

**Epping Forest District Local Plan
Infrastructure Delivery Topic Paper:
Highways and Education
Apportionment Addendum**

April 2019

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1. Introduction

1.1 Overview

- 1.1 Epping Forest District Council (EFDC) have prepared a Submission Version Local Plan (EB114) which sets out the strategy for meeting the District's needs from up to 2033. It includes: The Council's vision and objectives for the District; policies to ensure that high quality development; and proposals for the delivery of infrastructure to support this development.
- 1.2 EFDC commissioned the preparation of an Infrastructure Delivery Plan (IDP) (EB1101A/B), forming 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.
- 1.3 The IDP included consideration of highways infrastructure. Highways infrastructure refers to both the strategic road network and local roads within the District. Highways England is responsible for providing and managing the strategic network, whilst the local road network is managed by Essex County Council (Essex Highways), which is the highways authority.
- 1.4 The IDP also included education, including early years, primary and secondary provision. Essex County Council is the education authority for the District.
- 1.5 To support the Local Plan Independent Examination and building on the IDP, EFDC prepared an Infrastructure Delivery Topic Paper (ED2 / EB1101C). The purpose of the Topic Paper is to provide more information and certainty on infrastructure delivery, as well as a more general update on the work undertaken since the IDP was published. It includes a high level framework for apportionment and pooling arrangements to be taken forward for key infrastructure, alongside identification of external funding sources and the EFDC position on CIL and Section 106.
- 1.6 This Highways and Education Apportionment Addendum builds on the Topic Paper and demonstrates how required interventions might be apportioned to specific sites, and how contributions might be sought. It is worth noting that, whilst this Addendum groups developments into specific 'pools', further discussions and negotiations will be required through the production of strategic masterplans, concept frameworks and planning applications, which will determine specific pooling and delivery arrangements as further information becomes available.
- 1.7 This Addendum does not restrict EFDC or Essex County Council from taking a different approach to apportionment and pooling in the future, so long as it is compliant with the prevailing Regulations.
- 1.8 The information provided within the Topic Paper and Addendum will help to inform consideration of specific developer contributions that are likely to be required to support the development of specific sites. However, it should be noted that specific requirements associated with development proposals will be subject to refinement

and discussion with the Council and infrastructure providers as proposals emerge. In addition, the estimates for costs associated with individual infrastructure projects will be subject to change as further technical work progresses associated with the implementation of the Local Plan, the production of Strategic Masterplans, and the progression of individual development proposals. Applicants are advised to discuss specific requirements with the Council at the earliest possible stage through the pre-application process prior to the submission of planning applications.

- 1.9 The Council recognises that further consideration will need to be given to assess the implications of specific requirements for infrastructure contributions associated with development proposals in relation to viability, particularly in light of the National Planning Policy Framework 2019 (paragraph 57). This will draw on the published Local Plan Viability Studies (EB300 and EB301) in order to provide an up to date evidence base which informs the progression and determination of planning applications through the development management process.

1.2 Structure of this Topic Paper

1.10 The remainder of the Topic Paper is structured as follows:

- Section 2 outlines the general approach to apportionment and pooling that is set out in the Topic Paper has been used for the purposes of this Addendum;
- Section 3 summarises the methodology and findings in relation to highways; and
- Section 4 summarises the methodology and findings for education.

1.11 More information is provided in a series of appendices.

2. Apportionment and Pooling Methodology

2.1 Overview

- 2.1 As far as possible in accordance with the relevant regulations, new developments should meet their own infrastructure needs. This is often done through seeking Section 106 contributions to deliver the required infrastructure to support development. For highways, Section 278 Agreements or Section 38 Agreements (commuted sum for maintenance following adoption)¹ may also be used.
- 2.2 Under the CIL Regulations 2010 (2014 amendments) there are currently restrictions on the 'pooling' of separate Section 106 planning obligations, so that authorities cannot pool more than five obligations to pay for a single piece of infrastructure. (There are no limits on pooling for Section 278 Agreements, though in practice pooling a large number of Section 278 Agreements might not be practicable.)
- 2.3 Given this legislative context, the Topic Paper provides a high level framework for the apportionment of infrastructure costs between multiple developments, and how these might be collected under the pooling restrictions. This Addendum also considers the impacts of the pooling restriction.
- 2.4 It should be noted that the Government has committed to introducing guidance on the use of CIL and planning obligations, and it is expected that the restriction on pooling will be lifted.

2.3 Topic Paper Framework

- 2.5 The Infrastructure Delivery Topic Paper (ED2 / EB1101C) set out the following approach to apportionment in relation to highways:
 - Highways mitigation schemes will be matched to those developments which result in that mitigation being required. It should be noted that strategic or route-based transport schemes may serve a large number of developments, to different degrees.
 - Costs of the mitigation schemes will be apportioned based on the level of impact arising from each development (for example, the number of homes or additional trips generated).
 - It will be identified which mitigation schemes are likely to be subject to pooling restrictions – i.e. where schemes would be funded through Section 106 versus where they would be delivered through a Section 278 Agreement.
 - (It should be noted that the Developers' Guide to Infrastructure Contributions Revised Edition states that Essex County Council generally expects that

¹ Note, Section 38 Agreements are not normally used to deliver mitigation schemes. Any commuted sums for maintenance will be required in accordance with Essex Highways Developer's Construction Manual.

developers will complete or procure any necessary works to mitigate the impact of their development. Where more than one development in an area generates the need for a specific highways scheme, financial contributions may be secured through Section 106 Agreements – however, this approach will ‘only be taken in exceptional circumstances’.)

2.6 The Topic Paper set out the following approach to apportionment in relation to early years provision, primary and secondary education:

- Schemes for new education and early years facilities, including replacement of temporary facilities with permanent ones, will be matched to the most relevant housing allocation(s) which result in that scheme being required.
- The costs of each scheme will be apportioned based on the level of impact arising from each of these developments (i.e. the resulting ‘pupil product’, as set out in the ECC’s Developers’ Guide to Infrastructure Contributions).

2.7 If the apportionment of costs in relation to highways or education results in potential issues around the pooling restriction, the following approach will be taken:

- Where possible, schemes will be broken down into separate ‘projects’ that can be phased and delivered independently and for which five or fewer contributions are required. For example, it may be possible to break a junction scheme up into separate ‘carriageway works’, ‘signals’ and ‘pedestrian/cycle realignment’ projects. For education, it may be possible to break a new secondary school up into separate phases of development. This aligns with the preferred delivery of such facilities (rather than opening a new secondary school in its entirety where the demand for places is not yet in place).
- If it is not possible for the project to be broken down in this manner, then the method of contribution will be reconsidered – i.e. whether a highways scheme could instead be delivered through a Section 278 Agreement (which are not subject to pooling restrictions). This should take into account the likelihood of the method of contribution being entered into jointly and the impact of a particular development not coming forward.
- A minimum threshold (in terms of the number of units delivered) for contributions may also be applied to reduce the number of sites which are liable to contribute to such infrastructure. Thresholds for education and childcare places are already applied by Essex County Council, as set out in the Developers’ Guide to Infrastructure Contributions. However, this would likely reduce the total amount of monies available for collection.

2.8 In general, where new schools are needed the first developments will be expected to fund the provision and building of those new schools. Later developments coming forward that require substantial extra capacity and trigger a need for expansion will contribute to that expansion of provision e.g. additional school classrooms, as a

separate project. Where economies of scale or other benefits can be achieved ECC may consider delivering more than one phase of a project in unison e.g. a new two form-entry primary school rather than building a single form of entry first. On occasions this could involve Essex County Council forward funding projects and seeking reimbursement from future Section 106 contributions as they are received. In some instances, infrastructure is expected to be delivered on one site but will also serve other sites.

- 2.9 As it is not the role of the planning system to 'equalise' costs between landowners and developments, land costs are not factored into the costs calculated in this topic paper. However, the Council acknowledges that this will be necessary in future to ensure that contributions provided by individual sites and developments will be fair and equitable, and to ensure that viability of individual schemes is not unduly affected. Detailed discussions with all relevant stakeholders will be required as and when detailed schemes / planning proposals are being put forward.

3. Highways Apportionment

3.1 Summary of Highways Modelling Undertaken

- 3.1 Epping Forest District Council and Essex County Council have commissioned several studies in recent years to understand the existing highways issues, including detailed junction modelling. The full approach to modelling is set out in the Transport Assessment Report (EB503).
- 3.2 The Epping Local Plan Highway Impact Assessment (Ref), Essex Highways Technical Notes 1-8 (EB500A/B/C/D/E/F/G/H) and subsequent Transport Assessment Report, used a 'scenario-based' approach to understand the impact that growth might have on highways infrastructure, and in particular on junction capacities. The assessment has found that a number of junctions are expected to be operating over capacity as a result of growth.
- 3.3 The ability to mitigate for the impact of growth has been considered, taking into account land take, land ownership, and other feasibility considerations. Through this, a list of potential improvement schemes has been produced, and is presented in the final Transport Assessment Report.

3.2 Approach

- 3.4 A spreadsheet model has been developed which calculates the contributions that might be collected towards particular highways infrastructure projects. Appendix A sets out this spreadsheet model.
- 3.5 The approach undertaken, including any assumptions used, is set out below.

Schemes

- 3.6 The spreadsheet model includes the following schemes:
 - Assessed junction schemes included in the Essex Highways Technical Notes 1-8 (EB500A/B/C/D/E/F/G/H) (non-assessed junctions have not been included unless a scheme has been identified).
 - Other junctions identified following production of the Technical Notes.
- 3.7 Schemes relating to the Harlow and Gilston Garden Town are not included. The Council is working with the other 'Garden Town' local authorities (Harlow District Council, East Herts District Council, Herts County Council and Essex County Council) to produce an updated Infrastructure Delivery Plan for the entire Harlow and Gilston Garden Town. Once complete, this will identify in further detail the infrastructure required across the Garden Town as a whole (including highways), as well as which specific sites will be expected to deliver or contribute to infrastructure. This work has therefore not been replicated in this Addendum.
- 3.8 There are some schemes included in the IDP which were have been highlighted through consultation with town and parish councils. These have not been included

in the analysis, as the focus is on the schemes which the highways modelling suggests are essential to deliver the Local Plan growth. There is an Epping Forest Local Highways Panel, responsible for making recommendations and setting priorities for local highway schemes in the district. The Panel typically promotes town and parish council schemes and those that should be delivered by Local Transport Plan.

Matching schemes to development allocations

- 3.9 Detailed modelling on the highways impact of each residential and employment development allocation does not exist. Schemes have instead been matched to development allocations based on professional judgement as to where the impacts of development are likely to arise from.
- 3.10 For many of the schemes the matching of schemes to allocations is on a settlement or group of settlements basis, although some schemes relate to particular sites or masterplan areas only.
- 3.11 It should be noted that the proposed funding and apportionment contributions for physical highway improvement works at Four Wantz Roundabout, Wake Arms Roundabout and Robin Hood Roundabout have been removed from the Infrastructure Delivery Plan.
- 3.12 Funding has been committed to the A414 route improvement works, which includes the Four Wantz Roundabout layout improvements. These will be jointly funded by Essex County Council and South East Local Enterprise Partnership through the Local Government Fund and are scheduled to be delivered in 2021.
- 3.13 The updated Habitats Regulation Assessment 2019 (EB209) indicates that the physical highway improvement works at Wakes Arms Roundabout and Robin Hood Roundabout would not be needed to support improvements in air quality arising from new development over the period of the Local Plan, and that such works would have a likely significant effect on the integrity of the Epping Forest Special Area of Conservation and are therefore unlikely to be deliverable.

Apportionment and pooling

- 3.14 Detailed modelling on the highways impact of each development allocation does not exist. Apportionment of residential allocations to highways development allocations is instead based on unit numbers as a suitable proxy for impact.
- 3.15 Contributions towards highways improvements are likely to be required from some employment allocations. Any contributions would be commensurate with the level of traffic impact generated by specific sites and would take account of the overall location and proposals to reduce car use. For guidance purposes only, the following floor areas have been calculated to compare the likely impact from different employment uses with residential sites. The floor areas approximate to the trip generation from twenty residential units:

- 500sqm of B1a floorspace
- 2,000sqm of B1c/B2 floorspace
- 4500sqm of B8 floorspace

3.16 The respective floor areas have been calculated from the aggregated AM/PM peak hour trip generation estimates of the different land uses. This is a high level guide for comparison purposes only and will fluctuate between sites in town centre locations and more remote locations. The stated floor areas are not intended to be prescriptive and by no means represent a tariff-based approach.

3.17 The ready reckoner results in the comparisons set out in Table 1 below. Where a number of use classes is set out in the Submission Version Local Plan, the ready reckoner for B1c/B2 has been used.

Table 1 – Ready reckoners applied to employment allocations

Ref	Name	Allocated use	Floorspace (sqm)	Housing units comparison		
				B1a	B1c/B2	B8
LOU.E2	Langston Road Industrial Estate	B2	4,000		40	
NWB.E4	North Weald Airfield	B1/B2/B8	40,000	1,600	400	178
RUR.E19	Dorrington Farm	Not included - Harlow Strategic Site				
WAL.E6	Galley Hill Road Industrial Estate	B2/B8	5,120		51	23
WAL.E8	Land North of A121	B1c/B2/B8	40,000		400	178

3.18 Unlike education, the Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition (2016) does not state a size threshold, i.e. a number of homes over which they would expect contributions towards highways. For the purpose of the apportionment, only sites with 20 or more units have been assumed to contribute. In reality, contributions will be linked to Transport Statements and Transport Assessments (where the Epping Forest District Council Planning Application Validation Requirements Checklist (EB912) requires these), determined in detail as schemes comes through.

3.19 Under the CIL Regulations 2010 (2014 amendments), there are currently restrictions on the 'pooling' of separate Section 106 planning obligations, so that authorities cannot pool more than five obligations to pay for a single piece of infrastructure. As set out in 2.4, the restriction on pooling is likely to be lifted in the future.

3.20 There are some schemes shown in the model which may rely on contributions from more than five developments. No re-apportionment has been undertaken to overcome this at this stage, for the following reasons:

- It is not always clear whether these upgrades would be sought through Section 106 or Section 278 (for which there is no pooling limit).
- Schemes may be broken down into separate 'projects' in the future that can be phased and delivered independently and for which five or fewer contributions are required. As detailed scheme design has not taken place it is not confirmed that this is possible – although it is considered that there is considerable scope to deliver phased upgrades.
- If the pooling restriction is removed there will no longer be a barrier to pooling contributions.

Costs

3.21 For the purposes of the spreadsheet model, the following approach to scheme costs have been undertaken:

- Where cost estimates are already available through the IDP, they have been used.
- Where cost estimates are not available, a 'dummy cost' has been used (clearly flagged in the model – see Appendix A).

3.22 The costing of schemes set out in the spreadsheet model will be revised in line with planning applications, and the process of resolving will be as and when schemes are developed in more detail.

3.3 Summary of Findings

3.23 The highways apportionment model is shown in Appendix A.

3.24 Given that dummy costs are still being used, an accurate position on the contributions which might be expected from each development allocation is not available. As more certainty around scheme design and costs is known, the apportionment model can be revised and a position on contributions can be reached.

3.25 As explained in paragraph 3.18, there are some schemes shown in the model which may rely on contributions from more than five developments. The Government has committed to introducing guidance on the use of CIL and planning obligations, and it is expected that the restriction on pooling will be lifted. If the restriction remains, the following approaches should be explored to ensure that contributions can be collected in line with the CIL Regulations:

- The approach to matching schemes to development allocations should be revisited to explore whether there are options for rationalisation.
- Where possible, schemes could be broken down into separate 'projects' that can be phased and delivered independently and for which five or fewer

contributions are required. This requires more information on scheme design than currently available for most schemes.

- The method of contribution should be reconsidered – i.e. use of a Section 278 Agreement rather than a Section 106 Agreement.
- A minimum threshold (in terms of the number of units delivered) for contributions may also be applied to reduce the number of sites which are liable to contribute to such infrastructure, although this would likely reduce the total amount of monies available for collection.

4. Education Apportionment

4.1 Approach

- 4.1 A spreadsheet has been developed which calculates the contributions that might be collected each of the Local Plan residential allocations towards identified education infrastructure projects.
- 4.2 The model applies a per-unit contribution taken from the Essex County Council Developers' Guide to Infrastructure Contributions, and calculates the total contribution towards each infrastructure project and (if applicable) the funding gap. In reality, the amount of contributions required may be different from this per-unit contribution based approach as it will be based on actual quantum, unit mix, project cost and viability considerations etc. at the time of the application.
- 4.3 The following general assumptions have been used in the modelling:
- It has been assumed that one site equals one Section 106 Agreement. In reality land ownership or sub-phasing of sites may mean that more than one Agreement is required; however, at this stage it is not known where this will apply.
 - An assumption of the mix of units (between houses and flats) has been made in order to generate pupil yields and to apply Essex County Council's standard costs (expansion and new build).
 - The 2016 version of the Essex County Council Developers' Guide to Infrastructure Contributions applies a threshold for contributions of any development that would produce more than six pupils in either the primary or secondary age group. The formula is set out in the Developers Guide. If all units built on a development were houses (as oppose to flats) the threshold would be reached for primary school contributions at 20 houses and 30 houses for secondary). This threshold does not apply to early year and childcare provision. Instances where one developer may provide land for and/or deliver an education or early years facility which will be used to meet the demand generated by other sites has not been taken into account as part of this exercise. However, an arrangement may be reached between landowners and/or developers (e.g. equalisation agreements) through masterplanning / planning application process.
 - Modelling undertaken by Essex County Council to understand the future requirements for the provision of primary and secondary education school places took into account existing capacity of schools and so no additional adjustment is required. More information can be found in Section 6.2.3 of the IDP Part A Report (EB1101A).

- 4.4 The approach to attributing, apportioning and pooling contributions for early years, primary and secondary education is set out in more detail in the following subsections.

Early Years

Attribution

- 4.5 Essex County Council plan for early years provision on a ward geography basis. This approach has been used to attribute sites to early years interventions.

Apportionment and Pooling

- 4.6 Where more than five sites fall within a ward, in deciding which sites might contribute the impact of the sites (based on child yield generated) was taken into account. Actual contribution will also depend on size of the proposed development and local provision at the time of the application.

Primary Education

Attribution

- 4.7 The approach to apportioning development to indicative mainstream primary education interventions identified in the IDP is as follows:
- Growth in Buckhurst Hill and Loughton to be served by expansion of one or more primary schools in the Buckhurst Hill / Loughton Forecast Planning Group (FPG).
 - Growth in Chigwell and Stapleford Abbots to be served by expansions and replacement of temporary accommodation in the Chigwell / Lambourne FPG. It has been assumed that some replacement of temporary accommodation would be before the expansion, and some after.
 - Growth in Epping, Thornwood and Coopersale to be served by a new primary school in Epping and replacement of temporary accommodation within the Epping FPG. It has been assumed that contributions towards the replacement of temporary accommodation would come first.
 - Growth in Ongar, High Ongar and Fyfield to be served by expansions and new permanent facilities in the Chigwell / Lambourne FPG, plus replacement of temporary facilities with permanent facilities within the Ongar FPG.
 - Growth in Nazeing to be served by an expansion of Nazeing Primary School.
 - Growth in North Weald Bassett to be served by a new primary school at North Weald Bassett.
 - Growth in Waltham Abbey to be served by two expansions in the Waltham Abbey FPG, plus replacement of temporary facilities with permanent facilities.
 - Growth at East of Harlow and in Sheering and Lower Sheering to be served by a new primary school at East of Harlow.

- Growth at Latton Priory to be served by a new primary school at Latton Priory.
- Growth at Water Lane Area and in Roydon to be served by a new primary school at Water Lane Area.

Apportionment and Pooling

4.8 Where more than five sites are expected to benefit from the infrastructure intervention, in deciding which sites might contribute the following was taken into account:

- Impact, based on pupil yield generated.
- Broad phasing (start dates)

Secondary Education

Attribution

4.9 The approach to apportioning development to indicative secondary (mainstream 11-16) education interventions identified in the IDP is as follows:

- Growth in Epping, Ongar, High Ongar, Fyfield & Stapleford Abbots, Theydon Bois and Waltham Abbey to be served by expansion of up to three secondary schools which serve these areas.
- Growth in Loughton, Chigwell and Buckhurst Hill to be served by two expansions – potentially one to serve the Loughton area and one to serve the Chigwell area.
- Growth at East of Harlow and in Sheering & Lower Sheering to be served by a new secondary school at East of Harlow.
- Growth in Roydon and Nazeing to be served by secondary schools in Harlow Forecast Planning Group. At the time of writing, the capacity of secondary schools in the Forecasting Group is not known; however, appropriate level of contributions towards increased provision will be required.
- All other growth (Latton Priory, Water Lane, North Weald Bassett and Thornwood) to be served by a new secondary school at Latton Priory.

Apportionment and Pooling

4.10 Where more than five sites are expected to benefit from the infrastructure intervention, in deciding which sites might contribute the following was taken into account:

- Impact, based on pupil yield generated.
- Broad phasing (start dates)

Costs

4.11 All the costs quoted are at April 2017 prices and indexation from this date using the PUBSEC index should be applied to understand current costs.

3.1 Summary of Findings

4.12 The apportionment model is shown in Appendix B.

Appendix A Highways Apportionment

Legend

Table 1: Sites apportioned to infrastructure interventions (pages 17-24)

Table 2: Indicative costs by site and infrastructure interventions (pages 25-32)

Appendix B Education Apportionment