

<b>CABINET</b>	<b>AGENDA ITEM No. 5</b>
<b>16 NOVEMBER 2020</b>	<b>PUBLIC REPORT</b>

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Cabinet Member(s) responsible:	Cllr Ayres (Cabinet Member for Education, Skills and University)	
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## CHILD YIELD MULTIPLIERS

RECOMMENDATIONS	
<b>FROM:</b> Service Director: Education	<b>Deadline date:</b> N/A
<p>It is recommended that Cabinet adopts the proposed revised child yield multipliers to be used to calculate the level and type of education infrastructure required to mitigate the impact of new developments.</p>	

### 1. ORIGIN OF REPORT

- 1.1 This report is submitted to Cabinet following a request from the Cabinet Member for Education Skills and University.

### 2. PURPOSE AND REASON FOR REPORT

- 2.1 The purpose of this report is to provide Cabinet with an understanding of:

- (a) how the numbers of children arising from new developments is calculated and  
(b) how the multipliers are used to determine the education infrastructure required to mitigate the impact of new developments

- 2.2 This report is for Cabinet to consider under its Terms of Reference No. 3.2.1, *'To take collective responsibility for the delivery of all strategic Executive functions within the Council's Major Policy and Budget Framework and lead the Council's overall improvement programmes to deliver excellent services.'*

### 3. TIMESCALES

Is this a Major Policy Item/Statutory Plan?	<b>NO</b>	If yes, date for Cabinet meeting	<b>N/A</b>
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### 4. BACKGROUND AND KEY ISSUES

- 4.1 In order to plan appropriately for new housing developments, the Council's Business Intelligence Service provides forecasts of pupil numbers to inform planning for early education and school

places. The multipliers are used to forecast the numbers of children for a given number of new homes. There is a multiplier for each of the following age ranges:

- pre-school aged children (0 - 3 years)
- primary age children (4-10 years)
- secondary age pupils (11-16 years)

4.2 The multipliers which underpin the forecasts, have not been reviewed since 1998 when Peterborough became a unitary authority. Officers' understanding is that in the interim period the multipliers used at the time in Cambridgeshire continued to be used by Peterborough. These were 20-30 primary children per 100 dwellings, 15-20 secondary pupils per 100 dwellings and 4 0-3 year olds per 100 dwellings. The forecasts form the basis for either negotiation with housing developers as part of a S106 Agreement or for calculating the allocation of Community Infrastructure Levy (CIL) to support the funding of infrastructure requirements.

4.3 In larger developments the number of school places required may necessitate provision of new schools and sufficient land to accommodate buildings and outdoor space. These requirements feed into the planning process. Given the significance of the multipliers in the planning of the provision of new communities, it is important that they are approved by elected members and this, in turn, lends weight to the Council's case whenever it is challenged by developers.

4.4 Since 2018, the 0-19 Education Place Planning Service has been working with the Business Intelligence Service (BIS) to replicate for Peterborough the same set of forecasting and place planning tools which are integral to the place planning strategies used in Cambridgeshire. The child yield multipliers are the final element of this work.

4.5 Given the current and projected level of growth in the City a review of the multipliers will take place every three years.

#### 4.6 **Methodology**

Forecasting the number of children that will live in a new development is a complex evidence-led process. The Research Team within the BIS has developed a methodology over many years, based on:

- analysis of administrative data such as PLASC (pupil level annual school census)
- local surveys of new developments
- whole population analysis such as local population estimates, and where relevant
- the national Census and GP registrations

These data are then applied to a selection of recent case studies for new developments in the area; in this case The Hamptons (post 2010 build), Cardea / Stanground South and Paston.

4.7 Together, these sources indicate the average number of children that might be expected to live in individual properties, depending on the number of bedrooms and tenure. However, while some key variables e.g. dwelling size and tenure mix can be factored into forecasts, there remain many intangibles to do with location and design, the state of the housing market and government policy that affect the types of people and households attracted to an individual development.

#### 4.8 **GENERAL AND DETAILED MULTIPLIERS**

The multipliers are broken into two categories. Where the housing mix is unknown a general multiplier is applied. Where a detailed mix is known a detailed multiplier is used.

#### 4.9 **General multipliers**

When discussions with a developer begin, the intended housing mix may be unknown, not yet confirmed or known in broad terms only. In these situations it is necessary to apply a "general multiplier" range that indicates the lowest and highest number of children that might reasonably be expected to live in the development.

4.10 For planning purposes, BIS officers advise greater use is made of the full range rather than a single mid-point figure, particularly during early discussions. At all points it is important to be clear that any particular child forecast is based on a set of assumptions regarding the nature of the proposed development. If these assumptions change so too will the child forecasts. Whilst a multiplier range is proposed for calculating child yield, for the purpose of calculating developer contributions where a detailed housing mix is not yet known, the top end of the range must always be used to guarantee that the Council can cover its statutory obligations with regard to the provision of early years and school places.

4.11 **Evidence**

The Research Team have carried out three new development surveys to gather further data.

4.12 Table 1: Details of New Developments Survey, 2020.

	<b>The Hamptons</b> (Dwellings built since 2010)	<b>Cardea / Stanground South</b>	<b>Paston</b>	<b>Total Peterboro' 2020 surveys</b>
Number of surveys mailed to households	2,065	1,439	562	4,066
Number of responses*	443	249	90	782
Response rate %	21.5%	17.3%	16.0%	19.2%
% of surveys sent to affordable homes	19%	19%	30%	21%
% of surveys received from affordable homes	11%	10%	24%	12%

\* note that surveys were mailed a total of three times to non-respondents.

4.13 A total of 782, responses were achieved; enough to understand the pupil yield compared to the characteristics of bedroom size and tenure. Further desk-based work was undertaken to consider these results in the light of the differing ages of the developments and consistency with previous survey results from areas of Cambridgeshire (Love's Farm in St Neots, Cambridge Southern Fringe).

4.14 New developments have a significantly higher birth rate than the general population due to the over representation of younger couples, many buying their first homes and then starting families; this pattern creates a peak in demand for education particularly when three to four hundred family sized houses are built each year on a site. The age of the sites chosen as case studies for this work is particularly relevant.

- The Hamptons (dwellings completed since 2010). The peak of build completion for the dwellings surveyed was between the years 2010 to 2016 when an average of 165 dwellings were completed each year. This was between four to ten years ago making the Hamptons survey a particularly good exemplar for understanding the peak in primary age children in a new development.
- Stanground South / Cardea. The peak of the build completion was for the years 2013 to 2016 when an average of 267 dwellings were completed each year. This was between seven to four years ago making this survey an exemplar for the demand for early years / Key Stage One places.
- Paston. The development which started in 2008/09 is smaller than the other two with a lower build rate of fifty dwellings per year, except in 2015/16 when 196 were built. The absence of a peak in build means that this is a useful benchmark for building a more detailed trajectory model.

4.15 **Outcome**

The Peterborough CHIS (Child Health Information Service) and PLASC data analysis is consistent with the multipliers that have been previously adopted by Cambridgeshire County

Council. It should be noted that the adoption of the Cambridgeshire multipliers was based on a rigorous longitudinal study of child yields from new developments.

- 4.16 There are similarities with other areas where sufficiently robust research has been carried out. Gloucestershire County Council<sup>1</sup> research concluded with adoption of the following policy “GCC is currently using the updated pupil yields supported by two studies in 2018 and 2019. The updated pupil product ratios for new housing are; 30 pre-school children, 41 primary pupils, 20 secondary pupils and 11 post-16 pupils per 100 dwellings.” Other studies (Northamptonshire, Milton Keynes) provide a ‘snap shot’ in time, identifying high demand for early years places (32 to 36 per 100), which projected forward to primary demand (4 – 10s) would equate to approximately 38 – 43 pupils per 100.
- 4.17 Given the timing of the study compared to the age of the new developments data regarding early years (0-3) and primary (4-10) can be converted straight into recommended multipliers. For secondary, the data collected needs to be projected forward<sup>2</sup>, this gives a recommended figure somewhat higher than Cambridgeshire but which is consistent with the numbers of secondary-aged children living in social housing, in particular.
- 4.18 Considering the evidence and validation process, the conclusion of the work undertaken is that the general multipliers should be:
- 20 - 30 pre-school aged children (0 - 3 years) per 100 dwellings
  - 35 - 45 primary age children (4-10 years) per 100 dwellings
  - 23 – 33 secondary age pupils (11-15 years) per 100 dwellings
- 4.19 The adoption of a range compared to a single figure enables the Council and developers to reflect on the individual nature of each development during negotiations allowing both parties to exchange information about the impact of the development on educational provision, and reach agreement.

#### 4.20 **Detailed Multipliers**

The general multipliers above are applied where details of housing mix are not known, or at the early stages of a development and likely to change. Where a detailed intended housing mix of a new development is known in full, it is possible to forecast the number of children that might be expected to live in individual properties based on the number of bedrooms and whether they are market or social rented dwellings. For example, 100 three-bedroom market properties would be expected to house around 30 primary aged children compared to around 80 primary-aged children from 100 three bedroom social rented properties.

- 4.21 During planning for education provision on new developments there is the requirement for more detailed modelling as information on tenure and house / bedroom size becomes available. The data from the new development surveys support this work by feeding in information on the pupil yield for different sizes and tenures of housing, enabling a standard model to be built.

#### 4.22 **Evidence**

The headline findings from the surveys are as follows:

- the number of children living in a dwelling increases with the number of bedrooms but not all bedrooms are occupied by children; many bedrooms in market housing are retained as spare/alternative space;
- there are significantly more children, per bedroom, living in social housing compared to market housing;
- the children living in social rented homes in Peterborough new developments have a slightly older age range compared to market housing.

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<sup>1</sup> <https://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/gloucestershire-local-developer-guide-infrastructure-and-services-with-new-development/>

<sup>2</sup> Projection shows a future average secondary year group of 140 for The Hamptons (34 per 100), 80 for Stanground South / Cardea (28 per 100) and 30 for Paston (27 per 100).

#### 4.23 **Outcome**

Taking these issues into account the model for detailed multipliers can be generated. The table below summarises the model outputs.

#### 4.24 Table 2 summary of detailed multiplier model

	Age Group	Tenure	
		Market	Social
Children per 100 dwellings	0-3s	25	25
	4-10s	34	55
	11-15s	18	51

#### 4.25 **Special School Places**

DfE guidance states specifically that it is not necessary to produce pupil yields for SEN that differentiate between complexity of condition. To *“determine the need for SEN provision, pupil yield data should identify the number of pupils/learners within recent local housing developments who attend special schools, pupil referral units or alternative provision, SEN units and resourced provision within mainstream schools. It is reasonable and fair to seek developer contributions for SEN provision in direct proportion to the needs arising from planned housing development, applying the same principle to SEN provision as to mainstream.”*

4.26 The analysis of the PLASC data shows that approximately 2.8% of children in the new developments have an Education Health and Care Plan (EHCP) at present (1.6% within special school / Pupil Referral Units (PRU)). This is lower than the national average of 3.3%. The reason for this difference would be the relatively young age range of the cohort being studied (more children will receive EHCPs as they move through education) as well as new developments not exhibiting some aspects of deprivation and diversity found within the general population at the earlier stages of building. It is recommended that the Council adopts the national 3.3% for these reasons.

#### **Post 16 places**

4.27 At the present time there are sufficient places in the current Peterborough Sixth form / further education (FE) college system to meet anticipated future demand. The market for sixth form / FE college places works differently compared to mainstream school places with young people able to travel far greater distances to access provision. There is also a wider 'market' in operation with specialist courses and subjects on offer. Therefore, it is much harder to justify developer contributions for a specific locality.

#### 4.28 **IMPLICATIONS FOR DEVELOPMENT SITES**

The use of the proposed multipliers will enable the Council to anticipate ongoing implications that will need to be managed in terms of education place planning. For example, with regard to the planned development at Gt Haddon where there is already a negotiated s106 agreement, officers will be able to evaluate more accurately the timing for opening the three primary schools and the secondary school required to mitigate the impact of this development.

4.29 On developments where negotiations are at an early stage, or yet to begin, for example on the Peterborough Showground site, the revised multipliers set out in 4.18 and 4.24 above will be used.

### 5. **CONSULTATION**

5.1 Officers have shared with the Cabinet Member for Education, Skills and University, a briefing paper on the key principles of child yield multipliers.

## 6. ANTICIPATED OUTCOMES OR IMPACT

6.1 The anticipated outcome of this report is that Cabinet will:

- have a clear understanding of the purpose of child yield multipliers, how they are derived and the use to which they are put in planning education provision so that the Council meets its statutory place planning duties whilst minimising risk
- be able to endorse the use of the new general and detailed multipliers so that they can be used with immediate effect

## 7. REASON FOR THE RECOMMENDATION

7.1 To:

- reflect government non-statutory guidance *Securing Developer Contributions for Education (DfE November 2019)*, in particular “*Pupil yield factors should be based on up-to-date evidence from recent housing developments*”.
- provide officers with a robust platform on which to base negotiations with developers so that the Council will be better placed in the future to secure appropriate developer contributions
- enable the Council to plan more accurately with regard to the size and timing of new education infrastructure, and thus ensure it continues to meet its statutory place planning duties

## 8. ALTERNATIVE OPTIONS CONSIDERED

8.1 Do nothing. Maintaining the status quo and continuing to operate using out-of-date child yield multipliers would expose the Council to unnecessary risk of funding shortfall and undermine the Council’s ability to fulfil its statutory place planning duties.

## 9. IMPLICATIONS

### Financial Implications

9.1 Opening a new school is expensive. In addition to the capital investment, the Council is responsible for all pre-opening start-up costs in respect of new basic need schools, including diseconomy of scale costs, funding for which may be needed over a number of years. Given this burden of revenue expenditure, the Council will only consider commissioning new schools where there is no possible alternative. It is, therefore, essential that where new educational infrastructure is to be funded externally, that officers can evidence robustly to developers the Council’s education infrastructure requirements. Up-to-date and credible forecasting tools, such as child yield multipliers are essential to avoid exposing the Council to the risk of a funding shortfall.

### Legal Implications

9.2 Developers are only required to fund the level of new places required to mitigate the impact of their developments. If the Council’s child yield multipliers do not reflect accurately the situation in Peterborough there is a risk that education capital projects will be under-resourced.

### Equalities Implications

9.3 There are no significant implications.

### Carbon Impact Assessment

9.4 The impact of adopting the new child yield multipliers is carbon neutral.

## **10. BACKGROUND DOCUMENTS**

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985

- 10.1 *Securing Developer Contributions for Education (DfE November 2019)*  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/909908/Developer\\_Contributions\\_Guidance\\_update\\_Nov2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/909908/Developer_Contributions_Guidance_update_Nov2019.pdf)

## **11. APPENDICES**

- 11.1 *Peterborough Pupil Multipliers - Summary Technical Paper (October 2020) - Michael Soper, Research Team Manager, Business Intelligence Service (Cambridgeshire and Peterborough)*

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