

# Planning Inquiry

## Town and Country Planning Act 1990 (as amended)

Appeal by Hill Residential Ltd under S78 of the Town and Country Planning Act 1990 (as amended) against the decision of Stevenage Borough Council to refuse planning permission in respect of the Full application for the proposed demolition of existing office building (Use Class B1) and structures, and the construction of seven apartment buildings comprising 576 dwellings (Use Class C3) together with internal roads, parking, public open space, landscaping, drainage and associated infrastructure works.

**Land West of Lytton Way, Stevenage, Hertfordshire, SG1 1AG**

## PROOF OF EVIDENCE

### DAN HARDY

Dan Hardy, Senior Planning Officer, School Planning, Children's Services, Hertfordshire County Council.

**PINS Ref:** APP/K1935/W/20/3255692

LPA Reference: 19/00474/FPM

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## QUALIFICATIONS AND EXPERIENCE

My name is Dan Hardy. I have a BEng (Hons). I have 20 years experience in the public sector. My current role is Senior Planning Officer, School Planning, Children's Services, Hertfordshire County Council. In this role I am primarily responsible for School Place Planning in the west of Hertfordshire.

I am not a statistician or data scientist but work closely with colleagues from the data scientist team who maintain the Model and have undertaken the PYS. Where necessary I have included in this proof material directly from, or drawn from the input and expertise of, data scientists, particularly Dr Tony Bennetts, Business Intelligence Analyst within our Community Intelligence & Data Science Team, and have acknowledged where that is the case.

## 1. Introduction

- 1.1. The purpose of this proof of evidence is to explain how the County Council has projected the pupil yield arising from the Lytton Way development for the purpose of calculating a contribution towards education provision.
- 1.2. This proof of evidence is intended to cover the points made regarding pupil yield in the Appellant's education note dated 25 March 2021 and received by the Council on 17 May 2021. In particular, it explains, at a summary level, how the Hertfordshire Demographic Model ("the Model" or "HDM"), as adjusted to align with emerging outputs from the Pupil Yield Survey ("the PYS"), works in its practical application. The proof confirms the (adjusted) Model's application to the Lytton Way application and confirms that the assumptions used in the model and the outputs are reasonable and form a sound basis for the level of education contribution sought by the County Council.
- 1.3. This proof of evidence is structured in the following way:
  - An executive summary
  - A summary of the HDM.
  - A summary of the PYS.
  - A summary as to how the HDM is controlled to the PYS.
  - A summary as to how SG1 and BHS mainstream primary yields were calculated.
  - Comparison of Lytton Way projected mainstream primary yield to the county average urban high-density development flatted yield per 100 dwellings.
  - Conclusion.

## 2. Executive summary.

- 2.1. The appellants case focusses on an education note within which mainstream pupil yields are compared between the Lytton Way development and other sites in Stevenage for which primary education contributions have been sought towards the same project. Specifically, those sites known as SG1 (planning application reference number 19/00743/FPM) and BHS (The Former BHS Store 7 The Forum, planning application reference number 19/00647/FPM).
- 2.2. The appellant's Education Note assumes that the assessments made for SG1 and BHS used the Hertfordshire Development Model and that therefore the primary education contributions requested can be directly compared between sites. The challenge is premised on this comparison. However, this assumption is not correct. Whilst Lytton Way was assessed using the Model, neither SG1 nor BHS were as the latter two planning applications were submitted and

considered by the county council during a transition phase in which the Model was not available.

- 2.3. This transition phase covered a period in summer 2020, between the county council reviewing the initial findings from its PYS and integrating these conclusions into the HDM to ensure charging was as fair and directly related in scale as possible, and therefore meet the statutory CIL tests for seeking planning obligations. Unfortunately, the work needed to introduce these updates to the Model was significant and as such there was a short period in which it was not available for use as a small number of planning applications were prepared, considered and determined.
- 2.4. The SG1 and BHS developments were therefore considered, and financial contributions calculated, using a simpler, ad-hoc methodology. The financial contributions requested were therefore lower than would otherwise have been the case should the PYS controlled HDM have been applied. The updated Model, aligned with emerging PYS data, did not become available for use until September 2020.
- 2.5. The final, revised primary education contribution for the Lytton Way development was confirmed by the county council to Stevenage Borough Council in October 2020, at which point the revised HDM was available and being used to calculate potential pupil yields and mitigation costs. The Model has been used to calculate contributions for new developments across the county since this point and its use in the Lytton Way case is therefore consistent with the approach taken for other developments in both Stevenage and other district/borough councils in Hertfordshire.
- 2.6. The authority is confident that the methodology applied to Lytton Way and the requested contribution is robust, reasonable and proportional.
- 2.7. The Appellant appears to criticise the County Council for not providing the full model. It states in its Education Note at para. 3.1 that the contribution sought is “is not justified given that access to the model and understanding of the application of child yields is not forthcoming and hence it is not possible to interrogate or accurately assess the model outputs.”
- 2.8. I disagree with this statement. There are publicly available documents which explain, in further detail, how the Model operates and the underlying data that informs it, the PYS process and how the emerging PYS data has been applied to calibrate the Model. On this basis release of the model would not provide any greater understanding of how pupil yields were calculated for the Lytton Way development.

### 3. SUMMARY OF THE HERTFORDSHIRE DEVELOPMENT MODEL (HDM).

- 3.1. In this section I set out a summary of the Hertfordshire Development Model. In this section I have relied primarily upon information provided by our Community Intelligence & Data Science Team, Improvement & Technology, Resources.
- 3.2. Historically, estimates of early years, primary and secondary pupil yields arising from new housing developments have been debatable between authorities and developers and data to support these negotiations has often been limited<sup>1</sup>. Published literature indicates that the key metrics applied in calculating child yield are dwelling type, number of bedrooms and, dwelling tenure (Open Market or Affordable/Social Rented)<sup>2</sup>. However, it is broadly acknowledged that the exact number of children to live in a new housing development can be nearly impossible to predict due to the wide range of factors that affect the outcome<sup>3</sup>.
- 3.3. A census is considered the most comprehensive and accurate survey of the population, it's characteristics at the time it is taken and, the dwellings/household stock. Public services such as schools, health, roads and libraries amongst others need to be planned and a census provides information that government needs to develop such policies and allocate funding. Whilst, since the 2011 census, there has been substantial improvement in statistical information at small level geographies significant barriers still exist in sourcing individual dwelling tenure and bed size data. At current time no equivalent, detailed information exists to replace that available only from a census.
- 3.4. The HDM was originally created during the mid-2000's utilising 2001 census data and a national housing study regarding the assumed relationship between dwelling number of rooms and bedrooms. It has since been updated to reflect 2011 Census data.
- 3.5. The HDM utilises 2011 Census commissioned customised data outputs for All Households and Migrant Households which provides information relating to the number of persons by age versus total number of households, or it can be broken down by dwelling bed size, type and tenure (or any combination thereof). The All Households tables represent the wider population to which it is expected that a development will conform over time whilst, the wholly moving (migrant) households represents those persons whom move, or migrate, to a development. The HDM therefore allows for the population likely to be resident

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<sup>1</sup> Hollis, J. 2005. Data Management and Analysis Group – Child Yield. DMAG Briefing 2005/25 August 2005.

<sup>2</sup> For example: Hollis, J. 2005. Data Management and Analysis Group – Child Yield. DMAG Briefing 2005/25 August 2005. and, Greater London Authority (GLA). 2005. Child Yield. Data Management and Analysis Group (DMAG) Briefing 2005 / 25 – August 2005.

<sup>3</sup> Rockwell, J., Vargas, N., Vanis, C. and, Chou, S. 2005. Evaluation of Child Yield Within Recently Completed Housing Developments in the Borough of Brent. Worcester Polytechnic Institute.

in a new development to change with time and for the overall population to conform to an age structure in line with the wider community.

- 3.6. The process of creating the customised table outputs incorporated into the HCC model involves the base data passing ONS Statistical Disclosure Controls (SDC) and as such the data are considered robust and non-identifying. The ONS produced, upon commission by the authority, the following four customised table outputs:
- CT0173 - Tenure of household by accommodation type by number of bedrooms – All Households - All occupied households in unshared dwellings (excluding caravans and other mobile or temporary structures).
  - CT0174 - Tenure of household by age by accommodation type by number of bedrooms – All Households - All usual residents living in households in unshared dwellings (excluding caravans and other mobile or temporary structures).
  - CT0478 - Tenure by bespoke accommodation type by number of bedrooms – Migrant Households - Wholly moving households (excluding caravans/temporary structures) in unshared dwellings.
  - CT0479 - Age by tenure by bespoke accommodation type by number of bedrooms – Migrant Households - All usual residents living in wholly moving households (excluding caravans/temporary structures) in unshared dwellings.
- 3.7. The specific consideration taken of the demographic characteristics of wholly moving (Migrant) households is beneficial as they differ substantially to that of the population of the whole authority (All Households). The former cohorts are recognised by the ONS to be dominated by young adults of reproductive age<sup>4</sup> with a significantly smaller contribution of older age groups and are effectively a Special Population.
- 3.8. The model uses the number of dwellings by bed size to calculate single dwelling population yield values as determined from the Census Migrant Household data. These yield figures are then multiplied by the dwelling percentage representation by bed size (by type and tenure where required/appropriate) in order to calculate a yield per 100 dwellings by age. The yield per 100 dwellings values by age are linked to the underlying model sheets which utilise the build trajectory to calculate the number of persons by age as the development progresses. Cohorts are aged “year on year” as a development progresses and therefore provide a more accurate projection of likely populace than other methods such as those which apply a flat, or average, yield per 100 dwelling rates. The “ageing on” is common in cohort component demographic projection

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<sup>4</sup> ONS SNPP 2014 – 29<sup>th</sup> October 2015

techniques in order to determine how a population may be structured at a future point in time.

- 3.9. There are subsequently two types of yield: Direct – those, for example, already of primary age when they move into a development and; Transitional – younger ages transitioning into primary age cohorts over time. Whilst, therefore, there are immediate child yields once a development starts producing residential completions time is required before peak transitional yields are realised, this is normally several years following development completion. This theory is supported both by published literature<sup>5</sup> but also observations made by the authority in its Pupil Yield Study (PYS). Following attainment of peak yields, and with sufficient time, the demographic characteristics of a development become aligned to that expected of the wider population.
- 3.10. The model can operate at different levels of complexity to account for the level of information available at any given point in the planning application process. The more detail provided for input into the model, the more detailed the result:
- Unit numbers –this level of data represents the projected population wherein the least amount of data with regard to a development is known (typically the total development size only) although consideration can also be given to a specific bed size mix.
  - Unit numbers and the type of unit mix – this level of data represents the projected population wherein the type mix of the overall unit number is also known, so consideration is also given to the type of proposed dwelling (house or flat) by bed size.
  - Unit numbers and the type & tenure of unit mix – this level of data represents the projected population wherein the most detailed level of information is available regarding overall unit number, dwelling bed size, type and tenure.
- 3.11. Projected nursery, primary, secondary and Post-16 cohorts are reduced by relevant uptake rates based on county-wide data to account for those proportions of the population whom are likely to require a mainstream school place (e.g. discounting those whom take up places in the independent sector).
- 3.12. More recently, a number of points were raised with respect to the HDM in particular around concerns that birth numbers/rates had changed since the last census, that in/out movements from development were not fully accounted for and, that consideration was not given to any properties which may become long term vacant. The authority therefore commenced a Pupil Yield Study to investigate these issues and, if and where necessary/relevant, update the HDM.

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<sup>5</sup> Central Bedfordshire Council 2015 and, North Essex Garden Communities Employment & Demographic Studies 2017.

**4. SUMMARY OF THE AUTHORITY PUPIL YIELD STUDY (PYS).**

- 4.1. In 2019 the Department for Education (DfE) published preliminary guidance which specifically addressed the issue of developer contributions towards education requirements, including information about the necessary supporting evidence. It was intended that a more consistent, robust and defensible evidence base could be achieved, nationally, through informed up-to-date evidence of actual mainstream pupil yields from development, at both the plan preparation and application stages.
- 4.2. Whilst the DfE has yet to publish its point-in-time national dataset, HCC has been liaising closely with the department to contrast and compare emerging methodologies to ensure alignment. The DfE continues to indicate that locally held evidence to support any pupil yield method should be favoured.
- 4.3. It can be provisionally indicated that the county councils Pupil Yield Study will include 1,076 developments containing 51,479 dwellings constructed within the boundary of the authority across 19 annual cohorts in the period 2002 to 2020. The following is a high-level summary of the methodology applied by the county council although it is recognised that it is a “live process” and subject to continuous refinement and progression. Further detail, if required, can be obtained from the suite of documents submitted by the county council in support of the appeal process.
- 4.4. HCC has applied an administrative census in its PYS which removes the error element associated with many of the aspects of surveys and samples; it is a study of all dwellings which satisfy the population inclusion criteria. The results are specific to the whole population under consideration as all individuals within the population have been included. HCC considers the population under consideration to be defined as the number of completed dwellings of specified residential classifications arising from developments solely within the boundary of Hertfordshire County Council. All dwellings included in the population were lawfully erected through the Town and Country Planning system as evidenced by planning permission consent being granted by the relevant Local Planning Authority. Each dwelling included within the population was determined to have a development construction start and completion date.
- 4.5. The Pupil Yield Study is a census of the whole population of new build dwellings although this is on condition that the necessary data is required and available on a statutory basis. In this context it is a legal requirement for the information to be collected/provided and therefore the whole population is subject to these conditions such that no bias can be introduced. Consideration of databases held internally within HCC determined that statutory planning/dwellings information could be sourced via SMART Herts whilst mainstream pupils could be determined from the Schools Census return.

#### **4.6. SMART HERTS**

- 4.6.1 Hertfordshire County Council utilises a monitoring system termed the SMART (Spatial planning, Monitoring, Analysis and Reporting) Herts system which records amongst various factors planning permission applications and dwelling completions. The system is jointly used by HCC, and all the districts, and is a web-based data repository for legally required planning and building related information entered by the districts, building control and, annually provided National House Building Council (NHBC) updates, which enables centralised reporting. SMART Herts therefore provides a centralised repository of data relating to both residential and commercial planning applications and completions within the authority area.
- 4.6.2 SMART Herts picks up all dwelling gains and losses through the Town and Country Planning system. A new dwelling cannot be constructed outside of the system aside from within Permitted Development rights. However, information on the latter is also collated under Prior Approval applications within the same regime and added to the database. Conversions, such as from an office to a block of flats, are also included within the system. Any enforcement appeals would also be included as HCC applies a system which checks the Planning Inspectorate website. The authority collates completions and permissions data in conjunction with, and primarily on behalf of, the Districts as an evidence base for their Local Plans and statutory returns to Government. The data set provided is therefore considered to represent the whole population of completed developments.

#### **4.7. THE SCHOOL CENSUS.**

- 4.7.1 The 1996 Education Act (section 537A) provided a statutory requirement for each school in England and Wales to return a pupil census to the then named Department for Education and Skills (DfES). This was originally known as the Form 7 return and mainly dealt with total pupil numbers although, by 2002 schools were asked for the first time to supply detailed information about each pupil including names and address postcode (January each year). Termed the Pupil Level Annual Schools Census (PLASC) this was replaced in 2007 with the Schools Census which is now the Department for Education's (DfE) largest and most complex data collection exercise. Data is provided to the Department for Education for all pupils on a school's admission register on a termly basis.
- 4.7.2 The School Census is a statutory data collection for all maintained nursery, primary, secondary, middle-deemed primary, middle-deemed secondary, local authority maintained special and non-maintained special schools, academies including free schools, studio schools, university technical colleges and city technology colleges in England. Pupil Referral Unit/Alternative Provision (PRU/AP) establishments are legally defined as schools and are also included (comprising pupil referral units, 'AP' academies and 'AP' free schools).

Collected data is core to the National Pupil Database (NPD) and accuracy is therefore highly important with zero errors expected by the DfE. HCC as the Local Authority with responsibility for education collates the School Census data for submittal to the DfE.

#### 4.8. OVERALL PROCESS.

- 4.8.1 Figure 1 displays the overall processes associated with the principle data sets: SMART Herts, School Census and Births/GP Registrations. The initial step was the identification of developments which should be included within each annual cohort 2002\_2003 through to 2019\_2020.
- 4.8.2 Once developments satisfying the population inclusion criteria were identified SMART Herts data files relating to each development in each annual cohort were aggregated. Specific development polygons extracted from SMART Herts were used by the HCC GIS team to obtain *AddressBase\_Premium* dwelling addresses by specific residential dwelling characteristics. Dwelling counts by type were compared to SMART Herts data sets to ensure totals matched in relation to total number of dwellings and counts by type specific to each permission. Master address files were created for each development and in aggregate for each annual study cohort. Figure 2 below displays an example development polygon with postcode and OS determined dwellings.
- 4.8.3 The postcodes arising from the master address files were used to extract specific individual anonymised school census records from the January School Census return 2007 to 2020. For early cohorts between 2002 and 2006 January School Census records were extracted based on co-terminus postcode data. School Census records were address cleansed and Unique Property Reference Number (UPRN) identified. Linking the two data sets, based on UPRN, established mainstream sector counts by specific dwelling identifier in new build dwellings over time.

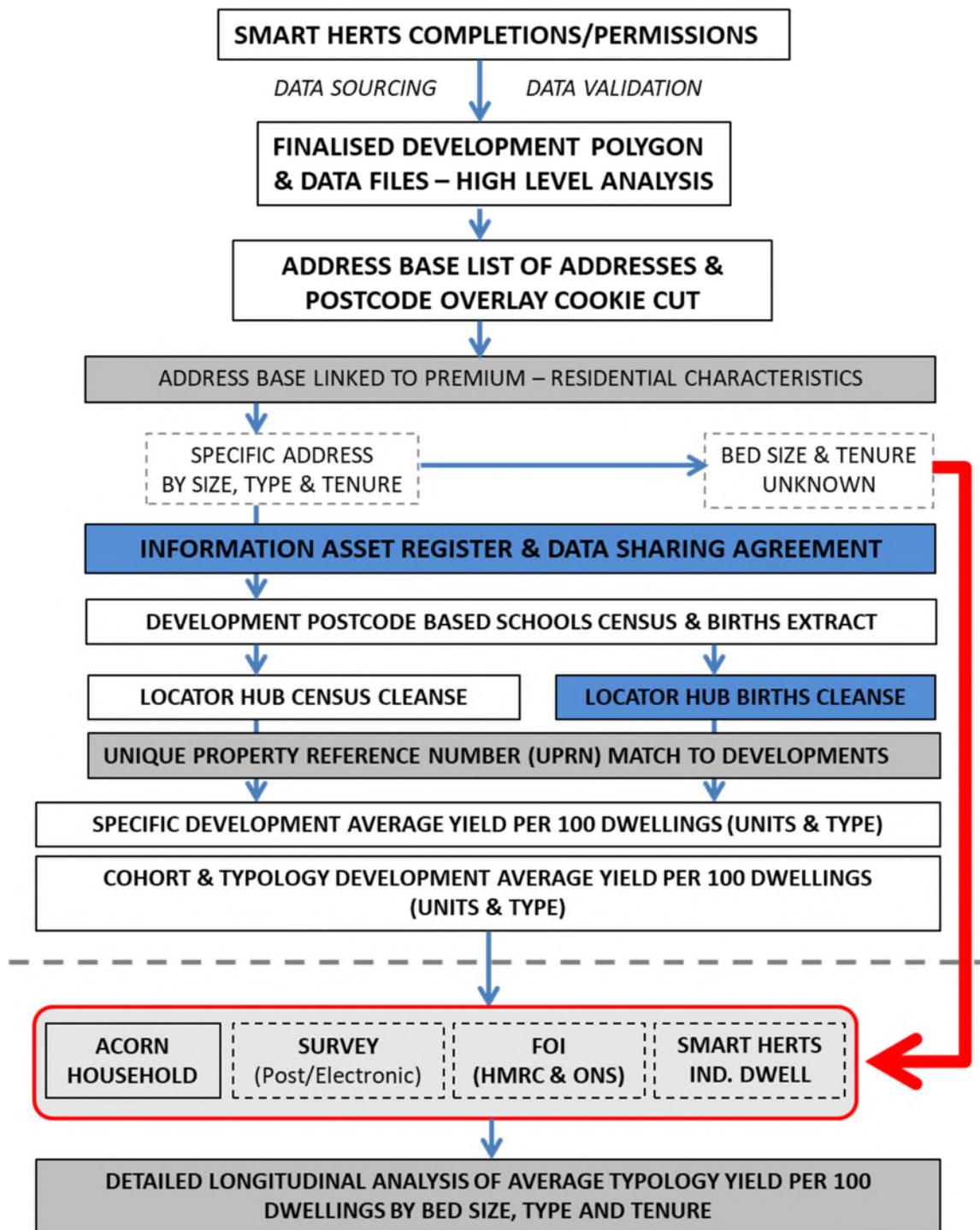


Figure 1. The high-level overall components to the Pupil Yield Study.

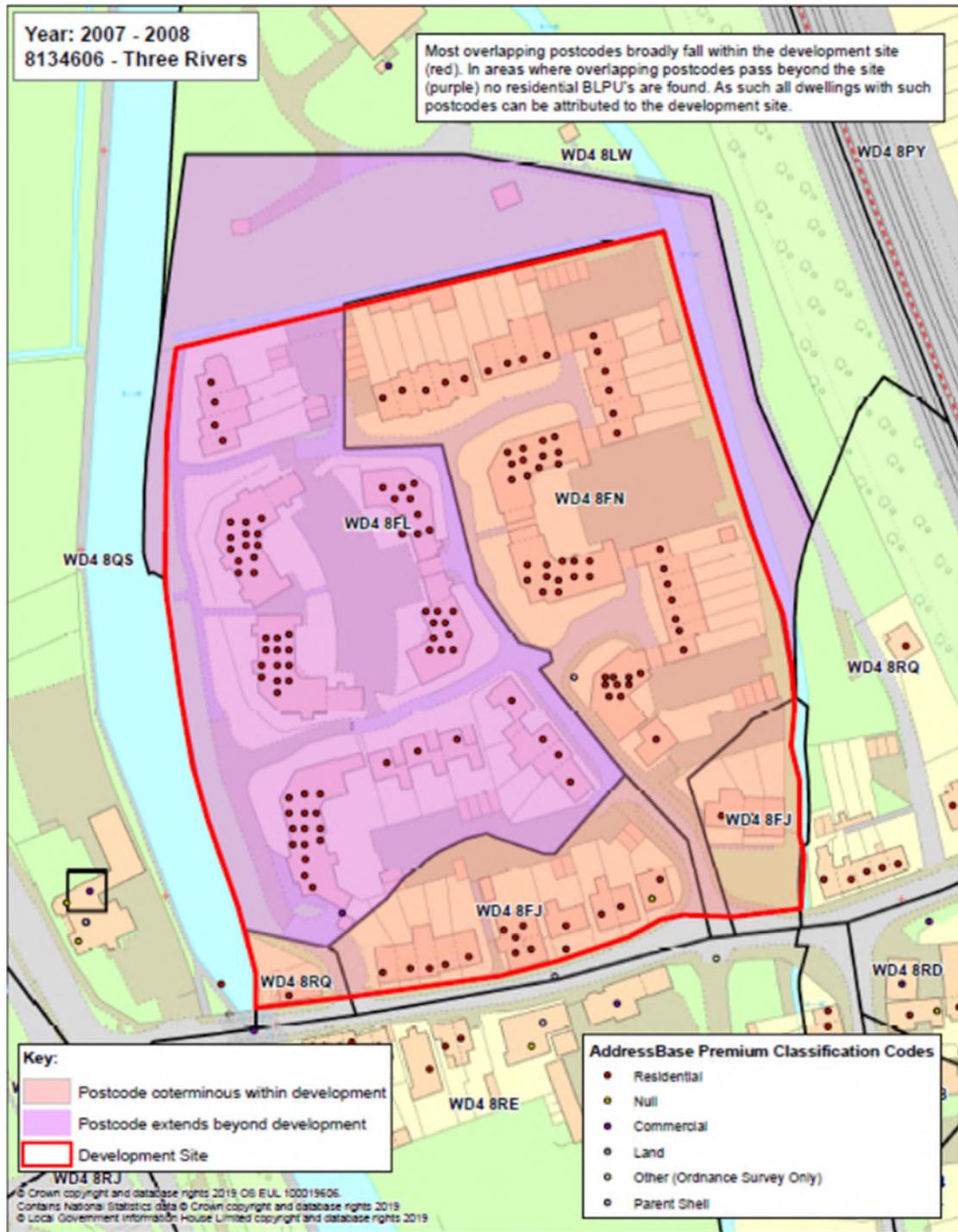
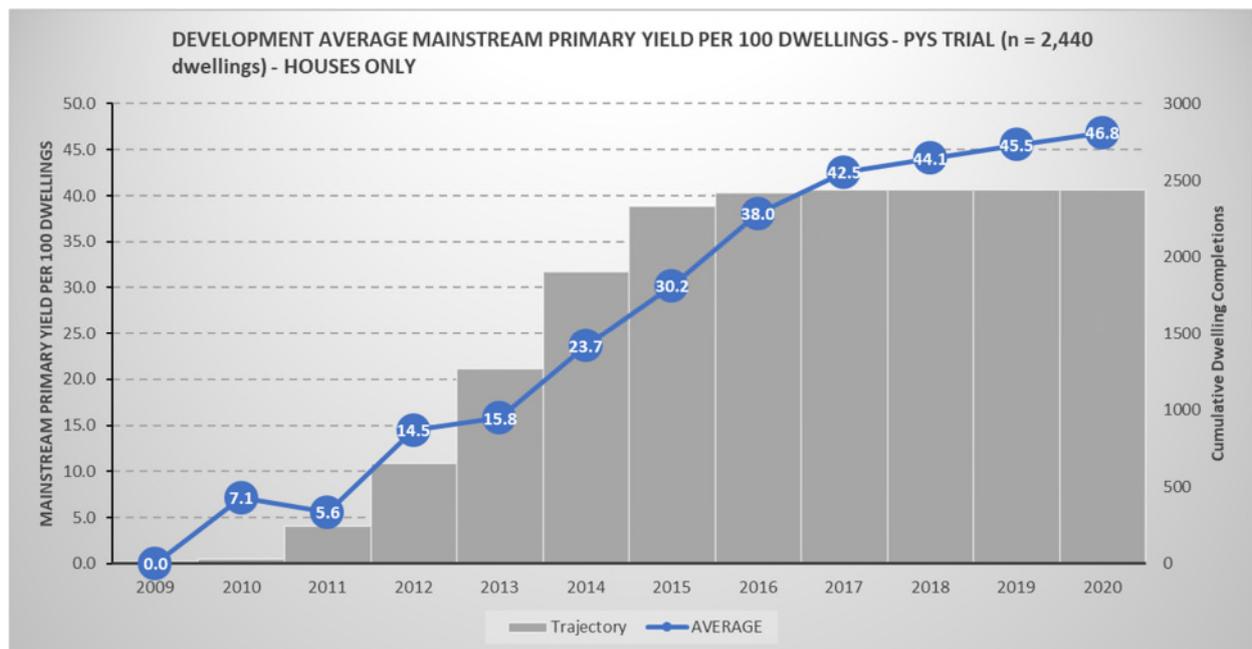


Figure 2. Example development with overlain postcodes and dwellings.

4.8.4 Longitudinal mainstream counts in aggregate for each development were determined and the mean taken each year to determine the variance of average development yield over time within each study year. This was repeated for dwelling type in addition to dwelling units overall. Development typology was determined, and the analysis repeated to calculate mainstream sector yields for each development characteristic typology. An example of the determined trajectory and associated mainstream primary yield per 100 dwellings is displayed in Figure 3 below. The data presented results from the initial Pupil Yield Study trial conducted by the authority and relates to 2,440 Houses Only, the principle is the same for Units Only and, Flats Only.



**Figure 3. An example of the trajectory determined from SMART Herts data sets for 2,440 Houses Only, and the calculated development average mainstream primary yield per 100 houses, arising from the initial HCC Pupil Yield Study trial.**

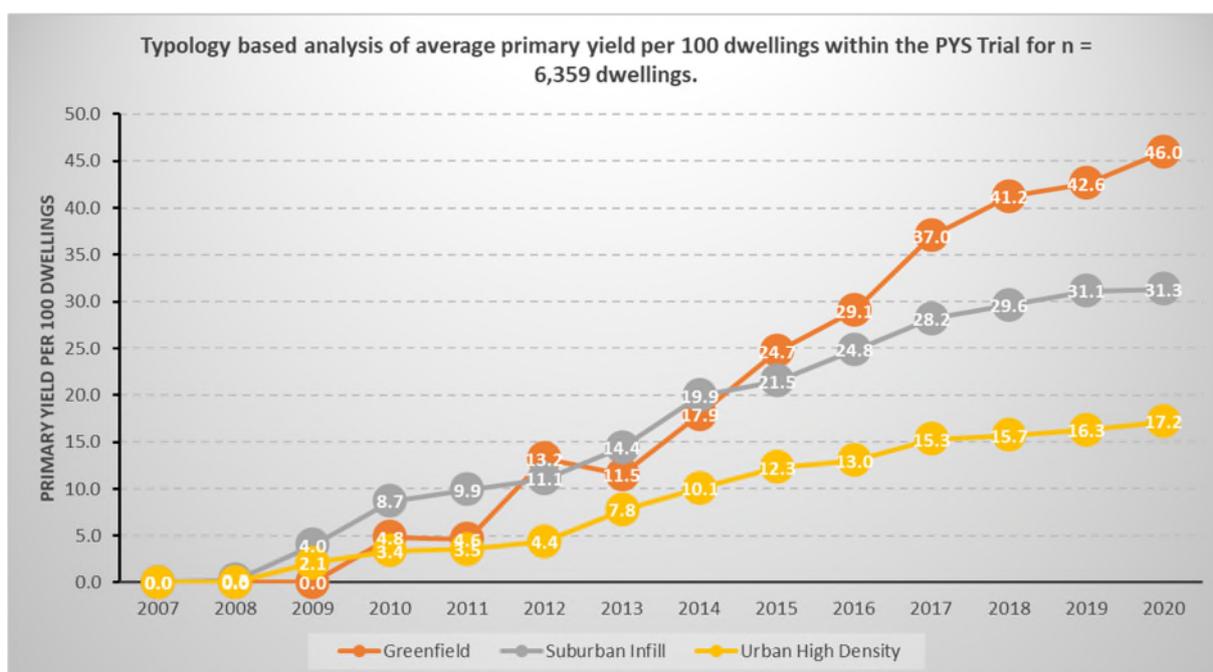
#### 4.9. EMERGING TYPOLOGY CLASSIFICATIONS.

4.9.1 Initial typology classification in accordance with emerging DfE methodology was derived from the PYS trial cohort. This provisional assessment resulted in the methodology applied herein and the emerging classification of developments as follows:

- Tier 1 – Greenfield (Mostly Houses): *These sites are typically greenfield sites with a dominance of houses (typically 80/20), a higher proportion of 3+ bed properties, and a higher proportion of detached or semi-detached. Housing unit density might typically be in a range of 20 to 40 dwellings per hectare (dph).*

- Tier 2 – Suburban Infill (Mixed Development): *These sites are typically PDL with a mix of houses and flats and a higher proportion of terraced houses, maisonettes or flats. There is generally a 50/50 split between smaller (1 & 2-bed) and larger (3-bed+) family homes and houses are most likely to be terraced. There tends to be a housing unit density of around 40 to 60 dph.*
- Tier 3 – Urban High Density (Mostly Flatted): *These sites are typically PDL with a dominance of 1-2 bed properties and are mostly flatted developments (at least 75% of units are flats). There tends to be a housing unit density  $\geq 60$  dph.*

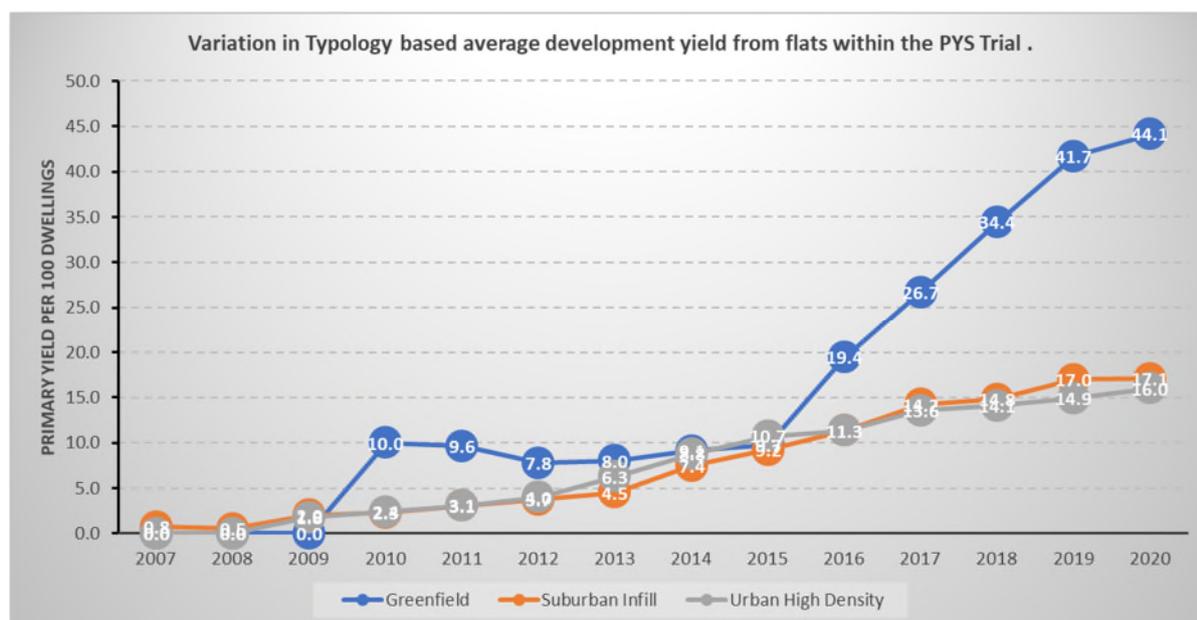
4.9.2 Following identification of developments by characteristics into the above tiers/typologies mainstream pupil yield counts were cross referenced to the respective cohorts to determine average yields arising. Figure 4 displays the mainstream primary yield per 100 dwellings, the data displayed is for Units Only with no distinction for dwelling type.



**Figure 4. Units Only based average mainstream primary yield by development typology characteristics.**

4.9.3 It was determined that there were significant differences in average yield rates between the typologies. As at 2020 average mainstream primary yield rates in Tier 1 – Greenfield sites (mostly houses) was 46 per 100 dwellings, 31.3 in Tier 2 (mixed development) and, 17.2 in Urban High-Density developments (mostly flatted). Mainstream primary pupil counts are still increasing within the cohorts.

4.9.4 The current position of the PYS also enables a differentiation of average yield by typology and dwelling type. For example, Figure 5 displays the differences in average primary yield for the flatted element of each typology. Small variation is observed in the accumulation of mainstream primary children within sub-urban infill and urban high-density flatted development, as at 2020 the respective average yields were 17.1 and 16.0 per 100 flats. The average yield from flats in Greenfield (mostly houses) developments is significantly different at 44.1 per 100. There is a corresponding variance in the proportion of AR/SR flats between the typologies with, on average, Greenfield sites equating to 63% whilst in urban high-density developments this decreases to an average representation of 21%.



**Figure 5. Variation in average mainstream primary yield between development typologies (Greenfield = 247 Flats, Sub-urban Infill = 1,200 Flats and Urban High-Density = 2,010 Flats).**

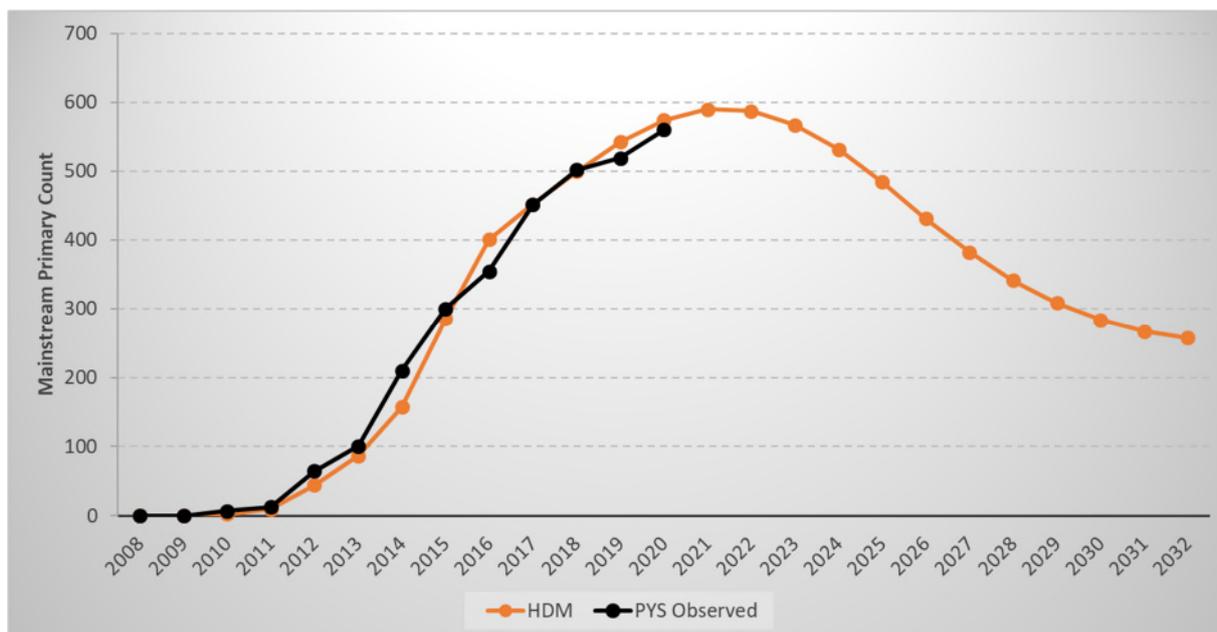
4.9.5 As the authority moves forward with the PYS it will overall include 1,076 developments containing 51,479 dwellings constructed within the boundary of the authority in the period 2002 to 2020 and from which further longitudinal analysis will be undertaken. However, enough information exists from the 6,359 dwellings included within the analysis to date to contrast aggregate HDM outputs to on-the-ground average development mainstream yield observations.

**5. HOW THE HDM IS CONTROLLED TO THE PYS.**

5.1. It is important that HCC considers the requirement for an interim revision to the HDM to ensure its planning is as well informed as possible and that contributions sought from developments are fair and proportional to the

potential pupil yield arising. This revision incorporates observations from the authority PYS which are used to control, where necessary, projected pupil yields to on-the-ground observations from average development typologies.

- 5.2. The scope of the authority PYS provides an excellent observed statistical base to which HDM mainstream pupil projections can be compared using “real world” new build development aggregations for which yields are known. The sourcing and analysis of planning and school census data sets over the previous nineteen-year period is resource intensive and still in process. A subset of the overall study was therefore considered to allow an interim update to the Model.
- 5.3. Comparison between the HDM and PYS was conducted using the PYS 59 cohort; this cohort has previously been used to determine mainstream pupil yields associated with an emerging development typology classification for intended application at Local Plan stage, as has been shared with LPA’s already. The PYS 59 cohort consists of 6,359 new build dwellings overall and for which development trajectory, bed size, type and tenure data in aggregate is known from SMART Herts. Comparisons in yields from the HDM projections to PYS observations were conducted for all typologies, and for the cohort overall (no typology consideration).
- 5.4. Figure 6 displays an example output of primary mainstream yields projected for Tier 1 Greenfield developments versus that observed from the PYS 59 cohort. It can be observed that, in this instance, the accumulation of mainstream primary yields follows a consistent pattern with that projected from the HDM. As such, there is very close correspondence between theoretical accumulation of both direct and transitional yields over time to that on-the-ground. Whilst there was a 4.1% difference in the HDM peak yield to the 2020 PYS Tier 1 cohort count, it should be noted that primary mainstream yields are still annually increasing, although at a decreasing rate. It is anticipated that PYS yields will increase further in 2021 either narrowing the marginal gap to the HDM projections or, for Tier 1 Greenfield developments, surpassing HDM forecasts.



**Figure 6. Typology Tier 1 PYS observed primary mainstream pupil counts versus HDM projected applying the aggregate development dwelling type, bed size and, tenure mix (Type Outputs).**

- 5.5. Whilst HDM projected mainstream primary yields were close to that observed in Tier 1 developments a higher degree of variance was observed with Tier 2 Sub-urban Infill (mixed development) and Tier 3 Urban High-Density (mostly flatted). Generally, as the percentage contribution of houses to a development mix decreased, and conversely a higher contribution of flats, then the larger the difference between the HDM projected primary mainstream yields and that observed from the PYS.
- 5.6. Based on the findings from this research HDM projected mainstream yields, for all education sectors, are subsequently reduced according to the typology-based Type and Tenure (highest level of detail) differences observed between PYS and HDM. The percentage reduction applied to a specific mix is not set to the Tier average difference observed for that typology but rather on a linear interpolated reduction relating to the percentage contribution of houses to the entered mix; outputs are therefore specific to each unique proposal.
- 5.7. As the PYS controls are applied as an overall reduction to the projected yields from the HDM, which are aggregations of specific bed size/type/tenure dwellings, this does however make it extremely difficult to back-calculate single dwelling yield rates at current point. This is further complicated in that whilst developers often provide trajectory data for expected dwelling completions per annum by type and tenure this is never provided by bed size.

## **6. HOW THE MAINSTREAM PRIMARY YIELDS IN SG1 & BHS WERE CALCULATED.**

- 6.1. The authority has previously informed the appellant that neither the SG1 nor BHS proposals were considered using the HDM. These two planning applications were submitted to, and considered by, the county council during the above transition phase in which PYS constraints were being investigated and incorporated into the Model. Unfortunately, the work needed to introduce these updates was significant and as such there was a short period in which the model was unavailable for use as a small number of planning applications were prepared, considered and determined.
- 6.2. Given the observed differences between HDM projections to that of some of the emerging study data, and the subsequent body of work required to update the model, PYS data sets were used to estimate primary yields for the SG1 and BHS proposals. This would prevent the request of a primary contribution which could be higher than relevant to the proposal as arising from the unamended HDM for this type of development.
- 6.3. In the coming sections I rely upon information provided by our Community Intelligence & Data Science Team, Improvement & Technology, Resources. The description of the SG1 and BHS site analysis and how it was derived from underlying data is set out by Dr Tony Bennetts, Business Intelligence Analyst within the Community Intelligence & Data Science Team.

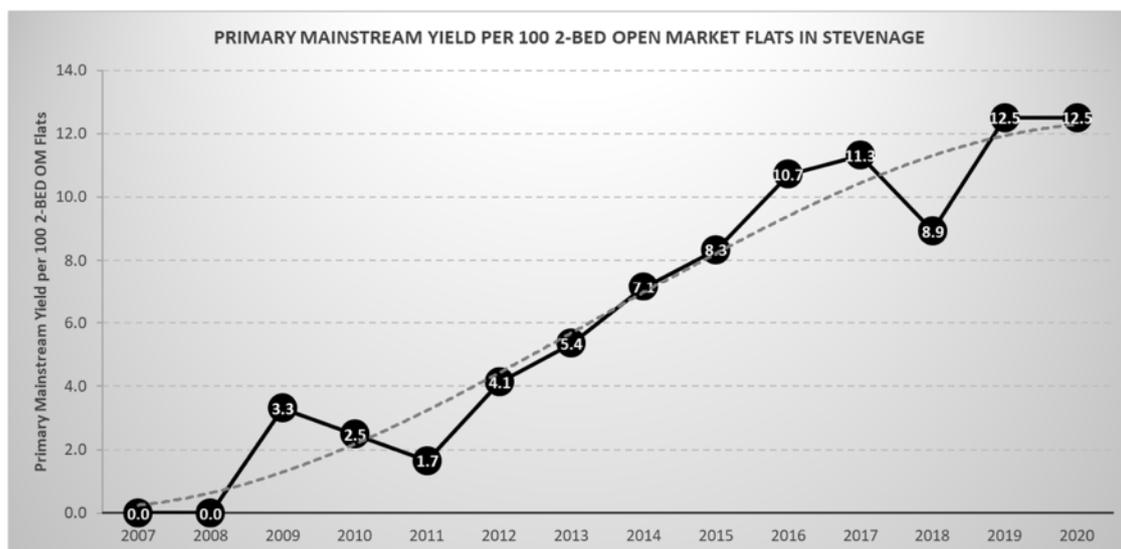
### **6.4. THE SG1 PROPOSAL**

- 6.4.1 The Stevenage Town Centre Development (LPA Ref: 19/00743/FPM) was for 1,867 dwellings and submitted to Stevenage Borough Council December 2019. The authority sought no education contribution from the 397 studio apartments, 21.3% of the total proposal, as it is considered such dwellings are likely to produce little or no education demand. Primary education contributions were sought for the remaining 1,470 units of which 99.5% were private flats. The proposal did not include any affordable/social rented dwellings, of the private flats 62.2% were 1-bed, 31.5% 2-bed and, 6.2% 3-bed.
- 6.4.2 As full analysis of the initial development cohorts (termed the PYS 59) was not complete for all Districts at that point in time, a review of flatted developments in a subset of the collected data was undertaken to determine whether a more basic set of multipliers could be applied to the proposal.
- 6.4.3 To start with, an urban high-density cohort of 765 flats associated with typical development of this type was identified. However, it was determined that the bed size mix was 23.2% 1-bed, 73.4% 2-bed and 3.4% 3-bed dwellings and significantly different to that of the proposal. The authority believed that the much higher proportion of lower yielding 1 bed dwellings in the proposal would

serve to reduce yields below that observed from applying the average yield from this subset.

6.4.4 Furthermore, the SG1 proposal contained no affordable/social units whilst, the flats in the subset cohort were 83.1% Open Market and 16.9% Affordable/Social Rented. The latter tenures are higher yielders and it was considered that exclusion of this tenure would likely serve to further reduce mainstream average primary yields. Further Stevenage developments included within the extended PYS study were extracted from annual cohorts within the study which had been partially assessed at that date (2008\_2009, 2009\_2010, 2012\_2013 and 2013\_2014 cohorts) to create an ad-hoc but more representative base for 2-bed flats.

6.4.5 A cohort of 2-bed Open Market flats, specific to Stevenage, was subsequently identified from which it was observed that a yield of 12.5 mainstream primary pupils per 100 flats would be realised (Figure 7).



**Figure 7. PYS observed 2-bed Open Market flatted development average yield specific to Stevenage.**

6.4.6 The same approach was not feasible for 1 and 3-bed Open Market flats as there were insufficient developments of those specific types identified at the time. An internet search of property databases was undertaken to ascertain which of the original 765 flats were Open Market and cross referenced to planning system data. It was subsequently estimated that 1-bed Open Market flats had a yield of 4.8 per 100 units whilst the 3-bed OM flats had a yield of 17.9 per 100 units.

6.4.7 Applying to the proposal then: 460 2-bed OM flats would be  $12.5 \times 4.6 = 58$  mainstream primary pupils, 910 1-bed OM flats would be  $4.8 \times 9.1 = 44$  mainstream primary pupils and, 3-bed OM flats would be  $17.9 \times 0.91 = 16$

mainstream primary pupils. The overall yield was therefore estimated to be  $58 + 44 + 16 = 118$  primary pupils or, 0.56FE. This equated to an overall development yield of  $118/1,470 = 0.083$  or 8.3 primary mainstream pupils per 100 flats.

6.4.8 Overall, the authority believes the requested contributions were conservative, based on the alternative and simpler method required at that time. Should the interim version of the HDM, controlled to PYS development average yield observations by development characteristics, be applied to these developments then the requested contribution would have been higher.

## **6.5. THE BHS PROPOSAL.**

6.5.1 The former BHS at 7 The Forum proposal consisted of 249 flats with no allocation for AR/SR. Of the Open Market flats 51.8% were 1-bed units (129) and 48.2% 2-bed units (120). An assessment of likely primary mainstream yield was undertaken after SG1 and prior to the PYS controlled version of HDM being available.

6.5.2 A yield rate of 3.2 per 100 units was applied to the OM 1-bed flats, this indicated that the 129 1-bed flats would yield  $(129/100)*3.2 = 4$  mainstream primary pupils. The 1-bed OM yield rate of 3.2 per 100 units was applied for the BHS site as some of the developments included within the SG1 assessment were under review at that time and not used within the analysis; there was a subsequent lowering of the average 1-bed OM pupil product ratio.

6.5.3 The OM 2-bed yield rate determined within the SG1 assessment at 12.5 primary pupils per 100 flats was applied to the BHS site and indicated that the 120 Open Market 2-bed flats would yield  $(120/100)*12.5 = 15$  mainstream primary pupils.

6.5.4 The total yield was therefore estimated to be  $15 + 4 = 19$  mainstream pupils, or 0.09FE, this equated to an overall yield rate of  $(19/249)*100 = 7.6$  per 100 units.

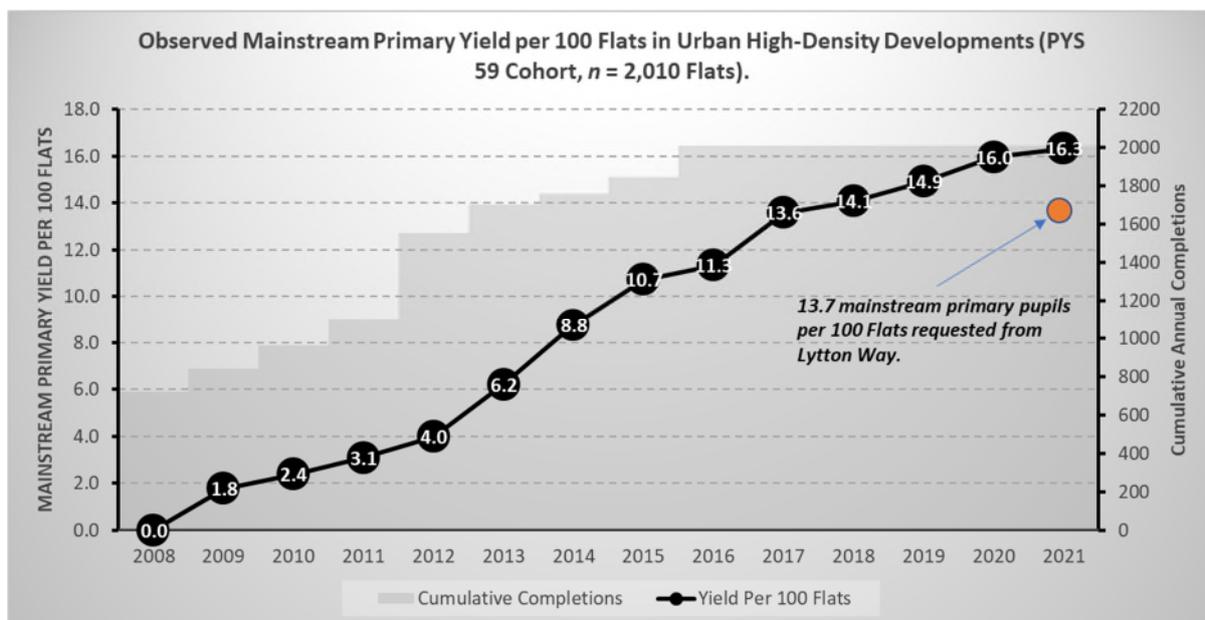
## **7. COMPARISONS OF LYTTON WAY PROJECTED PRIMARY YIELDS PER 100 FLATS TO THAT OBSERVED FROM THE COUNTY AVERAGE URBAN-HIGH DENSITY PYS (59) COHORT.**

7.1. The projected primary yield for Lytton Way was calculated in accordance with the methodology set out in section 2 and section 4 of this document. The projected peak yield value from the Model, adjusted based on PYS observed yields, was 76 children or 0.36 forms of entry (FE). An FE is equivalent to 30 children in each age group.

7.2. The Department for Education (DfE) indicate that local authorities should determine new build average pupil yield based on similar development characteristics only differentiated at district/borough level (in two-tier areas) when analysis shows substantial variations across the wider local authority area. To date no significant variation has been determined from emerging PYS

data between that of SBC and the authority overall, as such a comparison to the county average is relevant.

- 7.3. As part of the ongoing HCC Pupil Yield Study (PYS) a subset cohort, termed the PYS 59 containing 6,359 dwellings, was determined for more detailed investigation to assist in informing pupil projections and emerging local plan representation whilst the larger study continued. This is the dataset against which the Model has been calibrated. This ensures that education contributions requested are as up to date as possible in accordance with Regulation 122 requirements and in consideration of the transitional period with emergence of DfE guidance.
- 7.4. The PYS 59 cohort incorporates developments from the 2008/09, 2012/13 and 2013/14 annual cohorts and as such there is interactive phasing of both trajectories and, balances in peaks and troughs, in mainstream yield as preferred following consultation with LPAs. Within this cohort 2,010 Flats were identified specifically within urban high-density (mostly flatted) developments, the same development type as that of the proposal.
- 7.5. Figure 8 displays the observed average mainstream primary yields 2008 to 2021. Primary mainstream yields consistently accumulate over the trajectory, and beyond development completion, from urban high-density flatted development but will not reach peak until several years following trajectory completion. Current 2021 mainstream primary yield is 16.3 per 100 flats, 5 years following trajectory completion, which represents the current county average position for developments of these characteristics although it should be noted that yields are still annually increasing, albeit at a decreasing rate.



**Figure 8. Average mainstream primary yield per 100 flats from urban high-density development (n = 2,010 flats) with the below-average request of 13.7 per 100 flats from Lytton Way displayed.**

- 7.6. The observed mainstream yields are an average arising from all 2,010 Flats in the included urban high-density development cohort. Whilst the overall cohort has known bed size and tenure, individual proposals which differ substantially from this will have higher, and lower, mainstream primary yields. Individual developments will therefore show variation above and below the average yield displayed.
- 7.7. The requested contribution calculated for Lytton Way, at 13.7 per 100 units ( $[76/556]*100 = 13.7$ ) is shown and is 2.6 points less (16.0% below) than the county average flatted development primary yield in urban high-density settings. HCC has requested a contribution toward 76 primary pupils whereas the current county average urban high-density cohort indicates a yield of 90 primary pupils. However, the authority having considered the specific Lytton Way development mix has requested a less than average contribution for this proposal. This mainly occurs due to a lower proportion of higher yielding AR/SR flats at circa 9.4% although somewhat offset by a higher proportion of 3-bed flats than observed in the PYS 59 Urban High-Density cohort.
- 7.8. HCC believes this approach meets the requirements of Regulation 122 in a stringent manner, based on average development typology. Indications from the DfE are that average mainstream pupil yields observed from developments of similar characteristics are considered as being enough to meet the three tests under Regulation 122 of the CIL Act. There is no requirement to further compare development projected mainstream yields to other proposals also forthcoming through the planning system.
- 7.9. This is particularly relevant in instances where, for example, proposals have lower than average proportions of AR/SR dwellings and higher than average proportions of low yielding 1-bed flats. The authority believes that the requested mainstream primary contribution arising from the HDM, for Lytton Way, is therefore in accord with average on-the-ground observations for new build urban high-density flatted development within the boundaries of the authority when the specific proposal mix is considered.
- 7.10. As a final note, during the 2020/21 authority consultation process representations were received which raised concerns, principally, that the HDM did not take account of varying birth rates since 2011, new-build vacant properties which may exist, the interactive phasing of developments and, development churn (differences between ages of in and out movements from new-build developments). It is important to note that the PYS cohort mainstream yields as an on-the-ground longitudinal examination, 2008 to 2021,

would have been subject to such variable metrics and therefore provides an inclusive level of control for such factors, in aggregate, to HDM outputs.

**8. ASSOCIATED DOCUMENTS**

- 8.1. A detailed explanation of how the Model works can be found in the document “2021 Guide to the Demographic Model”. The document includes detail on how the Model is adjusted to align with data from the Pupil Yield Study.
- 8.2. A detailed explanation of the Pupil Yield Study can be found in the document “2021 PYS Methodology”.
- 8.3. The documents listed in paragraphs 8.1 and 8.2 are publicly available on the county council’s website at:

Document	Link
2021 Guide to the Demographic Model	<a href="https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/environment/2021-guide-to-the-demographic-model.pdf">https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/environment/2021-guide-to-the-demographic-model.pdf</a>
2021 PYS Methodology	<a href="https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/environment/2021-pys-methodology.pdf">https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/environment/2021-pys-methodology.pdf</a>

**9. CONCLUSION.**

- 9.1. Mainstream primary contributions projected to arise from the proposal at Lytton Way are less than that observed from the county average urban high-density development cohort from up-to-date mainstream pupil yield research of 2,010 flats of similar characteristics. An under-average projection occurs as the authority considers development specific characteristics associated with the proposal. The calculation has been made using the methodology adopted by the county council to assess all developments in its area. The methodology is consistent with the approach taken and accepted elsewhere in the county since its adoption.
- 9.2. For the reasons set out in this document the primary phase pupil yield projection of 76 pupils (or 0.36FE) for Lytton Way is reasonable and proportionate, being lower than the county average for similar types of flatted development.
- 9.3. This proof demonstrates that the Model (as adjusted) is a reasonable and sound method of projecting pupil yield for the purposes of calculating education contributions, and that the financial contribution sought from the Council based on that projected pupil yield is therefore reasonable.

## DECLARATIONS

### Statement of Truth

I confirm that, in so far as the facts stated in my Evidence, are within my own knowledge except where otherwise stated, I have made clear which they are and I believe them to be true, and that the opinions expressed represent my true and complete professional opinions.

### Declaration

I confirm that my Proof of Evidence includes or references all facts which I regard as being relevant to the opinions which I have expressed, and that attention has been drawn to any matters which would affect the validity of those opinions.

I can confirm that my duty to the Planning Inspector as an Expert Witness overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in giving my evidence impartially and objectively, and that I will continue to comply with that duty as required.

I confirm that I have not been instructed under any conditional fee arrangement.

I can confirm that I have no conflicts of interest of any kind.