdays; services are less frequent during the evenings and weekends. Improvements to Roydon rail station have recently been carried out by current rail operator Abellio Greater Anglia. These include:

- Reconstruction of Platform 1
- Installation of a new waiting room
- Additional cycle parking
- New lighting, CCTV and information boards

There are significant planned improvements to the West Anglia Mainline to the south of Roydon as part of the four tracking works between Tottenham and Broxbourne.

5.2.3 Shortfalls in Current Provision

TfL's RODS data indicates that, on the five stations at the end of the Central Line in Epping Forest District, peak hour capacity is around 37% utilised, as shown in Figure 7.

Figure 7: Train loading in Epping Forest district

Stations	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)	
	Eastbound	Westbound	Eastbound	Westbound
Buckhurst Hill	9%	34%	15%	8%
Loughton	6%	37%	10%	9%
Debden	2%	17%	6%	6%
Theydon Bois	2%	14%	5%	3%
Epping	N/A	10%	N/A	3%

There is no available data on the capacity of individual stations, (i.e. the amount of passengers that could be accommodated by the station premises and its facilities at any one time) and no evidence that any stations are nearing total capacity. However, it is understood that concerns were expressed by residents through previous consultation on the Local Plan that certain stations are constrained.

By the 2020s, the Central Line (along with the Bakerloo, Piccadilly and Waterloo & City lines) will be operating the oldest trains and signalling on the network. TfL is progressing plans for a comprehensive renewal of these lines, including a single train fleet and signalling system. As part of this upgrade, TfL hope to add an additional 25% capacity to the Central Line by 2025.

In the past TfL have stated that there are capacity issues further down the line during peak times and discussions about the implications of growth in Epping Forest District are ongoing with TfL.

5.2.4 Rail and Underground Infrastructure Requirements

The capacity of the underground is a significant concern for local residents. Many residents choose to use the Central Line in preference to overground rail as it is a more cost effective mode of travel and provides better connections to employment, leisure and other locations within London and its surrounding area. There is no evidence to suggest that the planned levels of growth would lead to capacity issues on rail services but further discussions will be held with Abellio Greater Anglia and TfL prior to finalising the IDP for submission.

As part of these discussions, the implications of Crossrail 2 for the District will be considered including both the potential to free up capacity on the Central Line as well as to provide improved access to London from Broxbourne and Cheshunt stations.

As part of site selection, the cumulative impact on the Central Line of proposed allocations within each settlement was assessed. In order to calculate the additional number of commuters who might be expected to use the Central Line as a result of the proposed allocations, the following data sources and assumptions were used:

- The proportion of residents using the underground as their main mode of travel to work was taken from 2011 Census data⁵, at ward level and applied to individual settlements. For the purposes of the assessment it has been assumed that these proportions will continue across the Plan period.
- TfL's *London Travel Demand Survey* (2014) highlights that while the highest flows are between 0800-0900 and 1700-1800, the AM and PM peaks extend beyond these hours (0700-1000 and 1600-1900 respectively). It has been assumed that one-third of additional users would choose to travel outside 0800-0900 and 1700-1800; in reality this might be an overestimation.

In the assessment, growth in any settlement which would result in an increase in eastbound or westbound peak hour travel of over 3% was considered to have a material impact on the expected peak use of the Central Line, and growth in any settlement which would result in an increase of over 10% was considered to have an impact on the capacity of the stations to accommodate this growth in demand. No settlements were found to have an increase of more than 10%, and only two (Epping and Loughton-Debden) were found to have an increase of over 3%. Most of the planned growth is therefore not expected to have a material impact on the

⁵ QS701EW - Method of travel to work

capacity of the Central Line within Epping Forest District (though it may have an impact on the capacity of the Central Line or wider TfL network as a whole).

As well as commuters, it is expected that growth in Epping Forest District would lead to other types of trip generation, e.g. travel into Central London for shopping and for entertainment. These trips have not been modelled because they are likely to occur outside the peak times.

Proposed allocations on TfL land assets (e.g. car parks) have assumed no reductions in service provision or car parking levels – this would be achieved through the use of decked parking facilities or similar. This aligns with the approach taken in the site selection.

Further consultation with TfL will be necessary to assess the impact of planned growth on the Central Line as a whole and wider TfL network. This will inform the next iteration of the IDP and submission version of the Local Plan.

5.2.5 Funding Mechanisms

Upgrades to the Central Line would be the responsibility of TfL, whose income and funding comes from five main sources: fares income; other incomes (e.g. rents, congestion charging); grant funding from the Department for Transport, Greater London Authority etc.; Crossrail funding; and borrowing.

5.3 Bus Network

Bus services in Essex are delivered by a range of providers. The *Getting Around in Essex* bus strategy outlines that 85% of the bus network is provided commercially, with the remaining 15% supported by Essex County Council, funded by taxpayers and fares. The County Council services cover concessionary fares, school transport and Sunday and evening services, which would otherwise not be commercially viable.

5.3.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Getting around in Essex: A Bus and Passenger Transport Strategy, Essex County Council (2015)
- Consultation with Essex County Council

Consultation with Passenger Transport representatives from Essex County Council have outlined how bus use across the District remains an unpopular form of transport. The low uptake of bus transport means the current service does not experience capacity deficits. Some parts of the District are poorly serviced by current bus routes, and do not provide sufficient connectivity between key locations. These shortfalls means that there is likely to be hidden demand, where services are not responding to the needs of potential local users.

5.3.2 Existing Provision

TfL currently runs bus services in Loughton and Waltham Abbey. Other providers of bus services in the District are set out in Figure 8.

Figure 8: Bus services in Epping Forest District

Bus operator	Service area
Regal Busways	Operate services both commercially and on behalf of ECC through Harlow, Epping, and Waltham Abbey. They provide home to school transport for Epping St Johns.
Ensign Buses	Operate services in Brentwood and Epping Forest District, Monday to Friday
NIBS Buses	Local bus company providing services for students attending a range of schools
Arriva the Shires	Operate services in Epping Forest District and Harlow
Galleon Travel	Operate services in Epping Forest District and Harlow. Operates some services on behalf of Essex County Council.
Blue Triangle Buses Ltd	Operate services in Debden and Chigwell, and provide school bus services on behalf of Essex County Council
Stephensons of Essex	Operate services on behalf of Essex County Council
First Essex Buses Ltd	Operate services on behalf of Essex County Council

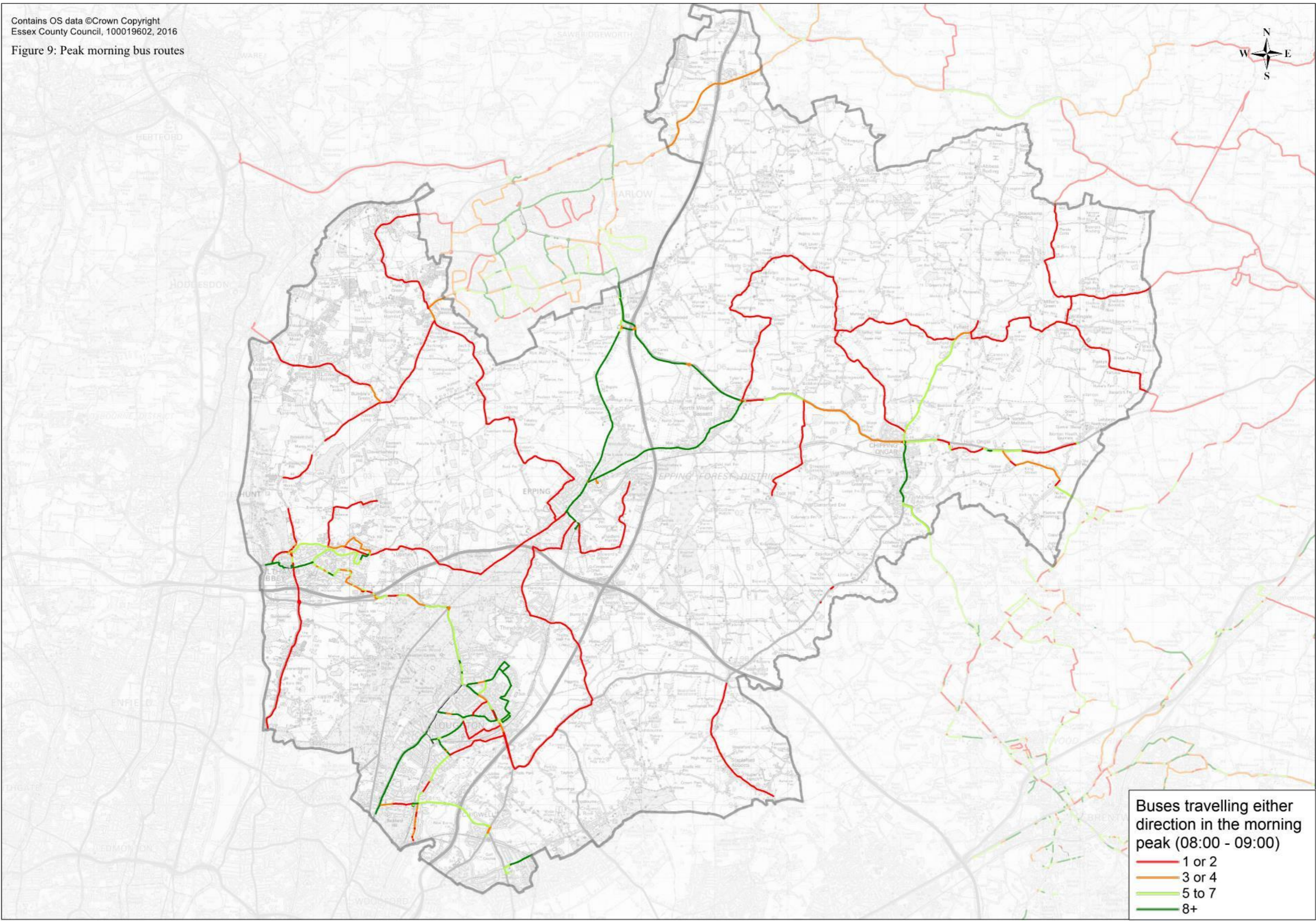
Essex County Council currently run evening and Sunday services to rural areas and villages to increase connectivity. The County Council also provide home to school transport for certain journeys, and additionally provides some ‘shopper services’ for people with no other means of transport. Essex County Council is currently undertaking a review of contracted services, with the aim of moving towards an increasingly demand based service.

There has been a history of poor service delivery by commercial providers in the past, offering an unreliable service, which has deterred higher use levels from local residents.

Bus routes during morning and evening peak travel times are shown in Figure 9 and Figure 10.

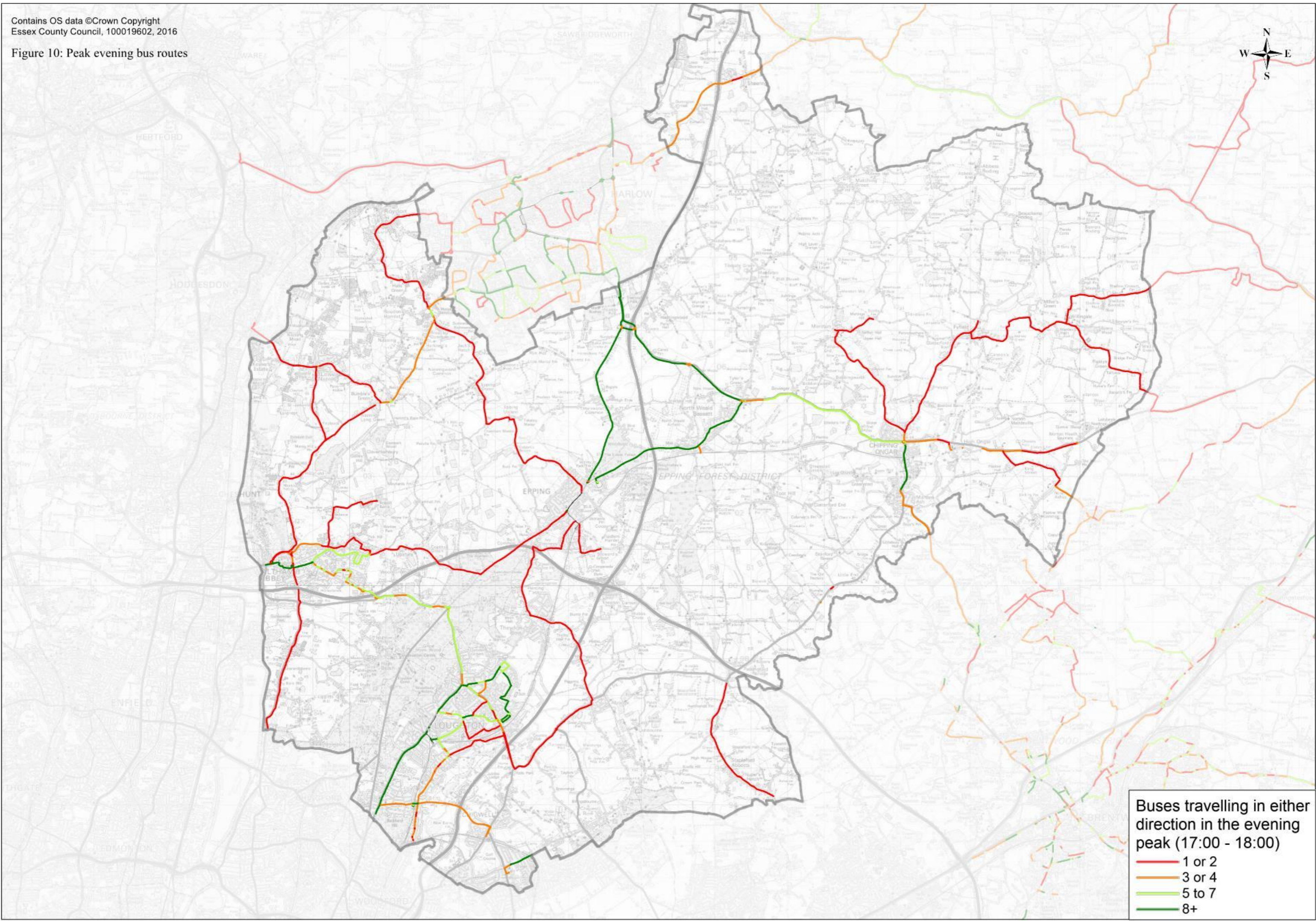
Contains OS data ©Crown Copyright
Essex County Council, 100019602, 2016

Figure 9: Peak morning bus routes



Contains OS data ©Crown Copyright
Essex County Council, 100019602, 2016

Figure 10: Peak evening bus routes



Buses travelling in either direction in the evening peak (17:00 - 18:00)

- 1 or 2
- 3 or 4
- 5 to 7
- 8+

5.3.3 Shortfalls in Current Provision

Across the District, the low level of service provision has deterred bus use and a significant level of investment would be required to provide a service at a sufficient frequency, and covering the appropriate routes, to make it attractive to users.

Bus services in North Weald Bassett remain limited, and do not provide a service able to sufficiently accommodate the commuter population, with poor linking services to Epping town centre. Limited bus services in more rural parts of the District, such as Nazeing, offer poor connectivity to key destinations in the District, and encourage unsustainable transport patterns amongst local residents. A Park and Ride service was considered by the County into Epping Station however it was concluded that this was an unviable option. Chigwell Parish are currently exploring a local hail and ride service.

5.3.4 Bus Infrastructure Requirements

Future requirements relate to the need to increase frequency and improve service coverage to encourage greater levels of use. The approach to site selection has prioritised sites with access to reasonable public transport services in an attempt to encourage modal shift towards public transport. There will be opportunities for extending or rerouting services to serve new development, particularly larger sites which have the potential to increase demand. The strategic sites surrounding Harlow present opportunities to improve the bus network in this area and to increase the bus modal share to serve the high level of development. This is in addition to the extensive network already existing in the town and the planned for east-west and north-south public transport corridors. Specific opportunities will be developed through the next iteration of the IDP.

The Essex County Council *Local Bus Service Assessment and Priority Policy 2015 to 2020* outlines priorities for future service provision arising from a public consultation process (Figure 11).

Figure 11: Priority allocation for future bus provision based on public consultation

Service Category	Priority Allocation
Monday to Saturday frequent services linking rural areas to key service centres (shopping, health, education, employment)	1
Monday to Saturday peak period services, offering access to employment, training and commuter services	2
Monday to Saturday urban services, connecting to key service centres and transport interchanges	3
Infrequent rural 'lifeline' services, linking rural areas to key service centres	4

Evening services after 7pm	5
Sunday services	6
Access to tourist and leisure destinations, and night buses	7

Source: Local Bus Service Assessment and Priority Policy 2015 to 2020, Essex County Council (2016)

5.3.5 Funding Mechanisms

The provision of bus services in Essex is a largely commercial operation, subsidised in part by Essex County Council. Essex County Council has a budget of £30m for the year 2016/17 to cover passenger transport. This will primarily fund the concessionary fares travel scheme and support local bus services. There is an additional budget of £24m to cover school transport services across the County. Preferred growth locations will benefit from better public transport provision and sustainable transport options, which will result in a greater demand for bus provision, thus improving the viability of routes.

Developer contributions could play a role in funding bus services, however will be subject to viability testing undertaken before Regulation 19 and the assessment of potential use of CIL. The *Essex County Council Developers' Guide to Infrastructure Contributions* sets out that developer funding may be required to improve existing infrastructure, particularly where small scale developments are located near to frequent current bus routes. For larger developments, diversions to existing bus routes, or additional services may be required to ensure sufficient access. To align the delivery of bus services with the rate of growth, developer contributions may be sought to subsidise a service until it becomes commercially viable.

5.4 Walking and Cycling

Walking and cycling infrastructure is currently provided by Essex County Council, alongside a range of additional providers, including developers, Epping Forest District Council, and voluntary groups. Across Essex as a whole, there are Local Highways Panel Schemes and district funded schemes, although these are less common in Epping Forest District.

5.4.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Consultations with Essex County Council Sustainable Transport team
- Consultations with Ringway Jacobs (consultants to Essex County Council)
- Essex Cycling Strategy (2015)
- Epping Forest District Cycling Action Plan (2016)

- Essex Transport Strategy: the Local Transport Plan for Essex (2011)

The Infrastructure Act (2015) committed the Government to producing a Cycling and Walking Investment Strategy, to raise the profile of sustainable transport across the UK, and ensure sufficient cycle infrastructure is in place. The *Draft Cycling and Walking Investment Strategy* was published by the Department for Transport in March 2016, and the feedback from public consultation is currently being reviewed. The draft report sets out the Government's ambitions to make cycling and walking the natural choice for shorter journeys, or as part of a longer journey. Service delivery for key walking and cycling infrastructure has become increasingly devolved, to allow local bodies to support change in their areas.

At the county level, the Essex Cycling Strategy (2015) outlines a range of strategic issues. The key future aims outlined in the strategy include:

- Promote a 'Cycle Essex' brand
- Improve the quality and overall provision of cycling infrastructure
- Increase the support for local initiatives
- Appoint an Essex Cycling Advocate

The report shows that Epping Forest District had some of the lowest cycling levels across the County between 2001 and 2011, and the numbers of residents cycling to work is low. This has partly been due to a lack of planned interventions and limited infrastructure in the District, which has meant that cycling has not been sufficiently promoted. The *Epping Forest District Cycling Action Plan* (2016) sets out some of the key barriers to cycling. These include a lack of signposted routes, the fragmented provision of the current network, limited cycle parking facilities, congested roads with limited crossings and areas of hilly topography.

The Essex Transport Strategy (2011) sets out the County's objective to promote walking as a healthy and sustainable alternative to motorised transport, particularly for shorter journeys. The footway network within Essex includes Category 1 & 2 Footways, such as footways within town centres and those leading to schools, hospitals and stations, along with Category 3&4 Footways which include footways in residential areas. In addition to this walking infrastructure, the County Council manages Public Rights of Way (PRoW) networks, which provide key links for local communities.

Consultation with Essex County Council identified that walking facilities were of a reasonable standard throughout the District. Future improvements of walking infrastructure will help to provide alternative transport solutions within congested areas, particularly in Epping town centre.

5.4.2 Existing Provision and Shortfalls

Cycling infrastructure is limited in the District, and is formed of isolated stretches of cycle route, and some provision for bike storage/parking. Off-road cycle lanes exist in some of the key settlements, connecting to social infrastructure, such as the area surrounding Epping Forest College in north Loughton. Within Epping, an

off-road route has recently been built to connect Epping with Coopersale, providing access to St Margaret’s hospital. This route however currently lacks sufficient lighting.

The District Cycling Action Plan (2016) identifies the lack of off-road cycling routes within the rural parts of the District, with the high-speed, congested nature of roads further deterring cyclists – particularly occasional cyclists. This is notably the case in North Weald Bassett and Epping. Due to its location, Waltham Abbey has access to a part of the National Cycle Network, linking through the Lee Valley. Similarly, areas in the south of the District have the opportunity to connect with cycle routes in the London Boroughs.

Roding Valley Way is a new part planned cycle route, connecting north of Woodford to Ilford, and terminating near to Roding Valley Station. There is potential to extend this route to link with other stations in Epping Forest District, such as Buckhurst Hill, Loughton and Debden. At present, cycle routes connecting to stations within the District remain limited, with some bicycle parking facilities.

Figure 12: Cycle parking spaces at stations in Epping Forest District

Tube Station	Cycling Parking Space
Buckhurst Hill	16
Chigwell	0
Debden	16
Epping	38
Grange Hill	0
Loughton	22
Roding Valley	6
Theydon Bois	10

Cycling infrastructure, including cycle stands and specialised traffic signals, across the District is varied. Epping town centre has a number of cycle stands, located on the main high street and at the hospital. There is also a bicycle locking scheme located on Sun Street in Waltham Abbey.

Cycling infrastructure in Harlow is one of the best maintained in the county and covers most of the District. The overall levels of frequent cycling however remained lower than expected, and there is currently insufficient cycling infrastructure at Harlow station.

5.4.3 Walking and Cycling Infrastructure Requirements

Consultations with the Sustainable Transport team at Essex County Council outlined how future agendas will focus on behavioural change, promoting cycling through community initiatives, and encouraging smarter working schemes. The Cycling Action Plan outlines a range of measures to improve cycling participation

in the District, including both physical infrastructure and softer schemes to encourage behaviour change.

The future provision of cycling infrastructure will involve extensions to the existing network, along with supporting facilities such as cycling storage, lighting, widening of cycle routes and improved junctions. Public realm improvements will improve safety on busy roads, such as the High Road in Loughton. In some cases, paths will be widened to allow for multi-modal uses, and integrated with PRoW. Consultation with Essex County Council identified that improvements to footways are likely to be incorporated with larger highways interventions.

Additional walking infrastructure will be site specific to individual developments as appropriate, and will improve the attractiveness of short distance routes to key destinations such as stations and town centres. These interventions will include the provision of footway access, dropped kerbs to improve user access, footpath lighting, and safe crossing points. Planned provision of existing cycling infrastructure in neighbouring authorities will help to link Epping Forest District with larger urban centres. The southern part of the District is well placed to link up with Quietways provided by TfL in the London boroughs. TfL Quietway 2 in Walthamstowe will offer a route to Central London from spring 2017, which will directly benefit Buckhurst Hill, only 3 miles away. There are also future proposals for a TfL Quietway 6 at Barkingside, which would benefit the Chigwell area.

Future planned provision for highways will assist in improving cycling infrastructure. A developer-funded highways improvement scheme is planned for Chigwell Lane, with work expected to take place from August 2016 until April 2017. This scheme will help to improve access through measures such as widening the footways and carriageways and improving street lighting and junctions.

Improved cycle access and infrastructure are expected as part of the proposed M11 7a Junction which will widen Gilden Way from the London Road roundabout to Marsh Lane, to create a three lane road. Improved Public Rights of Way cross points which tie into the new link road to Sheering Road roundabout will enhance existing walking and cycling routes in the surrounding area.

5.4.4 Funding Mechanisms

There are a range of funding options available for cycling infrastructure, including Central Government, Essex County Council and from developer contributions. There are a range of funding opportunities through Central Government, including through the South East Local Enterprise Partnership or the Department for Transport Access Fund.

In line with Government ambitions to increase per person cycling investment from £2.50 to £10 by 2020/21, Essex County Council seeks to increase the amount invested into encouraging cycling. Across the county, investment will initially be raised to £5 per person by 2017, and later increased to £10.

The main source of funding for local highways infrastructure is derived from the Local Highways Panels across the county, particularly for schemes costing less than £100k. The Epping Forest LHP has almost £450,000 available in capital

funding for the year 2016/17, including match funding. This funding is allocated to cover a range of highways schemes in the District such as congestion, cycling schemes, minor improvements and Public Rights of Way. The provision of local cycling schemes and smaller interventions can be funded as part of this budget allocated by Essex County Council.

For schemes costing more than £100k, funding is likely to be derived from a combination of Essex County Council, and available developer contributions associated with new developments subject to prioritisation considered further before Regulation 19, and Central Government. Cycling in the form of BMX infrastructure can be obtained through funding opportunities with the NHS, Sport England and National Lottery due to its role in mitigating childhood obesity.

Developer funding through S106 or CIL is likely to be an important source of funding. The *Essex County Council Developers' Contribution Guide* (2016) sets out that where appropriate, contributions might be sought to establish safe walking routes, particularly footways surrounding schools. For larger developments, contributions might be sought for ensure attractive walking routes to existing bus stops.

5.4.5 Future Policy Requirements/Next Stages of Work

The proposed levels of growth in the District will have a significant impact on existing transport infrastructure. There are a number of constraints associated with expanding the existing highways network, including the protection of Epping Forest, and safeguarding residential areas from receiving diverted traffic flows. These restrictions are set against the backdrop of increasing financial pressures, which pose significant challenges for the future delivery of transport infrastructure.

As a result of this there will be considerable emphasis on increasing the modal share of sustainable forms of transport, and reducing car usage. Further analysis will be undertaken to develop specific proposals for improving access to public transport, walking and cycling particularly for areas where significant growth is planned. This will inform the next iteration of the IDP and will inform decisions about the approach to S106 and CIL as well as requirements for individual developments.

The Draft Local Plan sets out a number of policies relating to the future provision of transport infrastructure and the promotion of sustainable transport choices. Draft Policy T1 sets out that development should seek to minimise the need to travel, promote opportunities for sustainable transport modes, improve accessibility to services and support the transition to a low carbon future. Draft Policy T2 identifies the need to safeguard land required for proposed transport routes and facilities.

The next stages of work for the IDP in relation to transport are:

- Use the detailed modelling work shortly to be commissioned by ECC on the impact of proposed site allocations in Epping Forest District. The findings of this modelling will also inform the submission version of the Local Plan.

- Undertake further work to assess costs associated with upgrading highways and public transport capacity and walking and cycling routes, if not covered by previous studies or strategies.
- Further explore options for the funding of transport infrastructure.
- Continue to engage with Essex County Council, Transport for London and others.

6 Education

6.1 Early Years and Childcare

Early years and childcare provision in Epping Forest District comprises a range of facilities, and includes independent nurseries, pre-schools and maintained school nurseries. A combination of providers additionally offer a range of part-time and full-time activities in the form of breakfast clubs, after-school care and holiday clubs.

Essex County Council has a duty to ensure that there are sufficient early years' places for children living in the county, and has an obligation to meet national standards of provision in terms of Free Early Education Entitlement (FEEE). Government legislation sets out that all 3 to 4 years old in England are entitled to 570 hours of free early education or childcare per year. This is usually formed of 15 hours a week for 38 weeks of the year. Some two year olds are also eligible for this childcare provision.

A range of organisations play a role in service delivery within the District. The County Childcare Sufficiency Strategy Group are a multi-agency group within Essex County Council, and are responsible for assessing the strategic issues affecting childcare, and formulating appropriate action plans to respond to identified issues. This group is made up of a broad range of agencies and actors, including library services, family information services, schools programme and Job Centre Plus. This reflects the increasingly collaborated approach to service delivery of childcare within the District.

6.1.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Essex Early Years and Childcare Strategy 2015-2018 (2015)
- Consultations with Essex County Council Children Community Development Officer
- Essex County Council Childcare Sufficiency Assessment (2011)
- Essex County Council Interactive map of childcare provision
- Ofsted Early Years Data (2015)
- Essex County Council Developers' Guide to Infrastructure Contributions, Revised Edition (2016)

The 2006 Childcare Act defines 'Sufficient Childcare' as being able to meet the needs of parents in the area who require childcare facilities to work – either to remain in work or take up employment. Current regulations on childcare entitles every three or four year old child to 15 hours' of free early years' provision for 38 weeks of the year. Provision must similarly be provided for two year olds from less affluent families. Government plans for 2017 include the introduction of 30 hours of free childcare for working families.

The Childcare Sufficiency Assessment (2011) outlines the role of the County Childcare Sufficiency Strategy Group, and the collection of childcare occupancy data on a termly basis. The report indicates that there was an annual increase of registered births 2004-5 to 2008-9 academic year, and suggested that this was likely to continue. The more recent Early Years and Childcare Strategy (2015-2018), outlines future aspirations and the changing nature of childcare provision in the county:

- Offer access to healthcare services and Job Centre Plus through childcare providers.
- Work towards developing community/ family hub models linking providers to make services accessible to local families.
- Invest to expand or commission new Free Early Education Entitlement (FEEE) provision in hotspot areas by March 2016.
- Invest in the construction of nursery classes and Foundation Stage Units to provide additional nursery provision in primary and infant schools.

The 2016 *Childcare Sufficiency Assessment* will not be publicly available during the period of this study.

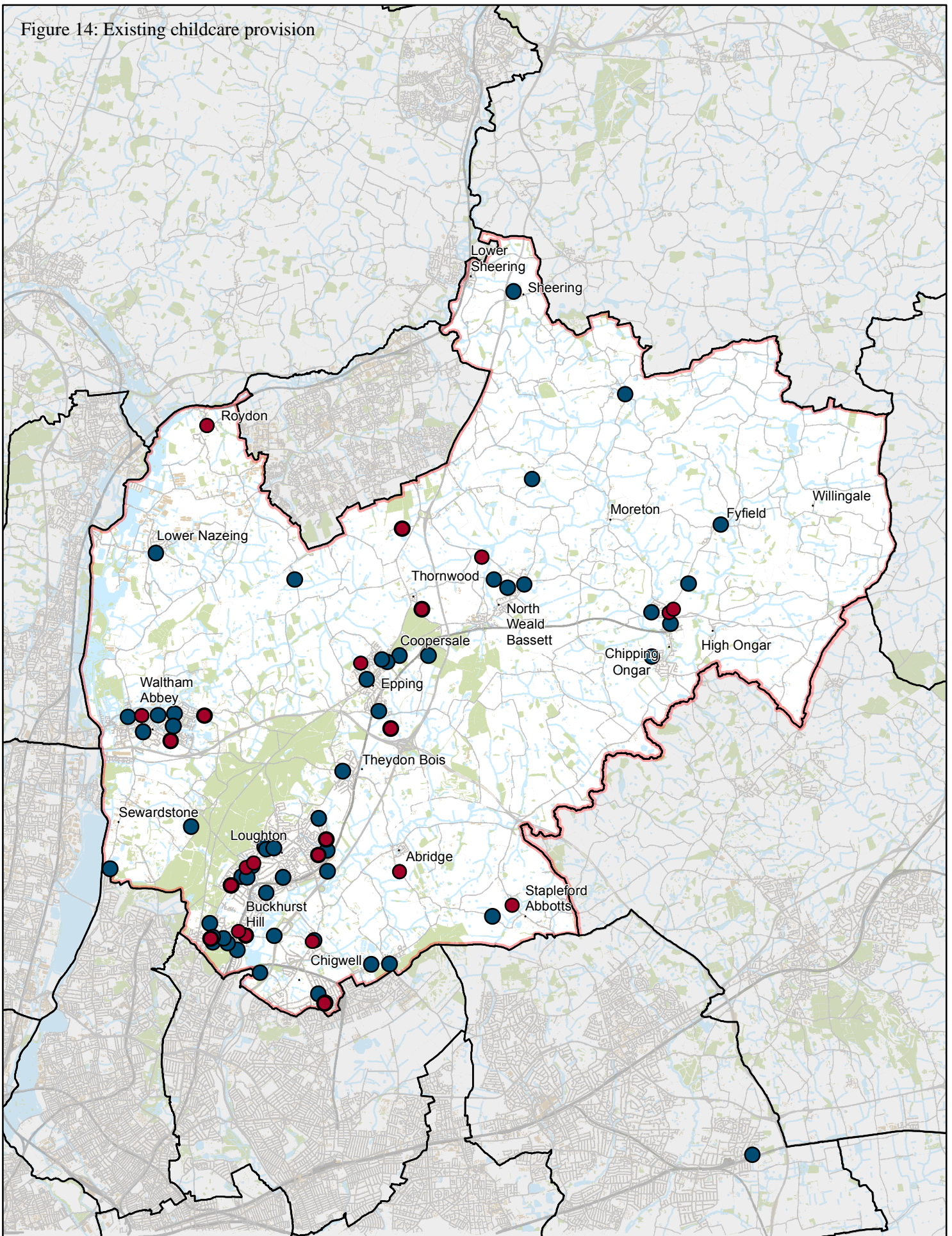
6.1.2 Existing Provision

There are currently 265 childcare providers in the District across all types of early years and childcare services. These are formed of both independent and public facilities, with a range of fee-paying requirements. The increase in breakfast clubs and other non-school related services has in part been in response to changing lifestyles and parental needs for greater flexibility. Conversations with Essex County Council outlined how parents tend to use a combination of formal and informal childcare services. The Government's plans to introduce 30 hours of free childcare for working families will place further strain on the childcare provision in the district. Any new developments will require additional childcare to support families to be able to work or study. Figure 13 provides a breakdown of childcare provision within the District.

Figure 13: Breakdown of childcare provision in Epping Forest District. Source: Essex County Council

Type of provider	Number of facilities
Child minders	135
Day nurseries	25
Pre-school	45
Primary school nurseries	4
Independent school nurseries	6
After school clubs	21
Breakfast clubs	16
Holiday clubs	13

Figure 14: Existing childcare provision



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-003

Date: September 2016

Scale: 1:150,000

Content
Early Years and Childcare provision

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Nurseries, Pre-Schools and Maintained School Nurseries
- Breakfast, After School and Holiday Clubs
- Surrounding Authorities
- Epping Forest District Boundary



6.1.3 Shortfalls in Current Provision

Access to early childcare provision in Epping Forest District is under significant pressure across much of the district. Due to the strong transport connections to London, average salaries are also higher in Epping Forest District than in other parts of the County. Childcare providers therefore have to take into account local wages and the cost of running services when setting pricing schedules. The cost of childcare in the District is the second highest in the County.

Conversations with Essex County Council's Children Community Development Officer brought to light the need for increased childcare provision across the whole District. Capacity figures for childcare in the District show that around 70% of the pre-schools, nursery units of independent schools and primary schools nurseries have an occupancy rate of 80% or more. Although none of the holiday and after school clubs in the District were identified as having an occupancy rate of over 80%, the existence of unfilled capacity at any given provider does not necessarily reflect sufficient provision. The working patterns and childcare requirements of parents vary considerably, and therefore require a range of options to be available.

There are a number of capacity 'hot spots', where current service provision is not meeting local need, particularly in providing FEEE for 2 and 3-4 year olds. Within the District, 23 out of the 32 wards do not have available FEEE capacity for 2 year olds.

Government plans to extend the current allowance of FEEE provision for 3-4 year olds in 2017 is likely to worsen the situation as currently 30 of the 32 wards in the District have insufficient capacity to accommodate the additional demand. Consultations with Essex County council identify that pressures on childcare services are likely to increase, as there are currently no planned expansions of childcare infrastructure, with some providers closing in the near future.

6.1.4 Early Years and Childcare Infrastructure Requirements

Childcare facilities are increasingly provided alongside a range of other services, including primary schools, community centres and library facilities. In order to estimate the magnitude of early years and childcare required to serve the additional population expected over the Plan period, the following standards set out in Figure 15 have been used.

Figure 15: Early years and childcare standards

Infrastructure	Standard	Per	Source
Children's clubs	0.09 children	House	<i>ECC Developers' Guide to Infrastructure</i>
	0.045 children	Flat	<i>ECC Developers' Guide to Infrastructure</i>
	1 club	46 children	<i>Essex Growth and Infrastructure Framework</i>

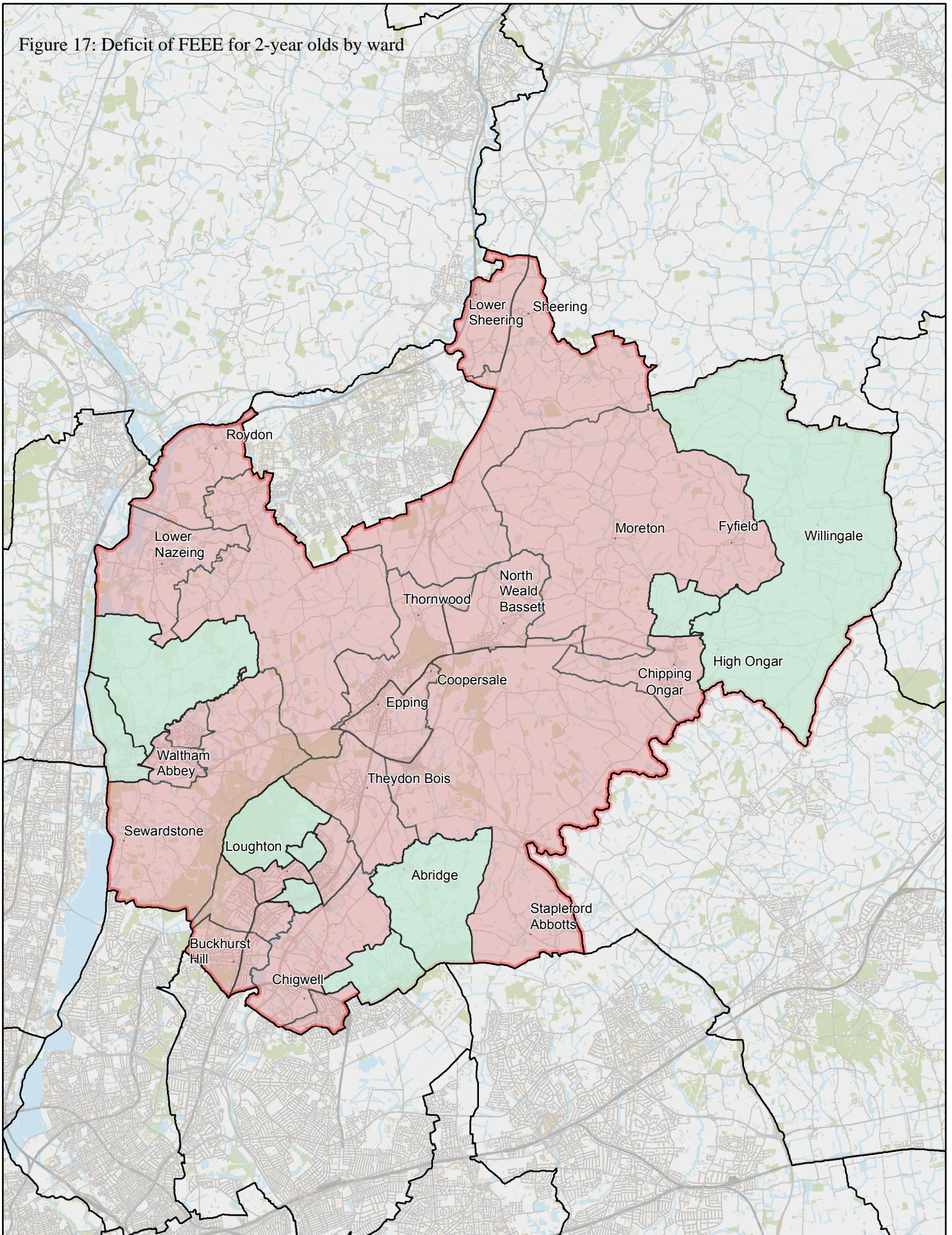
Nursery	0.09 children	House	<i>ECC Developers' Guide to Infrastructure</i>
	0.045 children	Flat	<i>ECC Developers' Guide to Infrastructure</i>
	1 club	56 children	<i>ECC Developers' Guide to Infrastructure</i>
Pre-school	0.09 children	House	<i>ECC Developers' Guide to Infrastructure</i>
	0.045 children	Flat	<i>ECC Developers' Guide to Infrastructure</i>
	1 club	46 children	<i>Essex Growth and Infrastructure Framework</i>

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the demand for children's clubs and nurseries across groups of settlements is shown in Figure 16. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 16: Childcare additional demand (newly arising only) – by settlement groups

Settlement Groups	Children's clubs newly arising demand over Plan period (facilities)	Nurseries newly arising demand over Plan period (facilities)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.92	2.37
Waltham Abbey and Rural Apportionment	1.70	1.37
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	5.04	4.05
Strategic Sites L and M and Rural Apportionment	2.12	1.70
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	2.65	2.13
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.71	1.37
North Weald Bassett, Thornwood and Rural Apportionment	3.12	2.51
Epping and Rural Apportionment	3.22	2.59
Chigwell, Stapleford Abbots and Rural Apportionment	1.22	0.98

Figure 17: Deficit of FEEE for 2-year olds by ward



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0004

Date: September 2016

Scale: 1:150,000

Content Free Early Education for two years olds by ward

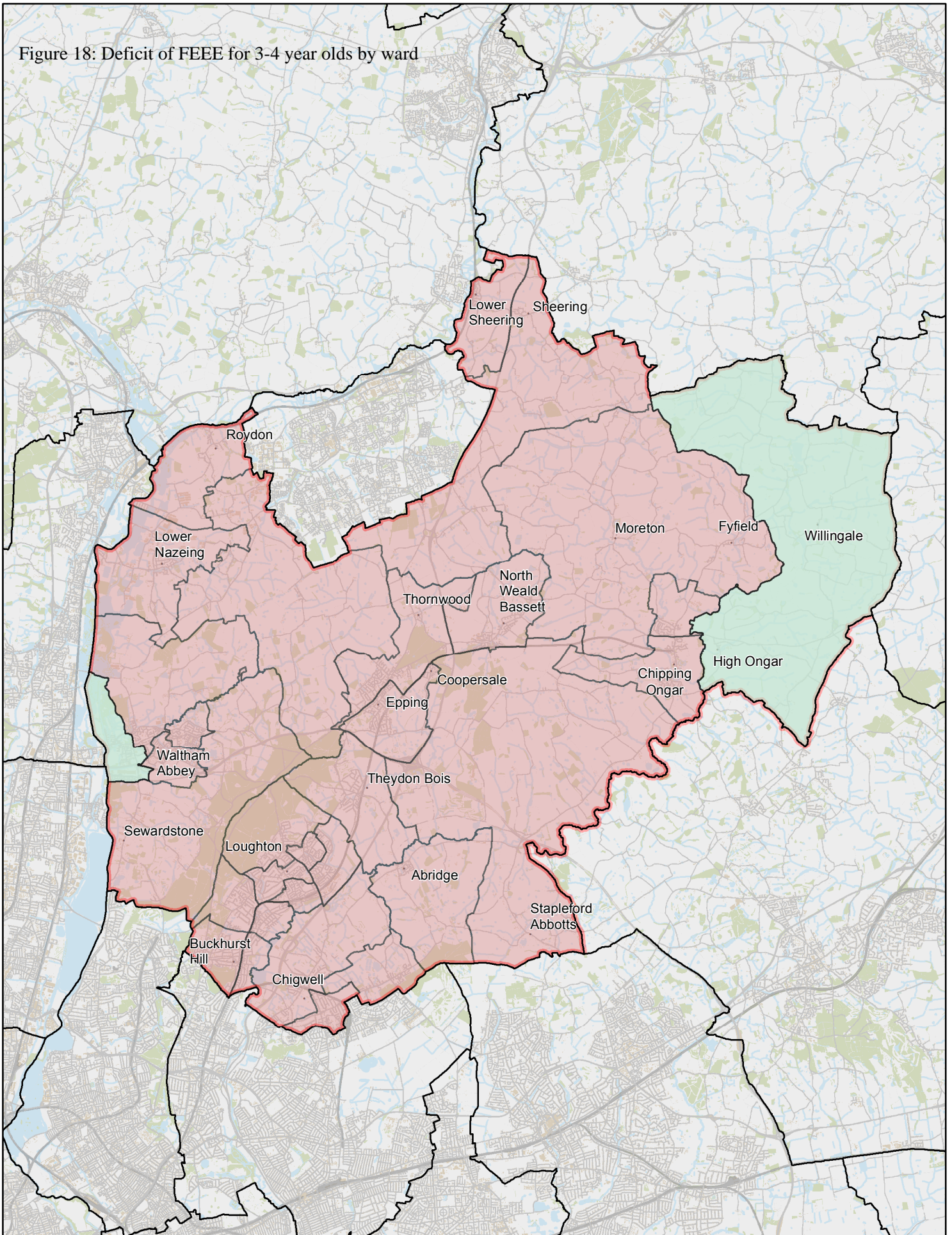
Contains Ordnance Survey & Royal Mail Data © Crown Copyright & Database Right 2015 EFDC Licence No: 100018534 2015 © Royal Mail Copyright & Database Right 2015

Legend	
	Settlements
	No FEE capacity for two year olds
	FEE capacity for two year olds
	Surrounding Authorities
	Epping Forest District Boundary

N



Figure 18: Deficit of FEEE for 3-4 year olds by ward



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0005

Date: September 2016

Scale: 1:150,000

Content
Free Early Education for 3-4 years olds by ward

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend	
	Settlements
	FEE capacity for 3-4 year olds
	No FEE capacity for 3-4 year olds
	Surrounding Authorities
	Epping Forest District Boundary

N



Additional demand for nursery capacity will primarily be met through private providers responding to market demand.

Figure 19: Pre-school additional demand (newly arising only) – by Forecast Planning Group (FPG)

Forecast Planning Group	Settlements	Pre-school newly arising demand over Plan period (whole facilities)
Ongar (Group 01)	Chipping Ongar; Fyfield; High Ongar	1.88
Epping (Group 02)	Epping; North Weald Bassett; Thornwood	6.48
Waltham Abbey (Group 03)	Waltham Abbey	1.69
Buckhurst Hill/Loughton South (Group 04)	Buckhurst Hill	0.20
Chigwell/Lambourne (Group 05)	Chigwell; Stapleford Abbots	1.25
Loughton (Group 06)	Loughton/Debden; Theydon Bois	2.73
Roydon (No Group)	Roydon	0.19
Nazeing (No Group)	Lower Nazeing	0.65
Uttlesford (Group 05)	Lower Sheering; Sheering	0.61
Strategic Sites	Strategic Sites	7.81

6.1.5 Funding Mechanisms

Childcare in Essex is provided by private organisations. The Department of Education invest capital resources to commission FEEE provision, to meet national standards of free childcare provision.

The Government is currently undergoing consultation on changes to how FEEE is funded. The proposals outlined include the introduction of a new national funding formula for three to four year olds, changes to the way local authorities fund early year providers and ensuring that children with special educational needs or disabilities receive the funding they need.

Developer contributions also offers a potential source of funding for childcare provision, and helps to mitigate the cumulative impact arising from growth. Contributions are required where there is a current or forecast lack of provision in the immediate area of the proposed development. However, this would need to be considered against all other competing demands for contributions to other services.

6.2 Primary Schools

The provision of primary school education covers children aged 4 to 11 years old. Essex County Council has a duty to ensure that there are sufficient school places for children living in the county.

Since the introduction of Academies and Free Schools in 2010, the provision and operation of schools has shifted towards greater levels of institutional autonomy. Academy schools are independent of local authority control, and are instead funded directly by central Government, and sponsors. Free schools have similar levels of autonomy, however can be set up by a range of groups, including charities, universities, parents, teachers, businesses and faith groups. Both types of school do not have to follow the national curriculum.

6.2.1 Evidence Base and Strategic Issues

The main sources of evidence include:

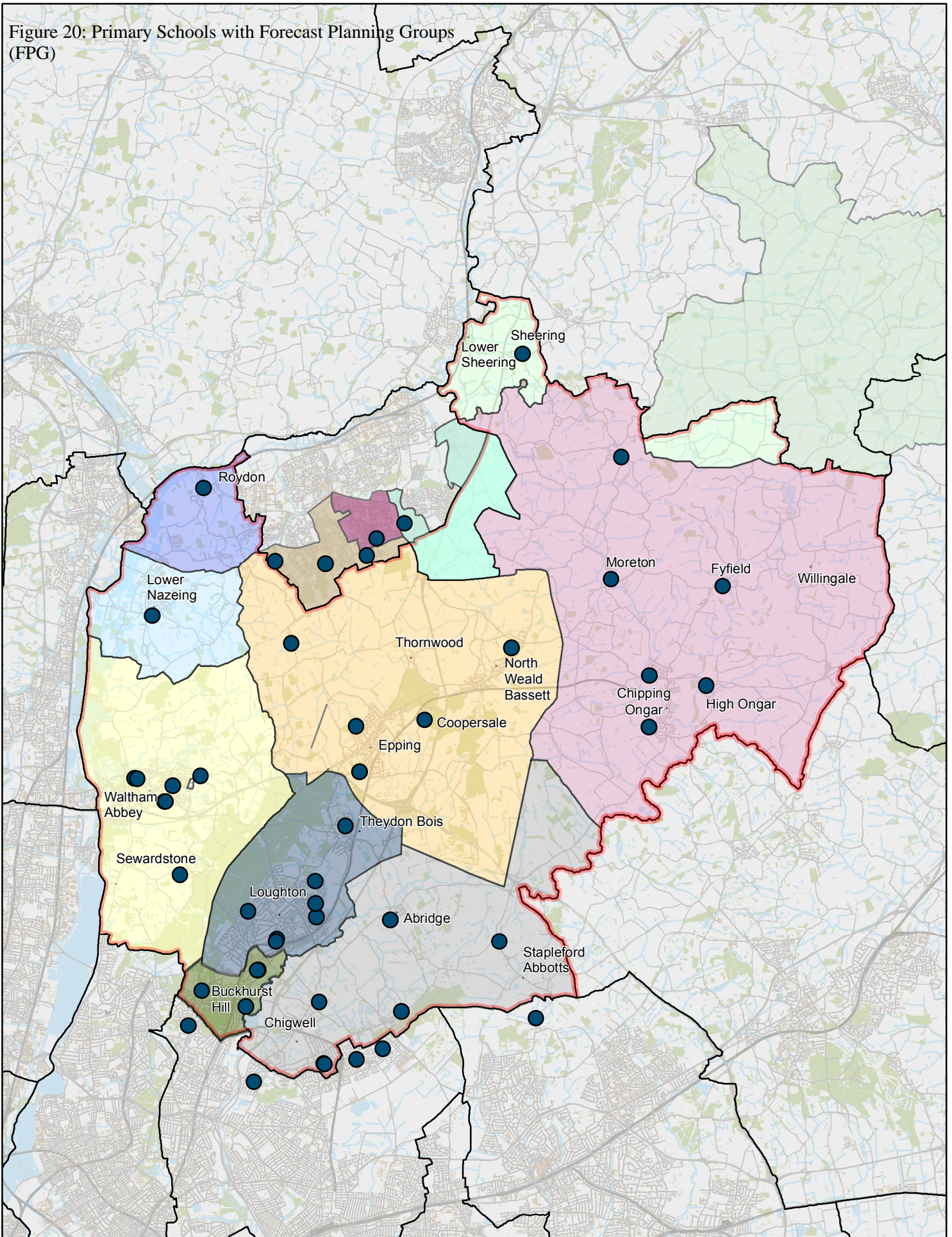
- Consultation with Essex County Council Pupil Planning team
- Commissioning School Places in Essex 2015-2020, Essex County Council (2015)

The *Commissioning School Places in Essex 2015-2020* report sets out the current provision of primary and secondary schools maintained by Essex County Council. A range of data on schools within the District is provided to help stakeholders assess the future demand likely to be placed upon this infrastructure as a result of growth. The report outlines the current organisation of school places, including the existing capacity and number of pupils on roll, along with forecasts of future pupil numbers.

6.2.2 Existing Provision

Within Epping Forest District, school capacity is assessed through Forecast Planning Groups (FPG), which divides the District into defined spatial areas in order to effectively plan school infrastructure. Currently there are 38 primary schools within the District (including five Free Schools and one academy), split across nine FPGs.

Figure 20: Primary Schools with Forecast Planning Groups (FPG)



The *Commissioning School Places in Essex 2015-2020* report provides capacity information for primary schools for the academic year 2014/15, and a forecast capacity figure for the academic year 2019/20. These forecast pupil figures are based on historical admissions trends, the current number of pupils on roll, historic birth rate trends and current GP registrations within school admissions boundaries.

The Department for Education sets out that schools should operate with a spare 5% capacity, or headroom, to allow for operational flexibility and maximise parental choice. Figures 14 and 15 set out current and forecast capacity figures for FPGs for the academics years 2014/15 and 2019/20 respectively.

The data has been sourced from the *Commissioning School Places in Essex 2015-2020* report, with an assumed 5% head room applied. Conversations with Essex County Council note that there are a number of faith schools which draw pupils from a wider catchment, and operate a faith-based admissions criteria. Capacity figures for faith-based schools have been marginally suppressed to reflect these patterns.

Figure 21: Primary school capacity figures, academic year 2014/15, by Forecast Planning Group (FPG)

Forecast Planning Group	Total Number on roll 2014/15	Total primary capacity 2014/15	Surplus/ deficit capacity 2014/15
Ongar (Group 01)	799	917	118
Epping (Group 02)	1,316	1,351	35
Waltham Abbey (Group 03)	1,529	1,587	58
Buckhurst Hill/ Loughton South (Group 04)	1,195	1,268	73
Chigwell/ Lambourne (Group 05)	969	1,073	104
Loughton (Group 06)	2,462	2,528	66
Nazeing (No Group)	249	285	36
Roydon (No Group)	199	200	1
Uttlesford (Group 05)	841	760	-81

Figure 22: Forecast primary school capacity figures, academic year 2019/20, by Forecast Planning Group (FPG)

Forecast Planning Group	Total NOR 2019/20	Total primary capacity 2019/20	Surplus/ deficit capacity 2019/20
Ongar (Group 01)	842	927	85
Epping (Group 02)	1,477	1,596	19
Waltham Abbey (Group 03)	1,656	1,596	-60
Buckhurst Hill/ Loughton South (Group 04)	1,283	1,397	114
Chigwell/ Lambourne (Group 05)	1,063	1,075	12
Loughton (Group 06)	2,717	2,691	-26
Nazeing (No Group)	229	285	56
Roydon (No Group)	199	200	1
Uttlesford (Group 05)	699	752	53

The figures for FPGs show that there are surplus primary schools places, with some localised capacity issues across the District.

For the academic year 2014/15, all FPGs other than Uttlesford (which includes Sheering Church of England School in Epping Forest District) had available capacity. The Roydon FPG however only had a surplus capacity of one pupil, which is insufficient for absorbing future growth. The forecast capacity figures for 2019/20 show that Waltham Abbey (Group 03) and Loughton (Group 06) FPGs will experience a capacity deficit, with Roydon still only offering one surplus place. The full breakdown of individual schools and capacity figures are set out in Appendix C.

FPG within Essex are cross-boundary. It is therefore appropriate to consider schools within adjoining authorities, particularly in relation to the key growth locations. Figure 23 outlines the FPG for primary schools in Harlow, based on schools located within 1km (transport networked) of the Epping Forest District boundary.

Figure 23: Forecast primary school capacity figures for Harlow, academic year 2014/15, by Forecast Planning Group (FPG)

Forecast Planning Group	Total NOR 2014/15	Total primary capacity 2014/15	Surplus/ deficit capacity 2014/15
Harlow (Group 01)	1,870	1,824	-46
Harlow (Group 02)	1,756	1,786	30
Harlow (Group 05)	1,008	1,063	55

Figure 24: Forecast primary school capacity figures for Harlow, academic year 2019/20, by Forecast Planning Group (FPG)

Forecast Planning Group	Total NOR 2019/20	Total primary capacity 2019/20	Surplus/ deficit capacity 2019/20
Harlow Group 01	2,015	2,223	208
Harlow Group 02	1,965	1,910	-55
Harlow Group (05)	1,138	1,375	237

There are only three FPGs in Harlow that have schools located within 1km from the Epping Forest District boundary. Harlow (Group 01) has a current deficit capacity, however forecast figures for the academic year 2019/20 demonstrate a significant surplus. This is due to the planned provision of the New Hall Farm academy school, which will accommodate the needs of pupils residing in and around the growth locations in west Harlow. In contrast, Harlow Group 02 has a current capacity surplus, but shows a future deficit in response to natural population growth, despite significant capacity expansion of Pear Tree Mead primary and nursery school. Harlow (Group 05) shows both a current and forecast capacity surplus, partly due to planned expansions at Longwood Primary Academy and the Kingsmoor Academy throughout 2016 and 2017.

6.2.3 Shortfalls in Current Provision

The *Commissioning School Places in Essex 2015-2020* report identifies the following four schools as having deficit capacity for the academic year 2014/15:

- Theydon Bois Primary School
- High Ongar Primary School
- The Leverton Junior School
- Sheering Church of England Primary School

The application of head room assumptions has shown a further seven schools to have a current capacity deficit. These include:

- Staples Road Primary
- St John Fisher Catholic Primary
- Waltham Holy Cross Infant School
- Leverton Infant and Nursery School
- High Beech Church of England school
- Epping Primary school
- Matching Green Church of England

The forecast capacity figures show that current infrastructure will be under significant pressure to accommodate the growing pupil population. For the academic year 2019/20, 21 of the primary schools show a forecast capacity deficit, with a further six schools showing a surplus of less than ten places.

Recent expansions and facility upgrades have been completed in the District to help ease capacity problems and upgrade ageing facilities. The primary schools have already undergone recent expansions and refurbishment are set out in Figure 25.

Figure 25: Recent primary school expansions and refurbishments

School	Location	Details
Alderton Infant	Hall Lane, Loughton	Extension to the infant school and junior school, including class bases, group room, ancillary accommodation and new library.
Thomas Willingale Primary & Nursery	The Broadway, Loughton	Single storey infill extension, including new resource area, meeting room and medical room
Epping St Johns	Bury Lane, Epping	New £18m facility completed in 2013

Planning applications have been made for a number of school facilities in the District to increase provision, ranging from minor infill extensions to significant refurbishments and the construction of new facilities. In addition, there is planned expansion for St Andrew's Primary School, North Weald Bassett which will increase available capacity.

A number of primary schools will undergo refurbishment work to improve the quality of ageing infrastructure, however additional capacity will not be provided.

6.2.4 Primary Schools Infrastructure Requirements

In order to estimate the additional pupils expected from the additional housing growth – and the forms of entry required to serve them – the following standards set out in Figure 26 have been used.

Figure 26: Primary school place standards

Infrastructure	Standard	Per	Source
Primary schools	0.3 pupils	House	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	0.15 pupils	Flat	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	210 pupils	1 FE	30 pupils per class across 7 year groups.

Based on expected additional population (from allocations, commitments and expected windfall development) only – i.e. not taking into account existing capacity or shortfall – the demand for primary schooling across the schools planning areas is shown in Figure 27.

Figure 27: Primary schools additional demand (newly arising only) – by Forecast Planning Group (FPG)

Forecast Planning Group	Settlements	Newly arising demand over Plan period (FE ⁶)	Newly arising demand over Plan period (Pupils)
Ongar (Group 01)	Chipping Ongar; Fyfield; High Ongar	1.34	282
Epping (Group 02)	Epping; North Weald Bassett; Thornwood	4.64	974
Waltham Abbey (Group 03)	Waltham Abbey	1.21	255
Buckhurst Hill/Loughton South (Group 04)	Buckhurst Hill	0.14	30
Chigwell/Lambourne (Group 05)	Chigwell; Stapleford Abbotts	0.90	188
Loughton (Group 06)	Loughton/Debden; Theydon Bois	1.96	412
Roydon (No Group)	Roydon	0.13	28
(Nazeing (No Group)	Lower Nazeing	0.46	98
Uttlesford (Group 05)	Lower Sheering; Sheering	0.4	92
Strategic Sites	Strategic Sites	5.6	1,172

Taking into account the deficits set out in Figure 22 the total demand for primary school capacity over the Plan period is shown in Figure 28.

Figure 28: Primary schools additional demand (newly arising and existing capacity/shortfall) – by Forecast Planning Group (FPG)

Forecast Planning Group	Settlements	Total demand at end of Plan	Newly arising demand over
-------------------------	-------------	-----------------------------	---------------------------

⁶ One Form Entry school is equivalent to 210 pupils, made up of seven classes of 30 pupils.

		period (FE)	Plan period (Pupils)
Ongar (Group 01)	Chipping Ongar; Fyfield; High Ongar	0.78	164
Epping (Group 02)	Epping; North Weald Bassett; Thornwood	4.47	939
Waltham Abbey (Group 03)	Waltham Abbey	0.94	197
Buckhurst Hill/Loughton South (Group 04)	Buckhurst Hill	-0.20 (capacity)	-43 (capacity)
Chigwell/Lambourne (Group 05)	Chigwell; Stapleford Abbots	0.40	84
Loughton (group 06)	Loughton/Debden; Theydon Bois	1.65	346
Roydon (No Group)	Roydon	0.13	27
Nazeing (No Group)	Lower Nazeing	0.29	62
Uttlesford (Group 05)	Lower Sheering; Sheering	0.82	173
Strategic Sites	Strategic Sites	5.58	1172

Consultations with Essex County Council outlined a number of delivery options for meeting additional demand for schools infrastructure, including the expansion of existing schools or the delivery of new schools.

Smaller levels of proposed growth are not likely to create the need for a school in their own right, and can usually be absorbed within existing infrastructure. The cumulative impact of multiple growth locations, however, could justify new provision.

The Epping (Group 02) FPG is formed of five primary schools, and has both current and forecast capacity. Proximity to the Green Belt acts as a constraint on the expansion of schools within this part of the District. Epping Primary School is partially located on Green Belt land, which limits the scope for school expansion unless the case can be made for either ‘exceptional circumstances’ for release (through the Local Plan process) or ‘very special circumstances’ for development (through the development management process). The proposed levels of growth for Epping would require a 3FE school, which could be met through expansions across the FPG as a whole. This could take the form of a new 3FE primary school, or it might be more appropriate to expand existing schools within the FPG.

The Waltham Abbey primary FPG has a current capacity surplus, but is forecast to experience deficits in the 2019/20 academic year. The growth proposed for Waltham Abbey would require less than a 1FE school, and could be accommodated within the planned expansion of White Bridge Primary School, which is likely to commence next year. There is a significant pupil movement from Waltham Abbey to Epping, which is likely to affect the location of future provision. Buckhurst Hill/ Loughton South (Group 04) FPG could similarly absorb proposed growth in existing infrastructure.

The strategic growth locations in and around Harlow will have significant implications for the provision of schools. This growth will affect the Roydon, Epping (Group 02) and Uttlesford (Group 05) FPGs within Epping Forest District. Growth proposed for East Harlow is adjoining the Roydon PFG, which currently consists of Roydon Primary School. This primary school is constrained in terms of current site capacity, and cannot be expanded. Possible options for accommodating the demand arising from growth includes the provision a new 2 – 2.5FE primary school. A number of primary schools in Harlow have recently been expanded with further plans for expansions in 2017, including Kingsmoor Primary School. Pear Tree Primary School in Harlow has already undergone expansion, however still has a forecast capacity deficit.

Growth proposed at Latton Priory would require an additional 1 -1.5FE primary school, but depending on need could be increased to a 2FE school to improve the efficiency of both cost and class size management. There are also proposals for a new 2FE primary school at Gilden Way, to accommodate increased future demand associated with growth.

The integrated nature of secondary school, sixth form and other post-16 educational services in the District requires a combined approach to assessing infrastructure.

6.3 Secondary Schools and Post 16 Education

Secondary school education covers pupils aged 11-16. Essex County Council has a duty to ensure that there are sufficient secondary school places for children living in the county. The provision of sixth form facilities covers pupils aged 16-18, and are often co-located with secondary schools. Post-16 facilities are provided by the Education Funding Agency, which sits within the Department for Education. The provision of Further Education services covers pupils over the age of 16, who are studying a course in an FE college, training provider or within their local community.

6.3.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Commissioning School Places in Essex 2015-2020, Essex County Council (2015)
- DfE Edubase
- Essex Employment and Skills Board, Evidence Base (2016)
- Conversations with Essex County Council

The provision of secondary education has been a longstanding issue in the District, with bottlenecks occurring from ‘feeder’ primary schools. The provision of secondary education has recently changed within the District, with four secondary schools forming a consortium to jointly provide sixth form services. The resulting District Sixth Form is comprised of four secondary schools:

- Debden Park High School
- Epping St Johns School
- Roding Valley High School
- King Harold Business School

The sixth form consortium was in operation at the beginning of the 2015/2016 academic year, with the lower sixth year occupying the facilities. The collaboration of these facilities enables greater flexibility and choice for post 16 education within the District.

In addition to this sixth form consortium, there are two sixth forms attached to secondary schools that have been in operation on a long standing basis. These include West Hatch High School and the Davenant Foundation School, which upholds a faith-based admissions criteria. Conversations with Essex County Council have highlighted migration flows of Epping residents to Harlow and Havering Colleges.

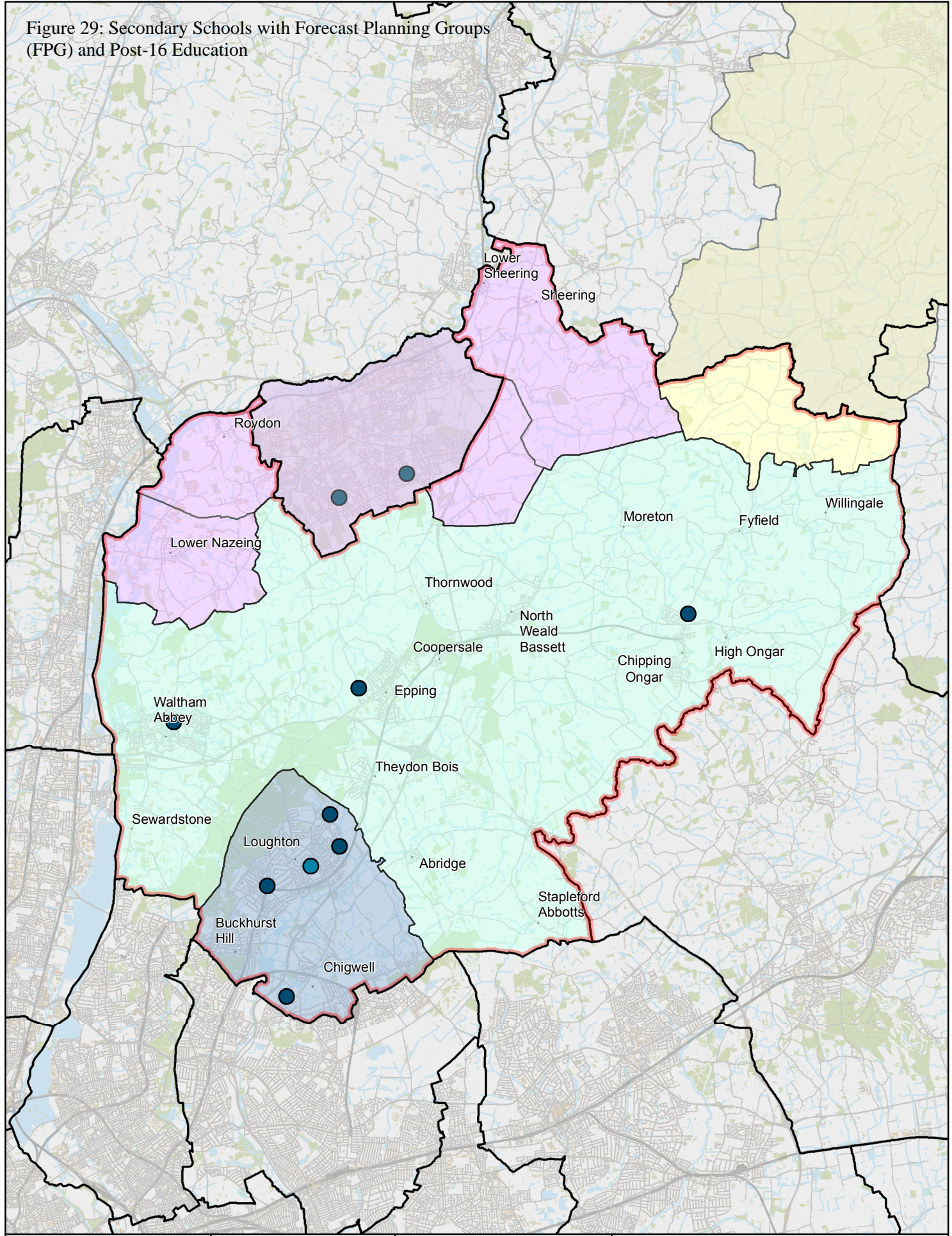
6.3.2 Existing Provision and shortfalls

6.3.2.1 Secondary schools and sixth forms

The *Commissioning School Places in Essex 2015-2020* report provides information on the current provision and capacity of secondary schools and adjoining sixth forms in the District. The document provides a detailed breakdown of existing capacity, number of pupils on roll, future expansion and future capacity surplus and deficits. The report combines capacity figures for secondary and sixth form education within the District, and for this reason they will be assessed together within this section.

Within Epping Forest District, secondary school capacity is assessed through Forecast Planning Groups (FPG), which divides the District into defined spatial areas in order to effectively plan school infrastructure. There are seven secondary schools within the District, split across four FPGs.

Figure 29: Secondary Schools with Forecast Planning Groups (FPG) and Post-16 Education



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-007

Date: September 2016

Scale: 1:150,000

Content Secondary schools with Forecast Planning Groups (FPG), and Post-16 Education

Contains Ordnance Survey & Royal Mail Data © Crown Copyright & Database Right 2015 EFDC Licence No: 100018534 2015 © Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Secondary schools
- Epping Forest College (FE)
- Loughton (Group 01)
- Epping/ Waltham Abbey (Group 02)
- Uttesford (Group 01)
- Harlow (Group 01)
- Surrounding Authorities
- Epping Forest District Boundary



The report shows capacity for the academic year 2014/15, and a forecast capacity figure for the academic year 2019/20. The forecast pupil figures are based on historical admissions trends, the current number of pupils on roll, historic birth rate trends and current GP registrations within school admissions boundaries.

The Department for Education sets out that schools should not operate at full capacity, but require a 5% head room to allow flexibility in the operating service, and maximise parental choice. Figures 23 and 24 set out the capacity surplus and deficits for the 2014/2015 academic year, and forecasts for 2019/20 respectively.

The data has been sourced from the *Commissioning School Places in Essex 2015-2020* report, with an assumed 5% head room applied. Conversations with Essex County Council note that the Davenant Foundation secondary school is a faith school which draws pupils from a wider catchment, and operates a faith-based admissions criteria. Capacity figures for faith based schools have been marginally suppressed to reflect these patterns.

Figure 30: Capacity figures for secondary schools, academic year 2014/15, by Forecast Planning Group (FPG)

Forecast Planning Group	Total No on roll (NOR) 2014/15	Total secondary capacity 2014/15	Surplus/ deficit capacity 2014/15
Loughton (Group 01)	4,451	3,935	-516
Epping/ Waltham Abbey (Group 02)	1,316	1,568	207
Harlow (Group 01)	4,846	5,529	683
Uttlesford (Group 01)	1,277	1,485	208

Figure 31: Capacity figures for secondary schools, academic year 2019/20, by Forecast Planning Group (FPG)

Forecast Planning Group	Total NOR 2019/20	Total secondary capacity 2019/20	Surplus/ deficit capacity 2019/20
Loughton (Group 01)	4,908	3,935	-973
Epping/ Waltham Abbey (Group 02)	2,211	2,138	-74
Harlow (Group 01)	5,834	5,529	-305
Uttlesford (Group 01)	1,323	1,485	162

The figures for FPGs show that there are surplus primary schools places, with some localised capacity issues across the District. For the academic year 2014/15, all FPGs other than Loughton had a significant amount of surplus capacity. In contrast, the forecast capacity figures for 2019/20 show that the Epping/Waltham Abbey, Harlow and Uttlesford FPGs will experience a capacity deficit. The full breakdown of individual secondary schools and capacity figures are set out in Appendix D.

FPG within Essex are cross-boundary. It is therefore appropriate to consider school provision within adjoining authorities, in relation to the key growth locations. There are two secondary schools in Harlow located within 1km (according to the transport network) of the Epping Forest District boundary; Passmores Academy and the Stewards School Science Specialist. These two schools are part of the Harlow Secondary school FPG. The location of the strategic sites requires a joined-up approach in assessing current school provision and capacity with Harlow. Although an important consideration, the capacity of schools within the remaining adjoining authorities is of less strategic importance.

Figure 32: Forecast secondary school capacity figures (Harlow), academic year 2014/15, by Forecast Planning Groups (FPG)

Forecast Planning Group	Total NOR 2014/15	Total primary capacity 2014/15	Surplus/ deficit capacity 2014/15
Harlow (Group 01)	4,846	5,529	683

Figure 33: Forecast secondary school capacity figures (Harlow), academic year 2019/20, by Forecast Planning Group (FPG)

Forecast Planning Group	Total NOR 2019/20	Total primary capacity 2019/20	Surplus/ deficit capacity 2019/20
Harlow (Group 01)	5,835	5,529	-305

Harlow only has one secondary school FPG, comprising six secondary schools, two of which have adjoining sixth forms. There is currently a capacity surplus for secondary schools and sixth forms across the District, however a significant capacity deficit is forecast for the academic year 2019/20. The *Commissioning School Places in Essex 2015-2020* report does not indicate any planned expansions for these secondary schools, therefore capacity deficits are forecast in line with natural population growth.

The Commissioning report identifies clear areas in the District where capacity will present future challenges. The recent opening of the Ongar Academy has provided significant additional capacity for secondary and sixth form pupils in the District. The staggered intake of pupils will require a five year period to achieve full capacity. In addition, Epping St John's Church of England Secondary School underwent significant refurbishment in 2013, which included a new £18m facility.

Consultations with Essex County Council have also identified viability work being undertaken at Roding Valley High School, West Hatch High School and Debden Park High School with the view to expand. No decisions on the future expansions of these secondary schools has yet been made.

6.3.2.2 Further Education

Epping Forest College is the only FE facility within the District, and is located in Loughton. The college has a large catchment area that draws pupils from outside the District boundaries, including wider rural Essex and east/north-east London boroughs. Figure 34 sets out the capacity of the college, drawing on data from the last academic year, as the college is still in the admission process for this coming year.

Figure 34: Capacity figures for Epping Forest College

FE facility	NOR	Course enrolment capacity	Building capacity
Epping Forest College	3,296	7,000	1,600

The flexible nature of timetabling at Epping Forest College, such as evening and part time courses, allows for a much larger number of students than the physical capacity of the building. Figure 35 sets out the breakdown of students on roll at the college.

FE facility	Pupils aged 16-18	Pupils aged over 19, and part time students	Total pupils enrolled
Epping Forest College	1,724	1,572	3,296

Figure 35: Further Education

There are currently no plans to expand the existing infrastructure for post 16 education. Consultations with Essex County Council identified how Epping Forest College will be included in a County-wide review of post 16 education, which will commence in November 2016. This is set to review provision delivery across Essex in terms of being supportive of economic growth (skills), demographic growth and potential collaboration with neighbouring colleges to facilitate financial savings.

6.3.3 Infrastructure Requirements

In order to estimate the additional pupils expected from the additional housing growth – and the forms of entry required to serve them – the standards set out in Figure 36 have been used.

Figure 36: Secondary school place standards

Infrastructure	Standard	Per	Source
Secondary schools (including post 16 and further education)	0.2 pupils	House	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	0.1 pupils	Flat	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	210 pupils	1 FE	30 pupils per class across 7 year groups.

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the demand for secondary schooling across schools planning areas is shown in Figure 37.

Figure 37: Secondary schools additional demand (newly arising only) – by Forecast Planning Group (FPG)

Forecast Planning Group	Settlements	Newly arising demand over Plan period (FE)	Newly arising demand over Plan period (Pupils)
Loughton (Group 01)	Buckhurst Hill; Chigwell	0.63	131
Epping/Waltham Abbey (Group 02)	Chipping Ongar; Epping; Loughton/Debden; Waltham Abbey; North Weald Bassett; Theydon Bois; Thornwood; Fyfield; High Ongar; Stapleford Abbots	6.12	1,285
Harlow (Group 01)	Roydon; Lower Nazeing	0.42	88
Uttlesford (Group 01)	Lower Sheering; Sheering	0.23	48
Strategic Sites	Strategic Sites	3.72	781

Taking into account the deficits set out in Figure 30 the total demand for secondary schools over the Plan period is shown in Figure 38.

Figure 38: Secondary schools additional demand (newly arising and existing capacity/shortfall) – by Forecast Planning Group (FPG)

Forecast Planning Group	Settlements	Newly arising total demand over Plan period (FE)	Newly arising demand over Plan period (Pupils)
Loughton (Group 01)	Buckhurst Hill; Chigwell	3.08	647.44
Epping/Waltham Abbey (Group 02)	Chipping Ongar; Epping; Loughton/Debden; Waltham Abbey; North Weald Bassett; Theydon Bois; Thornwood;	5.13	1077.63

	Fyfield; High Ongar; Stapleford Abbots		
Harlow (Group 01)	Roydon; Lower Nazeing	-2.62 (capacity)	-550.38
Uttlesford (Group 01)	Lower Sheering; Sheering	-0.76 (capacity)	-160.18
Strategic Sites	Strategic Sites	3.72	781.00

There may be different options available to the County in meeting this need, including the expansion of existing schools or the delivery of new schools.

For both Loughton (Group 01) Secondary Group 02 Epping/ Waltham Abbey (Group 02), forecasts demonstrate significant capacity deficits for the academic year 2019/20. The demand arising from the strategic sites would require an additional 4-5FE, which could be accommodated by the Epping/ Waltham Abbey FPG. There is opportunity for the new Ongar Academy could provide a service corridor for the Latton Priory strategic site, and help meet some of this additional demand. Proposed growth in Epping would require an additional 1-2FE. This growth is likely to be accommodated by the Ongar Academy or as part of a new site, as the potential for expansion at Epping St Johns remains limited.

There are a number of planned expansions for secondary schools within the Loughton (Group 01) FPG, which will increase capacity by 3.5-4FE across Roding Valley and West Hatch secondary schools. In addition, a bid has been submitted for a Free School to be located south of Chigwell, which could help absorb increased demand in the southern part of the District.

The forecast capacity for Harlow (Group 01) FPG also shows significant deficits, due to significant levels of proposed growth. There are a number of delivery options for secondary school provision in Harlow, including expansions to the Stewards Academy and the Mark Hall Academy, and a possible Free School on the old Passmores Academy site. There is ongoing consultation regarding the use of this site as either a new school, or an extension facility of an existing school.

The future requirements of Further Education within the District are less acute. Epping Forest College has sufficient enrolment capacity, where some of the additional demand might be absorbed. The building capacity for the college is currently exceeded, so an increase in 'traditional' students (i.e. full time, day) might mean enlargement of the existing infrastructure.

6.3.4 Funding Mechanisms

There are a number of Central Government funding sources for revenue and capital expenditure on schools. The main revenue funding allocations from DfE to schools and local authorities is the dedicated schools grant (DSG). The DSG divides funding across three main blocks, covering schools (80%), high needs (13%) and early years (7%). For 2016/17 Essex County Council received a DSG of £539m. The majority is passed on to schools, though a proportion is kept by the Council to fund education support services to all schools across Essex. The level

of funding available to ECC through the DSG will be subject to reductions as schools convert to academies.

A number of funding streams are provided by the Department for Education / Education Funding Agency for capital investment in schools including through Devolved Formula Capital (DFC) Allocations, School Condition Funding, and Priority School Building Programme.

Essex County Council is proposing to invest £365m capital in schools over the next three years, to create new school places maintain the quality of existing assets.

Some schools additionally generate their own incomes, through a combination of fundraising activities based on parental donations, leasing out premises for community use and business sponsorship.

Academies are funded using the local funding formula, which is then recouped from local authorities. This funding is then paid to academy trusts via the General Annual Grant. In addition to this funding stream, academies also receive funds from the Education Services Grant (ESG) to cover the cost of services that local authorities would typically provide.

Developer contributions could also be used to fund schools. The Essex County Council Developers' Contribution Guide sets out that financial contributions will be used to fund capital works to provide additional capacity at academies, Free Schools or maintained schools in the appropriate area. The expansion of existing schools can be complex due to the ability of Free Schools and academies to refuse proposed expansions. In these circumstances, developer contributions could be used to provide extensions and refurbishment of schools in the surrounding areas. However, there are clearly numerous competing demands on developer contributions and further work needs to be undertaken on viability as part of the next iteration of the Local Plan to inform the approach to S106 and CIL.

The future of school funding is likely to take the form of a national funding formula, to help standardise allocations across the county and ensure that pupils with the same characteristics and costs are funded at the same rate. These changes are proposed to be phased in the academic 2019-2020, with a transitional phases covering from 2017-2019.

6.4 Special Educational Needs and Disability

Special Educational Needs and Disability (SEND) provision covers pupils who experience difficulties or disabilities that makes learning more challenging in comparison to most pupils of a similar age. SEND provision can be located as a unit within mainstream schools, or within an independent SEND facility.

SEND services are coordinated by Essex County Council to ensure the provision of high quality services for all pupils with SEND. The provision of these services is a complex process. There are pupils attending schools within Essex however other local authorities are responsible for their statements. Similarly, there are cases where Essex County Council is responsible for pupil statements, even if pupils are being schooled outside of the county.

6.4.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Commissioning School Places in Essex 2015-2020, Essex County Council (2015)
- Department for Education Edubase
- SEN Joint Strategic Needs Assessment, Essex County Council (2015)

Recent policy by the Government has streamlined the process by which children and young people apply for and access special needs services. The Children and Families Act (2014) seeks to address the wider cultural and statutory challenges that constrain the SEND system. The new legislation was partly in response to the national shortfall of educational attainment for SEND pupils.

There have been year on year increases in the numbers of children with SEND applications in Essex, 5,377 to 7,016 in the period 2007 – 2014. This equates to an increase of over 30% in this 6 year period, and is significantly higher than the England average. Future projections suggest that Essex numbers are likely to increase by around 2% for the next six years (SEN JSNA).

The Special Educational Needs Joint Strategic Needs Assessment (2015) provides a map of SEND pupils residing in LSOAs. The majority of Epping Forest less than 4 SEN pupils per LSOA, however areas to the east and the south of the district experience slightly higher pupil counts.

6.4.2 Existing Provision

The majority of urban areas within Essex are located within 10km of a Special Educational Needs facility. There are however more rural areas that do not fall within a 10km radius, including eastern parts of Epping Forest District.

Within West Essex, SEND facilities are independent from mainstream schools, and there are currently no mainstream schools with a SEND unit or resourced provision.

There are two SEND schools located in Epping Forest District, which are Wells Park in Chigwell and Oak View in Loughton. Their capacity is set out in Figure 39.

Figure 39: SEND facilities within Epping Forest District

SEND facility	Wells Park	Oak View
Pupils on roll	41	83
Places (JSNA, 2015)	50	85
Surplus/(deficit)	9	2
Age range	5-11	3-19
Boarding facilities	Yes	No

6.4.3 Infrastructure Requirements

There is no current ‘standard’ in relation to SEND provision. However, it would be expected that an increase in Epping Forest District’s population would lead to an increase in demand for this service. These needs would need to be through new facilities or expansion of existing facilities.

The number of SEND applications are predicted in the Joint Strategic Needs Assessment to increase on average by 2% over the next six year period. A new Specialist Provision Capital Programme will increase specialist provision across Essex. The provision of SEND infrastructure across the County will include eight additional Autism support Centres, and up to ten centres catering specifically to pupils with Social, Emotional and Mental Health (SEMH) difficulties. Although the location of these additional facilities is not yet known, the catchment areas for SEND facilities are significantly larger than mainstream schools, with longer travel times. Even if located in adjoining authorities, these facilities could increase provision options for pupils in the District.

6.4.4 Funding Mechanisms

There are a number of funding streams available to provide educational support for high needs pupils. The Designated School Grant (DSG) provided by the Education Funding Agency includes a ‘basic per-pupil entitlement’, used to make general provision for all pupils, including SEND pupils. Local authorities also receive High Needs Block Funding as part of the DSG, which is distributed directly to schools with high-need low-incidence SEND. Essex County Council has committed to improve and expand the number of SEND schools across the county. In partnership with Schools Forum, Essex County Council has committed a £50m capital investment to fund SEND accommodation over the next three years.

The Department for Education provide additional funding through the Notional SEND Budget, which provides further financial support for SEND pupils. Schools have the ability to spend this funding how they see fit.

6.5 Adult Community Learning

Adult community learning covers a wide range of non-formal courses, which might range from personal development to older people’s learning, IT courses, employability skills, family learning or skills- or hobby-based learning (such as learning a new language). Community learning is sometimes thought of as part of other types of adult education, e.g. apprenticeships and workplace training. However, this assessment focuses on community-based learning alone, as distinct from further education.

6.5.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Further Education and Skills in Essex, Essex County Council (n/d)

- Essex Residents' Survey, Essex County Council (2014)
- Essex Residents' Survey, Essex County Council (2015)
- Consultation with Essex County Council

The New Challenges, New Chances: Next steps in implementing the further education reform programme (2011) report published by the Government outlines the key ambitions for community learning. The report offers detailed proposal to overcome a range of challenges involving skills gaps, access to education and to promote high quality learning at all levels of adult education.

6.5.2 Existing Provision

There are no large adult community education providers within Epping Forest District. However, there are facilities in Harlow (Harlow College and ACL Harlow). There is also a Loughton & Epping branch of the Essex Federation of the Workers Education Association (WEA), which is a voluntary provider of adult education. WEA provides courses in existing community halls etc., rather than purpose-built accommodation.

6.5.3 Shortfalls in Current Provision

Essex County Council undertook a residents' survey in 2014, which included attitudes to adult community learning. The survey found that around 41% of respondents from Epping Forest District already consider themselves to be participant in lifelong learning, and that 64% of respondents District would like to participate in some form of adult learning in the future (compared with 56% across Essex as a whole). A follow-up survey in 2015 suggests that participation levels across the county have reduced slightly.

Relevant barriers to participation in learning across Essex were found to include:

- Lack of time
- Costs associated with courses
- Location / transport
- Lack of childcare

6.5.4 Infrastructure Requirements

There is no current 'standard' in relation to adult community education. However, it would be expected that an increase in Epping Forest District's population would lead to an increase in demand for this service. This might be met within the District (through new facilities or groups making use of existing community halls etc.), or at accessible centres outside the District.

6.5.5 Funding Mechanisms

Community education providers are funded through a range of sources. The ECC Adult Community Learning service is predominantly funded by the county

council. Essex County Council has an Education and Lifelong Learning Budget of £45m. This fund covers large areas of expenditure and a range of services across the District, including ACL.

ACL is supplemented by Government funding via the Skills Funding Agency (SFA), or the Education Funding Agency (EFA). The Skills Funding Agency has produced a new Adult Education Budget, offering a single funding line, replacing previous separate streams. The WEA is a voluntary provider, however is supported by the Government through funding from the SFA.

6.5.6 Future Policy Requirements/Next Stages of Work

The proposed growth will have significant implications for education provision in the District, and will need to be considered alongside strategic growth locations in and around Harlow. Future provision of schools infrastructure will be against the backdrop of the changing role of the County Council, transitioning from a direct provider to a commissioning and facilitating role. The increasing prominence of Free Schools and Academies will further increase the importance of partnership working and will open up new streams of funding in the emerging Plan period, however there may potentially be less funding going directly to ECC. Decisions surrounding the provision of these facilities will require ongoing consultation between the County Council, the DoFE and the EFA.

The delivery of schools is likely to be a combination of new schools sites and expanding existing infrastructure. Consultations with Essex County Council indicated a preference towards the delivery of 2FE schools at primary level and 10 FE at secondary level, as they are more cost effective. There is considerable scope to expand some of the half FE schools to bring them in line with this preference. With regard to the strategic sites, a combined delivery approach should be taken, to ensure that increased demand is accommodated within close proximity to growth locations. Further consideration will be given to the need to review Green Belt boundaries where appropriate to allow the expansion of schools.

The Draft Local Plan sets out policy for the future provision of essential facilities and services. Draft Policy D2 sets out how the Council will work positively with local communities and support proposals to retain, improve or re-use essential facilities and services required to serve the scale of development proposed.

Within the Plan period, schools infrastructure will need to be delivered in accessible and sustainable locations, in line with sustainable transport objectives. Opportunities to co-locate schools with other community facilities, such as sports centres and recreational uses, and encourage dual use of facilities could be explored and supported in planning policy.

The next stages of work for the IDP in relation to education are:

- Undertake further work to assess costs associated with delivering new and expanded education facilities.
- Develop in more detail with ECC the preferred approach to the expansion of existing schools/provision of new schools.

- Further explore options for the funding and delivery of schools, early years and adult education.
- In the context of the increasing role of Free Schools and Academies, continue to engage with providers and Essex County Council.

7 Health, Social Care and Emergency Services

7.1 Primary Healthcare Overview

Primary healthcare provides the first point of contact within the health system. Primary care services include General Practice (GPs), dental practices, community pharmacists and optometrists, along with NHS walk in centres and 111 telephone services. These services are provided by a range of independent contractors.

NHS's *Transforming Primary Care in Essex* report states that these services are not currently integrated. GP services are currently organised into Clinical Commissioning Groups, with Epping Forest District falling under the West Essex CCG, alongside Uttlesford and Harlow.

The *Transforming Primary Care in Essex* report outlines the future vision for primary healthcare services in the county. Alternative models of healthcare delivery are being explored to help decentralise service provision across the local communities. The provision of GPs, dentists and pharmacies will be integrated within General Practice hubs. This integration will be accompanied by improved information sharing and a greater use of technology, to create a more responsive service for the changing demographic and lifestyles within Essex.

7.2 GP surgeries

7.2.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- West Essex Joint Strategic Needs Assessment (2015)
- Transforming Primary Care in Essex, NHS (2014)
- NHS Choices
- Health and Social Care Information Centre
- Consultation with West Essex Clinical Commissioning Group
- Five Year Strategic Plan for West Essex Health and Care System 2015-2020 (n/d)

The NHS is undergoing a shift in service delivery in response to rising demands and decreasing resources. New models of service provision are focusing on a more integrated network of community and social care services, enhanced out of

hours services, and the collaboration of a more diverse range of healthcare professionals.

The five year strategic plan for West Essex reflects this strategic direction, and places significant emphasis upon delivery integrated and ‘seamless’ services across the Uttlesford, Harlow and Epping Forest District. The key challenge within the West Essex CCG is providing high quality services for more people, with less financial resources available. The *Transforming Primary Care in Essex* report states the current model of healthcare provision across the county is not sustainable. There is no new funding available, and there is significant variation in the quality of premises, which are often not used in the most efficient way.

The five year strategic plan outlines a series of strategic issues faced by the West Essex CCG. These include:

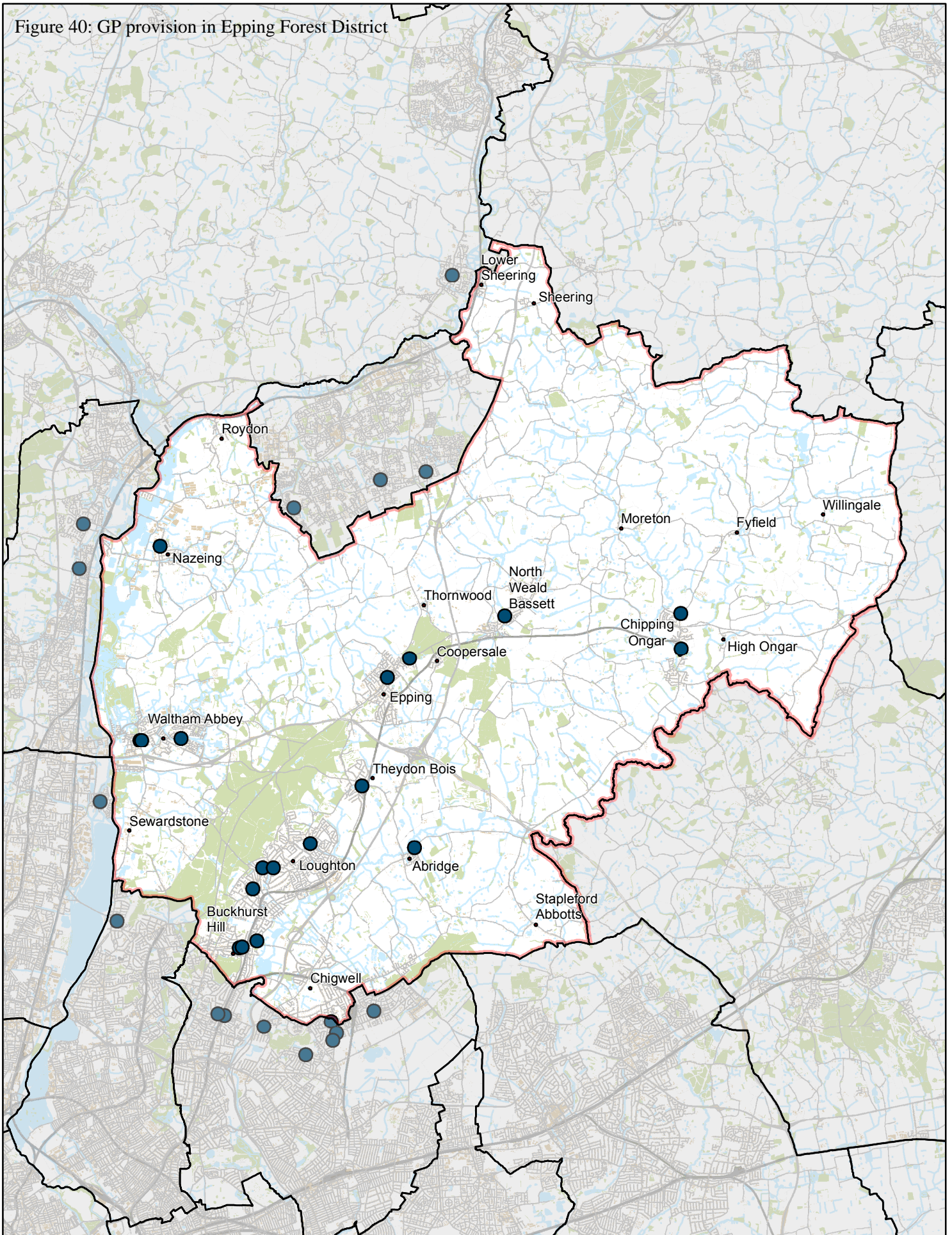
- Inequalities in health, quality of life and access to healthcare.
- Fragmentation in the delivery of care.
- Varying use and effectiveness of preventative measures.
- Rising obesity.

Compared to national averages, Epping Forest District experiences better than average health. However, there are a range of challenges that need to be addressed through improved services provision, including responding to an ageing population, tackling inequalities amongst deprived communities, improving access for rural areas, and counteracting the rising levels of obesity across the district.

7.2.2 Existing Provision

There are currently 20 GP surgeries in the District, including four branch surgeries. There are an additional 12 surgeries within a 1km radius (transport networked) of the Epping Forest District boundary.

Figure 40: GP provision in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0008

Date: September 2016

Scale: 1:150,000

Content

GP surgeries in EFDC and within 1km of the District boundary

Contains Ordnance Survey & Royal Mail Data © Crown Copyright & Database Right 2015 EFDC Licence No: 100018534 2015 © Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- GP surgeries
- Surrounding Authorities
- Epping Forest District Boundary



Figure 41 outlines the current provision of surgeries and capacity, based on the number of patients per GP. The NHS do not set standards for FTE GPs per 1,000 patients per practice, recognising differing patient needs in different areas. The North Weald Bassett Masterplanning Study (2014) identified a standard of 1 GP per 1,800 patients. The emerging Greater Essex Growth Infrastructure Framework however has used a ratio of 1 GP per 1,919 patients, reflecting the average across Essex. This study is more recent, and therefore provides more appropriate standard to assess the capacity of surgeries within Epping Forest District. Due to the centralised nature of patient information of branch surgeries, an assumption of the split of GPs and patients across the parent and branch surgeries has been assumed to calculate the indicative capacity. The assessment suggests there is a current capacity of 151,601 GP registrations, and an unused capacity across the District of 30,302 registrations.

Figure 41: GP surgeries in Epping Forest District

Health centre	Number of GPs	Number of registered patients (HSCIC, April 2016)	Capacity based on the average GP to patient ratio across Essex
Abridge Surgery 37 Ongar Road, Abridge, RM4 1UH	2	3,750	88
Chigwell Medical Centre 300 Fencepiece Road, Ilford, IG6 2TA	4	8,605	-929
The Forest Practice 26 Pyrles Lane, Loughton, IG10 2NH	6	10,437	1,077
The Loughton Surgery (High Road Branch) 113 High Road, Loughton, IG10 4JA	5	5,845	3,750
Traps Hill Surgery Branch 25 Traps Hill, Loughton, IG10 1SZ	4	4,675	3,001
High Street Surgery 301 High Street, Epping, CM16 4DA	3	7,006	-1,249
Kings Medical Centre 23 Kings Avenue, Buckhurst Hill, IG9 5LP	5	7,489	2,106
The Limes Medical Centre (Branch) The Plain, Epping, CM16 6TL	5	6,675	2,920
North Weald Surgery (Limes Branch) 67 Wheelers Farm Gardens, North Weald, CM16 6HW	3	4,004	1,753

Health centre	Number of GPs	Number of registered patients (HSCIC, April 2016)	Capacity based on the average GP to patient ratio across Essex
Waltham Abbey Branch Surgery (branch) 1st floor, WA Health centre, Sewardstone Road, Waltham Abbey, EN9 1NP	3	4,004	1,753
Thriffs Mead Branch Surgery (Limes Branch) Poplar Row, Theydon Bois, Epping, CM16 7NE	3	4,004	1,753
Loughton Health centre The Drive, Loughton, IG10 1HW	6	12,222	-708
Market Square Surgery 13 Sewardstone Road, Waltham Abbey, EN9 1NP	2	7,348	-3,510
Ongar Surgery The Ongar Surgery, High Street, Ongar, Essex, CM5 9AA	3	1,797	3,960
Ongar Health Centre Fyfield Road, Ongar, Essex, CM5 0AL	12	10,338	12,690
Nazeing Valley Health centre 64-66 North Street, Nazeing, EN9 2EU	2	3441	397
Palmerston Road Surgery 18 Palmerston Road, Buckhurst Hill, IG9 5LT	3	4,647	1,110
The River Surgery 16 Rous Road, Buckhurst Hill, IG9 6BN	2	4211	-373
The Medical Practice Sewardstone Road, EN9 1NP	3	6,961	-1,204
Maynard Surgery 17-18 Maynard Court	3	3,840	1,917

7.2.3 Shortfalls in Current Provision

Initial consultation highlights that there is an overall capacity deficit within the surgeries serving Epping Forest District, particularly as branch surgeries do not provide additional capacity. Surgeries in the District are facing rising patient demand, particularly from an ageing population with complex health needs. There are very limited out of hour's providers within the District, which places increased pressure on St Margaret's Hospital.

The patient to GP capacity ratio set out in Figure 41 shows six of the 20 surgeries are operating above the optimum standards. Local perceptions within the GP Patient Survey reflect this, with the main areas of complaint focusing on difficulties in booking an appointment, and long patient waiting times.

Consultation with the West Essex CCG identified that a significant proportion of GPs in the area are nearing retirement. This may have implications for healthcare provision in the District. Conversations with West Essex CCG advised that recruitment of nurses remains a significant problem for healthcare in the area, with high housing costs being one of the main barriers.

7.2.4 Infrastructure Requirements

In order to estimate the amount of GPs required to serve the additional population expected over the Plan period, the following standards set out in Figure 42 have been used.

Figure 42: GP standards

Infrastructure	Standard	Per	Source
GPs	1 FTE GP	1,919 population	<i>Essex Growth and Investment Framework</i> (average Essex-wide provision)

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional GPs across groups of settlements is shown in Figure 43. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 43: GP additional demand (newly arising only)

Settlement groups	Newly arising demand over Plan period (GP FTE)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.10
Waltham Abbey and Rural Apportionment	1.24
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	3.10
Strategic Sites L and M and Rural Apportionment	1.27
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.65
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.20
North Weald Bassett, Thornwood and Rural Apportionment	2.09
Epping and Rural Apportionment	2.26
Chigwell, Stapleford Abbots and Rural Apportionment	0.87

NHS Procurement guidelines typically favour larger floor plans as they are more cost effective to run. This could favour the modernisation and expansion of existing surgeries, as opposed to new surgery provision.

Figure 44 sets out the additional floorspace required to accommodate the arising demand for FTE GPs. Floorspace capacity was not available for two of the branch surgeries in the District, so some settlement groups will be marginally underrepresented. The newly arising demand for GP FTE has been rounded up to the nearest whole GP, to accommodate additional need into the floorspace calculation.

Figure 44: GP FTE converted to floorspace requirements

Settlement groups	Floorspace per settlement (GIA, m ²)	Newly arising demand over Plan period (GP FTE)	Rounded GP FTE	Floorspace required m ² (based on 120m ² floorspace per GP)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	3,123	2.10	3	360
Waltham Abbey and Rural Apportionment	389	1.24	2	240
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	320	3.10	4	480
Strategic Sites L and M and Rural Apportionment	n/a	1.27	2	240
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	n/a	1.65	2	240
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	400	1.20	2	240
North Weald Bassett, Thornwood and Rural Apportionment	n/a	2.09	3	360
Epping and Rural Apportionment	926	2.26	3	360
Chigwell, Stapleford Abbots, Abridge and Rural Apportionment	529	0.87	1	120

7.2.5 Funding Mechanisms

Funding for GP practices is primarily through the General Medical Services (GMS) and the Personal Medical Services (PMS). The GMS is negotiated between the BMA General Practitioners Committee and NHS Employers, on behalf of the Government. At least half of the money received is from the global sum core funding for essential services, and is weighted by need. The PMS are locally agreed contracts between the NHS England and a GP service. These allow for greater local flexibility by allowing variation in the range of services provided by the practice, the financial arrangements for those services, and who can hold the contract. It is found that expenditure on PMS practices is higher than on GMS services.

In April 2016 NHS England published the *General Practice: Forward View* aimed at improving general practices. It commits to investing a further £2.4 billion a year by 2020/2021 into GP services (14% increase in real terms). Further investments will be made in workforce and workload, but of significance here is the further investment in practice infrastructure. £900 million over the next five years will be invested through the NHS's Estates and Technology Transformation Fund. New rules will enable NHS England to fund up to 100% of the costs for premises developments, where previously caps were for only 66% funding. There will be additional technology improvements for better provision of IT services and technology for GPs.

Developer contributions also offer a possible source of funding, but will have to be balanced against other priorities in the District. Prioritisation and allocation of developer contributions will be subject to viability testing undertaken in the next stage of the Local Plan before Regulation 19. It might be appropriate to secure financial contributions from developments as a means of increasing the capacity of existing surgeries.

Further consultation will be undertaken with West Essex CCG about the implications of population growth for primary care provision and priorities for new and expanded facilities.

7.3 Dentists

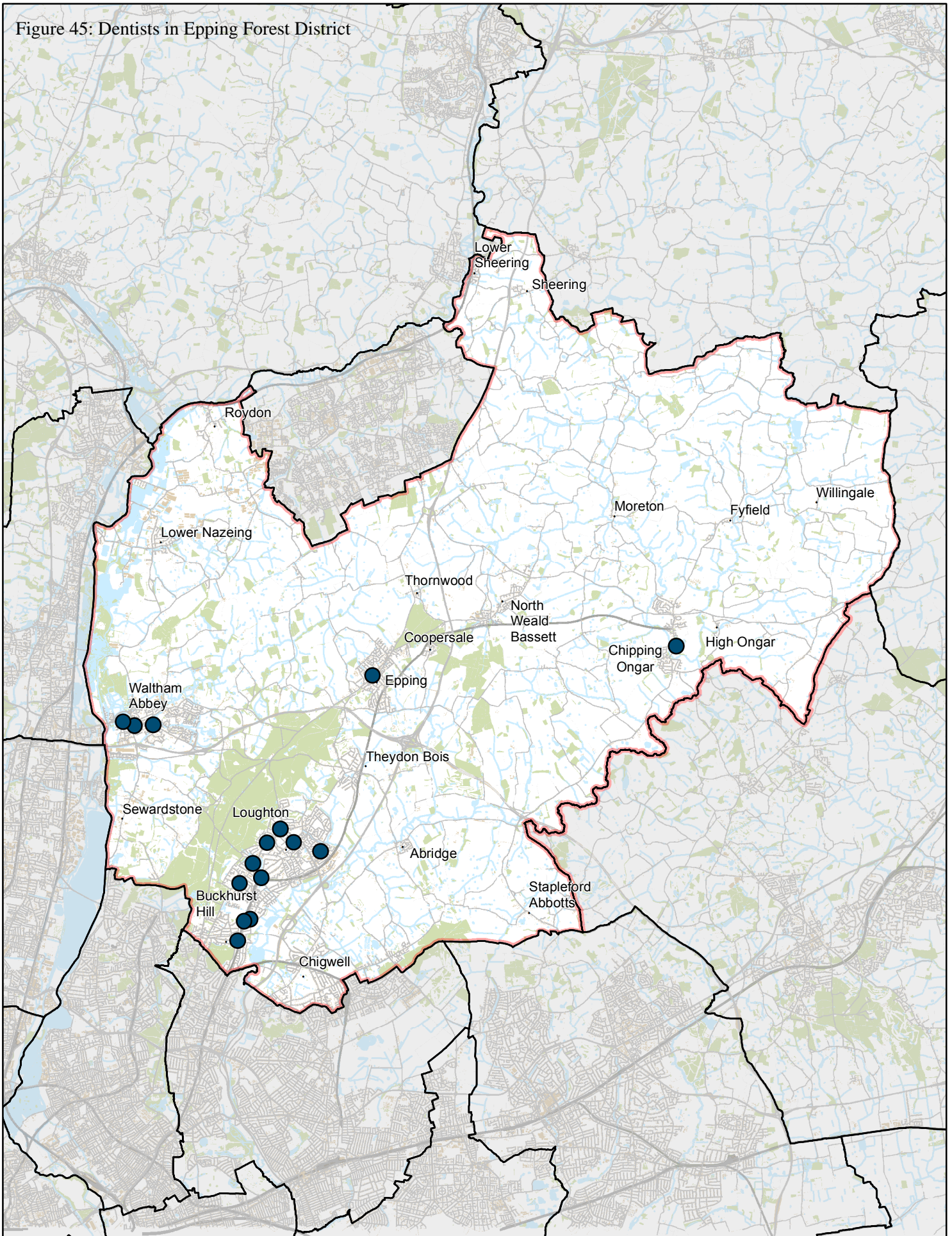
7.3.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Transforming Healthcare in Essex, NHS (2014)
- Consultation with West Essex CCG
- Consultation with the West Essex Primary Care Service

The provision of dental care within Epping Forest District takes multiple forms, including high street dental practices, community dental services and hospital out-of-hours services. Figure 46 shows the number of dental practitioners currently located within the District.

Figure 45: Dentists in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0009

Date: September 2016

Scale: 1:150,000

Content

Dental Surgeries

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Dental surgeries
- Surrounding Authorities
- Epping Forest District Boundary

N



7.3.2 Existing Provision and Shortfalls

Figure 46: Dentists in Epping Forest District

Dentist	Location	Number of dental practitioners	Accept NHS patients
Ongar Dental Practice	Ongar	1	Yes
The Tooth Booth	Epping	3	Yes
Alexanders Dental Practice	Waltham Abbey	1	Yes
Market Square Dental Surgery	Waltham Abbey	2	Yes
Cobbins Brook Dental Practice	Waltham Abbey	5	Yes
Loughton Dental Spa	Loughton	3	Yes
J. Atherton Dental practice	Loughton	2	No
Church Hill Dental practice	Loughton	4	Yes
Forest Hill Dental Practice	Loughton	1	No
Broadway Dental Clinic	Loughton	4	Yes
Station Road Dental Practice	Loughton	3	Yes
Loughton Dental Centre	Loughton	4	Only under 18's
Valley Dental Practice	Buckhurst Hill	7	Yes
The White House Practice	Buckhurst Hill	6	No
The Queen's Dental practice	Buckhurst Hill	1	Only under 18's

In addition to these surgeries, there are a number of community dental services in the District, aimed at providing dental care to residents who cannot access General Dental Services. Community dental services are centrally managed by the West Essex Primary Dental Care Service, with the head office in Harlow. A part time community dentist currently offers services in Waltham Abbey Health centre and Waltham Abbey Primary Care Centre. West Essex CCG also provide an out-of-hours dental service, located at St Margaret's Hospital.

7.3.3 Infrastructure Requirements

The *Transforming Healthcare in Essex* report produced by the NHS states that dental services within Essex remain fragmented across separate providers. The future vision for dental care in the county involves the use of specialist-led facilities to provide complex restorative care to patients, and greater integration of dental services with other forms of primary care.

Community dental services in Essex are similarly transitioning into a new model of service provision. Future provision by the South East Partnership Trust will focus around service delivery from centralised 'hubs' in larger settlements across the county. Additional services will also be provided from mobile dental units, and clinics in neighbouring authorities such as Suffolk. This will improve access for patients living in more rural locations.

In order to estimate the amount of dentists required to serve the additional population expected over the Plan period, the following standards set out in Figure 47 have been used.

Figure 47: Dentist standards

Infrastructure	Standard	Per	Source
Dentists	1 FTE GP	2,000 population	<i>North Weald Masterplan (no relevant NHS standard available)</i>

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional dentists across groups of settlements is shown in Figure 48. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 48: Dentist additional demand (newly arising only)

Settlement groups	Newly arising demand over Plan period (Dentist FTE)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.02
Waltham Abbey and Rural Apportionment	1.19
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	2.97
Strategic Sites L and M and Rural Apportionment	1.22
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.59
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.15
North Weald Bassett, Thornwood and Rural Apportionment	2.00
Epping and Rural Apportionment	2.17
Chigwell, Stapleford Abbots and Rural Apportionment	0.84

7.3.4 Funding Mechanisms

Dental services are provided by independent practitioners, with the addition of NHS funding to subsidise provision for NHS patients. It is common for dental practices to offer both NHS and private services. There are a number of providers in the District that do not offer NHS services. There might be opportunity to expand local provision if these services were partly contracted by the NHS.

7.4 Pharmacies

7.4.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Transforming Healthcare in Essex, NHS (2014)
- NHS Choices
- Essex Pharmaceutical Needs Assessment (2015)
- West Essex Pharmaceutical Needs Assessment (2011)

Key providers of pharmacies include the Essex Health and Wellbeing Board and the NHSE Area Team.

The *Essex Pharmaceutical Needs Assessment* was undertaken in 2015 to assess how pharmaceutical services across the county meet the needs of the population. The report identifies the important role of pharmacies in community healthcare provision, offering a regular source of advice and access to simple self-treatment.

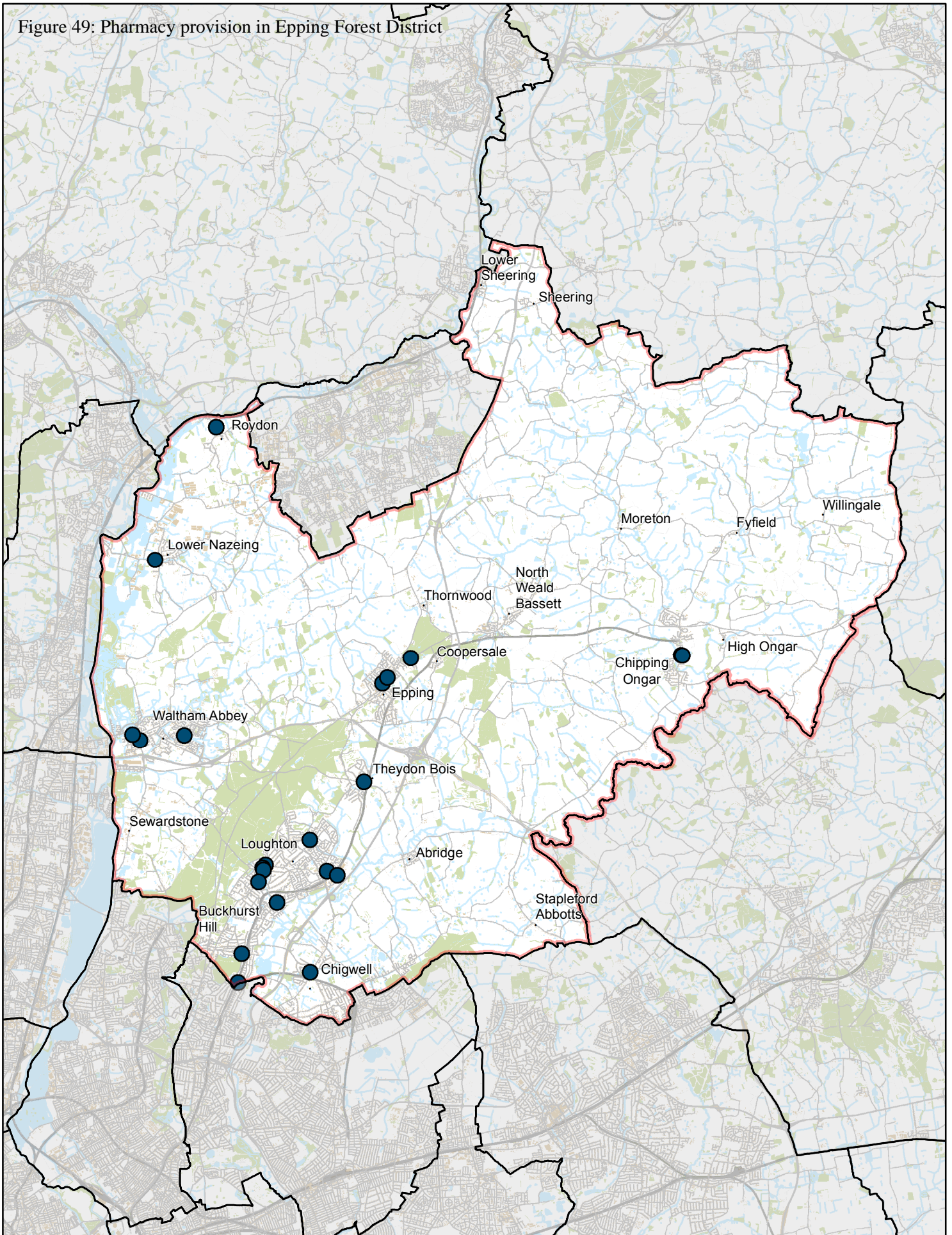
They provide services such as non-smoking and sexual health, without the need to book an appointment, and play a key role in out-of-hospital care. At the local level, pharmacies increasingly act as a platform in which to communicate health messages, and encourage lifestyle changes. This role is crucial in the early detection of illness, and strengthening the effectiveness of preventative measures. For these reasons, pharmacies tend to see significantly more people than many other NHS care settings.

The *Transforming Healthcare in Essex* NHS report envisions a more prominent role for pharmacies in community healthcare. Pharmacists should become the first point of contact for the public, with the aim of reducing pressure on GP surgeries, out-of-hours services and Accident and Emergency departments. The *Essex Pharmaceutical Needs Assessment* report outlines that demographics most likely to visit a pharmacy at least once a month include older people, children, women aged 55 and over and those with a long term condition.

7.4.2 Existing Provision

There are currently 24 pharmacies within Epping Forest District. These services are located in the key service centres across the District, including Ongar, Epping, Waltham Abbey, Loughton, Buckhurst Hill and other smaller settlements.

Figure 49: Pharmacy provision in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0010

Date: September 2016

Scale: 1:150,000

Content

Pharmacies

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Pharmacies
- Surrounding Authorities
- Epping Forest District Boundary

N



Figure 50: Pharmacies in Epping Forest District

Pharmacy	Location	Online Prescription Services
Glennon Chemists	Waltham Abbey	Yes
Lloyds Pharmacy	Waltham Abbey	Yes
Lloyds Pharmacy	Waltham Abbey	Yes
Boots Pharmacy	Epping	Yes
Lloyds Pharmacy	Epping	Yes
Well Epping – The Limes MC	Epping	Yes
Theydon Bois Pharmacy	Epping	Yes
North Weald Chemist	North Weald	Yes
Leach and Burton Ltd	Loughton	Yes
Boots Pharmacy	Loughton	Yes
Kg Dispensing Chemist	Loughton	Yes
Total Medicare Limited	Loughton	Yes
Morrisons Pharmacy	Loughton	Yes
Well Loughton – Loughton HC	Loughton	Yes
Boots Pharmacy	Loughton	Yes
Hutchins Chemist	Loughton	Yes
Oakwood Pharmacy	Loughton	Yes
Elgon Chemists	Nazeing	Yes
Lloyds Pharmacy	Chipping Ongar	Yes
Brookhouse Pharmacy	Chigwell	Yes
Well Ongar – High Street	Ongar	Yes
Safedale Ltd	Buckhurst Hill	Yes
Dees Pharmacy	Roydon	Yes
Easter Pharmacy	Buckhurst Hill	Yes

Source: NHS Choices

The 2008 White Paper entitled Pharmacy in England: building on Strengths – Delivering the Future, states that community pharmacies should be easily accessible to the local population, and that all local residents should be within a 20 minute journey by car of a pharmacy, and where possible by sustainable modes of transport. The *Essex Pharmaceutical Needs Assessment* (2015) confirms that the whole of Epping Forest District meets this access criteria.

7.4.3 Shortfalls in Current Provision

Compared to the average for Essex as a whole, the West Essex CCG has a lower provision of pharmacies. However, this lower provision is in line with the lower than average dispensing rate.

Figure 50: Pharmacies in Epping Forest District

Pharmacy	Location	Online Prescription Services
Glennon Chemists	Waltham Abbey	Yes
Lloyds Pharmacy	Waltham Abbey	Yes
Lloyds Pharmacy	Waltham Abbey	Yes
Boots Pharmacy	Epping	Yes
Lloyds Pharmacy	Epping	Yes
Well Epping – The Limes MC	Epping	Yes
Theydon Bois Pharmacy	Epping	Yes
North Weald Chemist	North Weald	Yes
Leach and Burton Ltd	Loughton	Yes
Boots Pharmacy	Loughton	Yes
Kg Dispensing Chemist	Loughton	Yes
Total Medicare Limited	Loughton	Yes
Morrisons Pharmacy	Loughton	Yes
Well Loughton – Loughton HC	Loughton	Yes
Boots Pharmacy	Loughton	Yes
Hutchins Chemist	Loughton	Yes
Oakwood Pharmacy	Loughton	Yes
Elgon Chemists	Nazeing	Yes
Lloyds Pharmacy	Chipping Ongar	Yes
Brookhouse Pharmacy	Chigwell	Yes
Well Ongar – High Street	Ongar	Yes
Safedale Ltd	Buckhurst Hill	Yes
Dees Pharmacy	Roydon	Yes
Easter Pharmacy	Buckhurst Hill	Yes

Source: NHS Choices

The 2008 White Paper entitled Pharmacy in England: building on Strengths – Delivering the Future, states that community pharmacies should be easily accessible to the local population, and that all local residents should be within a 20 minute journey by car of a pharmacy, and where possible by sustainable modes of transport. The *Essex Pharmaceutical Needs Assessment* (2015) confirms that the whole of Epping Forest District meets this access criteria.

7.4.3 Shortfalls in Current Provision

Compared to the average for Essex as a whole, the West Essex CCG has a lower provision of pharmacies. However, this lower provision is in line with the lower than average dispensing rate.

The *Essex Pharmaceutical Needs Assessment* report outlines that in rural areas, services are not always available within the immediate locality. High street pharmacies within Epping Forest are predominantly located in urban settlements, leaving the north east of the District and more rural settlements with limited access.

All of the listed pharmacies within the district have online prescription services available, offering a more responsive and flexible service for residents with restricted access. In addition to this service, two of the GP surgeries in the District are dispensing practices (Ongar Health Centre and The Ongar Surgery), allowing doctors to provide pharmaceutical services to eligible patients living in rural areas. For these patients, dispensing services are available during surgery opening hours.

7.4.4 Infrastructure Requirements

The *Essex Pharmaceutical Needs Assessment* considered the impact of development and housing growth on the provision of community pharmacies. Both travel distances and access to provision were taken into account, with the conclusion that all areas are well served by the existing network of pharmacies, and no gaps in provision have been identified.

It was noted however that changing models of healthcare provision are likely to impact upon pharmacy services. The movement towards a 7-day service for GPs may require additional hours from current contractors, to ensure that local residents can easily access prescriptions. The Department for Health have outlined ambitions to shift towards multi-speciality community providers, to ensure greater integration of pharmacies with the NHS. In the context of funding constraints, there will be ongoing attempts to modernise the pharmacy systems. These will include encouraging online ordering, click and collect and home delivery options in accessing prescriptions.

7.4.5 Funding Mechanisms

Pharmacists are private practitioners, who receive NHS funding to provide free prescriptions to those qualifying, and additional NHS health services. The average (median) pharmacy received around £220,000 a year in NHS fees and allowances. However in the context of NHS funding cuts, this allowance is being reviewed.

Proposals for future reform are currently undergoing consultation. These set out a reduction in funding of £170m for 2016/17. In contrast to other public sector services, there is a low online uptake of pharmacy services, which means the NHS are responsible for funding a large estate. There is a drive to ensure efficiency by removing pharmacies that are within clusters. There will be revised funding streams opportunities through the Pharmacy Integration Fund (PhIF).

7.5 Secondary healthcare overview

Secondary care services are generally provided by Care Commissioning Groups, and predominantly include hospital and community care services. Such care services include the following:

- Planned hospital care
- Rehabilitative care
- Urgent and emergency care
- The majority of community health services
- Mental health services
- Certain GP services

7.6 Hospitals

7.6.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Consultation with West Essex CCG
- Care Quality Commission
- 5 Year Strategic Plan for West Essex Health and Care System 2015-2020 (n/d)
- PAH Strategic Context, Officer Discussion with DC Planning Representatives and PAH, NHS Trust

The NHS Business Plan (2016/17) outlines the increasing pressures the UK health services are under, particularly in A&E, waiting times for operations and the overall management of hospital finances.

The *5 Year Strategic Plan for West Essex Health and Care System* report outlines that the local hospital for many residents across West Essex is the Princess Alexandra Hospital (PAH) in Harlow. Continued population growth has placed increasing pressure on hospital services. The report states that the PAH Emergency Department receives over 110,000 patients each year, and has seen a 50% increase in emergency admissions since 2010/11, making it one of the busiest departments in England.

An Inspection by the Care Quality Commission in 2015 outlined that the trust has “significant capacity issues”, with a high pressure on available bed spaces. The hospital estate is ageing and insufficient for current healthcare needs, and has accumulated a large maintenance backlog of over £28 million.

Due to the constrained nature of the PAH site, there is limited scope for expansion. Two sites are currently being considered for the relocation of the PAH, one of which is in Epping Forest District as part of the Harlow East allocation. This would have significant implications for future service delivery of both primary and acute services across the District, including the closure of the St. Margaret’s hospital located in Epping.

The southern part of the District will be affected by changes at Whipps Cross Hospital in Waltham Forest, which faces significant estate challenges, and is in the process of being reorganised and redeveloped to provide a more extensive range of community services. Conversations with the West Essex Care

Commissioning Group have outlined how stroke service and supported rehabilitation services in Epping Forest District are under strain, with hospital services unable to provide the required bed space.

7.6.2 Existing Provision and Shortfalls

Epping Forest District has one hospital, which is the St. Margaret's Hospital in Epping. This hospital is managed by the Princess Alexandra Hospital (PAH) NHS Trust. NHS data on overnight bed availability and occupancy shows that for Q4 2015-16, 93.8% of the PAH Trust overnight bed spaces were occupied, with 96% of general acute overnight bed spaces occupied. 87.4% of total day bed spaces were also occupied. This is shown in Figure 51. Disaggregated data for St. Margaret's Hospital is not available.

Figure 51: Available and occupied bed capacity for Princess Alexandra Hospital NHS Trust

	General and acute	Learning disabilities	Maternity	Mental health	Total
Available	424	-	41	-	465
Occupied	407	-	29	-	436
%	96.0%	-	59.2%	-	93.8%

7.6.3 Infrastructure Requirements

Across England, there are currently approximately 0.0025 hospital beds per person (Mid-2014 Population Estimates for Clinical Commissioning Groups in England). Applying this current level of provision to new population expected over the Plan period would suggest an additional demand for an extra 74 hospital beds. However, due to changes in the provision of health care expected over the Plan period – e.g. a move to more day procedures or localised treatment – there is not necessarily a straightforward link between population and hospital beds. The West Essex CCG will undertake more detailed assessment of future need as part of its ongoing forecasting.

The Princess Alexandra Hospital NHS Trust is currently considering options for relocating the Princess Alexandra Hospital in Harlow potentially to the East of Harlow site in EFDC. The relocation of the Princess Alexandra may have impacts on the provision of care across the District, including the rationalisation of primary care and the closure of St Margaret's Hospital.

7.6.4 Funding Mechanisms

Hospitals are funded by the Department of Health (DfH). In December 2015, the DfH set up a Sustainability and Transformation fund, to support challenged hospitals improve finances and achieve greater efficiency. Funding is distributed from this fund to all providers of emergency care, with additional finances made available for hospitals capable of delivering additional improvements.

7.7 Mental Health

Mental health services cover a range of emotional and psychological difficulties. Within Epping Forest District, services are provided by the North Essex Partnership Trust and the South Essex Partnership Trust. In addition to these services, therapists provide mental health therapy under the Improving Access to Psychological Therapies (IAPT) programme.

7.7.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- North Essex Mental Health Joint Commissioning Strategy, 2013-2017 (n/d)
- 5 Year Strategic Plan for West Essex Health and Care System 2015-2020 (n/d)
- Consultation with West Essex CCG
- The Five Year Forward View for Mental Health, NHS (2016)

The North Essex Mental Health Joint Commissioning Strategy outlines future ambitions for improving mental healthcare outcomes. Essex faces a range of strategic challenges, including demographic shifts, fragmented service provision and increasing demand made more acute by a series of cost reduction programmes. As the population grows, the prevalence of mental illness is also likely to increase, particularly for dementia due to the increase in the elderly population. The West Essex Clinical Commissioning Group has commissioned its own primary care service through the Improving Access to Psychological Therapies (IAPT) programme. IAPT is an NHS programme, offering services for treating disorders such as anxiety and depression. These services offer Psychological Wellbeing Practitioners (PWP) and High Intensity CBT Therapists, who offer low and high intensity intervention respectively. There are a number of such therapists across Epping Forest District, often working from home.

7.7.2 Existing Provision and Shortfall

North Essex Trust are commissioned by the CCG to provide secondary mental healthcare across an area which includes Epping Forest District. The following are provided:

- Access and assessment services for those needing new assessments. Whilst the base is at the Derwent Centre in Harlow, assessments are undertaken in venues in Epping Forest District, most usually the Epping Forest Mental Health Recovery Service in Loughton.
- Intensive home treatment services for those who are experiencing acute episodes which may result in a hospital admission or those who have just been discharged.
- Mental health recovery services, providing community treatment for those with secondary mental health needs. This team is based at Epping Forest Mental Health Recovery Service in Loughton. The service consists of

community psychiatric nurses, social workers, psychiatrists, psychologists, occupational therapists and an employment advisor.

- Early intervention, providing assessment treatment and support for those experiencing their first episode of psychosis.
- Dementia and frailty services, providing assessments and on-going support and treatment based at Regent's Road in Epping. The majority of the support, care and treatment is provided within the individual's own home.
- Inpatients Service at the Derwent Centre in Harlow (for under 65s) and the Mental Health Unit within St. Margaret's Hospital (over 65s).

7.7.3 Infrastructure Requirements

There are no 'standards' on the provision of mental health services in Essex; for this reason, it has not been possible to model future infrastructure requirements.

The Essex County Council Developers' Contribution Guide has identified that specialised housing with care for older people and working age people with disabilities needs to be provided in a number of areas across Essex County. Specialised housing is characteristically 12 flats with an on-site office. There is also a need for move-on accommodation of self-contained flats in general needs accommodation.

The Five Year Forward View for Mental Health report produced by the Mental Health Taskforce (2016) sets out the future delivery models for mental healthcare in the UK. To help 'plug the gaps' of the current system and maximise efficiency, future provision will focus strongly on integration, more flexible responses and out of hours crisis care, and define clear care pathways. This will include joining up services more effectively with existing NHS health providers, along with a range of community services such as the Jobcentre Plus, services for young people and other voluntary sectors.

7.7.4 Funding Mechanisms

Mental health services in Epping Forest District are funded by the West Essex Clinical Commissioning Group (CCG). The CCG model receives funding allocations from the NHS, based on a local funding formula, to reflect local population changes and deprivation. In addition to NHS funding, Essex County Council funded social workers, who are fully integrated into the mental healthcare service within the District.

Developer contributions can also provide crucial funding streams for delivering a range of supported living options.

7.8 Community Nursing

District nurses form a key part of primary healthcare, and provide support for a complex range of care needs in patients own home or a residential home. District nursing services are coordinated alongside a range of bodies, including social services, voluntary agencies, and other NHS organisations. The Royal College of

Nursing (RCN) states how community nursing is the mainstay of locally delivered health care. The report ‘Pillars of the Community’ outlines the role of community nurses as promoting health, healing, growth and development, as well as preventing disease, illness and disability.

7.8.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Pillars of the Community: the RCN’s UK position on the development of the registered nursing workforce in the community, RCN (2010)
- Consultation with West Essex Clinical Commissioning Group

National healthcare policy is increasingly favouring care taking place outside hospitals and surgeries, for both economic and ideological reasons. An ageing population will put further pressure on these services in the future, particularly as accommodating the complex range of care needs within hospital facilities is unviable. Primary care services, where appropriate, are being delivered in home and residential settings to provide ongoing support. As more people are living longer, new service models are required to enable people to remain within their homes and communities.

The Department of Health, in partnership with the NHS Commissioning Board and the Queen’s Nursing Institute, have developed a Community Nursing Development programme. This programme seeks to introduce a new model of service delivery for District nursing, which focuses on mobile working, the efficient targeting of resources, greater integration across health bodies and improved technology.

There are three existing centres within Epping Forest District from which community nursing is organised:

- Buckhurst Way Community Health Clinic
- Buckhurst Way Clinic
- Epping Forest Specialist Dementia and Frailty Team,

There are no current ‘standards’ on the provision of community nursing. However, in recent years there has been a renewed emphasis on community nursing to treat people in their homes rather than requiring treatment or stays in hospitals. The future provision of District nursing is likely to be delivered as part a package of care treatments, targeted at specific patient groups.

7.9 Adult Social Care

This section focuses on three types of adult social care:

- Independent living
- Extra care
- Residential care

Independent living facilities are designed to provide housing for people over the age of 55 whose current home no longer meets their needs – e.g. as a result of social isolation, a need to downsize, access to care and support etc.

The term extra care housing often relates to an extension of the types of housing provided through independent living, although with escalating levels of domestic and personal care to suit the changing needs of the occupants.

There are two main categories of residential care facilities. Nursing care will always include one qualified nurse or doctor, and can therefore cater for people with conditions that require nursing attention. Residential homes will call in routine and emergency medical support from other agencies (e.g. GPs or district nurses), as required. Both types of facilities provide accommodation, meals and personal care. It should be noted that whilst residential care is often thought of as catering for older people, some facilities will cater in part or exclusively for other ages with specific needs. Given that this is not always clear which groups are catered for, they have not been disaggregated.

7.9.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Shaping Futures: Market Position Statement, Designing Services for the Future 2015-2025, Essex County Council/ NHS (n/d)
- The Housing, Learning and Improvement Network – Shop Tool
- The Independent Living Programme for Older People, Essex County Council (2016)
- People in Essex can live independently and exercise choice and control over their own lives, Essex County Council Commissioning Strategy (2014)
- Care Quality Commission directory
- www.carehome.co.uk

Essex County Council's *Shaping Futures: Market Position Statement, Designing Services for the Future 2015-2025* looks at the adult social care needs that are likely to be required across the county over the next decade. It concludes that extended periods of residential stay are not desirable, and that more should be done to help people stay in their homes. There is also a desire to manage demand for social care by diverting away from formal care to community based resources. However, even if people use formal services later, increasing life expectancies mean that services are required for longer – therefore in real terms volume and general demand for social care is expected to increase in the future.

7.9.2 Existing Provision

7.9.2.1 Independent Living

Essex County Council's *Independent Living Programme for Older People* (April 2016) document outlines the demand and current provision of Independent Living

Units in the district (Figure 52). Presently, there is only one scheme (Honey Tree Court in Loughton), consisting of 40 units.

Figure 52: Demand and current provision for independent living units

Independent living provision (April 2016)	Demand	Existing	In development	Shortfall
Independent Living Rental Units	102	40	0	62
Independent Living Ownership Units	175	0	0	175

Source: *Independent Living Programme for Older People (April 2016)*

7.9.2.2 Extra Care

Across Essex, there are currently 478 units of extra care accommodation through 11 schemes (*Shaping Futures: Market Position Statement, Designing Services for the Future 2015-2025*). Provision is not known on a district level.

7.9.2.3 Residential Care

Provision of spaces within care homes is also a significant issue and will become more acute with the ageing population. Data from the Care Quality Commission Directory shows that Epping Forest currently has 19 residential care homes and nine nursing homes, with a capacity of 1,289 spaces.

Figure 53: Residential care within the District

Facility	Settlement	Spaces
Nursing homes		
Forest Place Nursing Home	Buckhurst Hill	90
Queens Court Nursing Home	Buckhurst Hill	88
Sherrell House	Chigwell	92
Revitalise Jubilee Lodge	Chigwell	36
Ashlar House	Epping	36
Woodland Grove	Loughton	72
1 Sewardstone Close	Waltham Abbey	21
Ashbrook Court Care Home	Waltham Abbey	70
Paternoster House	Waltham Abbey	109
Residential homes		
Lugano Residence for the Elderly	Buckhurst Hill	27
Belmont Lodge Care Centre	Chigwell	46
Bramble Close	Chigwell	4

Facility	Settlement	Spaces
Habilitation Unit		
Alder House	Chigwell	19
Wensley House Residential Home	Epping	48
Treetops Care Home	Epping	52
Beechlands	Loughton	28
Loughton Hall	Loughton	33
The Mellows	Loughton	50
Cunningham House	North Weald	54
Frank Foster House	Theydon Bois	78
Marcris House	Theydon Bois	32
Weald Hall Residential Home	Thornwood	39
Willow Court	Waltham Abbey	11
Honey Lane Care Home	Waltham Abbey	51
Tallis House	Waltham Abbey	41
Vibrance - 138-138a Mason Way	Waltham Abbey	8
Sherbrooke Hostel	Waltham Abbey	25
Upshire Residential Home	Waltham Abbey	29
	Total	1,289

Source: Care Quality Commission directory; www.carehome.co.uk

7.9.3 Shortfalls in Current Provision

7.9.3.1 Independent Living

Essex County Council undertook a demand analysis assessment, which identified a shortfall in independent living units of a total of 237 units in the District, of which 62 are for the affordable market (rental only) and 175 are ownership (outright sale and shared ownership) (Figure 52, above). This forms part of the objectively assessed need for the District as established in the SHMA (in contrast with extra care and residential care which falls under institutional population).

There is a scheme of 60 units (30 rental and 30 ownership) which is currently at the planning application stage and would be due for completion in 2018/19. If this development receives permission and goes ahead this would leave a remaining shortfall in provision of 177 units.

7.9.3.2 Extra Care

The volume of extra care facilities on offer across the county is low, at 1.5 per 1,000 of the population compared to the national picture of 4.5 per 1,000. Based on the national prevalence rates, More Choice Greater Voice recommends 25 units per 1,000 of the population 75+. Compared to this recommendation Essex currently has a deficit of 2,700 units.

Applying these county-wide ratios to Epping Forest district would have an indicative current shortfall of around 280 spaces.

7.9.3.3 Residential Care

The Strategic Housing for Older People Analysis Tool (SHOP@) suggests demand standards of 45 nursing home places and 65 residential places per 1,000 population aged 75 and over. If applied to current population, this would result in:

- a surplus in residential care of 135 places; offset by
- a deficit in nursing care of 166 places.

Therefore, there is a total deficit in residential care of 31 places. The south of the District is particularly pressured due to a large proportion of spaces being filled with residents from London. In addition, the Princess Alexandra Hospital has limited capacity to provide bed spaces, especially for patients with dementia. There is therefore a need for additional care home places to free up hospital beds. There may be opportunities to convert residential care facilities into nursing care.

7.9.4 Infrastructure Requirements

Growth in population combined with changing demographic patterns mean there will be additional demand for adult social care facilities. In order to estimate the magnitude of adult social care required to serve the additional population expected over the Plan period, the following standards set out in Figure 54 have been used.

Figure 54: Adult social care standards

Infrastructure	Standard	Per	Source
Independent living	25	1,000 55 and overs	Independent Living Programme for Older People, Essex County Council
Extra care	25	1,000 75 and overs	Strategic Housing for Older People Analysis Tool (SHOP@)
Nursing care	45	1,000 75 and overs	Strategic Housing for Older People Analysis Tool (SHOP@)
Residential care	65	1,000 75 and overs	Strategic Housing for Older People Analysis Tool (SHOP@)

Note, demand for independent living is based on 25 places per 1,000 people over the age of 55. It is understood that, whilst this is the same standard as was originally used in Essex County Council's *Independent Living Programme for*

Older People document, more detailed demographic analysis was also undertaken.

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the demand for adult social care across the District is shown in Figure 55.

Figure 55: Adult social care additional demand (newly arising only)

Infrastructure	Newly arising demand over Plan period (places)
Independent living	262
Extra care	91
Nursing care	164
Residential care	237

Taking into account the deficits set out in Section 7.9.3, the total demand for adult social care over the Plan period is shown in Figure 56.

Figure 56: Adult social care additional demand (newly arising and existing capacity/shortfall)

Infrastructure	Existing capacity (-) / shortfall (+)	Newly arising demand	Total
Independent living	237	262	499
Extra care	280	91	371
Nursing care	166	164	330
Residential care	-135	237	102

7.9.5 Funding Mechanisms

Adult social care services are privately provided, however Essex County Council have contracts with providers to subsidise a set number of bed spaces. Developer contributions could play a role in delivering specialist housing need, however there will be a limited pool of capital from these contributions to distribute across the District's infrastructure needs. The County Council provide a capital grant scheme and models for land and building donations to support scheme viability.

Essex County Council's Adult Social Care Budget is £414m for the 2016/17 year, an increase of £10m from the previous year's budget. At present, 81% of this budget is used in the provision of care packages for vulnerable adults, in the form of residential care. Due to the demographic pressures facing the District, an addition £5m has been added to the 2016/17 budget to accommodate the rising number of older people.

7.9.6 Future Policy Requirements/Next Stages of Work

The integrated and complex nature of healthcare provision poses challenges for the future planning of services, with new models of provision likely to emerge over the Plan period. Decisions about the relocation of Princess Alexandra

Hospital will have significant implications for service delivery and will require further analysis once confirmed. The level of growth proposed for the District, and the strategic growth locations, might justify a new centralised care ‘hub’, to co-locate key primary health services. Draft Policy D2 Essential Facilities and Services supports proposals for new essential facilities and services where they meet an identified local need. In order to understand the impact of new residential development on health, the draft policy also requires development proposals in excess of 50 units to prepare a Health Impact Assessment.

The provision of secondary healthcare services such as adult social care is likely to become more critical within the District, due to the ageing demographic profile. These demographic trends will place greater demand upon health services within the District, particularly the various forms of supported accommodation for the elderly. This is reflected in Draft Policy H1 Housing Mix and Accommodation Types, which supports the delivery of housing and specialist accommodation for those with particular needs, including for older people.

The next stages of work for the IDP in relation to healthcare are:

- Undertake additional work to assess costs associated with delivering healthcare and adult social care facilities, and further explore options for the funding of facilities.
- Continue to engage with providers of healthcare facilities, including partners in Epping Forest District Council, Essex County Council, NHS and private providers.
- Consider implications of relocation of PAH within the District.
- Explore options for, and benefits of, co-location of different types of healthcare facilities.

8 Emergency Services

8.1 Ambulance

The main sources of evidence include

- Care Quality Commission: East of England Ambulance Service NHS

Across Essex, ambulance services are provided by the East of England (EoE) Ambulance Service. This service was established in 2006, and provides emergency care services across Bedfordshire, Cambridgeshire, Hertfordshire, Essex, Norfolk and Suffolk. Across this area, there are 130 sites, and a fleet of 1,000 vehicles. Within Epping Forest District, ambulance stations are located in Waltham Abbey, Loughton, Epping and Ongar.

Throughout 2014/15, the EoE Ambulance Service saw significant improvements to overall performance, against the background of increased demand. These improvements included:

- Undergoing a major recruitment period
- Strong focus on up skilling and training
- Increasing ambulance cover
- An overall efficiency saving of £14m

The service has seen an overall improvement in clinical quality indicators, with more patients receiving appropriate care. In some areas of service delivery however, the Trust is performing slightly below the national standard. Across the region, the Trust has experienced increasing pressure on services, particularly in the context of meeting response time targets. In response to these challenges, new models of service provision are being developed to meet with demand and resourcing constraints.

Changes to service provision are predominantly focused upon the modernisation of vehicles and medical devices, and changes to recruitment through creating new role reorganising the current workforce model. In addition, efforts to recruit clinical staff into 'clinical hubs' are being made to significantly improve the number of patients treated over the telephone or signposted to other services. This will place less demand on new infrastructure. The Operations Support team regard future priorities for ambulance-related estate to include:

- The restructuring and increased provision of training facilities
- Ongoing investment in maintenance, particularly addressing the backlog maintenance programme.
- The development of an estates strategy to address key concerns
- To implement a revised operating model, including a new clinical career pathway

8.2 Police Services

The main sources of evidence include

- Essex Policy Reform document (2012)
- Police and Crime Commissioner for Essex Annual Report (2014/15)

Police services in Epping Forest are provided by Essex County Council, however a number of other authorities are involved in the integrated provision of services. The Community Safety Partnership (CSP) in Epping Forest is made up of a number of local organisations:

- EFDC
- Essex Police
- ECC
- NHS West Essex
- Essex Probation
- Essex Fire & Rescue
- Voluntary Action Epping Forest
- Victim Support

The Police and Crime Plan (2014) was prepared by the Police and Crime Commissioner for Essex. Each district has a District Commander, who is responsible for developing clear plans that focus on addressing crime, safety and anti-social behaviour in that particular area. It also allows for continuity in neighbourhood policing.

Policing in West Essex is split up into neighbourhoods. Essex shares a number of resources with Kent police, including Serious Crime Directorate, and Support Services Directorate (includes Business Services, Corporate Finance, Estate Services, Human resources, Information Technology, Procurement, and transport). Epping Forest District has one base for officers in Loughton, and has no public desks. The two public desks were closed for use in March 2016, and residents will now have to travel to Harlow to report a crime in person.

The *Essex Police Reform Strategy* (2012) outlines the new policing model for Essex, and future plans for greater collaboration with the Kent police. Some key reforms were outlined, which will significantly impact future service provision and the overall policing model for the District:

- 2011-2014 reduction of 388 police officer posts, partly through reducing the number of Police Community Support officers (PCSOs)
- Borderless policing
- Greater use of technology
- A better use of intelligence
- Better match of resources to demand

- Reduced senior management to lower overall costs
- Creation of Local Policing Areas
- Each local authority split into District Policing Areas

The more recent Police and Crime Commissioner for Essex Annual Report 2014/15 strategy builds on increasing efficiency in its police services, starting with the rationalisation of the Essex Police Estate. It summarises that the force estate totals 1.25million square foot and has around 80 properties. They concluded that many of these properties are no longer fit of purpose or are in need of extensive and expensive maintenance. This is estimated to cost £30million with an additional £2m per year needed to maintain the estates in its current condition. As such there are planned collaborations with Kent Police to share IT, HR and other support services to reduce the space needed, and utilities technology to support the Essex Police to become more agile and efficient.

8.3 Fire and Rescue Services

The main sources of evidence include

- Consultation with Epping Forest District Fire Service

The Essex Fire and Rescue department have recently consulted the public on options for the future provision of services, which all have implications for estate and service provision in Epping Forest District. The department is aiming to reduce risk and ensure both continued performance and quality in the context of financial constraints.

The response to this consultation showed a perceived need for greater efficiency, value for money, and an overall recognition of the necessity of change in the current financial services. There were 17,630 responses, which gave overwhelming support to the option that had 66 fire engines, 18 of which would be wholetime (permanently based at a fire station) and 48 would be on-call. The total number of fire engines and those working wholetime were the highest number suggested for all the options. In Epping Forest District specifically, this would mean the removal of a second fire engine from Loughton fire station, and a change of the crewing system to on-call at Waltham Abbey fire station. Overall, the changes would see a reduction in watch-based wholetime firefighter from the current 570 to 432 and a net increase in on-call firefighters from 437 to 456. This option would save £6.4m from the operational budget.

Conversations with the Epping Forest District Fire Service suggest that there will be few issues responding to the demand created for services from new communities. The option that was most favoured following the consultation has been assessed as to how much additional capacity can be handled with and still meet the response time standards. The preferred options can deal with an additional 55%. However, the consultation did raise concerns about the impact of the option on specific local areas, specifically to Loughton and Waltham Abbey in Epping Forest District. It was generally agreed that in light of the overall decline in incident levels across the county, it is reasonable to reduce the fire and rescue service's operational resources to match reducing demand levels. This is on the

provision of re-balancing current provision to ensure the high risk areas are provided for, and proactively investing in preventative measures.

8.3.1 Funding Mechanism

Police and fire and rescue services are funded through a combination of Central Government grant and council tax revenues. Ambulance services are funded by NHS England.

8.3.2 Future Policy Requirements/Next Steps

The plan period will see a new model of delivery for emergency services across the region. The trend will be towards a reduction in facilities to create a more efficient service and respond to financial pressures. Emergency services will make savings through increased joint working across authority boundaries, and targeted resources to areas of acute need. Local need will be accommodated through community teams and representatives, offering a greater presence in community spaces, however there will not be any new dedicated facilities.

9 Community and Sports Facilities

9.1 Libraries

Library services in Epping Forest District are provided by Essex County Council. The nature of library provision is changing, with a greater shift towards providing an integrated community hub offer. Many of the services in Epping Forest District currently co-locate with partners to achieve a ‘one-stop’ service for residents.

9.1.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Consultation with Essex County Council

The *Community Libraries* report produced by the Arts Council and Local Government Authority in 2015 sets out the changing ways in which local residents use library facilities. The report draws upon best practice experience to outline ways in which communities are supporting and managing local library services.

Library facilities in the district are also used for community-run events and activities, and are increasingly becoming spaces where the public can come together.

9.1.2 Existing Provision

Current library provision is shown in Figure 57.

Figure 57: Library provision in the District

Library facility	Location	Active membership (2015-2016)	% Active membership within 15 mins drive
Epping Library And Register Office	St John's Road, Epping	2,554	92.3%
Buckhurst Hill Library	Queens Road, Buckhurst Hill	1,385	94.4%
Waltham Abbey Library	Sun Street, Waltham Abbey	3,326	93.3%
Loughton Central Library	Traps Hill, Loughton	8,816	94.0%
Ongar Library	High Street, Ongar	2,118	93.1%
Debden Library	Borders Lane, Loughton	587	93.7%
North Weald Library	High Road, North Weald Bassett	684	94.2%
Chigwell Library	Hainault Road, Chigwell	995	95.4%

Essex County Council also provides ten mobile libraries to increase access to a range of services. Mobile libraries are not restricted to serving just one district or borough and, as such, usage info at the Epping Forest District level is not readily available. The stops within the District are shown in Figure 58.

Figure 58: Essex mobile library stops in Epping Forest District



Source: Essex County Council Library Services

9.1.3 Shortfalls in Current Provision

Conversations with Epping County Council outline how Epping Forest District is well matched in terms of library provision and population. Despite this, visits, loans and active membership across the District's libraries have fallen slightly over the last few years. For example, active membership across all eight libraries was 22,291 in 2013/14, falling to 19,835 in 2015/16.

Given that the libraries are based within settlements, they are less accessible to more rural areas of the District. However, there are no distance standards relating to libraries. In addition, the mobile library service helps to serve rural areas. For this reason, it is assumed that there is no existing deficit library provision.

9.1.4 Infrastructure Requirements

The future requirements in relation to libraries are set out holistically with other types of community facilities (youth services and village and community halls) in Section 9.4.4.

9.2 Youth Services

9.2.1 Evidence Base and Strategic Issues

The main sources used for this section include:

- Consultation with Essex County Council

9.2.2 Existing Provision and Shortfalls

The Essex Youth Service operates a light-touch community model with youth workers becoming ‘community commissioners’ supporting the community to deliver services themselves. Essex County Council retains ownership of a number of physical Youth Centres (two in Epping Forest District), where utilisation is maximised, especially for those youth functions that aren’t compatible with other community uses. Whilst no new facilities are planned to be built, it will be necessary to provide multi-purpose community spaces in the strategic sites, but which take account of specialised requirements of youth provision.

9.2.3 Infrastructure Requirements

The future requirements in relation to youth services are set out holistically with other types of community facilities (libraries and village and community halls) in Section 9.4.4.

9.3 Village and Community Halls

Community facilities and halls covers a range of spaces and centres in the District that serve the community. The *Epping Forest Open Space, Sport and Recreation Assessment* (2012) defines village and community halls as ‘multi-purpose indoor facilities that are capable of accommodating a range of sports and physical fitness activities, mostly at a recreational level’.

9.3.1 Evidence Base and Strategic Issues

The following sources have been used in this section:

- Epping Forest Open Space, Sport and Recreation Assessment (2012)

9.3.2 Existing Provision

The *Open Space, Sport and Recreation Assessment* outlines the main provision of village and community halls in the District. Figure 59 shows the 43 facilities

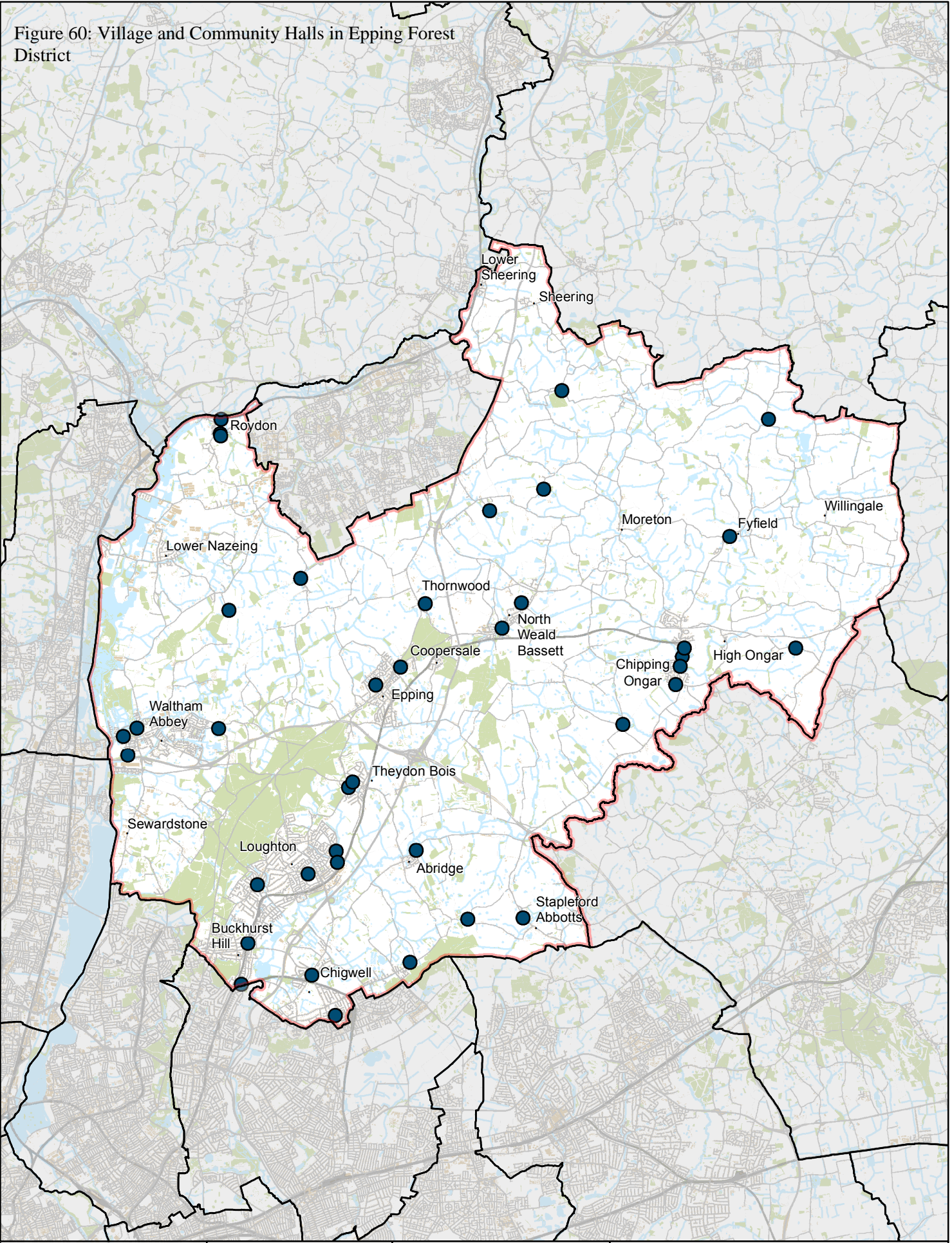
provided in the Open Space report, with the addition of one facility listed in the Essex County Council property database, which appeared to perform a similar function to those assessed in the report.

Figure 59: Community and village hall provision in the District

Facility	Location	Type
The Room in the Rodings	Roding	Hired space (wedding venue)
Debden Park Community Centre	Chigwell	Hired space
Roding Valley Hall	Buckhurst Hill	Hired space
Woollard Centre	Buckhurst Hill	Hired space
Limes Farm Community Centre	Grange Hill	Purpose built centre, including EFDC Housing Office, and hired spaces
Faversham Hall	Chigwell Row	Hired space
Victory Hall	Chigwell	Hired space
Epping Hall	Epping	Epping Town Council offices and hired space
Jack Silley Pavilion	Epping	Hire space
Epping Green Chapel	Epping Green	Church hall, hired space
Fyfield Village Hall	Fyfield	Hired space
High Ongar Village Hall	High Ongar	Hired space
Abridge Village Hall	Lambourne	Shared building with doctor's surgery, hired space
Lambourne End Parish Room	Lambourne End	Former chapel, hired space
Murray Hall Community Centre	Loughton	Hired space
Kingsley Hall	Loughton	Hired space
Lopping Hall	Loughton	Hired space
Matching Tye Village Hall	Matching Tye	Hired space
Moreton Village Hall	Moreton	Hired space
Magdalen Laver Village Hall	Magdalen Laver	Hired space
Nazeing Leisure Centre	Nazeing	Hired space
Thornwood Village Hall	Thornwood	Hired space
Queen's Hall Community Centre	North Weald	Hired space
North Weald Village Hall	North Weald	Hired space
Hastingwood Village Hall	Hastingwood	Hired space
Budworth Hall	Ongar	Hired space
St. Christopher's Hall	Roydon	Hired space
St. Martin's Church Rooms	Ongar	Hired space
St. James's Church Room	Ongar	Hired space
United Reform Church Hall	Ongar	Hired space
Roydon Village Hall	Roydon	Hired space

Facility	Location	Type
St Peter's Church Hall	Roydon	Hired space
Parma Room	Roydon	Hired space
Toot Hill Village Hall	Stanford Rivers	Hired space
Stapleford Abbots Village Hall	Stapleford Abbots	Hired space
Theydon Bois Village Hall	Theydon Bois	Parish Council office, and hired space
Theydon Bois Scout Hut	Theydon Bois	Scout use, and hired space
Theydon Bois Former Youth Centre	Theydon Bois	Hired space
St Mary's Church Hall	Theydon Bois	Hired space
Waltham Abbey Town Hall	Waltham Abbey	Town Council offices, hired space
Ninefields Community Centre	Waltham Abbey	Hired space
Town Mead Sports & Social Club	Waltham Abbey	Social club (membership required), hired space
Willingale Village Hall	Willingale	Hired space
Waltham Abbey Community Centre	Waltham Abbey	Hired space

Figure 60: Village and Community Halls in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0011

Date: September 2016

Scale: 1:150,000

Content
Community centres and village halls

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Community centres and village halls
- Surrounding Authorities
- Epping Forest District Boundary



9.3.3 Shortfalls in Current Provision

The *Open Space, Sport and Recreation Assessment* concluded that provision of community space was equivalent to one hall per 2,907 people (2012 based). A comparison was made with neighbouring Uttlesford, which had a provision of one hall per 1,426, offering a much higher rate of provision than Epping Forest District. The Limes Farm Community Centre is the only purpose built centre in the District, and operates a number of community services. The remaining community spaces are formed of church halls, village halls and council offices available to hire.

The report provides a qualitative assessment of quality and use of each facility. It is clear that the size, quality and age of community vary considerably across the District. Overall, the majority of facilities appear to be well used, and support a range of activities and events in the community. There are early redevelopment plans in place for the redevelopment of Sewardstone Village Hall, which is currently closed.

9.3.4 Infrastructure Requirements

For the purposes of the IDP, the future requirements for community facilities – libraries, youth services and community and village halls – have been considered together. This is because there is a movement towards the delivery of these services in an integrated manner, to make best use of the assets. The assessment converts this requirement into floorspace. However, it should be noted that this is in essence a ‘worst case’ as the floorspace standards used do not take into account efficiencies of co-location or joint delivery.

In order to estimate the amount of community floorspace required to serve the additional population expected over the Plan period, the following standards set out in Figure 61 have been used.

Figure 61: Community floorspace standards

Infrastructure	Standard	Per	Source
Libraries	1 library	7,000 population	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	30m ²	1,000 population	<i>ECC Developers' Guide to Infrastructure Contributions</i>
Youth services	1 youth centre	1,200 houses (60 young people)	<i>ECC Developers' Guide to Infrastructure Contributions</i>
	2.3m ²	Child	<i>Out of School Alliance</i>
Community and village halls	1 hall (180m ²)	2,900 population	<i>Open Space, Sport and Recreation Assessment</i>

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional community floorspace across groups of settlements is shown in Figure 62. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 62: Community floorspace additional demand (newly arising only)

Settlement groups	Newly arising demand over Plan period (GP FTE)			
	Library (m ²)	Youth (m ²)	Community / village hall (m ²)	Total (m ²)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	121	231	251	603
Waltham Abbey and Rural Apportionment	71	115	147	333
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	178	293	369	840
Strategic Sites L and M and Rural Apportionment	73	122	151	346
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	95	156	197	448
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	69	106	143	318
North Weald Bassett, Thornwood and Rural Apportionment	120	182	249	551
Epping and Rural Apportionment	130	211	269	610
Chigwell, Stapleford Abbots and Rural Apportionment	50	82	104	236

9.3.5 Funding Mechanisms

Community infrastructure is funded by a range of developer contributions, the voluntary sector and a range of Government grants.

Public libraries are funded by local authorities, and are likely to be increasingly constrained resources in the future. There are a range of additional funding grants available for communities on a bidding basis through the Arts Council, and the Big Lottery fund. Community centres receive funding from a range of stakeholders, including developers, local authorities, and voluntary organisations.

Developer contributions could also be sought in relation to library, youth service and community facilities provision. The *Essex County Council Developers' Contribution Guide* sets out that contributions towards libraries will be sought where a significant population increase is brought about by development, which cannot be met by existing provision. Further viability testing and the potential use of CIL will be explored along with priorities for available developer contributions before Regulation 19. Library expansion is likely to co-locate with a range of other community services. For youth centres, developer contributions can play a part in supporting 'youth hubs', satellite centres, community buildings, and outdoor spaces where young people can socialise.

Essex County Council's Funding and Investment team provides funding to support voluntary and community sectors across Essex. The county council uses the Open for Community service, which helps local organisations identify appropriate funding streams.

9.4 Sports Facilities

The provision of sports infrastructure within the District covers both indoor and outdoor facilities, and includes public and private services. The Sports & Physical Activity Needs Assessment (2015) undertaken by Essex County Council identifies that adult participation levels in physical activity in Essex is generally higher than both the national and regional averages. However, the report notes that almost 75% of adults in Essex are not meeting government recommended levels of exercise to achieve healthy lifestyles.

The future objectives of the District Council are to increase the number of people actively participating in sport and physical activity. In turn, the aspiration for sports infrastructure provision across the District are to assist in delivering benefits across a range of objectives, including health and wellbeing, local regeneration and social inclusion.

9.4.1 Evidence Base and Strategic Issues

The main sources of evidence are:

- Sports & Physical Activity Needs Assessment (2015)
- Epping Forest Open Space, Sport and Recreation Assessment (2012)
- Active Places Epping Forest Area Profile, Sports England
- Consultation with Active Essex and Epping Forest District Council

The information provided in the Epping Forest Open Space, Sport and Recreation Assessment and the Active Places Epping Forest Area Profile sources do not always align, varying in their inventory in sports facilities. This may be a result of changes in provision that have occurred since 2012, or because of differing definitions of particular types of standards (e.g. size standards). The information in this section presents both inventories, and attempts to provide a reconciliation between the two sources where possible. Consultation with Active Essex has highlighted that further work should be undertaken to ascertain whether or not existing provision is adequate. A number of assessments are being undertaken by the District to help inform the future sports and leisure strategy.

9.4.1.1 Indoor sports facilities

Indoor sports facilities can be split in the following types:

- Sports hall: equivalent to four badminton courts
- Swimming pools
- Squash courts

- Gym stations / suites
- Indoor bowls rinks
- Indoors tennis courts

This categorisation is consistent with Sport's England's *Active Places* and the *Greater Essex Growth and Infrastructure Framework* (2016).

9.4.1.2 Existing Provision

The District Council provides a range of leisure services, principally the provision of four sports and leisure centres - Waltham Abbey Swimming Pool, Epping Sports Centre, Ongar Leisure Centre and Loughton Leisure Centre. The services are managed through external contracts with providers. The District is well serviced by a high concentration of independent providers, offering a range of gym, studio, and weight lifting facilities. The Open Space, Sport and Recreation Assessment (2012) concludes that the total of these facilities offer an adequate provision of swimming pools, health and fitness facilities and squash courts across the District.

The quality of indoor sports facilities varies significantly across the District. The age and condition of Council operated facilities remains an issue, with Waltham Abbey Swimming Pool particularly identified as reaching the end of its viable life. Similarly, the current sports facility in North Weald Bassett is in poor condition and requires significant improvements.

In addition, not all facilities are being fully optimised. Sports centres in Epping and Ongar experience low user numbers during the day, particularly on weekdays. This is partly due to lifestyle factors, and the shift away from traditional sports hall facilities in favour of personal trainers, active transport and more flexible means of physical activity.

Proposals are being developed for a new combined facility in Waltham Abbey comprising a health centre, an independent living scheme, and a new swimming pool and leisure centre.

Existing indoor provision data from the 2012 Assessment and Sports England data is presented in Figure 63. Given the occasional discrepancy between the two sources, the figures in red denote those taken forward into the next stages of the assessment.

Figure 63: Current indoor sports facility provision

Facility	2012 Assessment	Sports England data (amended)		Reconciliation
Indoor tennis courts	1 facility (11 courts)	1 facility (14 courts)	No amendment	Additional courts opened since original assessment
Swimming pools	5 full size 4 small	16	No amendment made	Unclear why figures do not match
Sports halls	6 full size 4 small	6 full size 3 small	'Activity halls' removed from totals	David Lloyd Club in Chigwell appears to

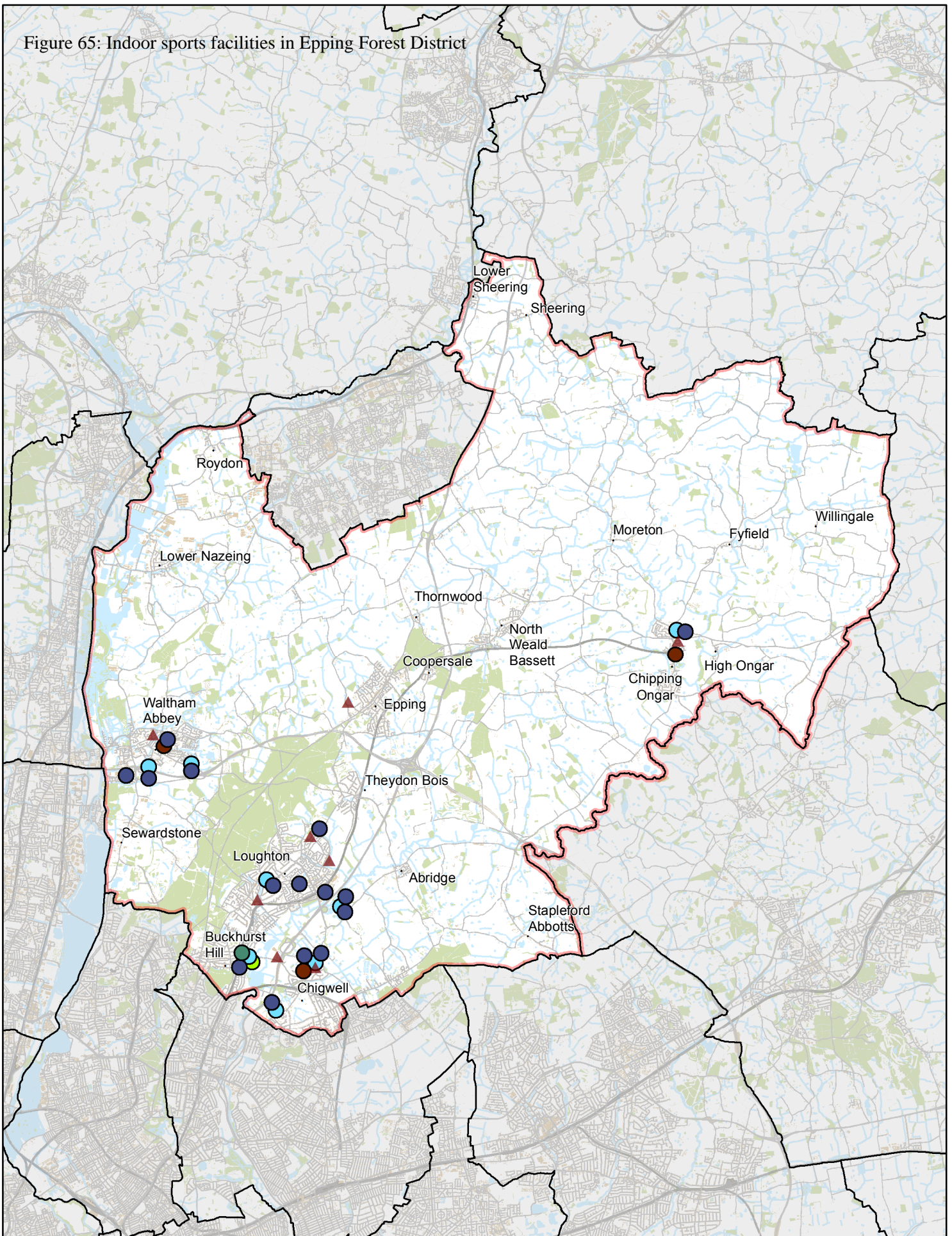
				have reduced in size since original assessment, under threshold for sports hall
Squash courts	5 facilities (11 courts)	4 facilities (10 courts)	No amendment made	Old Chigwellians not included – appears to still exist
Health and fitness suites	12 (715 stations)	16 (736 stations)	No amendment made	Several differences in individual suites across two sources
Indoor bowls facilities	1	1	No amendment made	-

Whilst the District suggest no plans to build any further sports centres, a number of sports facilities have been also been identified for possible residential uses in future (detailed in Figure 64 below). However, in all cases the existing facilities will be re-provided as part of development. In the case of Ongar Leisure Centre, this would only close in the event of a new facility being provided in North Weald Bassett.

Figure 64: Sports facilities identified for allocation

Sports facility	Location	Allocation
Epping Sports Club, Lower Bury Lane	Epping	Proposed for housing allocation
Ongar Leisure Centre, The Gables	Chipping Ongar	Proposed for housing allocation
Waltham Abbey Swimming Pool	Waltham Abbey	Proposed for housing allocation

Figure 65: Indoor sports facilities in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0013

Date: September 2016

Scale: 1:150,000

Content

Indoor Sports Facilities

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- ▲ Main Sports Halls
- Indoor Bowls
- Health and Fitness
- Squash Court
- Indoor Tennis Court
- Indoor Swimming Pool



9.4.1.3 Shortfalls in Current Provision

There is no current information available on the capacity or otherwise of existing provision. However, if the standards set out in Section 9.4.1.4 are applied to the current population, this would result in the capacities shown in Figure 66, showing any surplus or deficit in provision (minus figures denote there is capacity).

Figure 66: Indoor sports facilities current capacity / shortfall

Infrastructure	Existing provision	Existing capacity (-) / shortfall (+)
Sports halls	9	-2.43
Swimming pools	16	-10.75
Squash courts	10	-2.70
Health and fitness facilities	16	-2.87
Indoor bowls rinks	1	6.30
Indoor tennis courts	14	-6.70

Consultation with Active Essex and Epping Forest District Council suggested that there was a deficit of sports hall provision in Loughton and Debden in particular. They indicated that there is also limited access to nearby sports facilities in more rural parts of the District, which should be addressed. It was also highlighted that dual use of sports facilities between communities and schools can be problematic and members of the public often do not have sufficient levels of access. This issue is likely to become more acute in the future with the increasingly autonomous role of academy institutions.

9.4.1.4 Infrastructure Requirements

In order to estimate the amount of indoor sports facilities required to serve the additional population expected over the Plan period, the following standards set out in Figure 67 have been used, taken from the 2012 *Open Space, Sport and Recreation Assessment*. The standards give a good indication on the levels of new provision required from the communities, but consultation brought to light the importance of ensuring delivery of facilities requested by residents as a result of changes needs and wants, and in the right location in terms of accessibility and suitability to the demographic.

Figure 67: Indoor sports facilities standards

Infrastructure	Standard	Per	Source
Sports halls	1	20,000 population	Open Space, Sport and Recreation Assessment
Swimming pools	1	25,000 population	Open Space, Sport and Recreation Assessment
Squash courts	1	11,000 population	Open Space, Sport and Recreation Assessment

Health and fitness facilities	1	10,000 population	Open Space, Sport and Recreation Assessment
Indoor bowls rinks	1	18,000 population	Open Space, Sport and Recreation Assessment
Indoor tennis courts	1	18,000 population	Open Space, Sport and Recreation Assessment

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional indoor sports facilities across the District is shown in Figure 68.

Figure 68: Indoor sports facilities additional demand (newly arising only)

Infrastructure type	Newly arising facility demand over Plan period
Sports halls	1.49
Swimming pools	1.19
Squash courts	2.71
Health and fitness facilities	2.98
Indoor bowls rinks	1.65
Indoor tennis courts	1.65

Taking into account the deficits set out in Section 9.4.1.3, the total demand for indoor sports facilities over the Plan period is shown in Figure 69. This shows that, for many types of indoor sports requirements, the newly arising demand can be met by existing facilities.

Figure 69: Indoor sports facilities additional demand (newly arising and existing capacity/shortfall)

Infrastructure	Existing capacity (-) / shortfall (+)	Newly arising demand	Total
Sports halls	-2.43	1.49	-0.95 (capacity)
Swimming pools	-10.75	1.19	-9.56 (capacity)
Squash courts	-2.70	2.71	0.00
Health and fitness facilities	-2.87	2.98	0.11
Indoor bowls rinks	6.30	1.65	7.95
Indoor tennis courts	-6.70	1.65	-5.05 (capacity)

Over the Plan period, there are a range of opportunities to improve the quality and quantity of indoor sports provision across the District. There is ongoing consultation surrounding the location of sports facilities at Epping Forest College, to help meet current deficiencies in sports hall provision.

There are relatively limited options for expansion of existing sports and leisure facilities in the District, due to the constrained nature of sites. Consultation outlined how a cost-effective approach towards delivery should be taken. The preferred approach is to replace ageing facilities rather than enhancing existing

infrastructure, as this offers a more financially viable option. The District Council are positively exploring opportunities to provide a new hub facility in Waltham Abbey, to replace the existing ageing facility. Innovatively, this facility is planned to combine adult social care, NHS services and sports facilities, offering dual purpose spaces. Such a partnership model would facilitate future funding streams and management.

The potential rationalisation of existing infrastructure, combined with new development will create additional demand for sports facilities. There are proposed plans for a new multi-sport facility in North Weald Bassett, which would offer a range of indoor sports facilities. This facility is likely to accommodate increased demand arising from proposed growth in the District. Future provision of sports facilities is likely to focus around a hub model which would co-locate a number of integrated services. Trends are towards flexible and dual purpose spaces, for example gym and studio use for personal trainers of bespoke exercise classes such as Pilates or yoga.

9.4.2 Outdoor Sports Facilities

Outdoor sports facilities can be split in the following types:

- Artificial grass pitches
- Tennis courts
- Athletics tracks
- Golf courses

9.4.2.1 Evidence Base and Strategic Issues

The main sources of evidence are:

- *Epping Forest Open Space, Sport and Recreation Assessment* (2012)
- *Active Places Epping Forest Area Profile*, Sports England

The information provided in these two sources do not always align in regards to the inventory of outdoor sports provision – this may be a result of changes in provision that have occurred since 2012, or because of differing definitions of particular types of standards (e.g. size standards). The information in the rest of this section presents both, and attempts to provide a reconciliation between the two sources.

9.4.2.2 Existing Provision

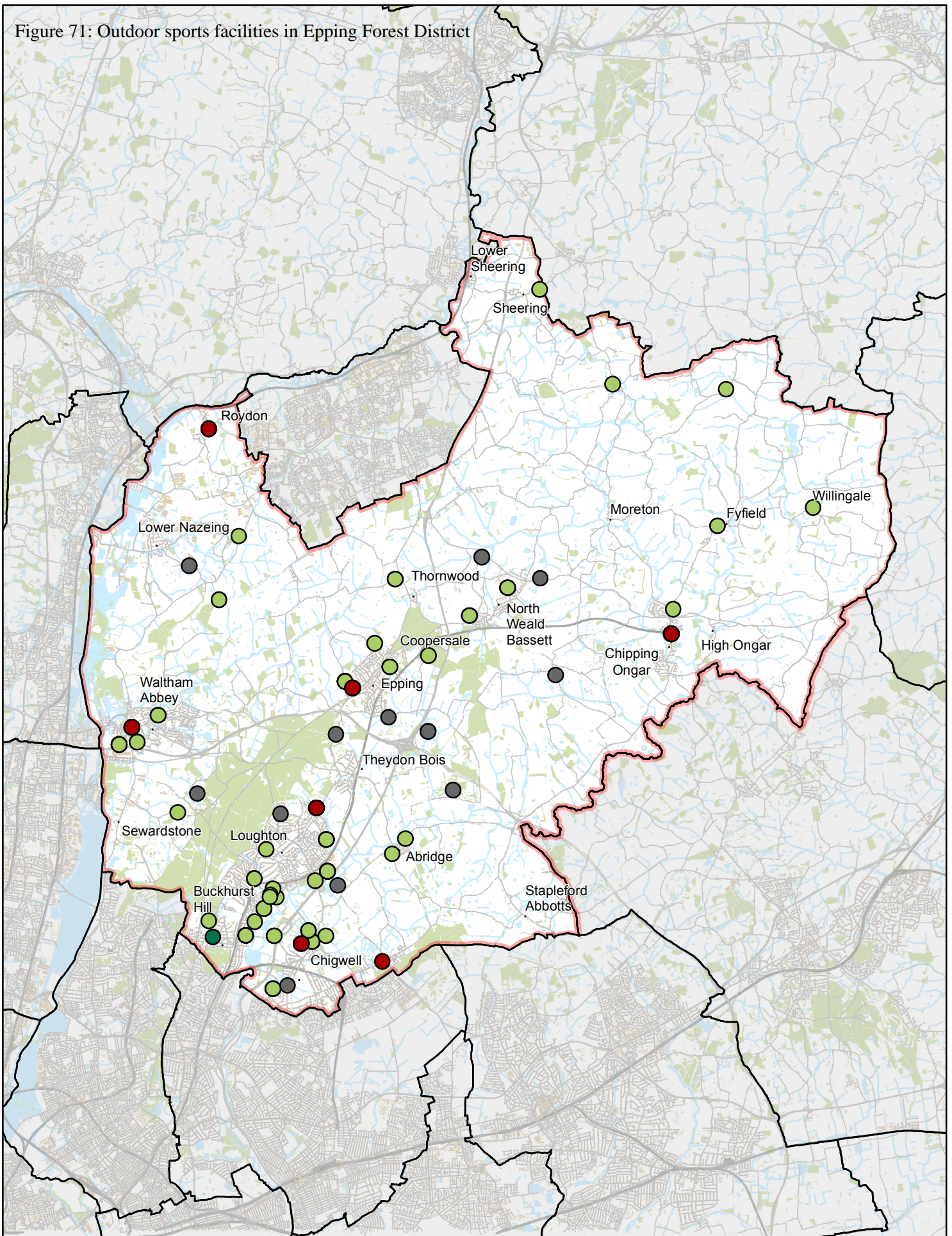
Existing provision data from the 2012 Assessment and Sports England data is presented in Figure 70. Given the occasional discrepancy between the two sources, the figures in red denote those taken forward into the next stages of the assessment.

Figure 70: Current outdoor sports facility provision

Facility	2012 Assessment	Sports England data (amended)		Reconciliation
Artificial grass pitches	5 full size 1 small	6 full size 1 small	Pitches less than 50m in length removed	Additional pitch at St John's School, Epping built in 2013
Tennis courts	53	30	No amendment made	Several differences across two sources – reasons not clear
Grass pitches ⁷	165	178	No amendment made	Several differences across two sources – reasons not clear
Athletics tracks	0	0	No amendment made	-
Golf courses	13 (216 holes)	13 (207 holes)	Driving ranges removed from totals	Sports England data does not include West Essex Golf Club (appears to still be operational), and includes Chigwell Hall (does not appear to offer golf)

⁷ Includes full sized football pitches, junior football pitches, mini soccer pitches, rugby pitches and cricket pitches.

Figure 71: Outdoor sports facilities in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0012

Date: September 2016

Scale: 1:150,000

Content

Outdoor Sports Facilities

Contains Ordnance Survey & Royal Mail Data © Crown Copyright & Database Right 2015 EFDC Licence No: 100018534 2015 © Royal Mail Copyright & Database Right 2015

- Legend
- Settlements
 - Tennis Court
 - Grass Pitch
 - Golf Course
 - Artificial pitches
 - Surrounding Authorities
 - Epping Forest District Boundary

N



9.4.2.3 Shortfalls in Current Provision

There is no current information available on the capacity or otherwise of existing provision. However, if the standards set out in Section 9.4.2.4 are applied to the current population figures, this would result in the shortfalls shown in Figure 72. Please note that there are no standards relating to the provision of grass pitches.

Figure 72: Outdoor sports facilities current capacity / shortfall

Infrastructure	Existing provision	Existing capacity (-) / shortfall (+)
Artificial grass pitches	7	6.13
Tennis courts	30	27.09
Athletics tracks	0	0.53
Golf courses	13	0.13

9.4.2.4 Infrastructure Requirements

In order to estimate the amount of outdoor sports facilities required to serve the additional population expected over the Plan period, the following standards set out in Figure 73 have been used, taken from the 2012 *Open Space, Sport and Recreation Assessment*. Grass pitches have not been modelled as there are no corresponding standard available.

Figure 73: Outdoor sports facilities standards

Infrastructure	Standard	Per	Source
Artificial grass pitches	1	25,000 population	Open Space, Sport and Recreation Assessment
Tennis courts	1	2,300 population	Open Space, Sport and Recreation Assessment
Athletics tracks	1	250,000 population	Open Space, Sport and Recreation Assessment
Golf courses	1	10,000 population	Open Space, Sport and Recreation Assessment

Based on the expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional outdoor sports facilities across the District is shown in Figure 74.

Figure 74: Outdoor sports facilities additional demand (newly arising only)

Infrastructure type	Newly arising demand over Plan period (number of new facilities)
Artificial grass pitches	2.98
Tennis courts	12.94
Athletics tracks	0.12
Golf courses	2.98

Taking into account the deficits set out in Section 9.4.2.3, the total demand for outdoor sports facilities over the Plan period is shown in Figure 75.

Figure 75: Outdoor sports facilities additional demand (newly arising and existing capacity/shortfall)

Infrastructure	Existing capacity (-) / shortfall (+) (facilities)	Newly arising demand (facilities)	Total (facilities)
Artificial grass pitches	6.13	2.98	9.11
Tennis courts	27.09	12.94	40.03
Athletics tracks	0.53	0.12	0.64
Golf courses	0.13	2.98	3.11

Outdoor tennis courts can be broken down further by groups of settlements, as shown in Figure 76. This refers to newly arising need only. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 76: Outdoor tennis courts additional demand (newly arising only) – by settlement groups

Settlement	Allotment (ha)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	1.76
Waltham Abbey and Rural Apportionment	1.03
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	2.58
Strategic Sites L and M and Rural Apportionment	1.06
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.38
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.00
North Weald Bassett, Thornwood and Rural Apportionment	1.74
Epping and Rural Apportionment	1.89
Chigwell, Stapleford Abbots and Rural Apportionment	0.73

Consultation with Active Essex raised the underuse of two football pitches in Waltham Abbey due to prolonged waterlogging. As such, the need to re-provide these facilities in the future should be carefully considered as demands for other facilities may be greater.

Residents' options of places to exercise have broadened, and are no longer confined to specified locations. Parks and public footways, for example, are increasingly used for cycling and walking activity groups, particularly amongst the older communities, and for personal training sessions. This places less demand on the provision of dedicated outdoor sports facilities.

9.4.3 Funding Mechanisms

Essex County Council has very limited financial resources to support the provision of sports infrastructure, whilst also having no statutory obligation to provide further sports facilities. The future provision of services therefore needs to be delivered in the most cost effective way, focussing on partnership arrangements and the co-location of integrated services.

There are also funding opportunities available through the Primary School Premium, which is a government funded initiative to improve sports and physical activity within primary schools. The Sports & Physical Needs Assessment sets out that primary schools on average receive around £9,500 each a year from this funding stream.

Sport England play a significant role in financing sports infrastructure in offer a range of funding in Essex. Consultation with Active Essex indicated how Sports England provide funding for 10% of a sports facility, to help establish initial backing. Further, the Football foundation combining funding from the Premier League, the Department for Media, Culture and Sport, Sport England and The FA is a significant financial provider.

The private sector plays an important role in funding the provision of sports facilities, particularly for sports such as swimming, gyms, dance and golf.

9.4.4 Future Policy Requirements/Next Stages of Work

The provision of community and sports facilities remains challenging due to limited funding availability, and will require new models of delivery in the Draft Local Plan period. In the context of significant growth, it is vital to ensure the overall provision of community and sports facilities is safeguarded, although there is potential to redevelop and re-provide services to make efficient use of land.

Development within the District will place additional demands on current facilities, which will need to be proactively planned for. Within the draft Local Plan, Draft Policy D4 Community, Leisure and Cultural Facilities states that proposed developments should contribute to the provision of new or improved facilities in proportion to the scale of the proposed development. For larger, strategic developments on site provision will be expected where feasible; for smaller developments, a financial contribution will be sought. Financial contributions for on-going maintenance of facilities will be sought where appropriate.

Where possible, opportunities for the co-location of services and maximising the use of existing buildings are encouraged by Draft Policy D4, to respond to the increasingly integrated models of service provision. For example, this might involve combining sports infrastructure with schools, or supporting applications for multi-purpose facilities. There is increasing emphasis on the integration of other form of community infrastructure, such as libraries and community spaces. This need could be reflected in future housing policy, by supporting applications that contribute to the provision of local community facilities.

The next stages of work for the IDP in relation to community facilities are:

- Explore options for, and benefits of, co-location of different types of community facilities.
- In relation to the further separate work on sports facilities need and standards for provision, understand the implications for the facilities required over the Plan period and potential for accommodating demand and rationalising provision.
- Undertake further work to assess costs associated with delivering community facilities.
- Further explore options for the funding of community facilities.
- Continue to engage with providers of community facilities, including Essex County Council and private providers.

10 Green Infrastructure

Epping Forest District is host to a number of environmental assets. The District is predominantly rural in character, with a landscape formed of ridges and valleys, along with substantial rural wooded areas, including Epping Forest.

The District has good access to a number of strategic green spaces, such as the Lee Valley Regional Park, which provides a significant recreational resource for the area. The Lee Valley Regional Park follows the course of the River Lea for almost 23 miles (37 km) from Ware in Hertfordshire to the River Thames. A substantial area lies within the District, including extensive visitor and recreational facilities as well as heritage assets such as Waltham Abbey Gardens, Gunpowder Mill and Gunpowder Park.

The largest wooded area in the District is Epping Forest, though there are also significant areas of woodland to the north of Epping and to the south of North Weald. On the southern boundary of the District is Hainault Forest which lies partly within the District, but mainly within the London boroughs of Havering and Redbridge. There are other scattered areas of woodland, veteran trees and networks of established hedgerows which structure the landscape.

The District benefits from a number of key walking routes, such as The Essex Way and Three Forests Way, which links up a historic woodland, river valleys and open space across the wider Essex region. The District has good access to other key walking routes such as Flich Way, which cuts horizontally through the District linking Enfield with East London and the River Thames.

There are two main river systems in the District, the Roding, which runs along the eastern boundary, and the Lee River, which runs on the Western boundary. The northern area of the District is partly covered by the Stort Catchment. The Stort Valley Way is a key footpath that follows the River Stort from Roydon, through to Harlow and Sawbridgeworth.

Green Infrastructure refers to a network of green spaces and other environmental features. It incorporates both urban and rural assets and should be planned and managed as a multi-functional resource. GI assets provide a range of benefits including providing ecological habitats, contributing to landscape character and quality, making places healthier and more distinctive, providing amenity and recreational opportunities as well as a range of 'eco-systems' benefits such as climate change mitigation and pollution control. More valuable green spaces have multiple uses and are connected as part of an integrated network as opposed to being isolated.

The Lea Valley Regional Park Authority is preparing proposals for the future use of sites that cover eight areas across the Park. Epping Forest District is partially covered by Area 5 proposals, which were adopted in 2013. These proposals aim to enhance current visitor facilities at Gunpowder Park, to create a visitor hub and improve both pedestrian and cycle access. A new Management Plan is being developed to set out the ongoing management of Epping Forest's landscape, wildlife and visitor population. This will cover the period 2017 to 2027.

10.1.1 Evidence Base and Strategic Issues

The main source of evidence is:

- Epping Forest Open Space, Sport and Recreation Assessment (2012)

Epping Forest Open Space, Sport and Recreation Assessment (2012), building on an earlier audit undertaken in 2009 identified the following types of open space⁸:

- **Managed open space:** tending to consist largely of mown grass and sometimes incorporating play facilities; sometimes enclosed, designed and maintained e.g. urban parks or formal gardens.
- **Informal recreation grounds:** tending to consist largely of mown grass, which can be of a scale to provide an informal kickabout area and sometimes incorporating play facilities.
- **Woodland and semi-natural areas with public access:** including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
- **Children's playgrounds:** including play areas, skateboard parks, outdoor basketball hoops and other more informal areas.

For the purposes of the IDP, the Green Infrastructure of the District has been assessed according to these categories, though it is acknowledged that an integrated approach to the network as a whole is also required.

The 2012 assessment suggested a number of standards, based on the current level of provision or provision in other 'benchmark' authorities. It is not clear whether these standards are at a level which might be realistically delivered through new development. In particular, the level of woodland and semi-natural areas with public access is already very high in the District due to the presence of Epping Forest. Further work may be necessary to revise and revisit the 2012 assessment prior to the next iteration of the IDP. There will also be further assessment of the potential of the proposed development sites in the Draft Local Plan to provide new open space. An analysis will then be undertaken using this information to establish whether a new standard is suitable and what that might be for the different types of open space. This could include standards on quantity, quality and accessibility.

10.1.2 Existing Provision and Shortfalls

10.1.2.1 Managed Open Space

The 2009 and 2012 assessments identified 105 managed open spaces, across 19 parishes. Overall, the sites were assessed to be of 'average' quality, although some were found to be 'good' or 'very good'.

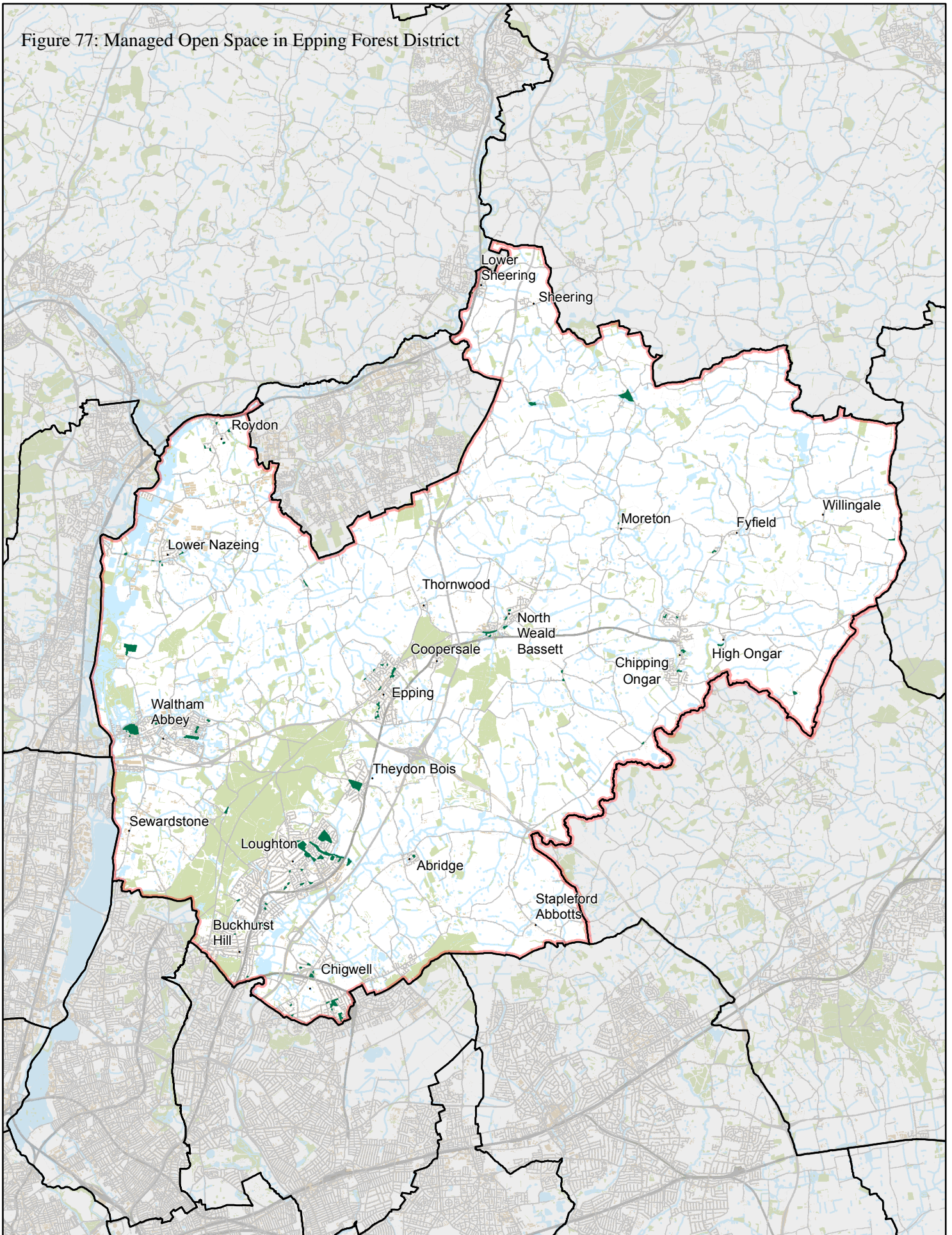
⁸ Allotments and burial grounds were also assessed under open space within the assessment, but are considered in other sections of this IDP.

The current level of provision is equivalent to 0.63ha/1,000 population across the district as a whole. This typology is quite widespread and well-distributed, with only Abbess, Beauchamp and Berners Roding, Stapleford Abbots, Stapleford Tawney, Theydon Garnon and Theydon Mount parishes not having managed open space. Most of this typology is concentrated in the urban centres i.e. Chigwell, Epping, Loughton, North Weald Bassett and Waltham Abbey.

The 2012 assessment concluded that there are no identified deficiencies in quantity of managed open space; however, deficiencies in accessibility were found in:

- Loughton west of the A121, northeast and southwest of Earl's Path.
- Some streets east of Golding's Hill in Loughton
- The northern segment of Theydon Bois
- Chigwell, north of the B173
- Parts of Buckhurst Hill between the A110 and the A121
- Around Bury Road in Sewardstonebury
- Some southern sections of Waltham Abbey
- Coopersale
- The northern part of North Weald Bassett and Tyler's Green
- Most of the boundary areas of the district where these abut Harlow

Figure 77: Managed Open Space in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0014

Date: September 2016

Scale: 1:150,000

Content

Managed Open Space

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Managed Open Space
- Surrounding Authorities
- Epping Forest District Boundary

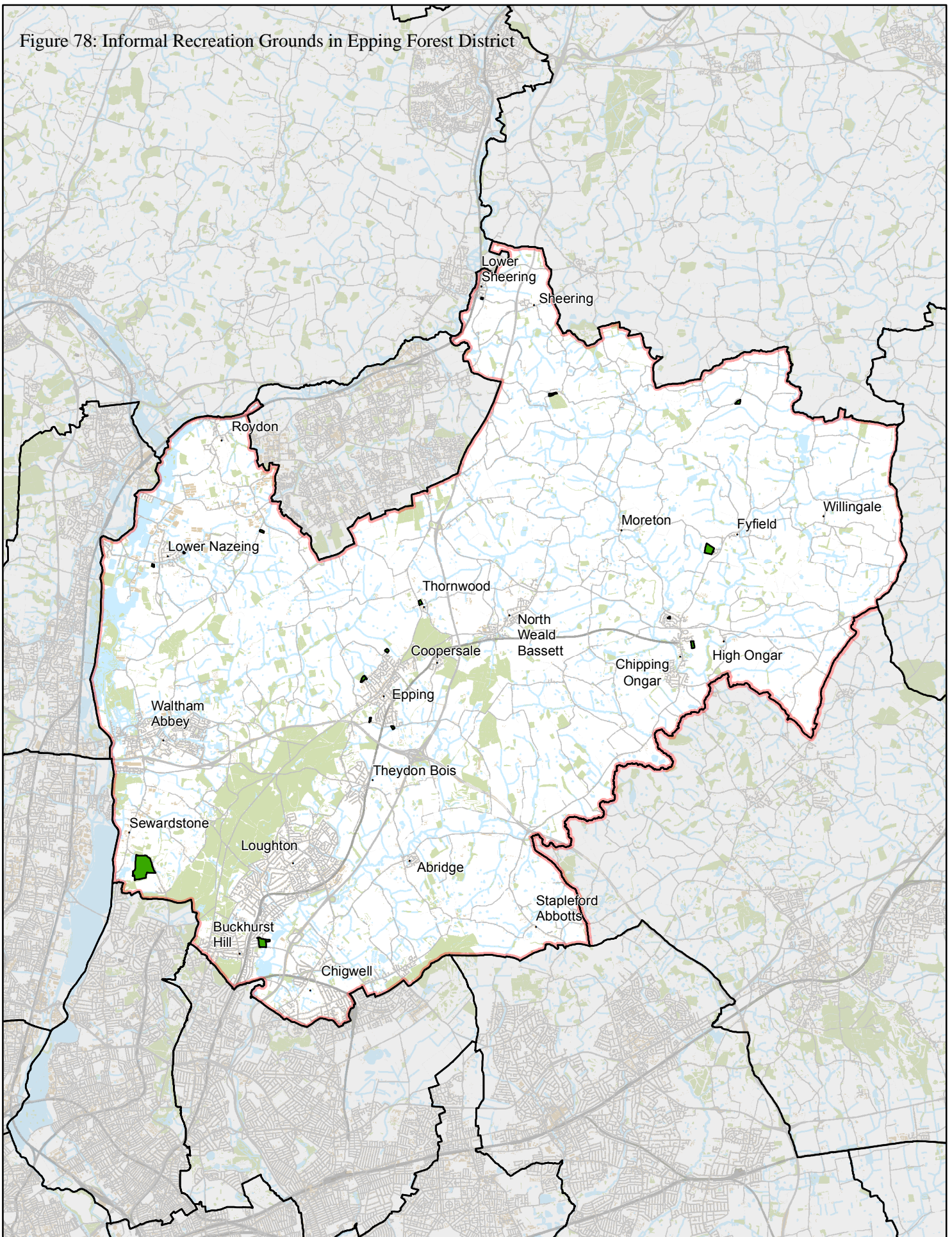


10.1.2.2 Informal Recreation Grounds

In total, 17 informal recreation grounds were identified in ten parishes across the district, all of which above 0.2ha in size. The majority were found to be of ‘average’ quality or better; however, Elmsbridge Open Space in Fyfield was assessed to be poor. The current level of provision is equivalent to 0.47ha/1,000 population.

The 2012 assessment concluded that there are no identified quantity deficiencies at this time (acknowledging that a higher provision standard of 0.49ha/1,000 is proposed in the assessment to match comparable benchmark authorities). It was also recognised that this sort of facility may not be available in each community, and therefore accessibility is not an appropriate standard to apply.

Figure 78: Informal Recreation Grounds in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0015

Date: September 2016

Scale: 1:150,000

Content

Informal Recreation Grounds

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Informal Recreation Grounds
- Surrounding Authorities
- Epping Forest District Boundary



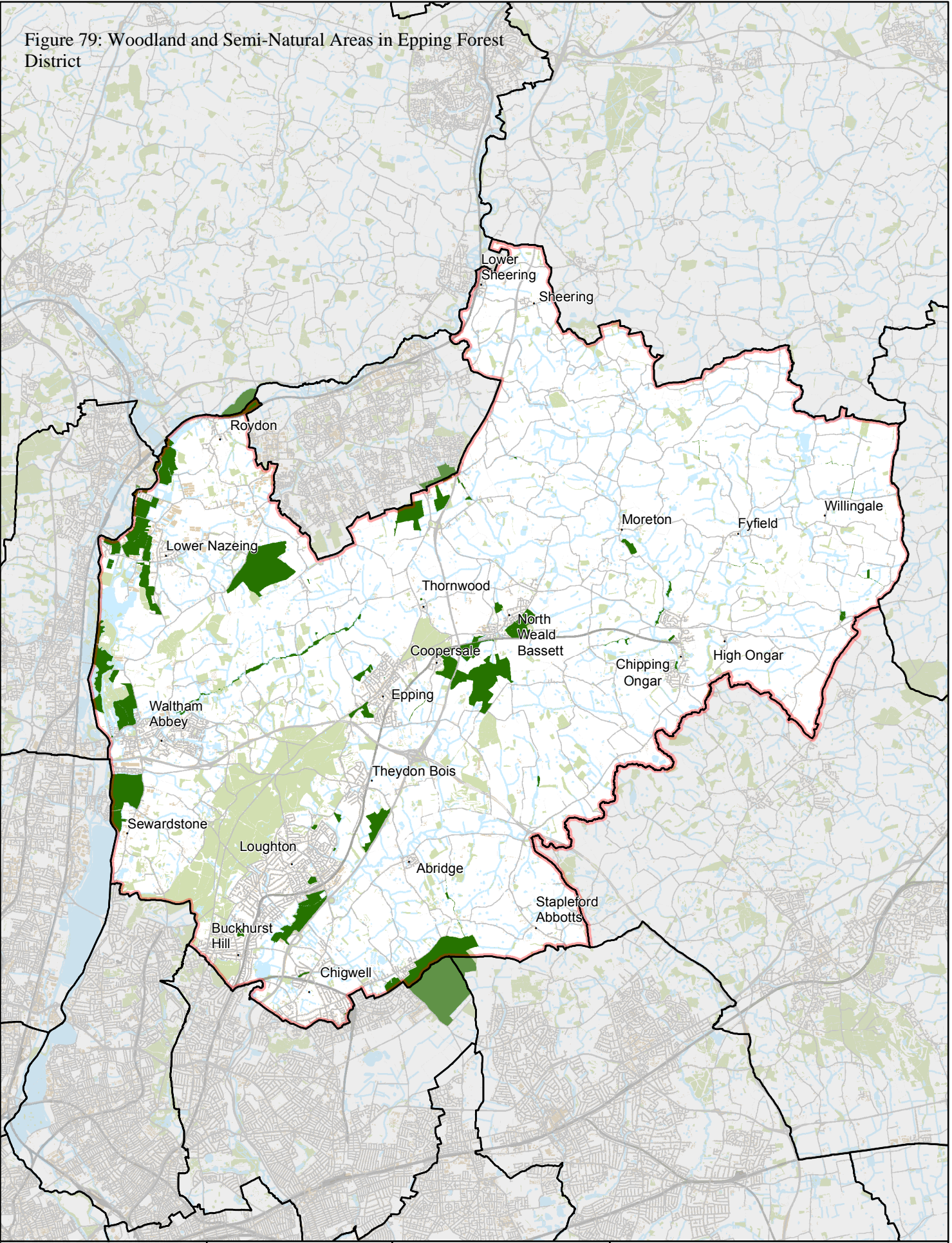
10.1.2.3 Woodland and Semi-Natural Areas

The 2009 and 2012 assessments found 61 sites of woodland and semi-natural areas within the District. The largest of these is Epping Forest; other large sites include Nazeingwood Common, Hainault Forest and Nazeing Meads. The overall rating for most sites is 'good' or 'very good'.

The current level of provision of woodland and semi-natural areas is 31.ha/1,000 population, which is significantly higher than comparator authorities. There are therefore no identified deficiencies in quantity. However, given that much of the provision is comprised of Epping Forest and its Buffer lands and the Lee Valley Regional Park, the northeast and central areas of the District have comparatively reduced accessibility to such areas. There are therefore accessibility deficiencies in the following areas:

- Central Waltham Abbey, outside the Lee Valley and Epping Forest buffer lands.
- Land directly west of Harlow but within Epping Forest District
- Lower Sheering in the far north of the district
- Tyler's Green north of North Weald Bassett
- Abridge
- Parts of Chigwell

Figure 79: Woodland and Semi-Natural Areas in Epping Forest District



10.1.2.4 Children's Playgrounds

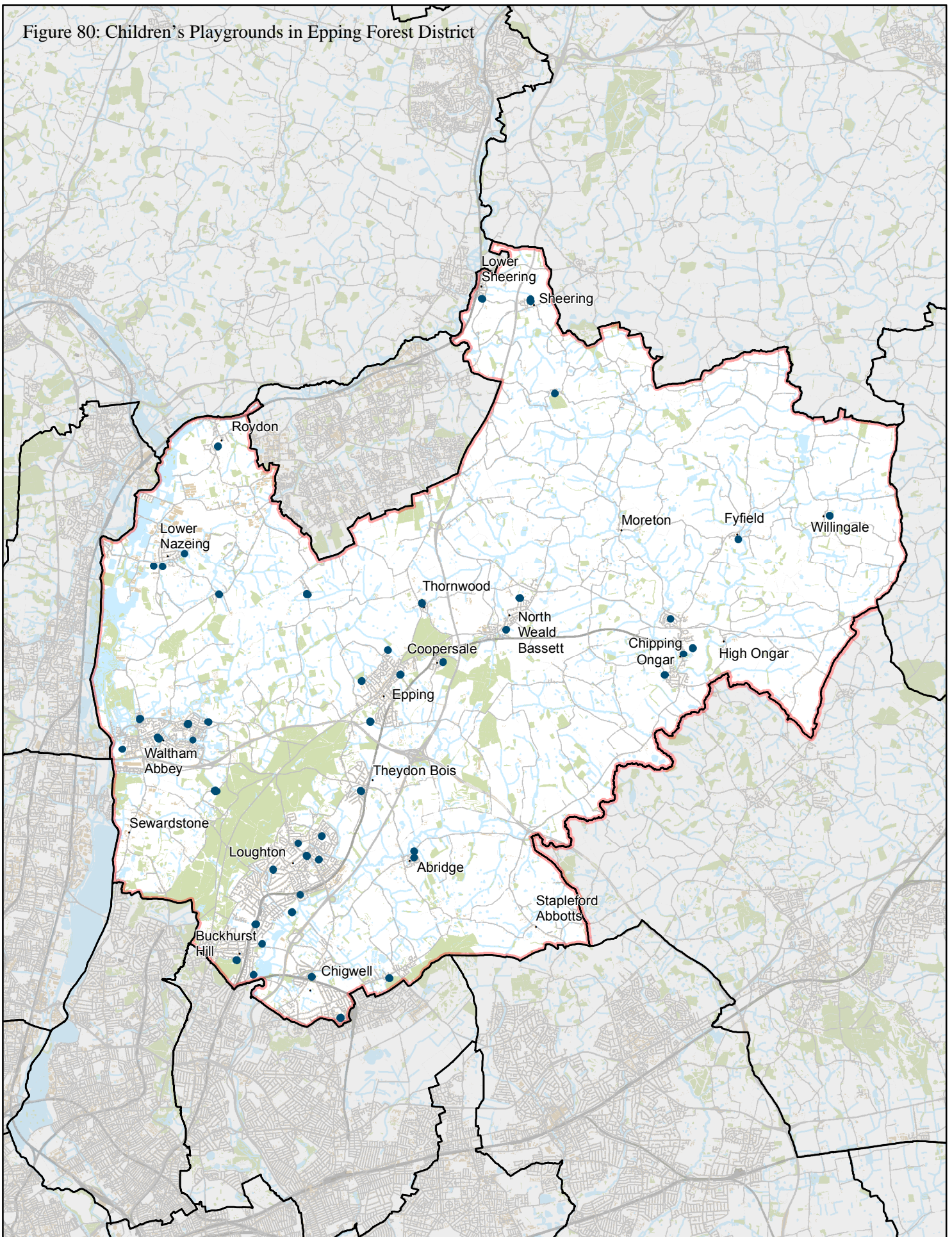
Fields in Trust has defined three categories of play areas:

- **Local Areas for Play (LAPs):** small landscaped areas of open space specifically designated for young children (under 6 years old) and their parents or carers for play activities and socialisation close to where they live.
- **Local Equipped Areas for Play (LEAPs):** unsupervised play area mainly for children of early school age (4-12 years, equipped with formal play equipment and providing a focal point for children when they are responsible enough to move away from the immediate control of parents.
- **Neighbourhood Equipped Areas for Play (NEAPs):** serving a substantial residential development and as such for a wide range of children including those with special needs. Play equipment should be aimed primarily at those aged between 4 and 14 and should aim to stimulate physical, creative, intellectual, social and solitary play. Teenage provision should be in the form of kickabout/basketball areas, opportunities for wheeled play and meeting areas.

The 2009 and 2012 assessments found 45 playgrounds, of variable quality. Seven parishes (High Ongar, Moreton and Bobbingworth, Stanford Rivers, Stapleford Abbots, Stapleford Tawney, Theydon Garnon and Theydon Mount) were found to have no provision at all. A significant lack of equipment for older children and teenagers, and for those with disabilities, was found.

The current level of provision was found to be equivalent to 0.024ha/1,000 population, which is low compared to comparable benchmark authorities. The assessment recommended that a standard of 0.038ha/1,000 should be adopted, within 5-10 minutes' walk.

Figure 80: Children's Playgrounds in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0017

Date: September 2016

Scale: 1:150,000

Content

Children's Playgrounds

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Childrens Playgrounds
- Surrounding Authorities
- Epping Forest District Boundary

N



10.1.3 Infrastructure Requirements

In order to estimate the amount of open space required to serve the additional population expected over the Plan period, the following standards set out in Figure 81 have been used, taken from the 2012 *Open Space, Sport and Recreation Assessment*.

Figure 81: Open space standards

Infrastructure	Standard	Per	Source
Managed open space	0.63ha	1,000 population	Open Space, Sport and Recreation Assessment
Informal recreation grounds	0.49ha	1,000 population	Open Space, Sport and Recreation Assessment
Children's play	0.038ha	1,000 population	Open Space, Sport and Recreation Assessment

It should be noted that whilst these standards are appropriate on a District level, it might not be realistic to expect all development proposals to meet these standards due to the nature of the site and surrounding area etc. In these instances, it might be more appropriate for developments to contribute to open space through other means, for example off-site provision or sums to improve quality and connectivity of green infrastructure. The approach to open space standards will be developed to inform the Regulation 19 version of the Local Plan.

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional open space across the District is shown in Figure 82.

Figure 82: Open space additional demand (newly arising only)

Infrastructure type	Newly arising demand over Plan period
Managed open space	18.75ha
Informal recreation grounds	14.58ha
Children's play	1.13ha

This requirement for managed open space and informal recreation grounds is set out by settlement groups in Figure 83. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 83: Open space additional demand (newly arising only) – by settlement groups

Settlement group	Managed open space (ha)	Informal recreation grounds (ha)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.54	1.98
Waltham Abbey and Rural Apportionment	1.49	1.16
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	3.74	2.91
Strategic Sites L and M and Rural	1.54	1.20

Apportionment		
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	2.00	1.55
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.45	1.13
North Weald Bassett, Thornwood and Rural Apportionment	2.53	1.96
Epping and Rural Apportionment	2.73	2.13
Chigwell, Stapleford Abbots and Rural Apportionment	1.05	0.82

This requirement for children's play is set out by settlement groups in Figure 84.

Figure 84: Children's play demand (newly arising only) – by settlement

Settlement	Children's play space (m ²)
Buckhurst Hill	108
Chigwell	545
Chipping Ongar	715
Epping	1610
Fyfield	102
High Ongar	34
Loughton / Debden	1078
Lower Nazeing	310
Lower Sheering	53
North Weald Bassett	1380
Roydon	75
Sheering	142
Stapleford Abbots	52
Theydon Bois	350
Thornwood	143
Waltham Abbey	844
Strategic Sites	3417
Rural	352

A small number of the proposed allocations involve the loss of managed open space or allotments. As part of site selection, the cumulative assessment of this loss on a settlement level was undertaken, using the assumption that all new development would be able to meet the newly-arising need resulting from the additional population (see below). The assessment found:

- For Loughton / Debden, Waltham Abbey and Chigwell, there are no identified current deficiencies in the quantum of open space within the settlement, however the cumulative impact of the proposed allocations would result in a

reduction in land for managed open space. The Council will be undertaking further work to quantify the existing surplus and how the loss of managed open space can be mitigated through new provision or improvements to quality and accessibility of existing spaces, focusing in particular on Loughton. In the case of one of the proposed allocations (Lime Estate in Chigwell), the site will be subject to a comprehensive masterplan which will seek to re-provide existing green space provision. There is not an existing deficit or forecast loss in other types of assessed open space in these settlements.

Notwithstanding any further work on open space needs and standards, a ‘sense check’ of the standards set out in the 2012 Assessment has been undertaken, assessing whether it would be reasonable for each allocated site to be able to meet their own need for managed open space and informal recreation ground on their sites. It was found that, for the majority of the sites, the proportion of land required for open space is less than 10%. However, there are some sites where a higher proportion might be required, and therefore delivering this level of open space may be more difficult. Epping Forest District Council might decide to require developers to contribute to open space through other means, for example off-site provision or sums (possibly through CIL) to improve quality and connectivity of green infrastructure. This is reflected in the relevant draft Local Plan policies.

Green infrastructure is more than about simply the ‘quantity’ of open space and environmental assets, but is also about the extent to which these assets are managed and linked as part of an integrated network, the extent to which they are physically accessible for people to use and enjoy and the extent to which are known, understood and appreciated by residents. The Draft Local Plan therefore includes policies which seek to protect, maintain and enhance green infrastructure within the District and encourage linkages to develop a coherent network. It is also encourages proposals which improve accessibility and help to raise awareness, understanding and appreciation of the important and valuable assets in the District. Key objectives for developing the network include:

- **Areas of special wildlife value:** protect sites and their setting; develop green links between assets to better integrate the network.
- **Areas of heritage and landscape importance:** protect sites and their setting; improve access where appropriate.
- **Woodland:** create and encourage connections between isolated woodland pockets; improve accessibility from Epping Town to Epping Forest. – signage, footpaths, improved walking environment etc.
- **Veteran trees:** enhance setting and improve integration to the network, along with an overall objective to increase tree cover in the District;
- **Hedgerows:** protect, develop and extend the network as the key connecting element of the green infrastructure network.
- **Natural, semi-natural and rural green space:** improve gateways between the towns and surrounding open countryside; improve east-west

access to the Lee Valley Regional Park; create links between Lee Valley Regional Park and Epping Forest;

- **Public rights of way (PROW) and connections:** protect and enhance Green Lanes and Protected Lanes; extend the PROW network; develop strategies to increase awareness of strategic footpaths such as Three Forests Way
- **Water assets:** improve connections to and along the River Roding; improve east-west access points to River Lee towpath.

These objectives will be developed into a more detailed GI strategy as work on the Local Plan progresses.

The strategic sites present particular opportunities to develop and extend the GI network. These are being developed through the preparation of masterplans for the sites.

10.2 Allotments

The *Epping Forest Open Space, Sport and Recreation Assessment* (2012) defines an allotment garden as ‘wholly or mainly cultivated by the occupier for the production of fruit or vegetables for consumption by himself and his family’. The primary purpose of this type of open space is to provide opportunities for people to grow their own produce, and the overall promotion of sustainability, along with healthy socially inclusive lifestyles.

Allotments are a key part of a local recreational offer, and help to preserve and support local biodiversity.

10.2.1 Evidence Base and Strategic Issues

The following sources have been used in this section:

- Epping Forest Open Space, Sport and Recreation Assessment (2012)
- Consultation with Parish Councils

10.2.2 Existing Provision

The 2009 audit of allotments carried out by Epping Forest District Council identified 41 allotment sites (Figure 85).

Figure 85: Allotment provision in the District

Allotment	Location	Assessment of quality based on 2009 audit
Forest Edge Allotment	Buckhurst Hill	Good
Hornbeam Road Allotment	Buckhurst Hill	Average
Hornbeam Close Allotment	Buckhurst Hill	Poor
Lower Queen’s Road Allotment	Buckhurst Hill	Very Good

Boxted Close Allotment	Buckhurst Hill	Good
Palace Gardens Allotment	Buckhurst Hill	Good
Fencepiece Road Allotment	Chigwell	Good
Gravel Lane Allotment	Chigwell	Average
Vicarage Lane Allotment	Chigwell	Poor
Coopersale Allotment	Epping	Average
Lower Bury Lane Allotment	Epping	Average
Meadow Road Allotment	Epping	Average
Copped Hall Estate Allotment	Epping	Poor
Thornwood Road Allotment	Epping	Poor
High Road Allotment	Epping	Poor
Epping Green Allotment	Epping Upland	Average
Cannons Lane Allotment	Fyfield	Poor
King Street Allotment	High Ongar	Poor
London Road Allotment	Lambourne	Average
Loughton Potato Ground	Loughton	Good
Pyrles Lane Allotment	Loughton	Poor
Willingale Road Allotment	Loughton	Average
Roding Road Allotment	Loughton	Good
Garden Field	Moreton and Bobbingworth	Good
Middle Street Allotment	Nazeing	Average
Thornwood Common Allotment	North Weald Bassett	Good
Hastingwood Allotment	North Weald Bassett	Good
North Weald Allotment	North Weald Bassett	Good
St Andrews Close Allotment	North Weald Bassett	Average
Moreton Road Allotment	Ongar	Average
Moreton Road Private Allotment	Ongar	Average
Castle Street Allotment	Ongar	Average
Rodney Road Allotment	Ongar	Average
Roydon Village Allotment	Roydon	Average
Broadley Common Allotment	Roydon	Average
Theydon Bois Parish Allotment	Theydon Bois	Very Good
Denny Avenue Allotment	Waltham Abbey	Average
Capershotts Allotment	Waltham Abbey	Average
Crooked Mile Allotment	Waltham Abbey	Average
Longfields Allotment	Waltham Abbey	Average
Willingale Parish Allotments	Willingale	Average

Source: Epping Forest Open Space, Sport and Recreation Assessment (2012)

A small number of allocations involves loss of allotments. As part of site selection, the cumulative assessment of this loss on a settlement level was undertaken, using the assumption that all new development would be able to meet the newly-arising need resulting from the additional population.

The assessment found that for Coopersale in Epping parish, there is a current deficiency in the quantum of land for allotments, and the cumulative impact of the proposed allocations would result in a reduction in land for allotments. Some further analysis will be undertaken about whether there is demand for further provision in Epping and depending on the results, opportunities for re-provision should be explored.

Figure 86: Allotments in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0018

Date: September 2016

Scale: 1:150,000

Content

Allotments

Contains Ordnance Survey & Royal Mail Data
 © Crown Copyright & Database Right 2015
 EFDC Licence No: 100018534 2015
 © Royal Mail Copyright & Database Right 2015

Legend

- Settlements
- Allotments
- Surrounding Authorities
- Epping Forest District Boundary



10.2.3 Shortfalls in Current Provision

The assessment concluded that Epping parish was the only location with a quantitative deficit in allotment provision, although access may also be restricted at some sites due to current waiting lists.

There are accessibility deficiencies in parts of the following areas:

- Grange Hill
- Chigwell Row
- Chigwell
- Loughton west of the A121
- Loughton between the A121 and the A1168
- Theydon Bois
- South-east Epping
- Central-north Waltham Abbey
- Lower Sheering.

The overall quality of the provision from the 2009 assessment shows that the provision of allotments is generally of ‘Average’ or ‘Good’ quality, however eight sites were identified of ‘Poor’ or ‘Very poor’ quality. The identified issues with quality included sites being overgrown and not regularly maintained, lack of sufficient parking facilities, unused plots on the site and poor accessibility for wheelchair users.

10.2.4 Infrastructure Requirements

In order to assess the demand for allotments at the local level, 21 parishes within the District were contacted, and asked to provide information on waiting lists and any changes in trends. The thirteen responses received from parish councils showed a varied picture of demand across the District. A few parishes without allotment plots reported having received requests from interested residents, suggesting there is some demand at the local level. For the larger Parishes allotment sites were typically fully utilised. Epping Town Parish identified long waiting lists ranging from a couple of months to a few years. Some of the smaller and more rural settlements reported having allotments available, however plots are gradually being taken up, and remain popular with residents who do not have a garden. Loughton Town Council have relatively small waiting lists of around seven people or less, however have experienced an 80% increase in demand in the last year. It was noted that demand for allotments fluctuates in line with fashion, including popular television programmes.

In order to estimate the amount of allotments required to serve the additional population expected over the Plan period, the following standards set out in Figure 87 have been used, taken from the 2012 *Open Space, Sport and Recreation Assessment*.

Figure 87: Allotment standards

Infrastructure	Standard	Per	Source
Allotments	0.33ha	1,000 population	Open Space, Sport and Recreation Assessment

As with other types of open space, whilst these standards are appropriate on a District level, it might not be realistic to expect all development proposals to meet these standards due to the nature of the site and surrounding area etc.

Based on expected additional population only (i.e. not taking into account existing capacity or shortfall), the requirement for additional land for allotments across settlement groups is shown in Figure 88. However, some further analysis of current up-take and waiting lists should be undertaken to determine the level of demand and whether and where any further provision might be made. Section 4.4 sets out the methodology for defining settlement groups and rural apportionment.

Figure 88: Allotment additional demand (newly arising only) – by settlement groups

Settlement	Allotment (ha)
Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	1.33
Waltham Abbey and Rural Apportionment	0.78
Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	1.96
Strategic Sites L and M and Rural Apportionment	0.80
Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.05
Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	0.76
North Weald Bassett, Thornwood and Rural Apportionment	1.32
Epping and Rural Apportionment	1.43
Chigwell, Stapleford Abbots and Rural Apportionment	0.55

10.3 Burial Provision

There are different types of burial grounds, which are often used interchangeably but refer to different things:

- Churchyards or graveyards can usually be defined as burial grounds within the boundary of a church.
- Cemeteries are burial grounds outside church confines. All or part of the cemetery may be consecrated for use by a particular faith.

10.3.1 Evidence Base and Strategic Issues

The following sources have been used in this section:

- Epping Forest Open Space, Sport and Recreation Assessment (2012)

The primary purpose of this type of open space is for burial of the dead and quiet contemplation, but the amenity and visual benefits are also important, as well as the opportunities to promote wildlife conservation and biodiversity, especially in older churchyards. Cemeteries and churchyards can be a significant open space provider in some areas particularly in rural areas.

Demand for burial provision is influenced by changing preferences, in particular the increasing proportion of people opting for cremation over the past few decades. Across the country, there has also been an increasing demand for 'natural' or 'green' burials, such as woodland burial grounds. This is often because they represent a more environmentally-friendly burial or because they provide a more contemplative or reflective environment in which to remember the deceased. This type of burial ground can provide a wide range of open space benefits to the community.

Burial preferences are also determined by faith. For example, whereas Muslim and Jewish communities tend to favour burial, Sikh and Hindu communities almost always choose cremation. Some faith communities may wish to have dedicated areas within a burial ground where members of the same community may be buried and remembered together.

Burial grounds should be accessible to the whole of the community, both for attending funerals and for visits to remember the deceased. Facilities and services should therefore be designed and executed in compliance with the Disability Discrimination Acts.

10.3.2 Existing Provision

The *Open Space, Sports Facility and Recreation Assessment* identified 46 sites being used as cemeteries and burial grounds, in every parish in the District. The Assessment found that provision is generally of a good quality, though two sites (Foster Street Non-Conformist Burial Ground in North Weald parish and St Boltoph's Church in Abbess Beauchamp and Berners Roding parish) were found to be of a poor quality.

Figure 89: Burial Provision in Epping Forest District



Report on Infrastructure Delivery Plan



Drawing No. EFDC-IDP-0019

Date: September 2016

Scale: 1:150,000

Content
Graveyards and Burial Grounds

Contains Ordnance Survey & Royal Mail Data
© Crown Copyright & Database Right 2015
EFDC Licence No: 100018534 2015
© Royal Mail Copyright & Database Right 2015

Legend	
	Settlements
	Graveyards and Burial Grounds
	Surrounding Authorities
	Epping Forest District Boundary



10.3.3 Infrastructure Requirements

It is not appropriate to set standards for either quantity or accessibility for burial grounds in a similar manner to other types of accessible open space; their primary role is not one of accessible open space but as burial grounds.

10.4 Funding

Essex County Council has designated budgets to support strategic environmental improvements in response to planning issues. For the 2016/17 year, a budget of £1m is available to environmental strategic planning issues, and a £2m fund available for the Lee Valley Regional Park. There are a range of bodies that provide funding for children's play areas and community allotments, including Sports England, the Community Development Foundation, the Big Lottery Fund, along with other charitable trusts.

Developer contributions are likely to play a part in funding sports infrastructure, particularly as part of schools, where sports pitches are required. The *Essex County Council Developers' guide to Infrastructure Contributions* (2016) report outlines how sports facilities might be delivered in partnership with community facilities. There are multiple options for 'big win' hub facilities, including a Multi Sports Arenas, skate parks and a Multi-Use Games Arena.

CIL or S106 is likely to be a significant source of funding for open space and GI improvements. However, further work on viability and on the approach to CIL and S106 needs to be undertaken prior to the next iteration of the Local Plan.

10.4.1 Future Policy Requirements/Next Stages of Work

The provision of open space and preserving and enhancing environmental assets is of key importance in light of future growth. Within the Local Plan, Draft Policy DM 6 Designated and Undesignated Open Spaces states that, where appropriate, development proposals will be expected to provide open space or links to open space. Further work on open space need and standards for provision may need to be undertaken prior to the submission of the Local Plan, to ensure it is closely linked with the future development strategy for the District. This will ensure development is accompanied by appropriate levels of access to different types of open space. Opportunities to improve and develop the GI network will be identified through further consultation as part of a GI strategy. This will identify specific projects which might be funded through CIL.

Draft Policy DM 6 also states that development on open spaces (including on sites allocated through the Local Plan) will only be permitted if it does not result in the total loss of open space, and where the remainder of the site is maintained and enhanced.

The next stages of work for the IDP in relation to green infrastructure are:

- In relation to the further separate work on open space need and standards for provision, understand the implications for the amount of open space required over the Plan period.

- Undertake further work to assess costs associated with delivering open space and green infrastructure.
- Develop proposals and requirements for the strategic sites.
- Further explore options for funding of open space and green infrastructure, and any implications for viability.

11 Utilities

11.1 Water

11.1.1 Evidence Base and Strategic Issues

The main sources of evidence are:

- Water Management Plan 2015-2040, Thames Water (2014)
- Final Water Resources Management Plan 2015-2040, Affinity Water (2014)

Central government have policy priorities for secure, sustainable and affordable supplies of water, as outlined in the *Water for Life White Paper* (2001)⁹. The accompanying Environment Agency's *The Case for Change – Current and Future Water Availability* (2011)¹⁰ identifies the stresses put on water supply given the expected population growth and seeks to understand the scale of the challenge. The report concludes that the future of water resource availability is uncertain, given the combined impacts of climate change, population growth, and changes in lifestyle. Managing a consistent supply of water will become more of a challenge, and as such a strategic and local planning including demand management and the development of new resources will be necessary.

11.1.2 Existing Provision

The regulated water companies in the area are Thames Water and Affinity Water. Thames Water and Affinity Water are responsible for the full range of water supply process including production, treatment, distribution, metering and billing. Thames Water supply area covers around 8,000 square km, and is divided into six water resource zones (WRZ). Epping Forest District falls into the London WRZ, where Thames Water serves the west side of the District. In the London supply area, 80% of supply comes from surface waters of the River Thames and the River Lee, via reservoirs, and 20% from groundwater. The London WRZ imports no bulks supplies, but exports to Affinity Water Central.

Affinity Water supplies drinking water to approximately 3.5 million people and 1.4 million properties in the South East of England. Affinity Water is divided into eight WRZ, where EFDC falls into Resource Zone Stort and serves the remaining area of the east side of the district. Water comes from 130 groundwater sources, four river intakes on the River Thames, one impounding reservoir and 12 bulk supply imports from neighbouring water companies. Approximately 65% of the water is from groundwater sources and the rest from surface water. Affinity Water also provides bulk supply exports to three water companies. Cambridge Water also donate bulk supply import of treated water to WRZ 5 Stort as part of existing arrangements.

⁹ <https://www.gov.uk/government/publications/water-for-life-market-reform-proposals>

¹⁰ <http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/geho1111bvpe-e-e.pdf>

Existing water provision is provided mainly from surface water abstraction, groundwater, and bulk supplies (where water is transferred in and out of the water supply area).

Figure 90: Water Resource Zones in the Thames Water Supply Area

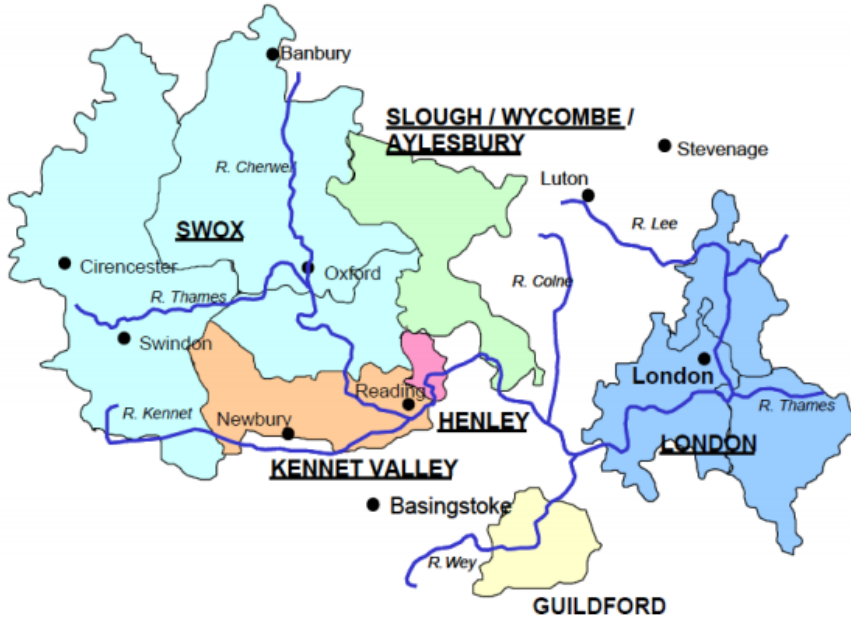


Figure 91: Map of Affinity Water eight Water Resource Zones



11.1.3 Shortfalls in Current Provision

Thames Water have used plan-based forecasts using the local authority Local Plan growth projections to estimate a forecast total increase in population within the supply area of between 2 million and 2.9 million people by 2040. In line with the forecast growth, water demand is expected to increase by approximately 250 million litres per day (Ml/d) over the planning period. Over the same planning period, the baseline water supplies are also expected to reduce. Figure 92 show the current and forecast supply demand balance in each of the water resource zones, which indicates that London is currently experiencing water supply deficits.

Figure 92: Thames Water supply-demand balance in each Water Resource Zones (deficits shown in red)

Water Resource Zone	2011	2015	2020	2025	2030	2035	2040
London	18.8	-59.4	-132.7	-213.1	-291.7	-361.1	-415.9
Swindon and Oxfordshire	37.34	27.08	-0.14	-12.05	-21.30	-26.70	-32.66
Slough, Wycombe and Aylesbury	21.47	11.57	7.93	4.89	0.77	-2.60	-6.09
Guilford	6.85	0.85	0.06	-1.14	-2.14	-2.85	-3.80
Henley	5.32	5.14	4.76	4.31	3.80	3.26	2.67
Kennet Valley	41.25	26.05	21.68	16.38	11.41	7.84	5.59

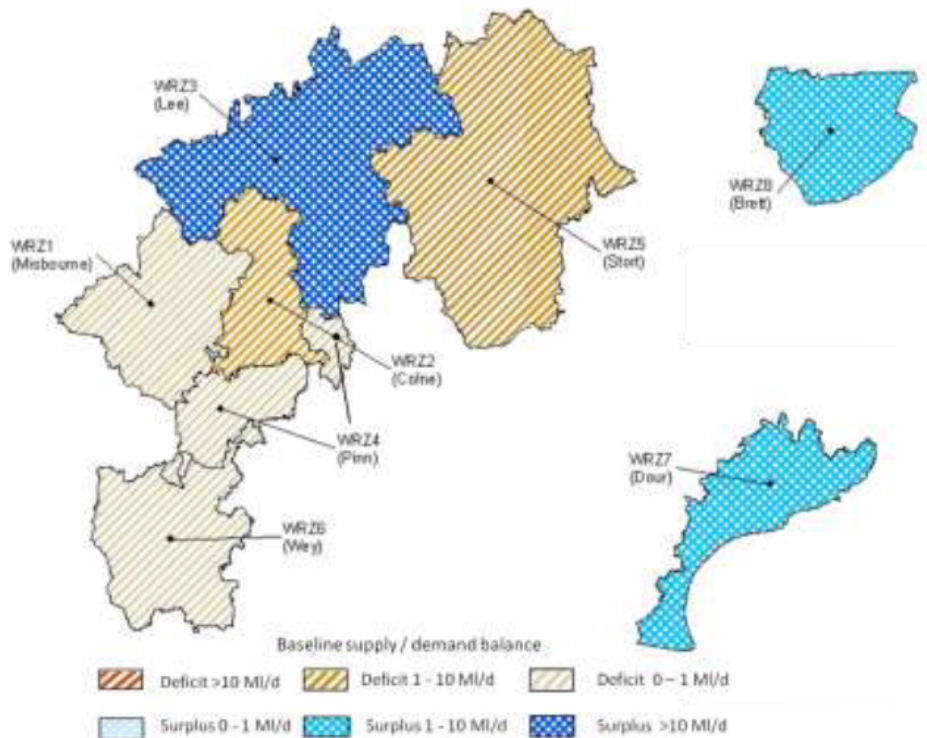
Affinity Water similarly anticipates significant employment growth in the WRZ that EFDC falls into, projecting a 25% increase in population by 2040 (Figure 93).

Figure 93: Population projections within WRZ 5

WRZ	Current Pop (2012/13)	Total Pop Forecast by 2020	Total Pop Forecast by 2040	% increase by 2040
5	289,142	307,418	362,351	25%

Affinity Water report existing deficit in water supply in 2015 in Stort WZR (in which Epping Forest District falls), although there is surplus water supply in the neighbouring Lee WRZ (Figure 94).

Figure 94: Average surplus and deficit available to each WRZ in 2015. Stort WRZ (which EFDC falls within) show a deficit of 1-10MI/d.



11.1.4 Infrastructure Requirements

Further consultation with Thames Water and Affinity Water will be necessary to determine water infrastructure requirements in Epping Forest District Council. Meetings are planned for autumn 2016, at which point the Infrastructure Delivery Plan will be updated. Thames Water is currently undertaking detailed analysis of the proposed housing allocations, which will inform the next iteration of the IDP.

Neighbouring authority Harlow District consulted Thames Water and Affinity Water on their Issues and Options document in 2011 which set out their preferred development sites. As part of this consultation, Affinity Water reported that there is sufficient capacity to provide water to Gilston Park, Latton Priory, Foster Street South and North, West of Harlow, and West Sunners.

11.2 Wastewater Treatment and Sewage

Waste water treatment refers to the treatment of both domestic and commercial waste water, including from toilets, baths, and washing machines, as well as industrial waste. It can also be water rainwater run-off from roads and other impermeable surfaces such as roofs and pavements. If left untreated, this can cause contamination and significant adverse impacts on the water environment, including oxygen depletion, eutrophication of water as a result of the build-up of

nutrients, and sewage litter. Waste water can be treated for appropriate disposal or reuse of sewage sludge.

11.2.1 Evidence Base and Strategic Issues

The main sources of evidence are:

- Waste Water Treatment Works Needs Assessment in Essex and Southend-on-Sea, URS (2014)
- Initial consultation with Thames Water

The Urban Waste Water Treatment Directive (91/271/EEC), adopted in 1991, is an EU directive that has the aim of protecting the water environment for the animals and plants that live in and around water, and its use as a resource for drinking water, sanitation, industry and commerce. The EU Member States, including the UK, are required to implement the Directive through their national legislation. Further, the NPPF and Planning Practice Guidance (PPG) set out an overall approach for the provision of adequate water and wastewater infrastructure to support sustainable development.

11.2.2 Existing Provision

There are 124 Waste Water Treatment Works (WwTWs) operated by Anglian Water Services and 15 operated and maintained by Thames Water Utilities across Essex County Council and Southend-on-Sea. Each of these WwTWs is fed by a network of wastewater pipes (the sewerage system) which drains wastewater generated by property to the treatment works; this is defined as the WwTWs 'catchment'. Due to the dispersed nature of development across Essex, each settlement tends to have its own designated WwTW, hence a large number WwTWs are affected by growth. Figure 95 shows which settlements flow into which WwTW, and who the service is operated by.

Figure 95: Waste Water Treatment Works serving the District

Epping Forest District Ward	WwTW Catchment	Operator
Roydon, Nazeing, Sheering, Foster Street and Hastingwood	Rye Meads	Thames Water
Waltham Abbey, Upshire, Sewardstone and High Beech	Deephams	Thames Water
Loughton, Chigwell, Abridge and Stapleford Abbots	Beckton	Thames Water
Chipping Ongar, Marden Ash, High Ongarm Toot Hill and Little End	Stanford Rivers	Thames Water
Epping	Fiddlers Hamlet	Thames Water
North Weald	North Weald	Thames Water
Thronwood	Thornwood	Thames Water
Theydon Bois	Theydon Bois	Thames Water

Moreton	Moreton	Anglian Water
Matching Tye	Hatfield Heath	Thames Water
Matching Green, Abbess Roding and Beauchamp Roding	Abbess Roding	Thames Water
Fyfield and Willingdale	Willingdale	Thames Water
King Street and Nine Ashes	Anglian Waters' STW at Doddinghurst	Anglian Water

11.2.3 Shortfalls in Current Provision

The *Essex County Council and South End Needs Assessment* estimates, through discussions with local authorities, that a total of 102,472 houses are required between 2014 and 2032 across Essex and Southend to accommodate growth. The assessment states that the proposed additional growth from within the study area and within these WwTW catchments is very small in comparison to the proposed growth within London. As such, the WwTWs are unlikely to be sensitive to small growth numbers proposed for Essex. Figure 96 shows each of the WwTW and their current and future capacities. Red cells indicate where there is a shortfall in current provision.

Figure 96 shows the majority of the WwTW have both current and future capacity, which can accommodate the future demands from the anticipated growth. There are three however that are highlighted as at capacity or close to capacity. Moreton WwTW is identified as currently exceeding its baseline DWF permit by greater than 10%. Fiddlers Hamlet has been identified as having limited capacity, as it slightly exceeds (less than 10% exceedance) their Baseline DWF permit in the future. Thornwood is also at limited capacity, with capacity between 0% and 5%.

However, options have been identified to overcome these shortfalls. For all three WwTW that have identified deficit, the mitigation option is to increase dry weather flow (DWF) permit (the discharge allowed into controlled water) and increase volumetric capacity and allow a greater volume of discharge from the existing WwTWs. Additionally at Fiddlers Hamlet, there may be options to provide greater process capacity at existing WwTWs. The report therefore concludes that all volumetric and processing demand which is treated within the study area can be accommodated for within the existing WwTWs. The existing provision can also accommodate for future growth and so it is concluded that there is no demand for a new WwTW.

11.2.4 Infrastructure Requirements

Further consultation with Thames Water will be necessary to determine water infrastructure requirements in Epping Forest District Council. Meetings are planned for autumn 2016, at which point the Infrastructure Delivery Plan will be updated. Thames Water is currently undertaking detailed analysis of the proposed housing allocations, which will inform the next iteration of the IDP.

The Harlow Strategic Sites Assessment was jointly commissioned by Epping Forest, East Hertfordshire and Harlow District Councils, and Thames Water provided input to this Assessment. Thames Water identified that all sites eventually feed into the same sewer located on the Eastern side of Harlow which drains to Rye Meads. This means there is a common sewer capacity restriction, and limited capacity to accommodate additional flows.

11.2.5 Funding Mechanisms

Thames Water are responsible for building, operating, and maintaining their water infrastructure.

11.2.6 Future Policy Requirements/Next Stages of Work

The adequacy of sewage infrastructure varies across the District, with some areas likely to experience capacity issues in the context of planned growth. There is ongoing consultation between the Council and utility providers to identify the need for new and upgraded facilities, particularly in relation to the strategic sites.

Policies have been developed to ensure that development is located in areas with available utility capacity, or in locations where provision can be feasibly enhanced to support growth (Draft Local Plan Policies D1 Delivery of Infrastructure and D3 Utilities). This approach has also been incorporated into the selection of proposed allocations.

	Current Capacity		Future Capacity		
WwTW Catchment	Current Capacity (m3/d)	Current WwTW Capacity	Post growth capacity (m3/d)	Future WwTW Capacity	Overall constraint
Abbess Roding	671	81%	635	77%	No identified constraints
Beckton	266,525	20%	266,147	20%	Tight permit standards should not limit growth
Deephams	27,053	12%	26,597	11%	Tight permit standards should not limit growth
Fiddlers Hamlet	40	1%	-170	-5%	5% capacity shortfall accounts to 510 dwellings out of the 630 total dwelling allocations. Future capacity shortfall and tight permit standards may limit growth
Moreton	-41	-44%	-89	-96%	Already exceeds Baseline DWF permit. Additional growth leads to a 96% capacity shortfall and tight permit standards may limit growth.
North Weald	651	44%	555	28%	Tight permit standards should not limit growth
Stanford Rivers	2,549	61%	2,354	56%	Tight permit standards should not limit growth
Theydon Bois	2,509	73%	2,425	70%	Tight permit standards should not limit growth
Thornwood	67	28%	5	2%	Close to capacity limit, remaining capacity for 14 dwellings
Willingale	64	24%	49	18%	No identified constraints
Rye Meads	34,374	31%	31,447	29%	Tight permit standards should not limit growth

Figure 96: The current and future of Waste Water Treatment Works in Epping Forest District

11.3 Electricity

The energy industry in the UK is separated between the generators, the network operators and the suppliers. Electricity transmission and distribution sections are owned by separate companies. The companies recover the costs of operating and maintaining their systems by levying charges on electricity traded using their network. National Grid owns and maintains the electricity transmission system in England. National Grid also provides electricity suppliers from generation to local distribution companies. There are six Distribution Network Operators (DNOs) in Great Britain. DNO own, operate, and maintain the distribution networks. DNOs charge suppliers for using the distribution system.

11.3.1 Evidence Base and Strategic Issues

The main sources of evidence are:

- Electricity Ten Year Statement 2015: UK Electricity Transmission, National Grid (2015)
- UK Power Network Regional Development Plan: RDP 13 Elstree and Rye House (EPN), UK Power Network (2014)

National Grid are responsible for ensuring the balance of supply and demand of electricity, in a cost-effective way. Significant forecast growth and demand on supply has created a greater need to establish a more flexible electricity system, using new technologies and a smarter network. The Department of Trade and Industry's *Meeting the Energy Challenge: A White Paper on Energy* and The Department of Energy and Climate's *Planning out electric future: A White Paper for secure affordable and low carbon electricity* both seek to reform the electricity market. This is in order to ensure the security of future supply, and to build a cleaner, more diverse supply and create a more sustainable electricity mix. It seeks to support investments in a low-cost way. The government's Electricity Market Reform (EMR) policy to incentivise investment in secure, low carbon electricity, to improve supply, and to improve affordability for customers. National Grid identify mitigations through improved demand side response (financially incentivizing customers to lower or shift their electricity use at peak times), greater storage, and increased interconnection and smarter networks.

11.3.2 Existing Provision

The local DNO for Epping Forest District is UK Power Networks, who distribute electricity to homes and businesses throughout the area. It is recognised that new transmission infrastructure is necessary to meet increased demand and changes in patterns of supply. UK Power Networks has identified that the previous economic downturn has depressed industrial load, whilst the Epping area generation demands are generally from overall growth rather than from site specific development.

Epping Forest District is covered by UK Power Networks Elstree 132 Grid Supply Point (GSP), shown in Figure 97. The Epping Grid is equipped with 2 x 90MVA,

132/133kV transformers supplied by a dual circuit 132kV overhead line from Rye House 132. The switchgear was upgraded in 2010 as part of a wider strategy for the area and there is an interconnection between Epping Grid and Harlow West. Epping supply is from Lindsey Street and Ongar Primary substations. Both substations have spare capacity but are nearing the limit of firm capacity (the amount of energy available for production or transmission which can be guaranteed to be available at a given time).

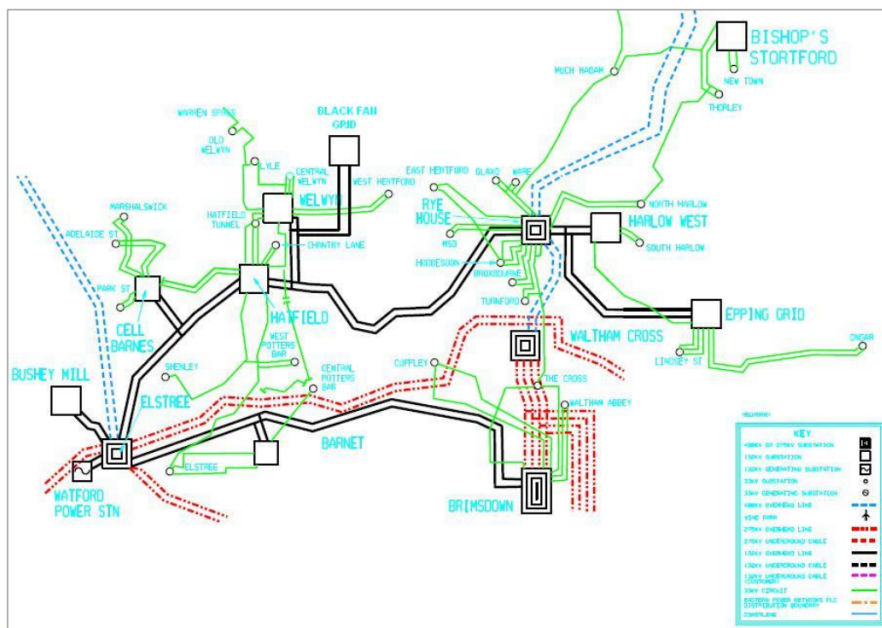
Figure 97: Elstree and Rye House Grid Supply Point

Regional Development Plan



Elstree & Rye House GSP (EPN)

APPENDIX A: GEOGRAPHICAL DIAGRAM



Demand is anticipated to increase to 2022 at the Epping Grid Substation. The conditions of the existing Epping Grid substation is expected to degrade and become unacceptable for operational use. Replacements will therefore be necessary.

P2/6 is a guidance document published by Electricity Networks Association (ENA), covering system planning and network capacity requirements and details the minimum standards for the security of supply. Findings show that in the substation at Harlow/Epping group will become none compliant in 2023, at which point upgrades will be required.

11.3.3 Shortfalls in Current Provision

UK Power Networks identify that there are no known works which will impact on the generation network.

UK Power Networks have established a strategy to deal with the increased demand and the aging infrastructure. Plans are to reinforce the Harlow/Epping

area by separating the 132kV circuits to Harlow West Grid and Epping Grid. Two more cables will be installed from Rye House 132 to the Harlow/Epping terminal towers. A new substation at Epping Grid (costing £5.2m) is proposed in addition, as well as reinforcements to the existing grid. This includes replacing the existing transformers at Ongar costing £7.5m.

The National Grid's North London Reinforcement Project will upgrade 14km of electricity lines that supply Epping Forest and the London Boroughs of Enfield, Haringey and Hackney. The project will upgrade the existing 275kV overhead line to operate at 400kV to meet the growing demand for energy.

11.3.4 Infrastructure Requirements

Further consultation with UK Power Networks will be necessary to determine electricity infrastructure requirements in Epping Forest District Council. Meetings are planned for in autumn 2016, at which point the Infrastructure Delivery Plan will be updated.

Harlow District Council consulted on an Issues and Options paper in 2011. As a result of development at Gilston Park Estate and land at Harlow Gateway South, it has been identified that a new substation at each site will be required to support the new development. An energy centre has also be identified to support development north of the A414/ West of Gilston.

11.3.5 Funding Mechanisms

UK Power Networks are responsible for building, operating, and maintaining their electricity infrastructure.

11.4 Gas

11.4.1 Evidence Base and Strategic Issues

The Energy White Paper charts the significant demand on energy over the next 20 years. As such, it will be necessary to upgrade much of the energy infrastructure during this period. Requirements will include expansions of national infrastructure such as overhead powerlines, extending substations, and new gas pipelines, and new infrastructure such as smaller scale distribution generation and gas storage sites.

11.4.2 Existing Provision

National Grid Transmission are responsible for balancing energy inputs and outputs to match supply and demand. The high pressure gas transmission system in England, Scotland and Wales consists of approximately 4,300 miles of pipeline and 26 compressor stations connecting to eight gas distribution networks (GDNs). The eight GDNs cover a separate geographical region of Great Britain. There are no known gas transmission assets within Epping Forest District.

11.4.3 Shortfalls in Current Provision

There are no known shortfalls in provision. Further consultation is required with National Grid.

11.4.4 Infrastructure Requirements

Further consultation with National Grid will be necessary to determine gas transmission infrastructure requirements in Epping Forest District Council. Meetings are planned for in autumn 2016, at which point the Infrastructure Delivery Plan will be updated.

The Harlow Strategic Sites Assessment was jointly commissioned by Epping Forest, East Hertfordshire and Harlow District Councils. Site promotion feedback for the site to the north of Harlow (Gilston - in East Hertfordshire District area) has identified that an energy centre will be delivered as part of the development.

11.4.5 Funding Mechanisms

National Grid are responsible for building, operating, and maintaining their gas transmission infrastructure.

11.5 Telecommunications

11.5.1 Evidence Base and Strategic Issues

- Ofgem ‘Making communications work for everyone: Initial conclusions from the Strategic Review of Digital Communications’ (2016)
- Superfast Essex

This section covers the provision of Broadband services to residents and businesses. It is recognised that digital services are important for resident’s digital inclusion, participation in society and in democratic processes, whilst providing necessary connectivity for businesses to drive the economy. In light of this, the Government has committed to giving all premises in the UK access to a minimum of 2Mbps download speeds for both residents and businesses. Ofcom are the independent regulator for the UK communications industry and have launched a Digital Communications Review. The strategy focuses on guaranteeing universal broadband availability at a sufficient speed, supporting investments and innovation in ultrafast broadband networks, and improving the quality of service delivered by the whole of the telecoms industry. There is a drive to eventually provide superfast broadband to all residents and businesses across the UK.

11.5.2 Existing Provision

Superfast broadband coverage in Epping Forest District was above the Essex average in 2013, but future planned investment should mean that 97% of Epping Forest District will have access to superfast broadband by early 2020 (compared

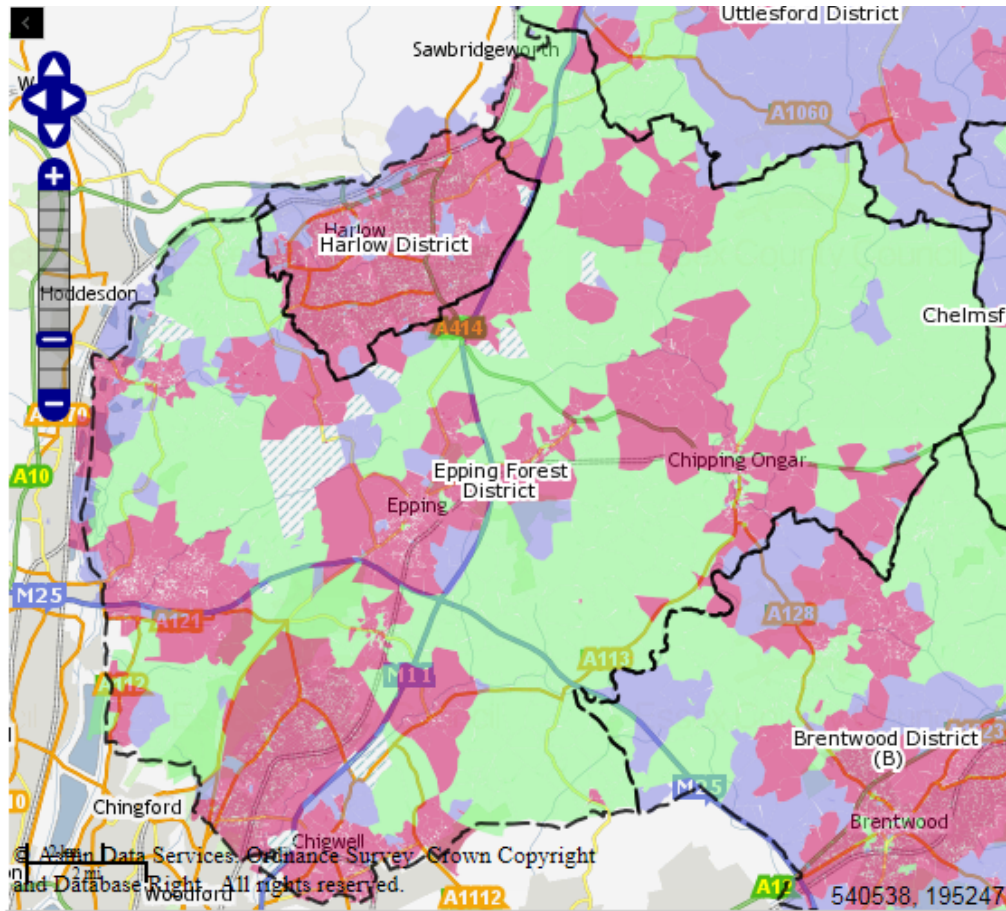
with 94% in the whole of Essex).¹¹ Essex County Council are coordinating the Superfast Essex Broadband scheme, which is part of the national Superfast Britain Programme. The aim of the programme is to ensure that 95% of the county has access to fibre broadband by 2019, with a download speed of 24Mbps.

The scheme is available to both residents and businesses that do not currently have access to broadband speeds on 2Mbps. Essex County Council are also currently delivering the Rural Challenge Project which will bring ultrafast to rural communities in Essex by 2019. The Rural Challenge will focus on the east of Epping Forest District. Fyfield, Stapleford Tawney, Ongar, Moreton, Bobbingworth and the Lavers and Theydon Mount will be able to access ultrafast broadband speeds. This £7.5m project is part funded by UK government, Essex County Council, Epping Forest District Council and Gigaclear.

The map below shows the current and planned broadband coverage in Epping Forest District. The District has a number of settlements with fibre or wireless broadband access, including Epping, Chigwell, Waltham Abbey, parts of Nazeing and Chipping Ongar. Fibre broadband is planned for the majority of the district that does not currently have provision, however it is understood that due to some technical and financial difficulties, some parts of the District will be confined only to basic satellite broadband.

¹¹ 'A profile of people living in Epping Forest', Essex Local Authority Portraits Joint Strategic Needs Assessment, Organisational Intelligence (2016)

Figure 98: Current and planned for broadband provision in Epping Forest District



— Superfast Essex

Superfast Essex Status - 1st August 2016

- Fibre or wireless broadband available
- Fibre broadband planned
- Satellite
- Not in current plans

12 Flood Protection and Drainage

12.1 Flood Protection and Drainage

Infrastructure provision for flood defence and surface water management includes a range of measures to counteract the risks arising from local flooding. The Flood and Water Management Act (2010) states that local flood risk includes the flood risk from surface runoff, groundwater and ordinary watercourses.

Flood defence is a statutory obligation, and is provided by a number of authorities. Essex County Council is Lead Local Flood Authority (LLFA) and are responsible for developing a strategy for flood risk management, and the relevant monitoring procedures. In addition to Essex County Council, the Environment Agency is responsible for managing flood risk from main rivers or the sea, alongside engagement with the district council and sewage companies and highways authorities.

12.1.1 Evidence Base and Strategic Issues

The main sources of evidence include:

- Level 1 Strategic Flood Risk Assessment Updated, AECOM (2015)
- Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan, EFDC and ECC (2016)
- Update to the River Roding Flood Risk Management Strategy (2012)
Managing Flood Risk in the Roding Catchment Over the Next 100 Years
- Flood and Coastal Resilience Partnership Funding, DEFRA (2011)

The Level 1 SFRA identifies that forms of flooding experienced in the District are: ‘fluvial’ from rivers and other watercourses; ‘pluvial’ from rain i.e. surface water flooding resulting from rain; and ‘groundwater’ flooding which is the emergence of water from the ground away from river channels. The SFRA 1 identified surface water run off as the greatest risk to the District with regard to flooding.

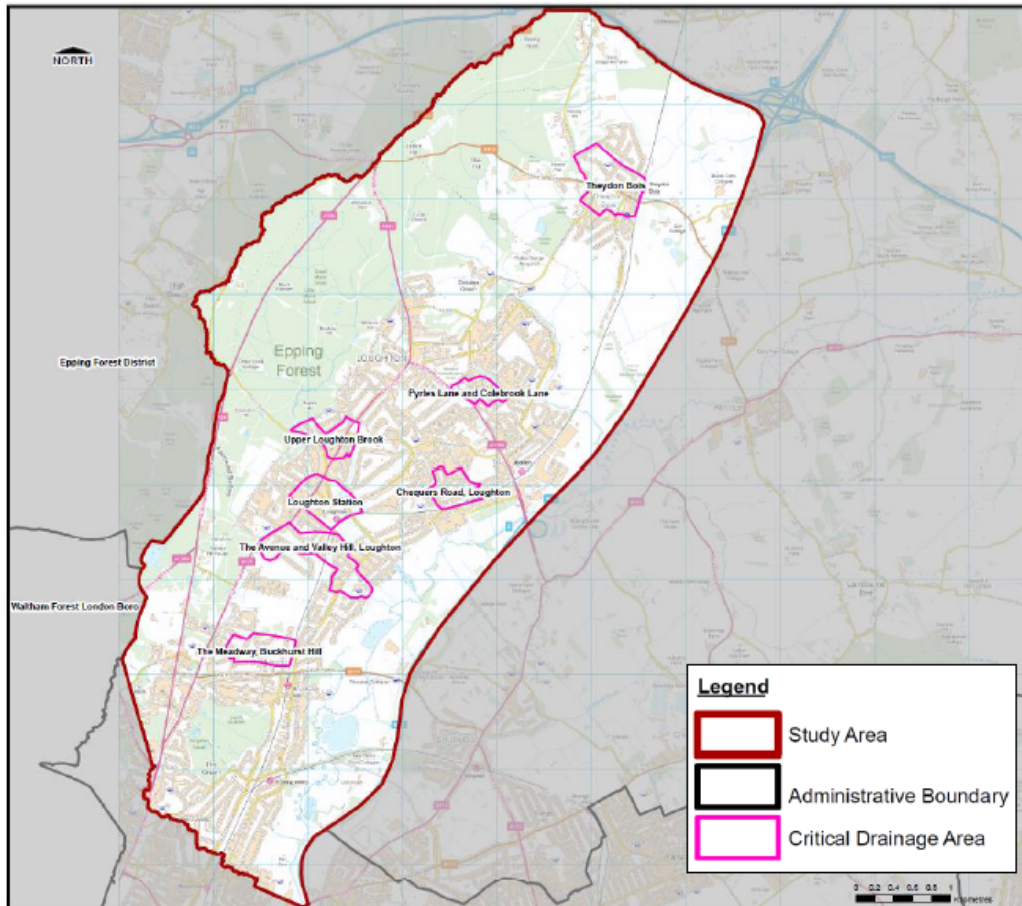
The District consists of two main river systems, including the Roding and Lee rivers. The River Roding flows north to south through the district along the eastern boundary. The river originates from Molehill Green in Uttlesford, and discharges into the Thames at Barking Creek. The Roding catchment covers two thirds of the district, with the Lee flowing along the western boundary and the catchment covering the remaining western part of the district.

Due the majority of the district overlaying London Clay, the Roding catchment has a rapid response to rainfall, and is vulnerable to flooding.

Within Epping Forest District, the main urban areas that fall within the upper Roding Catchment include Fyfield, Thornwood, North Weald Bassett and Chipping Ongar. The lower Roding catchment area includes more densely populated settlements, including Abridge, Loughton, and Chigwell.

A series of smaller waterways within the district create flood risks for Loughton, Buckhurst Hill and Theydon Bois. The Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan (2016) identified seven Critical Drainage Areas across these three settlements.

Figure 99: Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan



Source: Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan

The Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan identifies Loughton as an area particularly vulnerable to surface water flooding, with around 1,000 properties at risk from flooding.

It is estimated that 183 properties, the majority being residential, in Lower Nazeing are at risk from fluvial flooding in the occurrence of a 1% annual probability event. According to the report, Nazeing Brook has the lowest standard of protection of all the Lower Lee tributary rivers.

12.1.2 Existing Provision

Epping Forest District has a long history of flooding, and therefore has undertaken a range of alleviation schemes.

Figure 100: Flood alleviation schemes

Flood Defence Infrastructure	Location	Completed	Purpose	Capacity/ standard
Loughton Brook Flood Storage Reservoir	Staples Road	1995	Built to protect Loughton town centre from flash flooding associated with Loughton Brook	The pond can store up to 47,200 cubic metres during a 1 in 75 year event
Thornwood Brook Flood Storage Reservoir	Thornwood	1998	Part of a two reservoir scheme to protect Carpenters Arms Lane	The reservoir canstore 14,350 cubic metres of water during a 1 in 100 year event
Cripsey Brook Flood Storage Reservoir	Woodside and Duck Lane, Thornwood	1998	Part of the same reservoir scheme as Thornwood Brook	
Culverts	Woodside, Brookfield, Weald Hall Lane and Weald Hall place.			Withstand a 1 in 100 year flooding event
Church Lane Flood Storage Reservoir	North Weald Bassett	1990	Gravity bypass pipe diversion to protect North Weald Bassett from flooding associated with the North Weald Brook.	The reservoir will store 38,000 cubic metres of water during a 1 in 50 year event.
Thornhill Flood Storage Reservoirs	North Weald Bassett	1995	To protect North Weald Bassett from flooding caused by water running off the higher ground near the old Radio Station in Ongar.	The two ponds combined are capable of storing 6,300 cubic metres of water in a 1 in 75 year flooding event.
Upshire Flood Alleviation Scheme	Waltham Abbey	2009/10	To reduce flooding from Cobbins Brook to properties in Waltham Abbey	Earth embankment and upstream storage area that can withstand a 1 in 50 year flooding event.
Lower Lee Flood Relief Channel		1970s		Deteriorating quality of infrastructure means that the relief channel could only withstand a 1 in 20 year flooding event
EFDC Trash Screens (Storm Grilles)			EFDC maintains a network of 62 trash screens, designed to collect large debris and prevent blockages within the culverts.	

Source: *Level 1 Strategic Flood Risk Assessment EFDC and Harlow Council (2011)*

12.1.3 Infrastructure Requirements

The Surface Water Management Plan for Loughton, Buckhurst Hill and Theydon Bois incorporates an Action Plan which identifies specific projects for surface water management, including priorities, responsibilities and timescales.

The site selection process took into account flood risk zones and sites within Flood Zone 3b were discounted from further assessment. The methodology incorporated a sequential approach whereby land in Zone 2 and 3 was only considered where need cannot be met in Flood Zone 1. As such, all sites are considered suitable for development from a flooding perspective, subject to

mitigation measures as appropriate. This should include integration of Sustainable Urban Drainage Systems (SuDS) into the design of new developments.

12.1.4 Funding Mechanisms

Funding for flood and coastal erosion risk management (FCERM) projects is largely directed through DEFRA. ECC and EFDC will hold further discussions with the Environment Agency and Thames Water to determine potential for funding (including Flood Defence Grant in Aid funding, Local Levy Funding, AMP 5 / 6, and other funding opportunities).

Where specific measures are required to support development, these would be funded by developers. Development contributions may be sought for flood risk management measures, including alleviation, storage and related environmental enhancement.

12.1.5 Future Policy Requirements/Next Stages of Work

Further Surface Water Management Plans may be produced for priority areas in the District.

The policies of the Draft Local Plan require all proposals for development within a Critical Drainage Area (CDA) or an EFDC Flood Risk Assessment Zone (FRAZ) to provide a site specific flood risk assessment focussing predominantly on surface water and ordinary watercourses and outlining details of any mitigation measures required on site and a drainage strategy incorporating the use of SuDs (Draft Local Plan Policies DM 16, DM 18 and DM 19).

Further consultation will be undertaken with the Environment Agency and ECC.

13 Infrastructure Delivery Schedule

The Draft Infrastructure Delivery Schedule details all the infrastructure requirements in Epping Forest District up to 2033. This section sets out the level of current, planned and future infrastructure that will need to be delivered to accommodate the planned growth, synthesising the evidence and analysis from the baseline and modelling. The infrastructure delivery schedule:

- presents the indicative costs associated with delivering the planned and future infrastructure required to support the long term growth objectives in EFDC;
- outlines how EFDC could look to prioritise and facilitate the delivery of infrastructure; and
- Summarises potential funding sources that the EFDC could explore to deliver on its infrastructure requirements.

The schedule will seek to identify funding gaps and then determine potential options for bridging the funding gap from different funding mechanisms.

The IDP is an iterative process and further consultation and costing work is required to develop a comprehensive schedule. This will take place prior to the Regulation 19 publication and the subsequent submission of the Local Plan for examination. Once the evidence base and consultations have been completed, this section of the report will be updated to reflect the findings.

13.1 Epping Forest District Council Infrastructure Requirements and Investment

Once the level of necessary infrastructure and the associated cost has been determined, a priority level will be set and apportioned to the following categories:

- ‘Essential’ infrastructure - defined as infrastructure that is required to make development acceptable in planning terms.
- ‘Desirable’ infrastructure - defined as infrastructure which would improve the capacity and deliver place making benefits.

This apportionment will be completed following the final consultations and analysis.

Appendix A

Stakeholder List

A1 Stakeholder List

Infrastructure type	Organisation	Key contact
Early Years & Childcare	Essex County Council	Gill Holland
Primary School	Essex County Council	Neil Keylock, Yeelam Yau, Monica Bird
Secondary School	Essex County Council	Neil Keylock, Yeelam Yau, Monica Bird
Post-16 Education	Essex County Council and Epping Forest College	Paula Hornett, Ben Eshun
Adult Community Learning	Essex County Council	Katherine Burns
Primary Healthcare	West Essex CCG	Tracy Manzi, Christine Moss, Geoff Roberts
Secondary Healthcare	North Essex Partnership University NHS Foundation Trust	Stephanie Rea
Acute Care	Princess Alexandra Hospital	Marc Davies
Adult social care/ Independent Living	Essex County Council	Gary Heathcote, Eda Niland
Dentists	South East Partnership Trust and independent providers	Gill Bater
Community centres	Epping Forest District Council	Amanda Thorn
Youth Services	Epping Forest District Council	Louisa Stirling
Libraries	Essex County Council	Lee Shelsher, Steve Cooper
Green Infrastructure	Epping Forest District Council	Christopher Neilan
Allotments	Parish Council representatives	-
Sports facilities	Active Essex/ Epping Forest District Council	Rob Hayne, James Warwick, Kelly Harman
Highways and Transport	Essex County Council/ Ringway Jacobs	David Sprunt, Charles Freeman
Waste Water and Water Supply	Thames Water	Mark Matthews
Flood Risk and Surface Water Management	Epping Forest District Council	Susan Stranders
Emergency Services	Essex Fire Service	Dave Bill
Emergency Services	Police	Caroline Wiggins
Economic Development	One Epping Forest	John Houston

Appendix B

Housing Delivery Trajectory
2016/17 – 2032/33

Appendix C

Primary School Capacity Figures

C1 Primary School Capacity Figures

Primary School	Current surplus/ deficit for academic year 2015/15	Forecast surplus/ deficit for academic year 2019/20
Chipping Ongar Primary	14	-8
Dr Walkers Church of England Primary, Fyfield	41	46
High Ongar primary	-15	-7
Matching Green Church of England Primary	-4	4
Moreton Green Church of England Primary	13	-10
Shelley primary	69	60
Coopersale and Theydon Garnon Church of England Primary	4	-13
Epping Primary	-21	-20
Epping Upland Church of England	3	-3
Ivy Chimney Primary School	9	-13
St Andrew's Church of England Primary, North Weald Bassett	40	67
High Beech Church of England Primary	-3	0
Hillhouse Church of England Primary, Waltham Abbey	61	10
The Leverton Infant and Nursery, Waltham Abbey	-4	-14
The Leverton Junior, Waltham Abbey	-21	-7
Upshire Primary Foundation, Waltham Abbey	7	-12
Waltham Holy Cross Infant School, Waltham Abbey	-6	-24
Waltham Holy Cross Junior School, Waltham Abbey	24	-14
Buckhurst Hill Community Primary	7	-17
St Johns Church of England, Buckhurst Hill	29	-20
The White Bridge Community Infant School, Loughton	22	51
The White Bridge Junior School, Loughton	16	100

Chigwell Primary	16	-9
Chigwell Row	1	9
Lambourne Primary	2	-8
Limes Farm Infant and Nursery, Chigwell	5	19
Limes Farm Junior, Chigwell	77	-5
Stapleford Abbots Primary	3	6
The Alderton Infant, Loughton	38	3
The Alderton Junior, Loughton	49	35
Hereward Primary School, Loughton	46	-19
St John Fisher Catholic Primary, Loughton	-23	-34
Staples Road Primary, Loughton	-27	-22
Theydon Bois Primary	-19	-17
Thomas Willingale School, Debden	2	9
Nazeing Primary	36	56
Roydon Primary	1	1
Sheering Church of England Primary	-6	20

Appendix D

Secondary School Capacity Figures

D1 Secondary School Capacity Figures

Secondary school	Surplus/deficit 2015	Forecast surplus/deficit for academic year 2019/20 (with 5% headroom)
Ongar Academy	-	54
Epping St Johns Church of England	101	-143
King Harold Academy, Waltham Abbey	106	16
Davenant Foundation School, Loughton	-420	-402
Debden Park High School, Loughton	-23	-203
Roding Valley School, Loughton	20	-201
West Hatch High School, Chigwell	-93	-167

Appendix E

Draft Infrastructure Delivery Plan Schedule

Draft Infrastructure Delivery Plan Schedule

The Draft Infrastructure Delivery Schedule details all the infrastructure requirements in Epping Forest District up to 2033, synthesising the evidence and analysis from the Infrastructure Delivery Plan (IDP). The IDP is an iterative process and further consultation and costing work is required to develop a comprehensive schedule. Infrastructure will be categorised into delivery priorities ('critical', 'essential', and 'desirable') once the cost and phasing have been finalised. This will take place prior to the Regulation 19 publication and the subsequent submission of the Local Plan for examination. Once the evidence base and consultations have been completed, the schedule will be updated to reflect the findings.

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Highways	District wide		Improvements to Junction 7 on the M11	Essential	Main point of access to the strategic road network, and will release additional capacity on motorway for the growth of Harlow and EFDC	Highways England	Essex County Council	Road Investment Strategy 1	£34m		2020	Memorandum of Understanding on Highways and Transportation Infrastructure for the West Essex/East Hertfordshire Housing Market Area
Highways	District wide		New junction 7a on the M11	Essential	Release additional capacity on motorway for the growth of Harlow and EFDC, and improve journey time reliability.	Highways England	Essex County Council	Road Investment Strategy 1	£25-50m		2020	Memorandum of Understanding on Highways and Transportation Infrastructure for the West Essex/East Hertfordshire Housing Market Area
Cycling	Settlement	Epping	Improvements to signage, road markings, crossing facilities and the implementation of routes to town centre and	TBC	Epping has high traffic congestion and limited cycling-related infrastructure, which is limiting opportunities for sustainable	Essex County Council			£125,000		2017-2019	Epping Forest District Cycling Action Plan, August 2016

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
			schools.		travel							
Cycling	Settlement	Epping	Provision of segregated footway/ cycleway. TFL style on-road quietway route, improved routes to station, and surface improvements.	TBC	Epping has high traffic congestion and limited cycling-related infrastructure, which is limiting opportunities for sustainable travel	Essex County Council			£900,000		2020-2026	Epping Forest District Cycling Action Plan, August 2016
Cycling	Settlement	Epping	Provision of off-road routes, resurfacing, shared use footway and cycle uses, path conversions and upgrades	TBC	Epping has high traffic congestion and limited cycling-related infrastructure, which is limiting opportunities for sustainable travel	Essex County Council			£1,260,000		2026-2033	Epping Forest District Cycling Action Plan, August 2016
Cycling	Settlement	Waltham Abbey	Improvements to parking, signage and providing improved links and designate routes around key services.	TBC	Waltham Abbey has limited cycling infrastructure, and low quality paths, and is limiting opportunities for sustainable travel	Essex County Council			£325,000		2017-2019	Epping Forest District Cycling Action Plan, August 2016

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Cycling	Settlement	Waltham Abbey	Linking District networks to National Cycle Network, resurfacing junctions, toucan crossings and implementing TfL style quiet roads.	TBC	Waltham Abbey has limited cycling infrastructure, and low quality paths, and is limiting opportunities for sustainable travel	Essex County Council			£1,485,000		2020-2026	Epping Forest District Cycling Action Plan, August 2016
Cycling	Settlement	Waltham Abbey	Provision of off-road segregated cycle routes, and replacing existing footways.	TBC	Waltham Abbey has limited cycling infrastructure, and low quality paths, and is limiting opportunities for sustainable travel	Essex County Council			£1,450,000		2026-2033	Epping Forest District Cycling Action Plan, August 2016
Cycling	Settlement	Loughton, Chigwell and Buckhurst Hill	Provision of on-road cycling routes, unsegregated shared-use footways and cycleway, improved signage/ route navigation and legibility, TfL-style quietway	TBC	Limited cycling infrastructure, with fragmented networks and poor signage information for cyclists. This is restrict modal shift towards more sustainable travel patterns	Essex County Council			£1,615,000		2017-2019	Epping Forest District Cycling Action Plan, August 2016
Cycling	Settlement	Loughton, Chigwell and Buckhurst Hill	On-road cycling routes to link with routes alongside River Roding, segregated off-road footway alongside eastbound carriageway of B170, improved	TBC	Limited cycling infrastructure, with fragmented networks and poor signage information for cyclists. This is restrict modal shift towards more sustainable travel patterns	Essex County Council			£4,340,000		2020-2026	Epping Forest District Cycling Action Plan, August 2016

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
			access to tube station, shared cycle and footpath route through Nature Reserve.									
Cycling	Settlement	Loughton, Chigwell and Buckhurst Hill	Further links to tube station, junction improvements, widening of footpaths, provision of a Quiet Lane Route.	TBC	Limited cycling infrastructure, with fragmented networks and poor signage information for cyclists. This is restrict modal shift towards more sustainable travel patterns	Essex County Council			£1,800,000		2026-2033	Epping Forest District Cycling Action Plan, August 2016
Pre-school	Schools Planning Area	Schools Planning Area 01 (Ongar)	1.88 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Schools Planning Area 02 (Epping)	6.48 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Schools Planning Areas 03 (Waltham Abbey)	1.69 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Pre-school	Schools Planning Area	Schools Planning Area 04 (Buckhurst Hill/ Loughton South)	0.20 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Schools Planning Area 05 (Chigwell/ Lambourne)	1.25 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Schools Planning Area 06 (Loughton)	2.73 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Epping Forest No Group (Roydon)	0.19 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Epping Forest No Group (Nazeing)	0.65 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Pre-school	Schools Planning Area	Uttlesford Group 05	0.61 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Department of Education					
Nurseries	Settlement groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and	2.37 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet	Independent Providers	Essex County Council/ Department of					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
		Rural Apportionment			the increase in demand		Education					
Nurseries	Settlement groups	Waltham Abbey and Rural Apportionment	1.37 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	4.05 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	Strategic Sites L and M and Rural Apportionment	1.70 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	2.13 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.37 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	North Weald Bassett, Thornwood and Rural Apportionment	2.51 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Nurseries	Settlement groups	Epping and Rural Apportionment	2.59 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Nurseries	Settlement groups	Chigwell, Stapleford Abbotts and Rural Apportionment	0.98 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.92 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Waltham Abbey and Rural Apportionment	1.70 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	5.04 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Strategic Sites L and M and Rural Apportionment	2.12 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Sheering, Lower Sheering, Strategic Site J and Rural	2.65 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet	Independent Providers	Essex County Council/ Department of					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
		Apportionment			the increase in demand		Education					
Children's clubs	Settlement groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.71 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	North Weald Bassett, Thornwood and Rural Apportionment	3.12 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Epping and Rural Apportionment	3.22 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Children's clubs	Settlement groups	Chigwell, Stapleford Abbotts and Rural Apportionment	1.22 facilities	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Independent Providers	Essex County Council/ Department of Education					
Primary School	Schools Planning Area	Schools Planning Area 01 (Ongar)	0.78 FE	TBC	Based on the current occupancy rates, there is insufficient capacity to meet the increase in demand	Essex County Council	Land owners ¹					

¹ Land owners identified as partners where there is likely to be significant land take, however engagement with land owners will likely be required across all infrastructure types.

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Primary School	Schools Planning Area	Schools Planning Area 02 (Epping)	4.47 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Schools Planning Area	Schools Planning Areas 03 (Waltham Abbey)	0.94 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Schools Planning Area	Schools Planning Area 05 (Chigwell/ Lambourne)	0.40 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Schools Planning Area	Schools Planning Area 06 (Loughton)	1.65 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Primary School	Schools Planning Area	Epping Forest No Group (Roydon)	0.13 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Schools Planning Area	Epping Forest No Group (Nazeing)	0.29 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Schools Planning Area	Uttlesford Group 05	0.82 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Primary School	Strategic sites (Epping/ Harlow border)	Strategic sites (Epping/ Harlow border)	5.58 FE	TBC	Statutory requirement to provide primary school education for all pupils in the District. EFDC FPGs do not have sufficient capacity to meet future demand arising from growth.	Essex County Council	Land owners					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Secondary School and Post 16 Education	Schools Planning Area	Epping Forest Secondary Group 01 (Loughton)	3.08 FE	TBC	Statutory requirement to provide Secondary school education for all pupils in the District. EFDC FPGs do not have sufficient existing capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Secondary School and Post 16 Education	Schools Planning Area	Epping Forest Secondary Group 02 (Epping/ Waltham Abbey)	5.13 FE	TBC	Statutory requirement to provide Secondary school education for all pupils in the District. EFDC FPGs do not have sufficient existing capacity to meet future demand arising from growth.	Essex County Council	Land owners					
Secondary School and Post 16 Education	Schools Planning Area	Strategic sites (Epping/ Harlow border)	3.72	TBC	Statutory requirement to provide Secondary school education for all pupils in the District. EFDC FPGs do not have sufficient existing capacity to meet future demand arising from growth.		Land owners					
GP Surgeries	Settlement groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	360m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£720,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 1

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
GP Surgeries	Settlement groups	Waltham Abbey and Rural Apportionment	240m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£480,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 2
GP Surgeries	Settlement groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	480m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£960,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 3
GP Surgeries	Settlement groups	Strategic Sites L and M and Rural Apportionment	240m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£480,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 4
GP Surgeries	Settlement groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	240m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£480,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 5
GP Surgeries	Settlement groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	240m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£480,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 6

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
GP Surgeries	Settlement groups	North Weald Bassett, Thornwood and Rural Apportionment	360m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£720,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 7
GP Surgeries	Settlement groups	Epping and Rural Apportionment	360m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£720,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 8
GP Surgeries	Settlement groups	Chigwell, Stapleford Abbotts, Abridge and Rural Apportionment	120m ² additional floorspace	TBC	Current provision is not sufficient to accommodate growth and meet optimum GP:patient ratio	NHS England	West Essex CCG, Land owners	NHS	£240,000			EFDC Consultation on Local Plan Issues & Options Document July 2012– Representations on behalf of NHS North Essex - Annex 9
Dentist	Settlement grouping	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.02 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Waltham Abbey and Rural Apportionment	1.19 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	2.97 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Dentist	Settlement grouping	Strategic Sites L and M and Rural Apportionment	1.22 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.59 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.15 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	North Weald Bassett, Thornwood and Rural Apportionment	2.00 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Epping and Rural Apportionment	2.17 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				
Dentist	Settlement grouping	Chigwell, Stapleford Abbotts, Abridge and Rural Apportionment	0.84 FTE	TBC	Current provision is not sufficient to accommodate growth whilst meeting optimum GP:patient ratios	Independent Providers	NHS England	NHS				

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Independent Living	District wide		499 places	TBC	The ageing demographic population of the District will increase demand for future care services beyond existing provision.	Independent Providers	Essex County Council					
Extra Care	District wide		371 places	TBC	The ageing demographic population of the District will increase demand for future care services beyond existing provision.	Independent Providers	Essex County Council					
Nursing Care	District wide		330 places	TBC	The ageing demographic population of the District will increase demand for future care services beyond existing provision.	Independent Providers	Essex County Council					
Residential Care	District wide		102 places	TBC	The ageing demographic population of the District will increase demand for future care services beyond existing provision.	Independent Providers	Essex County Council					
Community, Youth, and Library Space	Settlement Groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	603m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Community, Youth, and Library Space	Settlement Groups	Waltham Abbey and Rural Apportionment	333m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	840m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	Strategic Sites L and M and Rural Apportionment	346m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	448m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	318m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	North Weald Bassett, Thornwood and Rural Apportionment	551m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community	Essex County Council						

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
					facilities, requiring increased provision.							
Community, Youth, and Library Space	Settlement Groups	Epping and Rural Apportionment	610m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Community, Youth, and Library Space	Settlement Groups	Chigwell, Stapleford Abbotts, Abridge and Rural Apportionment	236m ² additional floorspace	TBC	The increased population will put pressure on existing library, youth and community facilities, requiring increased provision.	Essex County Council						
Health and Fitness Facilities	District wide		0.11 facilities	TBC	To maintain a high level of provision for increased population and demand	Independent provider						
Indoor Bowls Rink	District wide		7.95 facilities	TBC	To maintain a high level of provision for increased population and demand							
Artificial Grass Pitches	District wide		9.11 pitches	TBC	To maintain a high level of provision for increased population and demand							

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Athletics Tracks	District wide		0.64 tracks	TBC	To maintain a high level of provision for increased population and demand							
Golf Courses	District wide		3.11 courses	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	1.76 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Waltham Abbey and Rural Apportionment	1.03 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	2.58 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Strategic Sites L and M and Rural Apportionment	1.06 courts	TBC	To maintain a high level of provision for increased population and demand							

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Outdoor Tennis Court	Settlement Groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.38 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.00 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	North Weald Bassett, Thornwood and Rural Apportionment	1.74 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Epping and Rural Apportionment	1.89 courts	TBC	To maintain a high level of provision for increased population and demand							
Outdoor Tennis Court	Settlement Groups	Chigwell, Stapleford Abbots and Rural Apportionment	0.73 courts	TBC	To maintain a high level of provision for increased population and demand							
Managed Open Space	Settlement Group	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	2.54ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	Waltham Abbey and Rural Apportionment	1.49ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased	Epping Forest District Council	Land owners					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
					population							
Managed Open Space	Settlement Group	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	3.74ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	Strategic Sites L and M and Rural Apportionment	1.54ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	2.00ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.45ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	North Weald Bassett, Thornwood and Rural Apportionment	2.53ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Managed Open Space	Settlement Group	Epping and Rural Apportionment	2.73ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Managed Open Space	Settlement Group	Chigwell, Stapleford Abbots and Rural Apportionment	1.05ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council	Land owners					
Informal Recreation Grounds	Settlement groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	1.99ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Waltham Abbey and Rural Apportionment	1.16ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	2.91ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Strategic Sites L and M and Rural Apportionment	1.20ha	TBC	To ensure development is accompanied by sufficient open space provision to	Epping Forest District Council						

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
					accommodate increased population							
Informal Recreation Grounds	Settlement groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.55ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	1.13ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	North Weald Bassett, Thornwood and Rural Apportionment	1.96ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Epping and Rural Apportionment	2.13ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						
Informal Recreation Grounds	Settlement groups	Chigwell, Stapleford Abbots and Rural Apportionment	0.82ha	TBC	To ensure development is accompanied by sufficient open space provision to accommodate increased population	Epping Forest District Council						

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Children's Play	Settlement	Buckhurst Hill	108m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Chigwell	545m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Chipping Ongar	715m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Epping	1,610m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Fyfield	102m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	High Ongar	34m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Loughton / Debden	1,078m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Lower Nazeing	310m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Children's Play	Settlement	Lower Sheering	53m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	North Weald Bassett	1,380m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Roydon	75m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Sheering	142m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Stapleford Abbots	52m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Theydon Bois	350m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Thornwood	143m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Waltham Abbey	844m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Children's Play	Settlement	Strategic Sites (Epping/ Harlow border)	3,417m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Children's Play	Settlement	Rural	352m ²	TBC	To ensure additional demand is met by the sufficient standard of play facilities							
Allotments	Settlement groups	Buckhurst Hill, Loughton/Debden, Theydon Bois and Rural Apportionment	1.33ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Waltham Abbey and Rural Apportionment	0.78ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Lower Nazeing, Roydon, Strategic Sites R and U and Rural Apportionment	1.96ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Strategic Sites L and M and Rural Apportionment	0.80ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Sheering, Lower Sheering, Strategic Site J and Rural Apportionment	1.05ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Allotments	Settlement groups	Chipping Ongar, High Ongar, Fyfield and Rural Apportionment	0.76ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	North Weald Bassett, Thornwood and Rural Apportionment	1.32ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Epping and Rural Apportionment	1.43ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Allotments	Settlement groups	Chigwell, Stapleford Abbotts and Rural Apportionment	0.55ha	TBC	Increased demand will exceed optimum standards of provision based on existing provision							
Electricity	Adjoining authorities	Harlow	One new sub-station off the A4169 in Harlow	TBC	To support growth associated with the strategic sites on the Epping/ Harlow border	UK PowerNetworks						
Waste Water Treatment Works (WwTW)	Settlement	Epping, North Weald Bassett, Lower Nazeing, Theydon Bois, Waltham Abbey, Loughton. and Moreton	Initial consultation with Thames Water has indicated that upgrades to drainage infrastructure may be required to support growth in these locations.	TBC	To provide sufficient sewage capacity to accommodate proposed growth	Thames Water/ Anglian Water						

Infrastructure type	Area covered	Location	Intervention	Essential/ Desirable	Need for intervention (why)	Lead delivery agency	Partners (public sector and a range of private organisations)	Funding source	Cost	Funding gap	Delivery phasing (when)	Baseline source
Broadband	District wide		Ongoing upgrades to existing broadband infrastructure in areas of poor connectivity.	TBC	To support growth and ensure that the majority of the District has access to fibre broadband by 2019, with a download speed of 24Mbps.	Essex County Council						
Water Supply	Water Resource Zones	Waltham Abbey, Loughton/Debden/Chigwell	Initial consultation with Thames Water has indicated that up-grades to the water supply network in these areas may be required to support growth.	TBC	To provide sufficient water capacity to accommodate proposed growth	Thames Water/ Affinity Water						

