

Epping Forest District Council
**Epping Forest District Council
Infrastructure Delivery Plan**
Part B Report (Infrastructure
Delivery Schedule)

Final | December 2017

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.

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Parish and Town Council infrastructure schemes

1 Introduction

Epping Forest District Council has commissioned the preparation of an Infrastructure Delivery Plan (IDP) to form part of the evidence base for the Local Plan.

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 over the Plan period to 2033. The Local Plan identifies site allocations totalling around 9,900 dwellings, 38 traveller pitches and one yard, and approximately 23 hectares of commercial and employment space.

A review of the existing infrastructure is presented in the Infrastructure Delivery Plan Part A report. This baseline report has been informed by consultation with infrastructure and service providers, along with a review of relevant policy documents. It reports the existing infrastructure across Epping Forest District and identifies any shortfalls in provision. From this starting point, the impact of growth over the Plan period can be considered, and new infrastructure requirements identified. Responsibilities for delivery and funding mechanisms have also been identified.

A draft IDP report was published as part of the Regulation 18 consultation in August 2016. Taking into account consultation responses, along with changes to proposed housing and employment sites and phasing, the IDP report was updated. Updates were informed by additional consultation with stakeholders, and revised policy strategies available.

This Part B report pulls together the outputs and infrastructure requirements identified in the baseline exercise into an Infrastructure Delivery Schedule. The Schedule sets out the identified infrastructure required at different spatial scales for Epping Forest District for the period up to 2033. The purpose of the Schedule is to:

- Present indicative costs associated with delivering the infrastructure required to support growth.
- Summarise the potential funding sources that could be used to deliver infrastructure upgrades, recognising that developer contributions will be a key part of this.
- Prioritise the infrastructure interventions according to whether it is considered to be ‘critical’, ‘essential’ or ‘desirable’, and identify when in the Plan period the infrastructure will be required.
- Identify, where possible, the scale of the funding gap where funding is not fully committed.

2 Policy context

2.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) requires planning authorities to positively plan for development and the infrastructure required in the area to meet the needs associated with growth. Local planning authorities must progress a proportionate evidence base for infrastructure which assesses the quality and capacity of various forms of infrastructure.

The Infrastructure Delivery Plan (IDP) is therefore an important part of the evidence base. Its purpose is to demonstrate that the infrastructure requirements necessary to support the level of housing and employment growth in Epping Forest District to 2033 can be delivered.

Paragraph 157 of the NPPF states that Local Plans should plan positively for the development and infrastructure required in an area. At paragraph 162, the Framework directs local planning authorities to assess the quality and capacity of infrastructure, whilst at Paragraph 158 it states that the Local Plan must be based upon adequate, up-to-date and relevant evidence.

Paragraph 158 of the NPPF states the following:

“Each local planning authority should ensure that the Local Plan is based upon adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. Local authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.”

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

- The Local Plan should identify what infrastructure is required and how it can be funded and brought on stream at the appropriate time.
- Early discussion with infrastructure and service providers should be undertaken 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.

2.2 ECC Developer's Guide to Infrastructure Contributions (2016)

The Developer's Guide to Infrastructure Contributions sets out the County Council's approach to securing appropriate infrastructure provision to support development. The Guide details the scope and range of contributions towards infrastructure, which ECC may seek from developers and land owners in order to make development acceptable in planning terms.

The Guide sets out infrastructure policy standards and costing information, to help standardise the approach to delivery, and ensure new developments are sustainable. This document has been used as a starting point for identifying the quantum and provision of infrastructure required to support growth over the Plan period.

3 Cross boundary working

Epping Forest District is surrounded by a number of authorities across Essex, Hertfordshire and London. Due to the cross-boundary nature of some infrastructure types, the consideration of neighbouring authorities plays an important role in the IDP process. Neighbouring authorities include:

- Harlow (ECC)
- Uttlesford (ECC)
- Brentwood (ECC)
- Chelmsford (ECC)
- London Borough of Redbridge
- London Borough of Havering
- Broxbourne District (HCC)
- East Hertfordshire District (HCC)

Cross-boundary working has been particularly important in relation to Harlow and Gilston Garden Town. The Garden Town covers strategic sites in and adjacent to Harlow, totalling around 16,000 dwellings. This includes two sites which are wholly within in Epping Forest District (Water Lane Area and Latton Priory) and a further site (East of Harlow) which falls partly within Epping Forest District and partly within Harlow. Together these sites, total 3,900 dwellings within Epping Forest District.

A joined up and collaborative approach is therefore necessary to successfully plan the infrastructure required to support the Garden Town. The Councils have set in place a number of processes and mechanisms to promote joint working, including the production of Strategic Masterplans through the Garden Town Developer Forum. In relation to the IDP specifically, Harlow has progressed an IDP in parallel with EFDC and the appointed consultant teams have sought to align IDP

methodology and approach as far as possible. The following steps were taken to facilitate joined-up working:

- Meeting notes and information received from key providers and stakeholders were shared between councils / consultant teams where it was considered to have cross-boundary issues;
- Joint meetings were held with both councils / consultant teams present, when considered appropriate;
- Consistent positions were sought from infrastructure providers and other stakeholders, where possible;
- Relevant work undertaken for the Harlow & Gilston Garden Town or across the wider SHMA / FEMA area has been incorporated into the respective IDPs as appropriate;
- Any draft IDP documents were shared between the councils / consultant teams, in order to review whether cross-border issues have been effectively addressed; and
- Agreed approach and wording across the IDP Schedules to help capture cross-boundary schemes consistently, and identify the need for contributions.

This provided the opportunity to ensure an early joined up approach to the planning and delivery of infrastructure.

4 Consultation workshops

To help inform the infrastructure required over the Plan period, a number of workshops took place. These are summarised below in Figure 1.

The workshops provided an opportunity for discussions on:

- Existing infrastructure issues, constraints, shortfalls and deficits;
- The implications of planned growth for infrastructure provision, including discussion on possible future needs and potential locations for future requirements;
- Finance and delivery of infrastructure; and
- The approach to cross-boundary infrastructure delivery.

Figure 1 Summary of workshops undertaken as part of the IDP process

Workshop	Attendees	Date	Purpose
Officer workshop	Officers from Epping Forest District Council, Harlow Council, East Herts District Council and Essex County Council, as well as representatives from Affinity Water and	2 June 2017	To consider the infrastructure requirements in relation to the proposed strategic site allocations in the Draft Local Plan, and co-ordinate the approach to infrastructure across stakeholders.

Workshop	Attendees	Date	Purpose
	Princess Alexandra Hospital.		
Developer Forum (strategic sites) Developer Forum (non-strategic sites)	Land owners, developers, promoters and their agents, along with representatives from ECC Harlow and East Herts	16 June 2017	To consider the specific infrastructure requirements in relation to the proposed site allocations in the Draft Local Plan, and provide site promoters and developers with the opportunity to provide input to the IDP.
Member's Workshop	All District Councillors and representatives from each Town and Parish Council were invited to the workshop.	8th July 2017	To provide an opportunity for members to give feedback on the findings of the IDP to date, and enable members to share their local knowledge on current infrastructure capacity issues around key settlements and areas of planned growth. Where possible, attendees were also encouraged to help to determine what infrastructure is needed, and where it should be provided to support anticipated growth.

The workshops were also used as an opportunity to identify infrastructure interventions needed to support growth, and therefore contribute to the Schedule.

4.1 Developer Forum

The Developer Forum meetings for both the Harlow and Gilston Garden Town sites and sites across the District were used to further understand any preliminary work or consultation that had been undertaken by developers, and to seek site promoters' views on the infrastructure required to deliver their respective sites. Representatives from East Herts and ECC also attended.

A pro-forma was issued in advance of the Developer Forum workshop to all attendees, requesting information on the provision of different types of infrastructure associated with development proposals. This included information on any engagement that has been undertaken with providers, any preliminary modelling or capacity work, and sought to capture understanding of interventions likely to be required to deliver sites.

The responses to both sets of pro-formas were analysed and incorporated into the Schedule, where appropriate.

4.2 Member's workshop

The purpose of this workshop was to provide an opportunity for Members to give feedback on the findings of the IDP to date, and enable attendees to share their local knowledge on current infrastructure capacity issues around key settlements and areas of planned growth. Where possible, attendees were also encouraged to help to determine what infrastructure is needed, and where it should be provided to support anticipated growth.

A pro-forma was issued to all Parish and Town Councils in advance of the Member's workshop to invite suggestions on the types of infrastructure projects that should feed into the IDP work. The pro-forma provided an opportunity for both attendees, and those unable to make the workshop, to contribute and share local knowledge of infrastructure required to support growth as part of the emerging Plan.

The infrastructure suggestions received from Parish and Town Councils through the proforma responses were compiled into a list, set out in Appendix A. This list reflects desirable infrastructure interventions to support growth over the Plan period. Where appropriate, these proposals have been reflected in the infrastructure Schedule in consultation with EFDC and ECC.

5 Methodology

5.1 Infrastructure types and scale of reporting

The Schedule covers the physical and social infrastructure types shown in Figure 2, and reported at the spatial scales identified in Figure 3. Some infrastructure types discussed in the baseline are not reported in the Schedule where no identified project or intervention has been identified as necessary to assist in the delivery of growth.

Figure 2 Infrastructure types identified in the Schedule

Category	Infrastructure
Transport	Highways
	Rail
	Buses
	Walking and Cycling
Education	Early Years and Childcare
	Primary Schools
	Secondary Schools
Health and Social Care	GPs
	Dentists
Community and Sport	Community Centres
	Indoor Sports Facilities
	Outdoor Sports Facilities
Open Space	Natural/ Semi-natural open space
	Informal recreation
	Managed open space
	Allotments
Utilities	Water
	Wastewater
	Electricity
	Gas
	Broadband

Infrastructure provision has been considered across a range of spatial scales, to fully reflect what is required to serve growth areas.

Figure 3 Spatial scales reported in the Schedule

Spatial Scale	Infrastructure schemes
District	Infrastructure required to serve growth across the District as a whole
Strategic sites - combined	Infrastructure required to serve growth across the strategic sites at the Harlow and Gilston Garden Town as a whole
Strategic sites	Infrastructure required to specifically support growth in either the Water Lane Area, East of Harlow or Latton Priory strategic sites.
Settlements	Infrastructure interventions required to support growth within specific settlements across the District.

It should also be noted that different infrastructure types were assessed and calculated across a range of geographies. This was informed by consultation with providers, and was used to best reflect how services are delivered and used. These are referenced below, and set out in more detail in Part A of the IDP:

- Primary Schools – assessed in Primary Forecast Planning Groups
- Secondary Schools – assessed in Secondary Forecast Planning Groups
- GP surgeries – assessed in Neighbourhood Areas

5.2 Identifying infrastructure requirements

As set out in Part A of the IDP, future infrastructure requirements associated with growth identified in the Plan period have been assessed through a combination of stakeholder consultation, a review of existing evidence-base strategies and forecast modelling.

5.2.1 Consultation with providers

Extensive stakeholder consultation was undertaken to establish the likely additional infrastructure requirements arising from growth over the Plan period. This included officers from EFDC, Harlow, East Hertfordshire and Essex County Council. In addition, consultation was undertaken with representatives from TfL, Network Rail, utility companies for water, wastewater, gas and electricity, the West Essex Clinical Commissioning Group, NHS England and representatives from the emergency services. The growth forecasts were shared with infrastructure providers and stakeholders, who commented on the likely impact of growth on existing provision in the District. The ability of existing infrastructure to absorb this additional demand, and the need for new facilities, were also considered as part of this process.

Stakeholder consultation formed part of an iterative process, with additional discussions with providers in line with changes to site allocations and phasing.

Although standards set out in the ECC Developers' Guide to Infrastructure Contributions provided a useful starting point in identifying infrastructure need, where more up to date information was received from infrastructure providers, this information was superseded. This was to ensure that schemes in the Schedule better reflect how infrastructure is assessed, delivered and funded. In some instances, changing models of service delivery also affected the space requirements associated with future infrastructure provision. Examples of this include the trend towards 'hub' models and co-location, whereby several services such as community centres and libraries may operate out of the same facility. It should therefore be noted that for some types of infrastructure, a more flexible approach to provision and delivery may be appropriate. It will be necessary that the IDP is updated regularly as policy changes come into effect, to reflect these changes in delivery.

5.2.2 Forecast modelling

Forecast modelling was undertaken to demonstrate requirements in line with policy standards. These standards of provision have been used to model infrastructure requirement across the Plan period, and calculate need in line with the housing trajectory for growth.

For certain infrastructure sectors, it was 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 those services has been modelled. The methodology associated with the forecast modelling is set out in full in Part A of the IDP. Demand forecasting was undertaken for the following infrastructure:

- Early years provision
- Community floorspace
- Outdoor sports facilities
- Adult social care
- Dentists

In some instances, providers undertook their own modelling and calculation of future need, which was fed directly into the Schedule. This was the case for:

- Primary and secondary education - modelling work undertaken by ECC;
- GP surgeries - work undertaken by West Essex CCG; and
- Transport - modelling work, and associated interventions, undertaken by ECC and Jacobs transport consultants.
- Open Space – modelling work undertaken as part of the Council's Open Space strategy
- Indoor sports facilities – modelling work undertaken as part of the Council's Built Facilities strategy

5.2.3 Review of existing strategies

Infrastructure needs over the Plan period were also identified by reviewing a range of evidence based strategies, commissioned to support the emerging Local Plan. In addition, infrastructure requirements identified in Neighbourhood Plans across the District were also reviewed and incorporated into the Schedule, where appropriate.

5.3 Approach to existing capacity surplus and deficits

Part A of the IDP assessed the current provision of infrastructure across the District, including any known shortfalls or surpluses in capacity. Across the majority of infrastructure types, data on existing capacity was not available or complete enough to inform the forecast modelling outputs. Data on existing capacity deficits and

surpluses were however available for primary and secondary education, GP surgeries, open space and sports facilities.

Where possible, existing surplus capacity information was built directly into the forecast modelling, to reflect future requirements as accurately as possible. The rationale for this approach was to reflect the ability of current provision to absorb some of the future demand. Without this information, the Schedule is likely to overstate the future infrastructure requirement.

For all other infrastructure types, forecast modelling identifies infrastructure future needs based on policy compliance. This newly-arising need does not take into account current surplus or deficit capacities. The Schedule identifies whether infrastructure provision reflects newly arising need associated with planned growth, or shows a combination of newly arising and existing need. It is recommended that the Schedule is revised to include capacity data if it becomes available.

5.4 Rationalisation and Limitations

The Schedule presents the infrastructure need to ensure that all development is policy compliant, in relation to the level of social and physical infrastructure required to serve the needs of the additional population.

In reality, service delivery is complex, and limited by financial constraints. It will be for providers to decide how best to deliver services and meet new infrastructure demands. This may include further co-location of services, multi-use of buildings such as using schools at weekends and evenings, or moving towards hub models.

Changing strategies for future service delivery will impact on infrastructure requirements going forwards. The IDP should therefore be updated yearly or in-line with any major policy changes which will significantly change the way infrastructure is delivered in future. Changes may impact on space requirements, which may increase or decrease over time.

The process of identifying future infrastructure requirements involved a degree of rationalisation between a number of different sources, in order to avoid duplicating or over-stating infrastructure requirements. Sources included:

- Consultation with stakeholders
- Council policy documents and relevant infrastructure strategies
- Forecast modelling based on policy standards of infrastructure provision

5.5 Prioritisation

The infrastructure interventions have been listed as either “critical”, “essential” or “desirable”.

Figure 4 Prioritisation Criteria

Priority	Criteria
Critical	Critical infrastructure is that which must happen in order for development to proceed. It most commonly involves connections to transport and utility networks. It is usually triggered by the commencement of development activity.
Essential	Essential infrastructure is that which is necessary to mitigate impacts arising from the development, for example provision of education and health facilities. It is usually triggered at occupation of a development site, either a specific phase or the whole site. It enables development to come forward in a way that is both sustainable and acceptable in planning terms.
Desirable	Desirable infrastructure is that which is required for sustainable growth and to achieve good place making objectives but the absence of which is unlikely to prevent development in the short to medium term. It is usually triggered at occupation of a development site, either a specific phase or the whole site. This type of infrastructure would improve operational capacity, and deliver other wider benefits, but would not prevent or delay the delivery of further development.

Interventions relating to open space have been categorised as essential where there is a known deficit of that form of open space within the settlement.

5.6 Costs

Infrastructure costs have been obtained from the most recent or locally specific information available. These exclude land costs.

It is recommended that the costs in the Schedule are updated regularly throughout the Plan period, to account for price changes, including change in costs for materials and labour or inflation, or if more up-to-date information becomes available. The sources of the cost for each infrastructure type are shown in Figure 5.

Within the Schedule, some costs are labelled as unknown. This is due to either a lack of detail of the intervention at this stage, or that costs have not yet been formulated by the delivery body. This is notably for transport and utilities schemes, along with community schemes identified through the Member’s workshops. Costs should be treated as indicative at this stage and should be updated as more detailed information becomes available.

Figure 5 Infrastructure cost sources

Infrastructure	Source of cost
Highways	Estimated costs provided by Essex County Council and Jacobs Transport Consultants
Public Transport (buses)	Estimated costs provided by Essex County Council and Jacobs Transport Consultants
Walking and Cycling	Estimated costs provided by Essex County Council, and taken from the ECC Cycling Action Plan (2016)
Early Years and Childcare	Cost estimates derived from BCIS average prices, Rebased to 4Q 2017 and South East Region (excluding Greater London)
Primary Schools	Estimated costs provided by Essex County Council
Secondary Schools	Estimated costs provided by Essex County Council
GP surgeries	Estimated costs provided by West Essex CCG
Libraries	Cost estimates derived from BCIS average prices, Rebased to 4Q 2017 and South East Region (excluding Greater London)
Community centres	Cost estimates derived from BCIS average prices, Rebased to 4Q 2017 and South East Region (excluding Greater London)
Indoor sports facilities	Sport England Facilities Costs Quarter 2, 2017
Outdoor sports facilities	Sport England Facilities Costs Quarter 2, 2017
Open space	Cost estimates derived from 2017 Spons and a South East adjustment factor; Arup professional experience on live/completed jobs

5.7 Phasing

The Schedule identifies when the infrastructure will need to be delivered over the Plan period. The phasing of infrastructure was determined through a combination of consultation with service providers, existing strategies and evidence base documents, and modelling based on the housing trajectory.

The majority of infrastructure types were phased in line with the housing trajectory, using forecast modelling. For transport infrastructure, phasing was informed by ECC and transport consultants, where known. For schemes where phasing was not yet determined, this was calculated in line with the housing trajectory at the settlement level. Consultation with ECC highlighted that transport schemes would be required in the short to medium term, to help unlock longer term growth over the Plan period.

The modelling identified the main period of growth over the Plan period for each settlement and strategic site. This identified whether infrastructure needed to be delivered within the first five years to unlock growth, or later on in the Plan period.

6 Infrastructure Funding

There are a range of funding sources available to support infrastructure delivery over the Plan period, including from a range of governmental and non-departmental public bodies, partnerships and wider grant opportunities. Funding options include:

- Central Government;
- Homes and Communities Agency;
- Funding through the South East LEP;
- Funding opportunities relating to Garden Town status;
- Funds available through the County Council; and
- Other grant sources.

Alongside these sources, developer funding will be an important element of delivering the infrastructure required to support growth. Further work will be undertaken as the Plan is progressed, and following Examination, to develop the Council's approach to developer funding as outlined below.

6.1 Pooling restrictions

The regime contained in the Community Infrastructure Levy Regulations 2010 restricts the use of planning obligations to avoid actual or perceived double charging of developers. The provisions of Regulation 123 (3) mean that a planning obligation cannot be imposed if there has (since 6th April 2010) been five or more planning obligations entered into within the area of the charging authority providing for the provision or funding of the same infrastructure project or type of infrastructure.

The Council recognises that this poses a challenge in securing funding for strategic infrastructure which benefits or serves a number of development sites, such as schools, health facilities and public transport improvements.

Further work will therefore be required to identify the sites that relate to or benefit from the more strategic infrastructure interventions identified in the IDP Schedule. Where five or more sites are directly related to the required infrastructure intervention, it will be necessary to consider a phased approach to securing funding in order to avoid breaching the limits set by Regulation 123 (3). An important part of this will be to undertake further technical work to develop a more detailed scope for such infrastructure interventions which will enable them to be broken down into distinct phases or projects, to be secured through separate planning obligations. The Council will ensure that S106 Agreements are drafted to be compliant with the CIL Regulations, taking into account existing obligations in completed S106 Agreement. The Council will continue to monitor infrastructure obligations to ensure that the limits set by Regulation 123 (3) are not breached.

Agreements under Section 278 of the Highways Act are not affected by the pooling restrictions set out in Regulation 123.

The Council will update the IDP in due course to reflect any changes surrounding the pooling of contributions, and will seek legal advice where necessary.

6.2 CIL Charging Schedule and Regulation 123 List

Subject to the outcome of the Government's review of CIL, the Council intends to progress the introduction of the Community Infrastructure Levy (CIL) as soon as possible after the Local Plan Examination. Charging Authorities are obliged to produce a CIL Charging Schedule which sets out the levy rates for a charging authority area and is subject to independent Examination. They are also obliged to produce a list of infrastructure projects or types of infrastructure that it intends will be, or may be, wholly or partly funded by CIL (known as a Regulation 123 List). The infrastructure on this list constitutes 'relevant infrastructure' as defined in the CIL Regulations. The Regulations prevent S106 Agreements from being used to fund such infrastructure.

It is therefore important to have a clear approach as to what will be funded by CIL and what will continue to be funded through S106 to inform the development of the Regulation 123 List. The Planning Practice Guidance acknowledges that there is still a legitimate role for Section 106 in securing development specific planning obligations to enable a local planning authority to be confident that the specific consequences of a particular development can be mitigated.

Through the Local Plan Viability Studies, the Council has already considered the potential for the implementation of a CIL charge. The Council acknowledges that the introduction of CIL may be required and beneficial in order to contribute towards District-wide non site-specific infrastructure requirements. However, it is envisaged that the majority of strategic infrastructure requirements requiring developer contributions will be funded through existing S106 / S278 mechanisms, and that this presents a more realistic and logical approach at this stage for requirements linked to specific sites, pending further announcements from the Government in relation to changes to the CIL Regulations and pooling restrictions. The Council will be undertaking further work to consider how developer contributions will be sought, including the future role of CIL, alongside the Submission and Examination of the Local Plan.

6.3 Apportioning costs

It will be necessary to ensure that the cost of providing infrastructure is shared equitably. This is particularly the case where one development is required to provide land for infrastructure which will serve a wider area such as schools and health facilities. This may be achieved through some form of land equalisation agreement. The approach to land equalisation and apportioning costs will be developed closely linked to the work outlined and through the masterplanning and planning application process.

7 Garden Town Delivery

The Government requires local planning authorities to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities.

One of the key strategic priorities embedded in the spatial strategy set out in the Local Plan is the creation of Garden Town Communities around Harlow to deliver significant housing growth. In January 2017 Epping Forest District, Harlow District and East Hertfordshire District Councils were given Garden Town status for the Harlow and Gilston Garden Town.

The delivery of the Garden Town Communities will need to be underpinned by a comprehensive package of infrastructure, which will need to be phased and delivered in a timely way ahead of or in tandem with the development it serves. This necessitates a coordinated approach across local authority boundaries and the involvement of a range of partners, including the site owners/promoters, infrastructure providers and other stakeholders.

Through the preparation of this IDP, joint working with Harlow and East Hertfordshire has sought to establish the key strategic infrastructure items required to support the Garden Town Communities as outlined in Section 3. In particular, it has been necessary to work with Harlow and their IDP consultants to ensure that a consistent approach to infrastructure required to support the sites around Harlow is taken across both IDPs. The Council will continue to work with relevant neighbouring local authorities to ensure the funding and delivery of strategic infrastructure requirements impacting on the Garden Town, taking into account the cross-boundary implications.

The Councils have established joint working mechanisms including a Garden Town Member Board. The Councils are preparing a Spatial Vision and Design Charter framework which will provide an overarching spatial vision across the Garden Town.

Strategic masterplans will be developed for each of the Garden Town Communities which will be formally endorsed by the relevant authorities. This process will be undertaken jointly with the relevant authorities and the site developers/promoters. A key element of this masterplanning process will be to establish in more detail the specific infrastructure that will be required to support the sites both individually and collectively. This will require further technical work to underpin the masterplan process. Further consultation with the key infrastructure providers will be necessary as the planning and design process progresses to determine in more detail the scope of works, the costs associated and the proportion that will be expected to be met by developers.

The East-West and North-South Sustainable Transport Corridors are a key element of the infrastructure required to integrate the Garden Town Communities with the built up area of Harlow and achieve the necessary level of modal shift in line with Garden Town principles. The Council has commissioned a Sustainable Transport Corridor Study for the Garden Town which will establish the design and scope of the corridors in more detail.

A number of delivery models for the Garden Communities and supporting infrastructure are being considered, and an appropriate tailored approach will be established for each. As set out in the section above, it will be necessary to ensure that appropriate measures are put in place to equalise and apportion the cost of shared infrastructure and associated land contributions.

8 Infrastructure Delivery Schedule

A Schedule of infrastructure has been produced to clearly show interventions required over the Plan period, to support growth across different spatial scales.

8.1 IDP as a Live Document

An Infrastructure Delivery Plan is by its very nature a ‘snapshot in time’, and as different infrastructure providers respond to their own unique challenges, the information that they provide will naturally date and alter over time, reflecting changing needs. It therefore needs to be recognised from the outset that the IDP should be viewed as a ‘live document’ with the information contained within the Schedule noted as indicative rather than prescriptive.

As such the requirements to support growth at the time of writing will naturally evolve throughout the Plan period. Given that the principle requirement of an IDP is to provide the local authority with the understanding of their infrastructure deficit in the context of Local Plan growth, where data from providers has not been available Arup has applied accepted industry standards to model the likely implications arising. It is considered that the application of these standards (as of 2017) fully meets the NPPF requirement that the Local Plan should be based on ‘adequate’ and ‘relevant’ evidence.

The modelled outputs are indicative and are provided in the absence of more up-to-date information being made available by the infrastructure providers. These outputs will therefore need to be reviewed in consultation with the respective providers throughout the plan period. Subsequent iterations of this document may therefore remove items where more detailed data becomes available. This may also reflect real-world changes such as actual housing delivery, migration rates and population growth, whereas the IDP is based on best estimates and best available forward projections.

8.2 IDP Next Steps

The IDP will need to be refreshed prior to the submission of the Local Plan and potentially prior to Examination, to capture the most up to date information.

There are a number of areas of work ongoing, which will further inform infrastructure requirements, and will need to be reflected in the Schedule. This includes ongoing transport modelling to identify in more detail the required mitigation to support growth. Further consultation with utilities providers will also be required as masterplanning work progresses, to fully understand infrastructure implications on a site-by-site basis.

Ongoing engagement with the West Essex CCG will also be necessary to determine specific projects to ensure additional GP capacity is delivered to support growth.

8.3 Infrastructure Delivery Schedule: District Wide

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
DW1	Utilities - Broadband	Ongoing broadband and communication upgrades, as required by technological change	Desirable	Providers	Providers	Unknown		Unknown						The IDP does not identify any specific requirements; however, upgrades may be required as new technologies are rolled out.	
DW2	Flood Protection	Shonks Mill flood storage area	Essential	Environment Agency	Environment Agency	Unknown		Unknown	2016-2021					The flood storage area will consist of an earth embankment constructed across the floodplain next to Shonks Mill Road. This will include a structure that controls the rate that water is allowed to pass downstream. It is planned to protect approximately 900 properties downstream in Redbridge. If the Environment Agency business case is approved, construction is expected to begin in 2019.	Environment Agency
DW3	Transport - Highways	Junction 7a; - widening of Gildea Way from the London Road roundabout to Marsh Lane to create a three lane road. - new road to the east to replace part of the existing road, to link the improved Gildea Way to the M11 via a new Sheering Road roundabout. - A new stretch of road from the roundabout northwards to reconnect to Sheering Road just south of Pincey Brook. - From the new Sheering Road roundabout, the link will continue in a north easterly direction to a second roundabout located south of Pincey Brook. - Two new roundabouts on either side of the M11 and connected by a new bridge over the M11. - slip roads on and off the M11 for both north-bound and south-bound traffic.	Essential	Highways England / ECC	Highways England - Road Investment Strategy 1	£50,000,000	£50,000,000 (Highways England - Road Investment Strategy 1)	£0	2016-2021					This transport intervention will improve access from eastern Harlow. The £50m cost of this infrastructure intervention includes Gildea Way. The project is scoped and fully costed, and a planning application has been approved.	Technical Note 3 Stort Crossing/ Northern Bypass Initial Testing (May 2016)

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
DW4	Transport - Highways	Improvements to Junction 7 on the M11	Essential	Highways England / ECC	Highways England - Road Investment Strategy 2	£29,000,000		£29,000,000	2025-2030					Project scoped and fully costed. If funding is not available from Road Investment Strategy 2 the cost will need to be borne by developers.	Memorandum of Understanding on Highways and Transportation Infrastructure for the West Essex/ East Hertfordshire Housing Market Area
DW5	Transport- Highways	A414 improvements - including improvements to the Four Wantz Roundabout (Ongar)	Essential	Highways England / ECC / Garden Town	LEP / ECC	£2,000,000	£2,000,000 (LEP / ECC)	£0	2016-2021					Project scoped and fully costed.	Consultation with Essex County Council
DW6	Transport- Highways	Improvements to Wake Arms Roundabout to relieve long queues, particularly along the B1393 Epping Road and A121 Woodriven Hill.	Essential	ECC	Developer Contributions (S278) / ECC / LEP LGF	£3,000,000		£3,000,000	2016-2021						Technical Note 4 - Forecast Modelling Results from 7x Development Scenario Tests (2014), Consultation with Essex County Council
DW7	Transport - Public Transport	Improved bus services between Epping and North Weald Bassett, including opportunity to convert the disused Epping – Ongar line into a bus rapid transport line to North Weald Bassett and future extension to Ongar, and potential Park and Ride at North Weald Bassett.	Essential	ECC / EFDC / Developers / TfL / Other Operators	Developer Contributions (S278 for physical infrastructure; S106) / TfL / Other Operators / ECC	Unknown		Unknown	2026-2031					Feasibility work required.	Essex County Council
DW8	Transport - Public Transport	Explore the potential and viability of new bus services and increased frequency of existing bus services to connect key settlements	Essential	ECC / Developers / TfL / Other Operators	Developer Contributions (S278 for physical infrastructure; S106) / TfL / Other Operators / ECC	Unknown		Unknown	2016-2031						Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
DW9	Transport - Public Transport	Installation of Real Time Travel Information at train stations and bus stops across the District	Desirable	ECC	Developer Contributions (S106) / ECC	£100,000 - £250,000		£100,000 - £250,000	Unknown	Unknown				Initial cost estimate provided by ECC - costs depend on number of interventions and may be refined accordingly.	Member Workshop discussion groups, consultation with Essex County Council
DW10	Transport - Public Transport	Additional rail capacity through longer carriages	Essential	Network Rail	Network Rail	Unknown		Unknown	Unknown	Unknown				This intervention will be supported by Crossrail, which will provide additional rail capacity	Consultation with Network Rail
DW11	Transport-Highways	A104 Epping New Road (Robin Hood) Roundabout	Desirable	ECC / Epping Forest Conservators / Developers	Developer Contributions (S278) / ECC / LEP LGF	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2025-30					Potential third party landtake required to deliver workable scheme. Consultation with Epping Forest Conservators is essential. There are significant challenges to delivery.	DRAFT Jacobs Technical Note TBC – Epping Forest VISSIM Forecasting (November 2017) - consultation with ECC
DW12	Transport-Highways	A121 Woodridden Hill/Woodgreen Road junction	Desirable	ECC	Developer Contributions (S278) / ECC / LEP LGF	£1,000,000		£1,000,000	2030-35					Target to deliver within highway boundary. Possible third party landtake.	DRAFT Jacobs Technical Note TBC – Epping Forest VISSIM Forecasting (November 2017) - consultation with ECC
DW13	Health	368 nursing care places	Desirable	ECC / NHS / Developers / Operators	ECC Capital Grant / ECC-NHS Pooled Revenue / Developer Contributions	To be confirmed following further more detailed work		To be confirmed following further more detailed work	2016-2033					Defined as independent units with some communal facilities and escalating levels of domestic and personal care.	Modelled demand (SHOP@ tool - endorsed by Department of Health though not specifically endorsed by ECC)
DW14	Health	166 nursing care places	Desirable	ECC / NHS / Developers / Operators	ECC Capital Grant / ECC-NHS Pooled Revenue / Developer Contributions	£6,041,346		£6,041,346	2016-2033					Defined as institutions which always include one qualified nurse or doctor, and can therefore cater for people with conditions that require nursing attention.	Modelled demand (SHOP@ tool - endorsed by Department of Health though not specifically endorsed by ECC)
DW15	Health	93 residential care places	Desirable	ECC / NHS / Developers / Operators	ECC Capital Grant / ECC-NHS Pooled	£3,384,609		£3,384,609	2016-2033					Defined as institutions with call-in routine and emergency medical support	Modelled demand (SHOP@ tool -

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
					Revenue / Developer Contributions									from other agencies (e.g. GPs or district nurses), as required.	endorsed by Department of Health though not specifically endorsed by ECC)
DW16	Open Space	Existing allotment sites to be upgraded to improve facilities and entrances	Desirable	EFDC	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown	Unknown				Upgrades could include better parking provision, improved water supply, and better site security. Priorities for improvement include: better signage on all sites in Buckhurst Hill, Lime Avenue in Chigwell, Moreton Road in Ongar, and all sites in Nazeing and Roydon; improved security fencing and access at Tylers Green in North Weald Bassett; and better, more welcoming access at all sites in Waltham Abbey.	Open Space Strategy
DW17	Open Space	Upgrades to play areas where required, including: interventions to make them more welcoming; upgrades to rubberised safety surfacing in provision for children and young people; and more exciting and stimulating play equipment.	Desirable	EFDC	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown	Unknown				Upgrades could involve informative signage and landscaping, including more tree planting to increase their attraction, enhance biodiversity, and provide shade.	Open Space Strategy
DW18	Open Space	Improving existing links through signage, physical upgrades etc. and extending the natural and semi-natural green space network	Desirable	EFDC	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown	Unknown				Upgrades could include: enhanced linkages to existing walking and cycling routes; improved waymarking, including of rights of way and footpaths; and the linking of different greenspaces to connect open space, link settlements, and provide improved wildlife habitats.	Open Space Strategy
DW19	Open Space	Improvement of existing amenity open spaces to provide wider functionality.	Desirable	EFDC	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown	Unknown				Improvements could take the form of additional seating, the provision of interpretive signage where there is local heritage and history or landscaping to promote biodiversity.	Consultation with Epping Forest District Council

8.4 Infrastructure Delivery Schedule: Strategic Sites (Combined)

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
SSC1	Transport - Public Transport	North-South, East-West sustainable transport corridors: - Extended busway service, with the potential to connect development to bus route 2, 3, 3A and 4 - New busway service - potential new bus route through the site from Rye Hill Road to London Road - New and improved walking and cycling facilities into the town centre As part of the scope of this project, there is the possibility of enhancing cycle connections to link Water Lane to the Pinnacles Estate through the site.	Essential	ECC / EFDC / Harlow Council / Garden Town	Developer Contributions (S278 for physical infrastructure; S106) / Central Government / Garden Town / LEP RGF	Unknown		Unknown	2016-2021					Multi-use corridors including bus routes, cycleways, footways and other green corridor functions. Further work has been commissioned through the Garden Town status, focusing on detailed appraisal of potential interventions and the identification of a package of interventions to be taken into the development of a Strategic Case for Investment and Implementation Strategy.	Consultation with Essex County Council
SSC2	Transport - Highways	New second Stort Crossing to the east of the existing crossing: Additional road crossing of the River Stort in Harlow, comprising a dual carriageway linking the A414 at Eastwick with a new 3-arm roundabout north of the River Stort, and a further single carriageway link to River Way towards the eastern end of A414 Edinburgh Way.	Essential	Highways England / Hertfordshire County Council / ECC / Garden Town	Highways England / Developer Contributions (S278) / ECC / HCC / HIF / LEP LGF / Garden Town	£50,000,000		£50,000,000	2027-2033					A northern bypass linking the A414 to the north of the River Stort to help ease congestion, and improve connectivity. Reduce traffic flows on the western section of Edinburgh Way in Harlow. Note, this intervention is outside the District but within the Garden Town. Further work required to determine an apportionment across the relevant local authorities and sites.	Technical Note 3 Stort Crossing/ Northern Bypass Initial Testing (May 2016)
SSC3	Transport- Highways	A414 improvements - including Edinburgh Way and East Road	Essential	Highways England / ECC / Garden Town	ECC / LEP LGF	£8,000,000	£8,000,000 (ECC / LEP LGF)	£0	2016-2021					Note, this intervention is outside the District but within the Garden Town.	Consultation with Essex County Council
SSC4	Transport- Highways	A414 improvements - including Howard Way and Harlow Retail Park	Essential	Highways England / ECC / Garden Town	Highways England / Developer Contributions (S278) / ECC / LEP LGF / Garden Town	£3,000,000-£4,000,000		£3,000,000 - £4,000,000	2027-2033					Project identified and scoped but not funded. Project related to Second Stort Crossing package of works (refer to SSC2). Note, this intervention is outside the District but	Consultation with Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2036	Notes	Baseline source
														within the Garden Town. Further work required to determine an apportionment across the relevant local authorities and sites.	
SSC5	Transport-Highways	Highways improvements to A1025 Third Avenue, First Avenue and Second Avenue.	Essential	ECC / Garden Town	Developer Contributions (S278) / ECC / LEP LGF / Garden Town	£5,000,000		£5,000,000	2020-2025					This intervention forms part of the wider sustainable transport corridors (refer to SSC1). Note, this intervention is outside the District but within the Garden Town. Further work required to determine an apportionment across the relevant local authorities and sites.	Jacobs Technical Note 3, consultation with Essex County Council
SSC6	Health	641 sqm additional GP floorspace across the Harlow strategic sites	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£1,765,033		£1,765,033	To be considered further by CCG	To be considered further by CCG				Provision through expansions and/or relocations of existing surgeries, and/or new facilities - to be further considered by the CCG. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG

8.5 Infrastructure Delivery Schedule: East of Harlow

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EHA1	Utilities	Likely upgrades to strategic wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded (local upgrades only)	Unknown		Unknown	Unknown	Unknown				Anticipated that Thames Water will meet the costs of strategic upgrades, but that any local upgrades would be borne by the developer(s).	Thames Water settlement assessment (2016)
EHA2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN /Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites. Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by site basis, in consultation with Cadent Gas.	Engagement with EFDC
EHA3	Flood Protection	Measures to ensure the protection of the functional flood plain and restriction of surface water run-off into Pincey Brook to no more than existing rates	Critical	Environment Agency / EFDC / ECC / Developers	Developer Funded	Unknown		Unknown	Unknown	Unknown				Flood protection should be considered as part of strategic masterplanning to ensure development is directed towards flood zone 1, and any necessary mitigation measures are incorporated into the design of the scheme. Further consultation will be required with the Environment Agency and EFDC Drainage Team.	Consultation with EFDC
EHA4	Transport - Public Transport	Explore opportunities to extend bus routes throughout the East Harlow development.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure; S106) / Grant Funding	£1,000,000		£1,000,000	2031-2033					Note: First Avenue is already a bus route; intervention relates to additional routes and/or increased frequency/capacity on existing routes required to serve development.	Consultation with ECC
EHA5	Transport - Public Transport	Explore opportunities to link strategic site into off-road cycle and walking network	Essential	ECC / Developers / Garden Town	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Garden Town / Grant Funding	Unknown		Unknown	2031-2033					Costs to be worked up and confirmed by ECC.	Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EHA6	Transport - Highways	Access improvements required at three junction locations, to improve access to Mayfield Farm, Sheering Road and the Nursery Site to the east of Gilden Way.	Essential	ECC / Developers / Garden Town	Developer Contributions (S278) / Garden Town / Grant Funding	£5,000,000-£10,000,000		£5,000,000-£10,000,000	2031-2033					A number of options are being explored, including the widening of B183 Gilden Way eastbound to two lanes, along with the replacement of the straight crossing on Gilden Way (W) arm of the junction at Loading Point 4 with a staggered pedestrian crossing Note, part of this intervention is outside the District but within the Garden Town. Further work required to determine an apportionment across the relevant local authorities and sites.	Jacobs Technical Note 5: East Harlow Corridor VISSIM Study (September 2016); Jacobs Technical Note 5: East Harlow Corridor VISSIM Study (September 2016); consultation with ECC
EHA7	Transport - Highways	Provision of a left turn slip road from M11 Junction 7a link road approach to the East Harlow northern access road (Loading Point 3)	Essential	ECC / Developers / Garden Town	Developer Contributions (S278) / Garden Town / Grant Funding	£1,000,000		£1,000,000	2031-2033						Jacobs Technical Note 5: East Harlow Corridor VISSIM Study (September 2016)
EHA8	Education	136 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£1,777,714		£1,777,714	2021-2031		64 places	72 places		Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only, on the EFDC portion of the site only. Costs depend on solution identified; costs shown based on new-build building. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
EHA9	Education [primary]	New (2.1ha site) primary school, including early years provision	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£4,600,000 (contribution)		£4,600,000	2021-2026					Cost shown is a pro-rata contribution estimated by ECC, and includes some early years provision (refer to EHA8). Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land)	Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														to be shared equitably and proportionally across relevant sites. Further work required to determine an apportionment across the relevant local authorities and sites. Note, this intervention will support wider growth including the Harlow portion of the East of Harlow site.	
EHA10	Education [secondary]	New (10ha site) secondary school	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE / Basic Needs Allowance / ECC	£5,800,000 (contribution)		£5,800,000	2026-2033					Cost shown is a pro-rata contribution estimated by ECC. Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites. Further work required to determine an apportionment across the relevant local authorities and sites. Note, this intervention will support wider growth including the Harlow portion of the East of Harlow site.	Consultation with ECC
EHA11	Health	Approx. 0.87 FTE Dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2021-2031		0.40 FTE Dentists	0.47 FTE Dentists		Newly arising need only, on the EFDC portion of the site only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EHA12	Open Space	Appropriate provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.40 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£367,130		£367,130	2021-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision. Indicative figures relate to the EFDC portion of the site only.	Modelled output, based on standards in Open Space Strategy
EHA13	Open Space	Appropriate provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.05 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£147,116		£147,116	2021-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision. Indicative figures relate to the EFDC portion of the site only.	Modelled output, based on standards in Open Space Strategy
EHA14	Open Space	Appropriate provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.44 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£101,972		£101,972	2021-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision. Indicative figures relate to the EFDC portion of the site only.	Modelled output, based on standards in Open Space Strategy
EHA15	Open Space	Appropriate provision of allotments in agreement with EFDC (likely to be around 0.35 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£7,997		£7,997	2021-2031					Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy. Indicative figures relate to the EFDC portion of the site only.	Modelled output, based on standards in Open Space Strategy
EHA16	Green Infrastructure	Compensatory Biodiversity Action Plan (BAP) habitat	Essential	Developer / EFDC / Natural England	Developer Funded	Unknown		Unknown	2021-2031					On-site compensatory habitat creation, in line with BAP priorities.	Consultation with EFDC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EHA17	Community Facilities	Approx. 250 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£435,089		£435,089	2021-2031		115 sqm	135 sqm		Modelled community facility space (combined library, youth services and community hall requirement), required to support the demand created from the strategic site. Site(s) not yet identified - to be identified as part of masterplanning. Newly arising need only, on the EFDC portion of the site only. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.7 Infrastructure Delivery Schedule: Latton Priory

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LPR1	Utilities	Likely upgrades to strategic wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded (local upgrades only)	Unknown		Unknown	Unknown	Unknown				Anticipated that Thames Water will meet the costs of strategic upgrades, but that any local upgrades would be borne by the developer(s).	Thames Water settlement assessment (2016)
LPR2	Transport - Highways	Improvements to both Southern Way and Second Avenue	Essential	ECC / Developers	Developer Contributions (S278) / Grant Funding	£12,000,000		£12,000,000	2016-2026					£2m for Second Way, additional £10m for Second Avenue	Developer Forum pro-forma response
LPR3	Transport - Highways	Minor upgrades to Junction 7 to provide access to Latton Priory and improvements to B1393	Essential	Highways England / ECC	Highways England - Road Investment Strategy 2	£5,000,000		£5,000,000	2016-2025					Project scoped and fully costed. If funding is not available from Road Investment Strategy 2 the cost will need to be borne by developers.	Memorandum of Understanding on Highways and Transportation Infrastructure for the West Essex/ East Hertfordshire Housing Market Area, consultation with ECC
LPR4	Education	192 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£2,509,714		£2,509,714	2021-2033		83 places	91 places	18 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
LPR5	Education [primary]	New (2.1ha site) primary school, including early years provision	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£5,800,000 (contribution)		£5,800,000	2021-2026					Cost shown is a pro-rata contribution provided by ECC, and includes some early years provision (refer to LPR4). Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including	Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														land) to be shared equitably and proportionally across relevant sites. Further work required to determine an apportionment across the relevant local authorities and sites.	
LPR6	Education [secondary]	New (10ha site) secondary school	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£25,000,000		£25,000,000	2021-2031					Cost provided by ECC. Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites. Further work required to determine an apportionment across the relevant local authorities and sites.	Consultation with ECC
LPR7	Health	Approx. 1.23 FTE Dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2021-2033		0.52 FTE Dentists	0.58 FTE Dentists	0.13 FTE Dentists	Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
LPR8	Open Space	Appropriate provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.97 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£516,605		£516,605	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LPR9	Open Space	Appropriate provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.48 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£207,363		£207,363	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
LPR10	Open Space	Appropriate provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.62 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£143,688		£143,688	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
LPR11	Open Space	Appropriate provision of allotments in agreement with EFDC (likely to be around 0.49 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£11,196		£11,196	2021-2033					Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy.	Modelled output, based on standards in Open Space Strategy
LPR12	Community Facilities	Approx. 350 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£614,037		£614,037	2021-2033		150 sqm	165 sqm	35 sqm	Modelled community facility space (combined library, youth services and community hall requirement), required to support the demand created from the strategic site. Site(s) not yet identified - to be identified as part of masterplanning. Newly arising need only. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.8 Infrastructure Delivery Schedule: Water Lane Area

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WLA1	Utilities	Likely upgrades to strategic wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded (local upgrades only)	Unknown		Unknown	Unknown	Unknown				Anticipated that Thames Water will meet the costs of strategic upgrades, but that any local upgrades would be borne by the developer(s).	Thames Water settlement assessment (2016)
WLA2	Utilities	33kV Overhead Head Lines may require diverting for masterplanning of the site.	Critical	UKPN / Developers	Providers / Developer Funded	Unknown		Unknown	2021-2033					These OHLs will require an easement along them, which may affect the masterplanning of the site. Potential to divert these to optimise the site.	UKPN network maps
WLA3	Transport - Public transport	Upgrades to bridleway to provide north/south combined footway and cycleway to connect to improve connectivity for the strategic site	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Grant Funding	Unknown		Unknown	2021-2026					Costs to be worked up and confirmed by ECC.	Consultation with ECC
WLA4	Transport - Highways	Enhancements to Water Lane/A1169 roundabout; A1025/Abercrombie Way signals; and, traffic calming along the A1169.	Essential	ECC / Developers	Developer Contributions (S278) / Grant Funding	£7,000,000-10,000,000		£7,000,000 - 10,000,000	2021-2026					Transport intervention identified to improve local access to site, however may provide other localised highways improvements.	Developer Forum pro-forma response
WLA5	Transport - Public transport	Possible extension of Route 1 bus service, or diversion of Route 87 bus service	Essential	ECC / Operators / Developers	Developer Contributions (S278 for physical infrastructure; S106) / Grant Funding	£1,000,000		£1,000,000	2021-2026					Transport intervention identified to improve local access to site, however may provide other localised highways improvements.	Developer Forum pro-forma response
WLA6	Transport - public transport	New busway service to support the Water Lane Area development, linking into the sustainable transport corridors, and providing bus, walking and cycle links to the Pinnacles and town centre.	Essential	ECC / Harlow Council / Garden Town / Developers	Developer Contributions (S278 for physical infrastructure; S106) / Garden Town / LEP RGF	£7,000,000-10,000,000		£7,000,000 - 10,000,000	2021-2026					This transport intervention will provided extended bus routes throughout the Water Lane Area development.	Consultation with ECC
WLA7	Education	378 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£4,941,000		£4,941,000	2021-2033		162 places	180 places	36 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land will also be required;	Modelled output; Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														overall costs (including land) to be shared equitably and proportionally across relevant sites.	
WLA8	Education [primary]	New (2.5ha site) primary school, including early years provision	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£11,600,000 (contribution)		£11,600,000	2021-2026					Cost shown is a pro-rata contribution estimated by ECC, and includes some early years provision (meeting a portion of the requirement outlined in WLA7). Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with ECC
WLA9	Health	Approx. 2.43 FTE Dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2021-2033		1.27 FTE Dentists	0.92 FTE Dentists	0.24 FTE Dentists	Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
WLA10	Open Space	Appropriate provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.88 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,017,476		£1,017,476	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WLA11	Open Space	Appropriate provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 2.91 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£407,720		£407,720	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
WLA12	Open Space	Appropriate provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.21 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£280,424		£280,424	2021-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
WLA13	Open Space	Appropriate provision of allotments in agreement with EFDC (likely to be around 0.97 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£22,164		£22,164	2021-2033					Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy.	Modelled output, based on standards in Open Space Strategy
WLA14	Community Facilities	Approx. 690 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,208,775		£1,208,775	2021-2033		295 sqm	325 sqm	70 sqm	Modelled community facility space (combined library, youth services and community hall requirement), required to support the demand created from the strategic site. Site(s) not yet identified - to be identified as part of masterplanning. Newly arising need only. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.9 Infrastructure Delivery Schedule: Buckhurst Hill

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
BUC1	Transport - Active Transport	Roding Valley Way Cycle route extension. Include providing cycling infrastructure from Buckhurst Hill Tube Station and improved connectivity to the Roding Valley Way Route at Cherry Tree Rise.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106)	£250,000		£250,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
BUC2	Transport - Active Transport	Possible option to improve north-south cycling connections, to link proposed development into interventions along Palmerstone Road, Roding Lane and Loughton Way	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106)	Unknown		Unknown	2016-2021					This option was identified to link residential allocations into transport improvements identified in the Cycling Action Plan (ECC), to improve access to key destinations. Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council
BUC3	Transport - Public Transport	'Park and ride' style shuttle services to service Underground stations	Desirable	ECC/ Developers	Operators / Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Grant Funding	£3,000,000-5,000,000		£3,000,000-5,000,000	Unknown	Unknown					Buckhurst Hill Parish Council Proforma response
BUC4	Education [early years]	28 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£366,000		£366,000	2016-2026	20 places	8 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
BUC5	Education [primary]	Expansion of one or more primary schools within Buckhurst Hill / Loughton Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£2,900,000		£2,900,000	2016-2021					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Buckhurst Hill or Loughton. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
BUC6	Health	83 sqm additional GP floorspace across the Buckhurst Hill & Chigwell Neighbourhood Area	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£230,368		£230,368	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Chigwell (refer to CHG11). Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG
BUC7	Health	Approx. 0.23 FTE Dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.23 FTE				Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
BUC8	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 4.03 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,056,811		£1,056,811	2016-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
BUC9	Open Space	Additional provision of amenity greenspace (potentially to south of Buckhurst Hill) in line with Fields in Trust Standards and agreement with EFDC (likely to be around 6.97 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£976,567		£976,567	2016-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
BUC10	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 2.95 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£683,677		£683,677	2016-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Nationally adopted standards will be used as a starting point for provision.	
BUC11	Open Space	Consider rationalisation and release of surplus allotments	Desirable	EFDC	Grant Funding	Unknown		Unknown	Unknown	Unknown					Open Space Strategy
BUC12	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined. Per dwelling contribution still to be determined.	Consultation with EFDC
BUC13	Community Facilities	Approx. 65 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£115,790		£115,790	2016-2031	40 sqm	15 sqm	10 sqm		Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output
BUC14	Sports and Leisure [outdoor]	New non-turf pitch at Buckhurst Hill Cricket and Lacrosse Club	Desirable	EFDC / Developers / Buckhurst Hill CC / ECB / Essex CCB	Developer Contributions (S106) / Grant Funding / ECB Capital Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
BUC15	Sports and Leisure [outdoor]	Four additional pitches at Buckhurst Hill Football Club	Desirable	EFDC / Developers / Buckhurst Hill FC / Football Foundation / Essex County FA	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2016-2021						Draft Playing Pitch Strategy

8.10 Infrastructure Delivery Schedule: Chigwell

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
CHG1	Utilities	Local upgrades to wastewater network infrastructure and potential upgrades to water network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
CHG2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN / Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites (CHIG.R1, CHIG.R5, CHIG.R7). Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by site basis, in consultation with Cadent Gas.	Engagement with EFDC
CHG3	Transport - Highway	Traffic management schemes including rephasing of the traffic lights at Rolls Park (Buckhurst Hill), Roding Lane (Buckhurst Hill), Limes Avenue/Fencepeice Road/ Hainault Road junction and Manor Road/Chigwell Road junction.	Desirable	ECC / Developers	Developer Contributions (S278)	£1,000,000		£1,000,000	2020-25						Chigwell Parish Council Proforma response.
CHG4	Transport - Highway	Assessment of the viability of providing 'park and ride' style services to Chigwell and Grange Hill Underground stations.	Desirable	ECC / Developers	Developer Contributions (S278)	£3,000,000-£5,000,000		£3,000,000-£5,000,000	2026-2031						Chigwell Parish Council Proforma response.
CHG5	Transport - Active Transport	Roding Valley Tube Station to LB Redbridge border at Monkams Lane and Chigwell Road: - Partly 3m wide unlit off-road and part on-road approx. 1.3 mile long cycle route along existing bridleway, from Hornbeam Road under the Central Line and over the River Roding and M11, along Luxborough Lane to West Hatch School.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Grant Funding	£400,000		£400,000	2021-2026					Identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
CHG6	Transport - Active Transport	Chigwell Rise cycle route and access to Chigwell Parade and tube station: - Off-road segregated footway / cycleway alongside the eastbound carriageway of the B170 - Possible continuation to housing at Chester Road, with an on-road cycle lane route along the eastbound carriageway to Lee Grove. - Possible link with Chigwell Rise at the Spanbrook crossing point, to comprise an on-road cycle route along Brook Way and Brook Mews.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Grant Funding	£600,000		£600,000	2026-2031					Identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
CHG7	Transport - Active Transport	Roding Cycle Hub Route – Loughton and Chigwell Greenway and TfL style quietway: - 1 mile length part on-road (via provision of signage and road markings) and part off-road scheme (a new unlit 3m wide shared cycle route facility) from London Square (Chigwell) via Grange Farm Lane, crossing the River Roding via an existing bridge and on to Highwood Lane. - Provision of an on-road cycling route in both directions along Oakwood Hill, made possible through parking restrictions and removal of the central hatching/wide centrelines.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / Grant Funding	£500,000		£500,000	2021-2026					Identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
CHG8	Education [early years]	102 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£1,333,286		£1,333,286	2016-2033	44 places	30 places	16 places	12 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
CHG9	Education [primary]	Expansion of one primary school within Chigwell / Lambourne Forecast Planning Group, and upgrading of temporary accommodation of up to four schools	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£3,100,000		£3,100,000	2016-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Chigwell, Stapleford Abbots or Lambourne. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
CHG10	Education [secondary]	Expansion of secondary schools within Loughton Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£8,900,000		£8,900,000	2021-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Loughton and/or Chigwell. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
CHG11	Health	83 sqm additional GP floorspace across the Buckhurst Hill & Chigwell Neighbourhood Area	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£230,368		£230,368	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Buckhurst Hill (refer to BUC6). Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG
CHG12	Health	Approx. 0.78 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2031	0.37 FTE Dentists	0.21 FTE Dentists	0.20 FTE Dentists		Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
CHG13	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 4.31 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£603,874		£603,874	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														will be used as a starting point for provision.	
CHG14	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 12.20 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£3,199,279		£3,199,279	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
CHG15	Open Space	Enhanced maintenance, access and signage at High Meadow in Chigwell	Desirable	EFDC	Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown					Open Space Strategy
CHG16	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.63 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£841,271		£841,271	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
CHG17	Open Space	Additional provision of allotments in agreement with EFDC (likely to be around 2.30 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£52,553		£52,553	2016-2033					Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy.	Open Space Strategy
CHG18	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
CHG19	Community Facilities	Approx. 220 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£385,966		£385,966	2016-2026	75 sqm	85 sqm	60 sqm		Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared	Modelled output

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														equitably and proportionally across relevant sites.	
CHG20	Community Facilities	New Community Hub at Hainault Road (Chigwell Village).	Desirable	EFDC / Community Trust / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown		Unknown			This could be one approach to meet the newly arising demand for community floorspace (see CHG19).	Chigwell Parish Council Proforma response.
CHG21	Community Facilities	New Community Hall at Chigwell Row.	Desirable	EFDC / Community Trust / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	Unknown		Unknown			This could be one approach to meet the newly arising demand for community floorspace (see CHG19).	Chigwell Parish Council Proforma response.
CHG22	Sports and Leisure [outdoor]	New 3G artificial grass pitch at Chigwell School	Desirable	EFDC / Developers / Essex County FA / Football Foundation / Chigwell School	Developer Contributions (S106) / Grant Funding / Club Funding / Chigwell School	£955,000		£955,000	2021-2026					Pitch to be developed in line with the FA Pitch Register requirements. If a development of this type is not possible at the school, the possibility of a full size 3G artificial grass pitch at Grange Farm should be explored.	Draft Playing Pitch Strategy
CHG23	Sports and Leisure [outdoor]	New non-turf cricket pitch at Fives and Heronians Cricket Club	Desirable	EFDC / Developers / Fives and Heronians CC / ECB / Essex CCB	Developer Contributions (S106) / Grant Funding / ECB Capital Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
CHG24	Sports and Leisure [outdoor]	Expand the existing artificial grass pitch at Metropolitan Police (Chigwell Sports Club) site, and develop a full sized 3G artificial grass pitch	Desirable	EFDC / Developers / London Mayor's Office / Essex County FA / Football Foundation / Barkingside Youth FC	Developer Contributions (S106) / Grant Funding / Club Funding	£955,000 (new pitch element only)		£955,000 (new pitch element only)	2026-2031					Intervention dependent on working with the London Mayor's Office to confirm a long-term community use agreement that will provide clubs with security of tenure.	Draft Playing Pitch Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
CHG25	Sports and Leisure [outdoor]	Potential refurbishment of existing ancillary facility at Abridge Village Hall	Desirable	EFDC / Developers / Abridge Parish Council / Football Foundation / Essex County FA	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2016-2021						Draft Playing Pitch Strategy

8.11 Infrastructure Delivery Schedule: Epping

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP1	Utilities	Upgrade to Lindsey Street sub-station	Critical	National Grid / UKPN	UKPN / Developer Agreement	Unknown		Unknown	Unknown	Unknown				Upgrade required to serve growth in Epping and North Weald Bassett.	National Grid consultation
EPP2	Utilities	Local upgrades to wastewater network infrastructure and potential minor upgrades to water treatment infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
EPP3	Transport - Active Transport	Hemnall Street Quietway; signage and road markings along 0.7 mile on-road quietway.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£1,000,000-£2,000,000		£1,000,000-£2,000,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council
EPP4	Transport - Active Transport	Improve cycling connections to the south of the settlement, including improving southern links to Hemall Street quietway, and extending Broad Oaks and Centre Drive connections to the station to serve proposed residential development in the south of Epping.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	2026-2031					This option was identified to link residential allocations into transport improvements identified in the Cycling Action Plan (ECC), to improve access to key destinations. Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council
EPP5	Transport - Active Transport	Signage and road markings along on-road quietway from Lindsey Street, via Shaftesbury Road, Coronation Hill, providing a route to and from the town centre and schools	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£15,000		£15,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council
EPP6	Transport - Active Transport	Signage and road markings along on-road quietways, connecting Cottis Lane with Coronation Hill, providing a route to and from the town centre and schools.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£15,000		£15,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP7	Transport - Active Transport	Kendal Avenue Signage; Create a signed on-road TfL-style quietway route to Epping Tube Station from the Hemnall Street quietway.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£15,000		£15,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council
EPP8	Transport - Active Transport	Segregated footway/cycleway alongside the westbound B1393 between Tower Road and Half Moon Lane, including: - On-road route (via signage and road markings) down Half Moon Lane, along Hemnall Street to Theydon Place and Madells. - Off-road section of cycle route linking Madells and Broadoaks. - On-road route around Broadoaks to Centre Drive. - TfL-style on-road quietway route (via signage and road-markings) along both sides of Centre Drive to Addison Court. - Provide cyclist-only access to London Underground Car Park from Addison Court turning head.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£300,000		£300,000	2021-2026					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council
EPP9	Transport - Active Transport	Southern extension to the quietway from Addison Court to Centre Drive to connect to proposed residential development in the south of the settlement, to improve access to the station	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	2026-2031					This option was identified to link residential allocations into transport improvements is set out in the Cycling Action Plan (ECC), to improve access to key destinations. Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council
EPP10	Transport - Active Transport	Cycling link from Epping tube station along the presently disused Epping-Ongar track: - On-road TfL-style quietway route from Epping Station to Kendal Avenue - Provision of an approx. 250m off-road route from Kendal Avenue, heading down the railway embankment to track level and running alongside the presently disused track	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£250,000		£250,000	2031-2033					Possible transport intervention identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP11	Transport - Active Transport	Extension of Kendal Avenue to link with proposed residential development north of Epping Station. Possible option of connecting proposed development in the north-east of the settlement to Lindsey Street improvements, and Hemnall Street Quietway. Improve eastern cycle links from Epping Station to connect to proposed development in the east of the settlement.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	2026-2031					This option was identified as a possible extension to schemes in the Cycling Action Plan (ECC), to improve access to key destinations. Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council
EPP12	Transport - Highways	Upgrade to the B1393 High Street/ Station Road Roundabout	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2026-2031					Costing dependent on scheme specifics. This option identified by Essex County Council/ Jacobs as part of the transport modelling process.	Consultation with Essex County Council and Jacobs
EPP13	Transport - Highways	Upgrade to the B1393 High Street/ St John's Road Roundabout	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2026-2031					Junction improvements to relieve congestion and queues at am and pm peak periods. Costing dependent on scheme specifics.	Consultation with Essex County Council and Jacobs
EPP14	Transport - Highways	Improvements to the B1393 Epping Road/ Theydon Road Signalised Junction.	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2026-2031					This transport intervention could include a method of signalling known as Microprocessor Optimised Vehicle Actuation (MOVA), however the benefits may be limited due to residential constraints. A mitigation option has been tested and is relatively deliverable to increase the number of lanes. Costs dependent on scheme specifics.	Technical Note 4 - Forecast Modelling Results from 7x Development Scenario Tests (2014), Consultation with Essex County Council/ Jacobs
EPP15	Transport - Highways	Improvements to the B1393 High Road/ Bury Lane Roundabout (Bells Common)	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2026-2031					Costing dependent on scheme specifics	Technical Note 4 - Forecast Modelling Results from 7x Development Scenario Tests (2014), Consultation with Essex County Council
EPP16	Transport - Highways	Thornwood Road Signals, Epping - Basic Scheme	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2020-2025					Target to deliver in highway boundary	Consultation with Essex County Council and Jacobs

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP17	Transport - Highways	Thornwood Road Signals, Epping - Full Scheme	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2025-2030					Third party landtake potentially required to deliver workable scheme. Consultation with Epping Forest Conservators essential. Significant challenges to delivery.	Consultation with Essex County Council and Jacobs
EPP18	Transport - Highways	A new access road behind Ivy Chimneys Road, Bridge Hill and Brook Road	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£3,000,000-£10,000,000		£3,000,000-£10,000,000	Unknown	Unknown					Epping Town Council Proforma response
EPP19	Transport - Highways	New vehicular, pedestrian and cycling bridge over the railway line south of Epping	Essential	ECC / EFDC / Developers	Developer Contributions (S278) / ECC	£10,000,000		£10,000,000	Unknown	Unknown				Linkage required to connect development to the south of Epping and provide enhanced accessibility.	Emerging Epping Neighbourhood Plan. Consultation with ECC
EPP20	Transport - Highways	Junction intervention (either traffic lights or a roundabout) at the Merry Fiddlers junction at Fiddlers Hamlet	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	Unknown	Unknown					Epping Town Council Proforma response
EPP21	Transport - Highways	Improved traffic management on B181, to exclude traffic through Epping Green village and use alternative routes	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	Unknown	Unknown				Traffic management schemes to alleviate pressure on the roads surrounding Epping Upland Parish, where there is limited options for widening or increasing the carriageway.	Epping Upland Parish Council Proforma response
EPP22	Transport - Highways	Improved traffic management or provision of an alternative route away from Rye Hill Road.	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	Unknown	Unknown				Improved traffic management or provision of an alternative route away from Rye Hill Road which is narrow and compounded by vehicle numbers.	Epping Upland Parish Council Proforma response
EPP23	Transport - Highways	An additional lane at Bell Common traffic lights	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	Unknown	Unknown					Epping Town Council
EPP24	Transport - Highways	Installation of real-time road signage at suitable locations, and improve directional signage elsewhere	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£500,000		£500,000	Unknown	Unknown					Epping Town Council
EPP25	Transport - Highways	Explore pedestrian priority areas in the side roads connecting High Road and Hemnall Street, and traffic calming measures in Kendall Avenue	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	Unknown	Unknown					Epping Town Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP26	Transport - Highways	Measures to ease traffic flows on Brook Road/ Bridge Hill	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	Unknown	Unknown					Epping Town Council
EPP27	Transport - Highways	Junction improvements to enable South Epping development – at Bower Hill/ Brook Road and improved pedestrian routes along Centre Drive/ Bride Hill into the town centre	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	Unknown	Unknown					Epping Town Council
EPP28	Transport - Highways	Junction improvements to enable South Epping development – at Ivy Chimneys Road/ Theydon Road including enhanced resident parking serving Ivy Chimneys Road	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	Unknown	Unknown					Epping Town Council
EPP29	Transport - Public Transport	Greenway footpath connections from Epping town centre – north across Epping Plain into the Lower Forest, and south connecting Hemnall Street and Bell Common	Desirable	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	Unknown	Unknown					Epping Town Council
EPP30	Transport - Public Transport	Greenway connections plus improved footpaths and cycleways connecting the developments at St Margarets and South Epping with the town cent	Desirable	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	Unknown	Unknown					Epping Town Council
EPP31	Transport - Public Transport	Improved bus facilities at Epping Station	Desirable	ECC / Developers / TfL	Developer Contributions (S278 for physical infrastructure ; S106) / TfL / ECC	£1,000,000		£1,000,000	Unknown	Unknown					Epping Town Council
EPP32	Transport - Highways	New signage and directions towards the M25/ M11 to help ease traffic flows	Desirable	ECC / Developers / Highways England	Highways England / Developer Contributions (S278) / ECC	£500,000		£500,000	Unknown	Unknown					Epping Town Council
EPP33	Education [early years]	236 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£3,084,857		£3,084,857	2016-2033	34 places	98 places	86 places	18 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build	Modelled output; Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source	
														building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.		
EPP34	Education [early years]	Children's Day nurseries for under five year olds as part of the South Epping and St John's development	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	Unknown		Unknown	Unknown					Unknown	This could be one approach to meet the newly arising demand for early years provision (see EPP33).	Epping Town Council
EPP35	Education [primary]	New (2.1ha site) primary school, including early years provision (which could be accommodated through the relocation of Ivy Chimneys Primary School)	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£7,300,000		£7,300,000	2021-2026						Costs provided by ECC and include some early years provision (refer to EPP33). Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with ECC
EPP36	Education [primary]	Upgrading of temporary accommodation at Epping Upland CE Primary School	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£400,000		£400,000	2016-2021						Costs provided by ECC. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
EPP37	Education [secondary]	Expansion of St John's School	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£5,800,000		£5,800,000	2021-2026						Costs provided by ECC. Phasing estimated based on expected delivery of housing and may be further refined. Subject to discussion with the school; no decisions have taken place.	Consultation with ECC
EPP38	Health	716 sqm additional GP floorspace across the Epping, Ongar & Abridge Neighbourhood Area - including appropriate provision within Epping and exploring the potential for a new health hub as part of South Epping Masterplan Area to include an integrated GP surgery, pharmacy and any other necessary health services	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£1,970,073		£1,970,073	To be considered further by CCG					To be considered further by CCG	Floorspace required over entire Neighbourhood Area; may also be delivered in Ongar (refer to ONG9), North Weald Bassett (refer to NWB10) or Abridge. Land may also be required; overall costs (including	Consultation with CCG

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														land) to be shared equitably and proportionally across relevant sites.	
EPP39	Health	Approx. 1.75 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2033	0.29 FTE Dentists	0.73 FTE Dentists	0.61 FTE Dentists	0.12 FTE Dentists	Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
EPP40	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 2.87 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£402,116		£402,116	2021-2033					Epping currently has sufficient amenity greenspace but will require additional greenspace later in the plan period. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
EPP41	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 13.12 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£3,440,536		£3,440,536	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP42	Open Space	Enhanced signage, access and seating at Lower Swaines in Epping	Desirable	EFDC	Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown					Open Space Strategy
EPP43	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.78 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£876,034		£876,034	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
EPP44	Open Space	Re-provision of LEAP at Lower Swaines in Epping	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£29,400		£29,400	2016-2033						Open Space Strategy; Epping Town Council
EPP45	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
EPP46	Open Space	Recreation for young teenagers, improvement and expansion to the skateboard area and pavilion at Stonards Hill	Desirable	ECC / Developers	Developer Contributions (S106) / Grant Funding	Unknown		Unknown	Unknown	Unknown					Epping Town Council
EPP47	Community Facilities	Approx. 490 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£859,651		£859,651	2016-2033	80 sqm	210 sqm	170 sqm	30 sqm	Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
EPP48	Community Facilities	Provision of multipurpose venues for community groups / arts performances / sports classes to replace Epping Hall	Desirable	ECC / Developers	Developer Contributions (S106) / Grant Funding	Unknown		Unknown	Unknown	Unknown				This could be one approach to meet the newly arising demand for community floorspace (see EPP47).	Epping Town Council
EPP49	Sports and Leisure [outdoor]	New non-turf cricket pitch at Epping Foresters Cricket Club	Desirable	EFDC / Developers / Epping Foresters CC / ECB / Essex CCB / Corporation of London	Developer Contributions (S106) / Grant Funding / ECB Capital Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
EPP50	Sports and Leisure [outdoor]	Increase access to a WR22 3G artificial grass pitch, either on the existing site of Epping Upper Clapton RFC or within an appropriate travel time	Desirable	EFDC / Developers / Epping Upper Clapton RFC / RFU	Developer Contributions (S106) / Grant Funding / RFU / Club Funding	£955,000		£955,000	2021-2026						Draft Playing Pitch Strategy

8.12 Infrastructure Delivery Schedule: Fyfield

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
FYF1	Utilities	Potential minor upgrades to wastewater treatment infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
FYF2	Education [early years]	6 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£78,429		£78,429	2016-2026	4 places	2 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
FYF3	Education [primary]	Expansion of one or more primary school within Ongar Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£2,200,000 (includes costs associated with upgrading of temporary accommodation at High Ongar Primary School)		£2,200,000	2021-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Ongar, High Ongar, Fyfield, Matching Green or Moreton. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
FYF4	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.05 ha).	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£7,006		£7,006	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
FYF5	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.07 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£18,357		£18,357	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
FYF6	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.02 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£4,635		£4,635	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

8.13 Infrastructure Delivery Schedule: High Ongar

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
HON1	Utilities	Potential minor upgrades to wastewater treatment infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
HON2	Education [early years]	12 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£156,857		£156,857	2016-2026	6 places	6 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
HON3	Education [primary]	Expansion of one or more primary school within Ongar Forecast Planning Group and upgrading of temporary accommodation at High Ongar Primary School	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£2,200,000		£2,200,000	2016-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Ongar, High Ongar, Fyfield, Matching Green or Moreton. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
HON4	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.10 ha).	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£14,011		£14,011	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
HON5	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.14 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£36,713		£36,713	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														standards will be used as a starting point for provision.	
HON6	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.04 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£9,270		£9,270	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

8.14 Infrastructure Delivery Schedule: Loughton

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LOU1	Utilities	Likely upgrades to water network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
LOU2	Flood Protection	Surface water drainage measures	Critical	Developer	Developer Funded	Unknown		Unknown	2016-2021					A site (LOU.R13) within this settlement has been identified as being at risk of surface water flooding. The design and layout of any development proposals should reduce the vulnerability and consequences of surface water flooding to the site and its surroundings, and development proposals should incorporate appropriate surface water drainage measures in order to achieve this.	Consultation with EFDC
LOU3	Transport - Highways	Upgrade of A121 Church Hill - A1168 Rectory Lane junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process. Scheme to include local widening and PUFFIN crossings to increase approach lane and circulatory capacity.	Consultation with Jacobs, Technical Note 5
LOU4	Transport - Highways	Upgrade of Millsmead Way - A121 Goldings Hill junction	Essential	ECC / Developers	ECC/ Developer Contributions (S278)	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Jacobs, Technical Note 5
LOU5	Transport - Highways	Upgrade of A1168 Chigwell Lane - Langston Road - Oakwood Hill junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process. Scheme to include introduction of MOVA and local lane widening.	Consultation with Jacobs, Technical Note 5
LOU6	Transport - Highways	Upgrade of A1168 Chigwell Lane - Borders Lane junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Jacobs, Technical Note 5
LOU7	Transport - Highways	Upgrade of A1168 Rectory Lane - Westall Road Rectory Lane junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/	Consultation with Jacobs,

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Jacobs as part of the transport modelling process	Technical Note 5
LOU8	Transport - Highways	Upgrade of A1168 Rectory Lane - Pyrles Lane junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Jacobs, Technical Note 5
LOU9	Transport - Highways	Upgrade of A1168 Rectory Lane - Hillyfields Priority junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Jacobs, Technical Note 5
LOU10	Transport - Highways	Upgrade of A121 High Road - Traps Hill junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2021-2026					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Jacobs, Technical Note 5
LOU11	Transport - Active Transport	Chigwell Lane /Rectory Lane Cycling Infrastructure improvements: Provision an off-road shared use footway/cycleway along the path being upgraded in Winter 2016/17 from Oakwood Hill towards Debden Tube Station. - Connect to an on-road section along Chigwell Lane comprising signage and road markings up to the turning head. - Improve the existing off-road path to permit cycling to and from the upgraded pedestrian crossing and signalised junction at Borders Lane. - Consider upgrading the crossing to a Toucan facility.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£500,000		£500,000	2021-2026					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
LOU12	Transport - Active Transport	Improve cycling connections in the north-east of Loughton, to connect proposed residential development into improvements along Rectory Lane, and improve connections to Debden Station.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	2021-2026					This option was identified to link residential allocations into transport improvements set out in the Cycling Action Plan (ECC), to improve access to key destinations. Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LOU13	Transport - Active Transport	Loughton Tube station to Nursery Road and Epping Forest: - Provision of an on-road TfL-style quietway heading from Loughton Tube Station via Algiers Road, along Lower Park Road, a new crossing of the A121 Loughton High Road and continuing on-road on Upper Park to the existing Nursery Road cycle route.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£100,000		£100,000	2021-2026					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity. Costs to be worked up and confirmed by ECC.	Cycling Action Plan, Essex County Council
LOU14	Transport - Active Transport	Loughton – Nursery Road – Epping New Road Quietways; - Sign off-road routes Nursery Road from Loughton (Upper Park and Warren Hill) through The Warren and The Stubbles, along existing City of London/Epping Forest paths.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£10,000		£10,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
LOU15	Transport - Active Transport	Forest track route from Nursery Road/ Warren Hill to Manor Road and Roebuck Green - Improve route navigation / legibility by improving signage and surfacing along this existing path route through Epping Forest	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£30,000		£30,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LOU16	Transport - Active Transport	Pyrles Lane, Lawton Road and Rectory Lane southbound Cycling Infrastructure;- Signage and road markings along the existing Rectory Lane side road for 0.2 miles until the start of the existing off-road unsegregated shared-use footway/cycleway route.- Provision of an uncontrolled crossing point across Rectory Lane to link together the existing shared-use footway/cycleway alongside the northbound carriageway and Lawton Road.- Consider a part on-road, part off-road scheme here heading south for cyclists heading towards Debden.- North of Conyers Way the scheme could then comprise signage and road markings along Lawton Road for approx. 160 metres to the start of the existing segregated footway/cycleway to Hillyfields.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£100,000		£100,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
LOU17	Transport - Active Transport	Roding Cycle Hub Route – Loughton Way, Valley Hill and Oakwood Hill; Provide on-road cycling route in both directions and consider formalising parking restrictions / TRO to enable car parking on the footway, and remove central hatching/wide centrelines along Loughton Way, Valley Hill and northwards to Oakwood Hill, to enable road space to be better utilised and allow cycle lanes to be created from north of Hurst Road.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£500,000		£500,000	2021-2026					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and improved connections between Loughton and Buckhurst Hill.	Cycling Action Plan, Essex County Council
LOU18	Transport - Active Transport	Loughton Tube station to Loughton High Road Parade and Traps Hill. This includes an opportunity to create a TfL-style quietway between Loughton Tube Station, shops and services and the existing cycle route to the north, and a connection with schemes linking Debden and Chigwell.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£20,000		£20,000	2016-2021					This option was identified by Essex County Council through the Cycling Action Plan to improve sustainable transport mode share and connectivity.	Cycling Action Plan, Essex County Council
LOU19	Transport - Highways	Junction 14 upgrade: A113 Ongar Road - B172 Abridge Road	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£500,000		£500,000	2020-2025					This option was identified by Essex County Council/	Consultation with Jacobs,

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Jacobs as part of the transport modelling process.	Technical Note 5
LOU20	Education [early years]	196 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£2,562,000		£2,562,000	2016-2031	95 places	85 places	16 places		Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
LOU21	Education [primary]	Expansion of one or more primary schools within Buckhurst Hill / Loughton Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£2,900,000		£2,900,000	2016-2021					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Buckhurst Hill or Loughton. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
LOU22	Education [secondary]	Expansion of secondary schools within Loughton Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£8,900,000		£8,900,000	2021-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Loughton and/or Chigwell. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
LOU23	Health	196 sqm additional GP floorspace across the Loughton Neighbourhood Area - including appropriate provision within Loughton	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£539,468		£539,468	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG
LOU24	Health	Approx. 1.56 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2031	0.80 FTE Dentists	0.65 FTE Dentists	0.11 FTE Dentists		Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or	Modelled output.

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	
LOU25	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 28.80 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£7,552,397		£7,552,397	2016-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
LOU26	Open Space	Upgrading of Roding Valley Recreation Ground	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2031					Upgrades required to fulfil Ground's role as a public park for Buckhurst Hill and to meet future demand arising from Loughton.	Open Space Strategy
LOU27	Open Space	Enhanced signage at the seven natural and semi-natural greenspace sites in Loughton (Roding Valley Meadows; Home Mead; Willingale Road Nature Area; Borders Lane, Loughton; Debden Road; Area adjacent Roding Valley Meadows; Woodland, Theydon Bois)	Desirable	EFDC	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown					Open Space Strategy
LOU28	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 8.66 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£2,006,998		£2,006,998	2016-2031					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
LOU29	Open Space	Improved play areas at Roding Valley Recreation Ground (in line with creating multifunctional parks and garden provision)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2031						Open Space Strategy
LOU30	Open Space	Potential upgrading of Westall Road and Rectory Road children's play facilities	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2031						Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LOU31	Open Space	New cemetery	Desirable	EFDC / ECC / Developers / Religious bodies	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2031						Open Space Strategy
LOU32	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
LOU33	Community Facilities	Approx. 470 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£822,809		£822,809	2016-2031	230 sqm	210 sqm	30 sqm		Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with ECC
LOU34	Sports and Leisure [outdoor]	Refurbish existing ancillary facility at Debden Sports Club to improve the overall quality of provision	Desirable	EFDC / Developers / Essex County FA / Football Foundation	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2016-2021					Pitch to be developed in line with the FA Pitch Register requirements.	Draft Playing Pitch Strategy
LOU35	Sports and Leisure [outdoor]	Refurbish existing ancillary facility at Loughton Football Club	Desirable	EFDC / Developers / Loughton Town Council / Loughton Football Club / Essex County FA / Football Foundation	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2021-2026					Pitch to be developed in line with the FA Pitch Register requirements.	Draft Playing Pitch Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LOU36	Sports and Leisure [outdoor]	New non-turf cricket pitch at Loughton Cricket Club	Desirable	EFDC / Developers / Loughton CC / Loughton Town Council / ECB / Essex CCB	Developer Contributions (S106) / Grant Funding / ECB Capital Grant Funding / Club Funding	Unknown		Unknown	2016-2021						Draft Playing Pitch Strategy
LOU37	Sports and Leisure [outdoor]	Refurbish existing ancillary facility at Roding Playing Fields North, to allow for continued affiliated football use	Desirable	EFDC / Developers / South Loughton CC / Loughton Town Council / Football Foundation	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
LOU38	Sports and Leisure [outdoor]	Explore options for relocation of South Loughton Cricket Club	Desirable	EFDC / Developers / South Loughton CC / Loughton Town Council / ECB / Essex CCB	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2026-2031						Draft Playing Pitch Strategy

8.15 Infrastructure Delivery Schedule: Lower Nazeing

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LNA1	Utilities	Local upgrades to wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown			Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
LNA2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN /Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites (NAZE.E2). Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by-site basis, in consultation with Cadent Gas.	Engagement with EFDC
LNA3	Education [early years]	52 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£679,714		£679,714	2016-2026		36 places	16 places		Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
LNA4	Education [primary]	Expansion of Nazeing Primary School	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£1,500,000		£1,500,000	2016-2021					Costs provided by ECC. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
LNA5	Health	173 sqm additional GP floorspace across the Waltham Abbey Neighbourhood Area	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£476,575		£476,575	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Waltham Abbey (refer to WAB20). Land may also be required; overall costs (including land) to be shared equitably	Consultation with CCG

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														and proportionally across relevant sites.	
LNA6	Health	Approx. 0.40 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.29 FTE Dentists	0.11 FTE Dentists			Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
LNA7	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.73 ha, assuming equal share between Roydon and Nazeing)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£978,140		£978,140	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
LNA8	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 2.24 ha, assuming equal share between Roydon and Nazeing), in the centre of Nazeing	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£313,846		£313,846	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
LNA9	Open Space	Additional provision for children and young people	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LNA10	Open Space	Potential upgrading of Pound Close, Nazeing Common and Elizabeth Close children's play facilities	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2026						Open Space Strategy
LNA11	Community Facilities	Approx. 110 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£196,492		£196,492	2016-2026	80 sqm	30 sqm			Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output
LNA12	Sports and Leisure [outdoor]	Replacement changing pavilion at Bumbles Green Leisure Centre	Desirable	EFDC / Developers / Nazeing Parish Council / Football Foundation	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
LNA13	Sports and Leisure [outdoor]	Replacement of existing ancillary facility at Nazeing Common with a fit for purpose pavilion	Desirable	EFDC / Developers / Nazeing Common CC / ECB / Essex CCB	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy

8.16 Infrastructure Delivery Schedule: Lower Sheering

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
LSH1	Flood Protection	Surface water drainage measures	Critical	Developer	Developer Funded	Unknown		Unknown	2016-2021					A site (LSHR.R1) within this settlement has been identified as being at risk of surface water flooding. The design and layout of any development proposals should reduce the vulnerability and consequences of surface water flooding to the site and its surroundings, and development proposals should incorporate appropriate surface water drainage measures in order to achieve this.	Consultation with EFDC
LSH2	Education [early years]	6 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer Contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£78,429		£78,429	2016-2026	4 places	2 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
LSH3	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.06 ha).	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£8,407		£8,407	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
LSH4	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.07 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£18,357		£18,357	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														standards will be used as a starting point for provision.	
LSH5	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.02 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£4,635		£4,635	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

8.17 Infrastructure Delivery Schedule: North Weald Bassett

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
NWB1	Utilities	Local upgrades to wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
NWB2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN /Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites (NWB.R3). Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by site basis, in consultation with Cadent Gas.	Engagement with EFDC
NWB3	Transport - Public Transport	Improvements to walking and cycling infrastructure, particularly to improve access to rapid transit bus stops.	Essential	ECC / Developers	ECC / Developer Contributions (S278)	£3,000,000-£5,000,000		£3,000,000-£5,000,000	2026-2031					This option was identified in the North Weald Bassett Masterplan to support growth. The junction is expected to operate above capacity, and would need to be considered against any further modal shift. (This scheme would support intervention DW7.)	North Weald Bassett Masterplan (Allies and Morrison, 2014), consultation with ECC
NWB4	Transport - Highways	Improvements to Talbot PH Roundabout, A414/Vicarage Lane junction	Essential	ECC / Developers	ECC / Developer Contributions (S278) / LEP RGF	£3,000,000-£5,000,000		£3,000,000-£5,000,000	2020-2025					This option was identified in the North Weald Bassett Masterplan to support growth. Challenges surrounding delivery. The junction is expected to operate above capacity, and would need to be considered against any further modal shift arising from Bus transit or Park and Ride.	North Weald Bassett Masterplan (Allies and Morrison, 2014), Technical Note 4 - Forecast Modelling Results from 7x Development Scenario Tests (2014), Consultation with Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
NWB5	Transport - Highways	A414/ Rayley Junction improvement	Essential	ECC / Developers	ECC / Developer Contributions (S278) / LEP RGF	£200,000		£200,000	2025-2030					This option was identified in the North Weald Bassett Masterplan to support growth	North Weald Bassett Masterplan (Allies and Morrison, 2014)
NWB6	Transport - Highways	Provision of additional lorry parking spaces	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	Unknown	Unknown				Provision of additional lorry parking spaces to mitigate from lorries currently parking in laybys and along Merlin Way in North Weald Bassett.	North Weald Bassett Parish Council Proforma response
NWB7	Education [early years]	200 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£2,614,286		£2,614,286	2016-2033	12 places	71 places	83 places	34 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
NWB8	Education [primary]	New (2.1ha site) primary school, including early years provision	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£7,300,000		£7,300,000	2021-2026					Costs provided by ECC and include some early years provision (refer to NWB7). Phasing estimated based on expected delivery of housing and may be further refined. Land will also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with ECC
NWB9	Health	Approx. 1.43 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2033	0.10 FTE Dentists	0.50 FTE Dentists	0.58 FTE Dentists	0.25 FTE Dentists	Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven.	Modelled output

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Given the range in types of provision, no benchmark cost is available.	
NWB10	Health	716 sqm additional GP floorspace across the Epping, Ongar & Abridge Neighbourhood Area - including appropriate provision within North Weald Bassett and exploring the potential for health facilities as part of North Weald Masterplan Area	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£1,970,073		£1,970,073	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Epping (refer to EPP38), Ongar (refer to ONG9) or Abridge. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG
NWB11	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 6.44 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,688,800		£1,688,800	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
NWB12	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.29 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£460,962		£460,962	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
NWB13	Open Space	Enhanced entrance signage at the Bassett Road N, Bassett Road E, and Bassett Road sites in North Weald Bassett	Desirable	EFDC	Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown					Open Space Strategy
NWB14	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.93 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£447,287		£447,287	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
NWB15	Open Space	Potential upgrading of the LAP at School Green Lane in North Weald Bassett	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2033						Open Space Strategy
NWB16	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
NWB17	Sports and Leisure [indoor]	New leisure centre	Essential	EFDC / Developers / Operators / Sport England	Developer Contributions (S106) / Operators / Grant Funding / Sport England	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown					Consultation with EFDC
NWB18	Community Facilities	Approx. 390 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£0		£0	2016-2021	30 sqm	135 sqm	160 sqm	65 sqm	Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output
NWB19	Community Facilities	Provision of a community hub including space for re-located and upgraded library space, GP provision, early years provision (see above) and an office for North Weald Parish Council.	Desirable	EFDC / Developers	Developer Contributions (S106) / Operators / Grant Funding / (NHS England if including GP provision)	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown				This could be one approach to meet the newly arising demand for early years provision (see NWB7), health provision (see NWB10) and community floorspace (see NWB18).	Consultation with EFDC and North Weald Bassett Parish Council

8.18 Infrastructure Delivery Schedule: Ongar

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
ONG1	Utilities	Local upgrades to wastewater network infrastructure and likely significant upgrades to water treatment infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades as per the charging schedule, with strategic infrastructure costs borne by Thames Water.	Thames Water settlement assessment (2016)
ONG2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN /Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites (ONG.R7). Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by site basis, in consultation with Cadent Gas.	Engagement with EFDC
ONG3	Transport - Highways	Either 1) a new priority junction on to High Ongar Road, approximately 160m east of the Four Wantz roundabout; or 2) a new priority junction on to High Ongar Road, approximately 70m north-east of the existing High Ongar Road/ Chelmsford Road Junction.	Essential	ECC / Developers	Developer Contributions (S278)	£1,000,000		£1,000,000	2025-30						Developer Forum pro-forma responses
ONG4	Transport - Highways	Upgrades to the A113 Coopers Hill/ Brentwood Road, Marden Ash/Ongar	Essential	ECC / Developers	Developer Contributions (S278)	£1,000,000		£1,000,000	2025-30					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process to improve A113 capacity.	Consultation with Essex County Council and Jacobs
ONG5	Transport - Highways	Four Wantz Roundabout, Ongar	Essential	Highways England / ECC / Developers	Highways England / Developer Contributions (S278)	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2025-30					This option was identified by identified by Essex County Council / Jacobs as part of the transport modelling process to improve A414 capacity.	Consultation with Essex County Council and Jacobs

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Target to deliver in highway boundary	
ONG6	Education [early years]	124 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£1,620,857		£1,620,857	2016-2026	33 places	91 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Newly arising need only. Includes demand from High Ongar and Fyfield. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
ONG7	Education [primary]	Expansion of one or more primary school within Ongar Forecast Planning Group	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£2,200,000 (includes costs associated with upgrading of temporary accommodation at High Ongar Primary School)		£2,200,000	2021-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Ongar, High Ongar, Fyfield, Matching Green or Moreton. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
ONG8	Education [secondary]	Expansion of secondary school places	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£3,400,000		£3,400,000	2021-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Phasing estimated based on expected delivery of housing and may be further refined. May be met at Ongar Academy or elsewhere in the Forecast Planning Group.	Consultation with ECC
ONG9	Health	716 sqm additional GP floorspace across the Epping, Ongar & Abridge Neighbourhood Area	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£1,970,073		£1,970,073	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Epping (refer to EPP38), North Weald Bassett (refer to NWB10) or Abridge. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
ONG10	Health	Approx. 1.06 FTE Dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2026	0.38 FTE Dentists	0.68 FTE Dentists			Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output.
ONG11	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.80 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£252,198		£252,198	2021-2026					Ongar currently has sufficient amenity greenspace but will require additional greenspace later in the plan period. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
ONG12	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 6.40 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,678,310		£1,678,310	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
ONG13	Open Space	Additional provision of natural and semi-natural greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.81 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£190,691		£190,691	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
ONG14	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.99 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£461,192		£461,192	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
ONG15	Open Space	Upgrading of LEAP at Greensted Road in Ongar	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£29,400		£29,400	2016-2026						Open Space Strategy
ONG16	Open Space	Existing play areas expanded at Shelley, High Street and Elizabeth II recreation field	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Unknown		Unknown	Unknown	Unknown				This could be one approach to meet the newly arising demand for children's play (see ONG14).	Ongar Town Council Proforma response
ONG17	Community Facilities	Approx. 300 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£457,896		£457,896	2016-2026	155 sqm	145 sqm			Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Includes demand from High Ongar and Fyfield. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output
ONG18	Sports and Leisure	Sports facilities upgrade and additional facilities	Essential	ECC/ Developers / Operators / Sport England	Developer Contributions (S106) / Operators / Sports England / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	Unknown	Unknown				The Council has committed to considering options to re-provide improved facilities to replace the existing leisure centre. This might include re-provision in an alternative location.	Ongar Town Council Proforma response
ONG19	Sports and Leisure	Additional land to expand Jubilee Park to provide additional sports pitches. Investment in a new clubhouse.	Desirable	ECC/ Developers / Operators / Sport England	Developer Contributions (S106) / Operators / Sports England / Grant Funding	Unknown - dependent upon scheme specifics		Unknown - dependent upon scheme specifics	Unknown	Unknown					Ongar Town Council Proforma response

8.19 Infrastructure Delivery Schedule: Roydon

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
ROY1	Transport - Public Transport	Bus service connecting Water Lane Area development to Roydon and Epping	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000-£2,000,000		£1,000,000-£2,000,000	Unknown	Unknown					Roydon Parish Council Proforma response
ROY2	Transport - Public Transport	New footpath on Epping Road	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	Unknown	Unknown					Roydon Parish Council Proforma response
ROY3	Education [early years]	18 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£235,286		£235,286	2016-2026	14 places	4 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
ROY4	Health	Approx. 0.13 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.13 FTE				Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
ROY5	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 2.24 ha, assuming equal share between Roydon and Nazeing)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£313,846		£313,846	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
ROY6	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 3.73 ha, assuming equal share between Roydon and Nazeing)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£978,140		£978,140	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
ROY7	Open Space	Additional provision for children and young people	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
ROY8	Open Space	Potential upgrading of Roydon Playing Fields Playground	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of scheme		Dependent upon exact size and nature of scheme	2016-2026						Open Space Strategy
ROY9	Community Facilities	Approx. 35 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£63,158		£63,158	2016-2021	35 sqm				Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.20 Infrastructure Delivery Schedule: Sheering

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
SHE1	Education [early years]	20 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£261,429		£261,429	2016-2026	13 places	7 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Includes demand from Lower Sheering. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
SHE2	Health	Approx. 0.20 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.20 FTE Dentists				Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
SHE3	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.18 ha).	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£25,220		£25,220	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
SHE4	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.24 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£62,937		£62,937	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
SHE5	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.08 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£18,540		£18,540	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
SHE6	Community Facilities	Approx. 55 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£73,684		£73,684	2016-2026	40 sqm	15 sqm			Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.21 Infrastructure Delivery Schedule: Stapleford Abbotts

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
STA1	Education [early years]	16 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£209,143		£209,143	2016-2026	11 places	5 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
STA2	Education [primary]	Expansion of one primary school within Chigwell / Lambourne Forecast Planning Group, and upgrading of temporary accommodation of up to four schools	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£3,100,000		£3,100,000	2016-2026					Costs provided by ECC (across all settlements in the Forecast Planning Group). Expansion in Chigwell, Stapleford Abbotts or Lambourne. Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC
STA3	Health	Approx. 0.12 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.06 FTE Dentists	0.06 FTE Dentists			Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
STA4	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.14 ha).	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£19,615		£19,615	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Nationally adopted standards will be used as a starting point for provision.	
STA5	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.19 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£49,825		£49,825	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
STA6	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.06 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£13,905		£13,905	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
STA7	Community Facilities	Approx. 35 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£59,649		£59,649	2016-2026	15 sqm	20 sqm			Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.22 Infrastructure Delivery Schedule: Theydon Bois

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
THB1	Utilities	Local upgrades to wastewater network infrastructure and potential minor upgrades to water treatment infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
THB2	Flood Protection	Surface water drainage measures	Critical	Developer	Developer Funded	Unknown		Unknown	2016-2026					Two sites (THYB.R1 and THYB.R2) within this settlement have been identified as being at risk of surface water flooding. The design and layout of any development proposals should reduce the vulnerability and consequences of surface water flooding to the site and its surroundings, and development proposals should incorporate appropriate surface water drainage measures in order to achieve this.	Consultation with EFDC
THB3	Transport - Active Transport	Improved non-motorised user connectivity between Theydon Bois and Debden. This includes 1.5 mile part on-road and part off-road scheme to link Theydon Bois Tube Station/ Town Centre to Debden and Loughton Tube Stations, and their shops and services.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£300,000		£300,000	2031-2033					This option was identified by Essex County Council through the Cycling Action Plan to improve links between settlements, particularly Theydon Bois Tube with neighbouring tube stations, such as Loughton and Debden.	Cycling Action Plan, Essex County Council
THB4	Transport - Highways	Piercing Hill Signals	Essential	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	2026-2031					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process. This schemes includes local widening, and roundabout options testing.	Consultation with Essex County Council and Jacobs
THB5	Transport - Highways	Traffic safety measures including speed cameras and traffic congestion control measures at the entrance of the village, on approach from Abridge Road and the junction of Coppice Row and Piercing Hill	Desirable	ECC / Developers	Developer Contributions (S278) / ECC	Unknown		Unknown	Unknown	Unknown				Identified need by Theydon Bois District Council. Transport modelling shows that the junction is predicted to exceed capacity at peak times by the end of the Plan period.	Theydon Bois Parish Council Proforma response

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
THB6	Transport - Public Transport	Improvements to local bus services to connect Theydon Bois to Epping, Harlow, and to Romford Shopping Centre. Increased frequency of the current 418 bus service.	Desirable	ECC / Developers	Developer Contributions (S278 for physical infrastructure; S106) / ECC	£1,000,000		£1,000,000	Unknown	Unknown					Theydon Bois Parish Council Proforma response
THB7	Education [early years]	14 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£183,000		£183,000	2016-2026	8 places	6 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
THB8	Health	0.10 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2026	0.06 FTE Dentists	0.04 FTE Dentists			Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
THB9	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 4.10 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,075,168		£1,075,168	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
THB10	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 1.20 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£278,106		£278,106	2016-2026					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
THB11	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
THB12	Community Facilities	Approx. 30 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£226,316		£226,316	2016-2021	30 sqm				Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only.	Modelled output
THB13	Community Facilities	Provision of an outdoor activity area for children and young people	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Unknown - dependent upon scheme specifics		Unknown - dependent upon scheme specifics	2016-2026					This could be one approach to meet the newly arising demand for children's play (see THB10). Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Theydon Bois Parish Council Proforma response
THB14	Sports and Leisure	Additional sports facilities/playing fields, including an outdoor bowling green	Desirable	EFDC / Developers / Sport England	Developer Contributions (S106) / Grant Funding / Sport England	Unknown - dependent upon scheme specifics		Unknown - dependent upon scheme specifics	2016-2026						Theydon Bois Parish Council Proforma response

8.23 Infrastructure Delivery Schedule: Thornwood

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
THO1	Utilities	Local upgrades to wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown			Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades in accordance with the charging schedule proposed by Defra.	Thames Water settlement assessment (2016)
THO2	Education [early years]	38 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£496,714		£496,714	2016-2026	14 places	24 places			Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
THO3	Health	Approx. 0.26 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2021	0.10 FTE Dentists	0.16 FTE Dentists			Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
THO4	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.32 ha).	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£44,835		£44,835	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
TH05	Open Space	Additional provision of public parks and gardens, which could take the form of a public park, in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.42 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£110,139		£110,139	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
TH06	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 0.13 ha)	Desirable	EFDC/Developers	Developer Contributions (S106) / Grant Funding	£30,128		£30,128	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Modelled output, based on standards in Open Space Strategy
TH07	Open Space	Additional provision of allotments in agreement with EFDC (likely to be around 0.11 ha)	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£2,513		£2,513	2016-2026					Newly arising need only. Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy.	Modelled output, based on standards in Open Space Strategy
TH08	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
TH09	Community Facilities	Approx. 70 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£126,316		£126,316	2016-2026	25 sqm	45 sqm			Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output

8.24 Infrastructure Delivery Schedule: Waltham Abbey

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WAB1	Utilities	Likely upgrades to water infrastructure, and local upgrades to wastewater network infrastructure	Critical	Thames Water	Thames Water / Developer Funded	Unknown		Unknown	Unknown	Unknown				Anticipated that developers would meet the cost of local upgrades as per the charging schedule, with strategic infrastructure costs borne by Thames Water.	Thames Water settlement assessment (2016)
WAB2	Utilities	Diversion of gas mains	Desirable	Cadent Gas	UKPN /Developer Agreement	Site dependent		Site dependent	Site dependent					Potential diversion of gas mains which pass through proposed development sites (WAL.E8 and WAL.E9). Alternative is to retain in position and design the site around an easement along the pipes. The potential easement / diversion will be dependent on the type of main - the options for these sites should be considered on a site-by site basis, in consultation with Cadent Gas.	Engagement with EFDC
WAB3	Flood Protection	Surface water drainage measures	Critical	Developer	Developer Funded	Unknown		Unknown	2016-2026					Two sites (WAL.R2 and WAL.R4) within this settlement have been identified as being at risk of surface water flooding. The design and layout of any development proposals should reduce the vulnerability and consequences of surface water flooding to the site and its surroundings, and development proposals should incorporate appropriate surface water drainage measures in order to achieve this.	Consultation with EFDC
WAB4	Transport - Highways	Upgrades to the A112 Sewardstone Road/ Sun Street signalised junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000		£1,000,000	2020-2025					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process. This scheme would need feasibility testing if taken forward.	Consultation with Essex County Council and Jacobs

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WAB5	Transport - Highways	Upgrades to the M25 Junction 26 Southern Roundabout	Essential	Highways England / ECC / Developers	Highways England / Developer Contributions (S278) / ECC	£2,000,000-£3,000,000		£2,000,000-£3,000,000	2020-2025					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process. Target to deliver within highway boundary - unknown/ possible third party landtake. Scheme to include enhanced roundabout with local widening to increase approach lane and circulatory capacity.	Consultation with Essex County Council and Jacobs
WAB6	Transport - Highways	Upgrades to the B194 High Bridge Street/ Meridian Way Signalised Junction	Essential	ECC / Developers	Developer Contributions (S278) / ECC	£1,000,000-£2,000,000		£1,000,000-£2,000,000	2026-2031					This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Essex County Council and Jacobs
WAB7	Transport - Highways	Local widening of Honey Lane to increase capacity	Essential	ECC / Developers	Developer Contributions (S278) / ECC	Unknown								This option was identified by Essex County Council/ Jacobs as part of the transport modelling process	Consultation with Essex County Council and Jacobs
WAB8	Transport - Active Transport	Cycling along Sun Street within permitted times; Allow cycling along Sun Street within permitted times during weekday mornings and evenings, provide signage to make this clear to users. - Provide additional bicycle parking. - Sign an alternative cycle route along Quaker Lane westbound for use at times when Sun Street is heavily used by pedestrians and shoppers (e.g. 10:00-16:00 and at weekends)	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£20,000		£20,000	2026-2031						Cycling Action Plan, Essex County Council
WAB9	Transport - Active Transport	Formal Off-road link for cyclists from NCN Route 1 to Sewardstone Road (3 possible routes identified): - Either a 750m Southern Link between NCN Route 1 at Blanchard Grove and Sewardstone Road. - Or a 750m north-south access across Gunpowder Park - Or a 760m east-west access across Gunpowder Park	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£90,000		£90,000	2026-2031						Cycling Action Plan, Essex County Council

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WAB10	Transport - Active Transport	From Larsen Drive to Monkwood Avenue via Rochford Avenue, Farm Hill Road and Halfhides; A TfL-style on-road quietway route (via signage and road markings) from the south of Waltham Abbey via Rochford Avenue, connecting with Monkwood Avenue	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£25,000		£25,000	2026-2031						Cycling Action Plan, Essex County Council
WAB11	Transport - Active Transport	Brooker Road, Greenfield Street, King George Road to Denny Avenue, through to Elm Close, Larsen Drive, Rochford Avenue and Roundhills. A TfL-style on-road quietway route (via signage and road markings): - Designate route as providing access to supermarkets, residential area	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£35,000		£35,000	2026-2031						Cycling Action Plan, Essex County Council
WAB12	Transport - Active Transport	Quietway network north of Honey Lane and south of Abbots Drive. Off-road route improvement to existing footway connecting Mason Way, Hillhouse and Skarnings Court:- Off-road route linking Stoney Bridge Drive and Abbots Drive.- On-road TfL-style Quietway route sections connecting the north east and south east of Waltham Abbey to and from the above offroad route, via Abbots Drive in the north east and via Shernbroke Road in the south east	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£100,000		£100,000	2026-2031						Cycling Action Plan, Essex County Council
WAB13	Transport - Active Transport	Route linking central and south-east Waltham Abbey. Provision of an approx. 650 metre length on-road cycle route along Honey Lane, through formalising parking restrictions, and removal of central hatching/wide centrelines.	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£30,000		£30,000	2026-2031						Cycling Action Plan, Essex County Council
WAB14	Transport - Active Transport	Improve north-south connections to cycling improvements along Honey Lane to support residential development in the north and north-east of the settlement	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to	Unknown		Unknown	2026-2031					Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
					highways; S106) / ECC										interventions set out in the Cycling Action Plan, Essex County Council
WAB15	Transport - Active Transport	Provide improvements to the existing footways alongside Abbeyview and Parklands, to create an unsegregated shared-use route for pedestrians and cyclists, to improve Non-Motorised User accessibility and connectivity for residents to the eastern part of the River Lee Country Park and the eastern side of Waltham Abbey	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	£550,000		£550,000	2031-2033						Cycling Action Plan, Essex County Council
WAB16	Transport - Active Transport	Improve north-south connecting links onto shared-use route along Abbeyview and Parklands	Essential	ECC / Developers	Developer Contributions (S278 for physical infrastructure relating to highways; S106) / ECC	Unknown		Unknown	2026-2031					Costs to be worked up and confirmed by ECC.	Scheme identified as a possible addition or extension to cycling/walking interventions set out in the Cycling Action Plan, Essex County Council
WAB17	Education [early years]	180 early years places to meet the needs of new residents	Essential	ECC / Operators / Developers	Developer contributions (S106) / DfE / Operators / ECC / (Working Parents Allowance)	£2,352,857		£2,352,857	2016-2033	38 places	100 places	38 places	4 places	Modelled early years space (combined nurseries and children's clubs requirement) - newly arising need only. Costs depend on solution identified; costs shown based on new-build building. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled output; Consultation with ECC
WAB18	Education [primary]	Expansion of two primary schools within Waltham Abbey Forecast Planning Group, and upgrading of temporary accommodation at Leverton Primary School	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£4,600,000		£4,600,000	2016-2031					Costs provided by ECC (across all settlements in the Forecast Planning Group). Phasing estimated based on expected delivery of housing and may be further refined.	Consultation with ECC

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WAB19	Education [secondary]	Expansion of King Harold School, including potential for relocation	Essential	ECC / Academy Trusts / Developers	Developer contributions (S106) / DfE including Basic Needs Allowance / ECC	£4,400,000		£4,400,000	2021-2026					Costs provided by ECC. Phasing estimated based on expected delivery of housing and may be further refined. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites. Subject to discussion with the school.	Consultation with ECC
WAB20	Health	173 sqm additional GP floorspace across the Waltham Abbey Neighbourhood Area - including appropriate provision within Waltham Abbey	Essential	NHS England / Developers	NHS England / Developer Contributions (S106)	£476,575		£476,575	To be considered further by CCG	To be considered further by CCG				Floorspace required over entire Neighbourhood Area; may also be delivered in Nazeing (refer to LNA5). Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Consultation with CCG
WAB21	Health	1.40 FTE dentists	Essential	NHS England / Operators / Developers	NHS England / Operators / Developer Contributions (S106)	Unknown		Unknown	2016-2031	0.32 FTE Dentists	0.76 FTE Dentists	0.32 FTE Dentists		Newly arising need only. Note, not every settlement is expected to have dental provision; instead, wider demand for these types of services would be met in certain settlements. This might involve co-location with other health provision e.g. GPs and pharmacies, or provision by private organisations. Dentists commonly operate as private businesses and so the nature and location of new provision is market driven. Given the range in types of provision, no benchmark cost is available.	Modelled output
WAB22	Open Space	Additional provision of public parks and gardens in line with Fields in Trust Standards and agreement with EFDC (likely to be around 10.45 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£2,740,366		£2,740,366	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
WAB23	Open Space	Additional provision of amenity greenspace in line with Fields in Trust Standards and agreement with EFDC (likely to be around 9.88 ha).	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,384,287		£1,384,287	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the	Open Space Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
														Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	
WAB24	Open Space	Potential upgrading of Town Mead and Honey Lane children's play facilities	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	Dependent upon exact size and nature of schemes		Dependent upon exact size and nature of schemes	2016-2033						Open Space Strategy
WAB25	Open Space	Additional provision for children and young people in line with Fields in Trust Standards and agreement with EFDC (likely to be around 5.38 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£1,246,842		£1,246,842	2016-2033					Where appropriate, development proposals will be required to provide open space in accordance with the guidance contained in the Open Space Strategy. Nationally adopted standards will be used as a starting point for provision.	Open Space Strategy
WAB26	Open Space	Additional provision of allotments in agreement with EFDC (likely to be around 2.90 ha)	Essential	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£66,262		£66,262	2016-2033					Where appropriate, development proposals will be required to provide allotments in accordance with the guidance contained in the Open Space Strategy.	Open Space Strategy
WAB27	Open Space	Contribution to access management and monitoring of visitors to the Epping Forest Special Area of Conservation (SAC)	Essential	Epping Forest Conservators / City of London Corporation / EFDC / Developers	Developer Contributions (S106)	Variable		Variable	2016-2033	As development is consented				Financial contributions should be made in accordance with Visitor Survey Information which demonstrates this is needed. Per dwelling contribution still to be determined.	Consultation with EFDC
WAB28	Community Facilities	390 sqm of additional community facilities space to meet the needs of new residents	Desirable	EFDC / Developers	Developer Contributions (S106) / Grant Funding	£684,212		£684,212	2016-2033	92 sqm	208 sqm	83 sqm	7 sqm	Modelled additional community facility space (combined library, youth services and community hall requirement) - newly arising demand only. Land may also be required; overall costs (including land) to be shared equitably and proportionally across relevant sites.	Modelled demand
WAB29	Sports and Leisure	Health and fitness and swimming provision to be enhanced in Waltham Abbey (as part of the relocation to Hillhouse), with high quality water space of at least a six-lane 25m main pool and a fit-for-purpose learner pool	Desirable	EFDC / Developers / Operators / Sport England	Developer Contributions (S106) / Operators / Grant Funding / Sport England	Dependent upon exact nature of scheme		Dependent upon exact nature of scheme	Unknown	Unknown					Draft Built Facilities Strategy

Ref	Infrastructure Type	Intervention	Priority	Delivery Partners	Potential Funding Source	Cost	Identified Funding	Funding Gap	Delivery Phasing	2016-2021	2021-2026	2026-2031	2031-2033	Notes	Baseline source
WAB30	Sports and Leisure	Refurbishment of ancillary facility at Capershotts, Waltham Abbey to meet the needs of the home club	Desirable	EFDC / Developers / Waltham Abbey FC / Essex County FA / Football Foundation	Developer Contributions (S106) / Grant Funding / Club Funding	Unknown		Unknown	2021-2026						Draft Playing Pitch Strategy
WAB31	Sports and Leisure	Extend the capacity of the Townmead Leisure Park through the provision of additional high quality grass pitches and, pending the availability of suitable space, explore the development of a second 3G artificial grass pitch	Desirable	EFDC / Developers / Waltham Abbey Town Council / Essex County FA / Football Foundation	Developer Contributions (S106) / Football Foundation / Grant Funding / Club Funding	£955,000 (additional artificial grass pitch element only)		£955,000 (additional artificial grass pitch element only)	2016-2021						Draft Playing Pitch Strategy

Appendix A

Parish and Town Council
infrastructure schemes

A1 Parish and Town Council infrastructure schemes

The infrastructure schemes set out below are interventions identified by Parish and Town councils across the District, to support growth over the Plan period.

Buckhurst Hill:

- The feasibility of a Park and Ride scheme that follows the old line of the train track should be considered to alleviate pressure on the mainline trains, and to provide routes to the strategic sites, and to and from stations.
- Additional car parking to alleviate pressure for spaces at Buckhurst Hill Stations, and to reprovide for spaces lost as a result of development at Queens Road
- Reopening of the disused Epping-Ongar rail branch line
- Investment in bus services to improve coverage and frequency, and to encourage sustainable forms of commuting
- Expansion to Buckhurst Hill Community Primary School, and improved road access, to serve the local population

Chigwell:

- Widening of the M11 highway leading into Redbridge. Possible transport intervention identified by Chigwell Parish Council to reduce number of bottlenecks, particularly at peak times.
- Traffic management schemes including the rephasing of the traffic lights at Rolls Park (Buckhurst Hill), Roding Lane (Buckhurst Hill), Limes Avenue/Fencepeice Road/ Hainault Road junction and Manor Road/Chigwell Road junction. Possible transport interventions identified by Chigwell Parish Council to allow the more efficient flow of traffic during periods of peak travel.
- Pedestrian bridge (or sub-surface crossing) under Manor Road and Chigwell Road junction. Possible transport intervention identified by Chigwell Parish Council to provide a more suitable crossing location, particularly for students travelling to West Hatch High School, and to prevent congestion attempting to exit Chigwell towards London.
- Assessment of the viability of providing a park and ride facility to Chigwell and Grange Hill Underground station. Possible transport intervention identified by Chigwell Parish Council to alleviate congestion of roads.
- Chigwell Parish Bus Service. Possible transport intervention identified by Chigwell Parish Council to provide a community service to serve all new housing schemes within Chigwell, and provide access to schools, underground stations and community facilities.

- Provision of a new pavement on Millers Lane. Possible transport intervention identified by Chigwell Parish Council to improve local access and active travel options.
- Widening of the High Road, and improvements to the High Road Junction. Possible transport intervention identified by Chigwell Parish Council to improve local access and support anticipated development.
- New Community Hub at Hainult Road (Chigwell Village). Possible intervention identified by Chigwell Parish Council.
- New Community Hall at Chigwell Row. Possible intervention identified by Chigwell Parish Council.
- Additional health and dental provision to accommodate the needs of the newly arising population.
- Refurbishment of Chigwell Primary School, and possible new school provision on the Girl Guides site in Chigwell Row.

Ongar:

- Major road improvements to support the increase in traffic as a result of developments throughout Ongar. These include road widening, straightening, dualling, and a bypass on the following roads:
 - A and B class roads through Ongar.
 - A414 Harlow to Chelmsford
 - A128 Ongar to Brentwood and beyond
 - A113 Ongar to Romford
 - B184 Ongar to Great Dunmow
- Additional and more frequent bus services from Ongar to larger towns, including an integrated bus service system between Ongar and neighbouring employment centres.
- Sports facilities upgrades, and provision of additional facilities, at Ongar Leisure Centre. These would include additional land and club house facilities, changing rooms and showers, the co-location of shared space with additional youth activities, and extended opening hours.
- Additional land required to expand Jubilee Park to meet existing and future demand. The existing clubhouse is outdated and requires upgrading to be fit for purpose.
- Additional children's play areas to be provided as part of developments, and the expansion of existing play areas at Greensted Road, Shelley, High Street and Elizabeth II recreation field.
- Additional GPs and support staff (community nursing, mental health care) and dentist provision
- Flood defences

Epping:

- A new access road behind Ivy Chimneys Road, Bridge Hill and Brook Road.
- An additional lane at Bell Common traffic lights.
- Installation of real-time road signage at suitable locations, and improvements to directional signage elsewhere.
- Measures to ease traffic flows on Brook Road/ Bridge Hill.
- Junction improvements to enable South Epping development at Bower Hill/ Brook Road and improved pedestrian routes along Centre Drive/ Bride Hill into the town centre.
- New road to serve the South Epping development from B1393 / Ivy Chimneys Road/ Theydon Road eastwards (beside route of M25), including a new tunnel beneath the railway.
- Junction improvements to enable South Epping development at Ivy Chimneys Road/ Theydon Road including enhanced resident parking serving Ivy Chimneys Road.
- Improved bus facilities at Epping Station.
- New signage and directions towards the M25/ M11 to help ease traffic flows.
- Installation of electric charging points at Epping Station, and the car parks at Cottis Lane and Bakers Lane.
- Explore pedestrian priority areas in the side roads connecting High Road and Hemnall Street, and traffic calming measures in Kendall Avenue.
- Greenway footpath connections from Epping town centre in north across Epping Plain into the Lower Forest, and south connecting Hemnall Street and Bell Common.
- Greenway connections plus improved footpaths and cycleways connecting the developments at St Margarets and South Epping with the town centre.
- Improvements to cycle routes to facilitate the ease of cycling across the Parish.
- Improvements to the Junction of B1393 (top of Palmers Hill) and B181 (The Plain) exploring the options of widening B181 to allow for a separate lane of traffic queuing to turn right towards Harlow and a mini roundabout to assist traffic flows.
- Junction intervention (either traffic lights or a roundabout) at the Merry Fiddlers junction at Fiddlers Hamlet. Junction interventions to provide for a safer road network.
- Additional car parking spaces to replace those lost as result of development at Cottis Lane Car Park (EPP.R6). Potential site yet to be identified. Re-provision of the public toilet currently at Cottis Lane Car Park which would be lost as a result of the development plans.
- Additional car parking spaces to replace those lost as result of development at Bakers Lane Car Park (EPP.R7). Potential site yet to be identified.

- Additional car parking spaces to support development at Epping Sanitary Steam and Laundry Company (EPP.R9). Potential site yet to be identified.
- Additional car parking (including provision of underground car parking) and improved access to Epping Station. Car parking at Epping Station is already reported to be at capacity. Extension of oyster payments to stations in Harlow to deter people driving to Epping to connect to the tube network.
- Improved traffic management on B181 to exclude traffic through Epping Green village and use alternative routes. Traffic management schemes to alleviate pressure on the roads surrounding Epping Upland Parish, where there is limited options for widening or increasing the carriageway.
- Improved traffic management or provision of an alternative route away from Rye Hill Road which is narrow and compounded by vehicle numbers.
- Additional car parking in Epping Green, particularly around Epping Upland CofE School and to support community and leisure visits.
- Provision of continuous bus service and dedicated school bus.
- Children's Day nurseries for under five year olds as part of the South Epping and St John's development. Additional early year's facilities identified by Epping Town Council to support development.
- Landscaped green corridor with integrated cycle and walking routes. Landscaped areas to maintain some of the existing high quality open space, protect levels of biodiversity, and improve sustainable access to sites.
- Additional green space to re-provide that lost as a result of redevelopment. Landscaped areas to provide high quality open space, protect levels of biodiversity, and improve sustainable access to sites.
- Recreation for young teenagers, improvement and expansion to the skateboard area and pavilion at Stonards Hill.
- Improvements to play and recreational facilities at Swaines Green.
- Sports facilities to replace those lost at Epping Sports Centre (EPP.R5) to avoid any net loss.
- Provision of some core hospital facilities such as a walk-in centre at St Margaret's Hospital site to provide some local health facilities particularly to those less mobile.
- The provision of an additional health hub for Epping, comprising GP and community nursing care services, to be in place before the loss of the St Margaret's hospital.
- Provision of multipurpose venues for community groups/ arts performances / sports classes to replace Epping Hall
- Comprehensive broadband coverage, particularly in rural areas where provision is currently limited.
- Provision of a visitor centre to support the visitor economy.

North Weald Bassett:

- Improved bus services and frequency, particularly to Epping town centre.
- Off-road cycling routes in rural parts of North Weald Bassett, linking to neighbouring towns.
- The provision of real-time information technology at bus stops throughout the area to enable residents to manage their travel arrangements.
- Major road improvements at Plain Junction to alleviate pressure between Epping and North Weald, and support growth at North Weald, Thornwood and South of Harlow.
- Provision of additional lorry parking spaces to deter lorries from parking in laybys, and along Merlin Way in North Weald Bassett.
- Road interventions around Church Lane, as the road is narrow and regularly used as a rat-run. Development is likely to compound this so transport mitigations to address this should be considered.
- Provision of a community hub, including library space and an office for North Weald Parish Council. Site yet to be identified.
- Provision of sufficient new school places to accommodate the needs of the new population.
- Provision of sufficient new health provision as part of any new development to accommodate the needs of the new population.

Roydon:

- Traffic management schemes on A414 to avoid congestion and deter drivers from using Roydon village as a cut through.
- Provision of adequate new parking as integrated part of any new development. Possible transport intervention identified by Roydon Parish Council to improve sustainable provision of parking.
- Bus service connecting Sumners/St Katherines development to Roydon and Epping. Possible transport intervention identified by Roydon Parish Council to improve sustainable transport mode share and connectivity.
- New footpath on Epping Road. Possible transport intervention identified by Roydon Parish Council to improve accessibility for pedestrians, including less mobile residents (including wheel car and buggy users).
- Improved rail services at Harlow, including more frequent services and additional car parking (to mitigate impacts for users at Roydon where opportunities are constrained).
- Additional GP and pharmaceutical provision to meet the demands of the additional populations from the new developments.
- Additional education provision to meet the demands arising from new developments.

- Additional open space provision as part of the masterplan for any new development. Additional open space provision to meet the demands arising from new developments.

Theydon Bois:

- Provision of an outdoor activity area for the youth sector. Site yet to be identified.
- Additional sports facilities/playing fields within new developments. Particular need for an outdoor bowling green and provision for older residents to encourage active engagement.
- Retention of doctor's surgery in Poplar Row.
- Provision of a dental surgery to accommodate the facility lost as a result of proposed development.
- New sheltered housing and/or retirement bungalows to provide alternative accommodation for the over 65's and retired members of the community.
- Renovation of the existing Children's Play Area in Poplar Row. Identified need by Theydon Bois District Council.
- Traffic safety measures including speed cameras and traffic congestion control measures at the entrance of the village - on approach from Abridge Road and the junction of Coppice Row and Piercing Hill. Identified need by Theydon Bois District Council. Transport modelling shows that the junction is predicted to exceed capacity at peak times by the end of the Plan period.
- Improvements to local bus services (including increased frequency of the current 418 bus service) to connect Theydon Bois to Epping, Harlow, and to Romford Shopping Centre. Possible transport intervention identified by Theydon Bois District Council to improve sustainable transport mode share and connectivity.
- Improvements to the electricity supply to support new communities and to minimise the number of reported power cuts in residential areas.
- Additional pre-school places. Previous planning application was granted within the grounds of Theydon Bois primary school but was never implemented (this permission would have allowed pre-school, infant and primary children to be catered for on one site).
- Additional FE provision and replacement of portacabins by permanent buildings or an extension to the existing main building.