

Appendix 4 – Methodology

1 Methodology

Overview

- 1.1 First the HMO density ratio of each street is calculated by the number of HMOs (licensed or not) against the total housing stock in each street in Guildford.
- 1.2 The number of reports relating directly to a licensed, investigated, noted or confirmed smaller unlicensable HMO are then collected. All the reports relating to all the HMOs in that street are then summarised as street-by-street data.
- 1.3 The combined score of reports relating to HMOs in a street is then used in conjunction with the number of HMOs in each street (HMO density) to identify the HMO mismanagement ratio for each street.
- 1.4 The HMO density ratio is then added to the HMO mismanagement ratio – scores above 50% indicate that street has both significant risk of HMO densification and a significant number of those HMOs are being mismanaged.

2 Aims

- 2.1 This report aims to provide hard data to help members decide if:
 - a) This report's findings meet the required statutory tests and are to be provided to the proper authorised officer in the planning service for further consideration of HMO Article 4 Direction.
 - *Including identifying suitable areas/streets of the Borough to apply the Direction.*

And/or;

- b) This report's findings meet the required statutory tests to introduce an Additional HMO Licensing Scheme – in specific wards in the Borough.
 - *Including identifying suitable areas of the Borough to apply the scheme (based on the data/finding of this report).*

3 The Test

3.1 The relevant test this report will assess is:

- a) Whether HMOs in significantly HMO dense streets in Guildford are also being significantly mismanaged. If so, which ones and by how much?

4 The Hypothesis & Null-hypothesis

4.1

- a) **Hypothesis:** *“There is strong evidence that HMOs in significantly HMO dense streets in Guildford **are also** being significantly mismanaged – evidenced by a **strong** relationship between HMOs density and HMO mismanagement”.*
- b) **Null-hypothesis:** *“There is **NOT** strong evidence that HMOs in significantly HMO dense streets in Guildford are being significantly mismanaged – there is **NOT** a **strong** relationship between HMOs density and HMO mismanagement”*

5 Definitions

5.1 **The overall HMO risk ratio** for each street with at least 1x licensed HMO will be quantified only where the following criteria are met:

a) A score of 30%+ mismanagement ratio

And

b) At least 3x separate data points/reports to the Council and agencies

And

c) HMO density above 20%

5.2 Streets that have an overall risk ratio of above 50% will be considered as mismanaged.

5.3 Streets that have a HMO density of 25% or more will be considered as at risk of HMO density.

6 Study Area

6.1 The study area for this report will be all streets with a licensed HMO. This will capture all streets with HMOs (that are confirmed and licensed) and ensure that all potential HMO density is captured.

7 HMO Density

7.1 A HMO dense streets are defined in relation to a specific study area. For the purpose of this report the study area will be all streets with a licensed HMO. Many places experience densities of 70% HMO's within an area. This is not the situation in any parts of Guildford.

8 HMO Mismanagement

- 8.1 A HMO that has evidence of being mismanaged will have one or more of the data points in paragraphs 13.8 & 14.1.
- 8.2 A HMO that has evidence of being significantly mismanaged will have at least 3 data points of mismanagement (reported over a 12 month period)
- 8.3 A street can only be deemed at high risk of significant HMO mismanagement if all below conditions are met;
 - a) The street has a significant (or borderline) HMO density ratio (20% or higher),
 - b) The street has more than one HMO
 - c) The street has at least 3x data points (reports to agencies)
 - d) The street has a HMO mismanagement ratio (30% or higher)
 - e) The street has an overall HMO risk ratio of 50% or higher.
- 8.4 HMO mismanagement will be quantified in each street with at least 1x licensed HMO. HMO mismanagement must be above 50% to be considered at high (significant) risk of HMOs having harmful and/or negative effects on localities.
- 8.5 A score of 30% will be considered in the analysis as these properties are on the precipice of the 50% threshold. It will also represent one-third of HMOs in a street (that is also HMO dense) are being mismanaged

8.6 Figure 2: HMO Mismanagement Ordinal Scale

Combined Mismanagement Ratio/Score/Total No. reports per street %	Definition
0 – 29%	LOW
30 – 49%	MEDIUM
50%+	HIGH
100%+	Is equal to more reports than HMOs in that street – There must also be a high HMO density score for this value to have any significant inferences.

9 High HMO mismanagement in low HMO dense locations

- 9.1 A street with 2x HMOs where there has been 1x report in last 12 months is not significantly mismanaged – despite having a 50% mismanagement ratio.
- 9.2 A street may have 1x HMO and 1x or 2x reports that would give that street a result of 100% HMO mismanagement – that would not be reflective of the level of harm to localities in that street.
- 9.3 There may be 4x HMOs in a street, with 4x reports relating to waste in the last 12 months that provides such a street with a 100% mismanagement ratio. However, if in that street HMO density is at 10% - Such results are arbitrary, there cannot be an established connection between HMO density and HMO mismanagement in streets with no HMO density concerns.
- 9.4 Therefore, overall HMO risk ratios are only applied to streets with 20%+ HMO density ratios. This ensures further HMO controls are

only considered in areas that are both HMO dense and also presenting evidence of mismanagement. The above tests will avoid false-negative interpretations of the data where high levels of HMO density are not present.

10 Calculations

HMO density

- 10.1 (Hd) will be calculated by dividing the number of HMOs (h) by the total number of stock in the street (s) – multiplied by 100 – To give a ratio of HMO density, expressed as a percentage.

$$Hd = \left[\frac{h}{s} \right] 100$$

- 10.2 The total number of data points (reports) will be combined for each street in the Borough that has a confirmed HMO. The overall, total number of reports relating to HMOs will then be sorted by the level of HMO density (%). The list of streets with HMOs will then be ordered by HMO density.

HMO Mismanagement Ratio

- 10.3 The total number of reports about HMOs (Hr) will be divided by the number of HMOs in a street (Hs). This figure will then be multiplied by 100 - To give a ratio of HMO mismanagement (Hm), expressed as a percentage.

$$Hm = \left[\frac{Hr}{Hs} \right] 100$$

10.4 A street with 0 – 29% HMO mismanagement ratio will be considered to have a low risk of being significantly mismanaged. A street with 30 – 49% HMO management will be considered as a medium risk of being significantly mismanaged.

11 Overall HMO Risk Ratio: Quantifying the overall HMO Density & Mismanagement in localities

11.1 The final step of data collection is to quantify the overall risk rating of HMO density and HMO mismanagement on localities (streets).

11.2 The HMO density ratio will be combined with the HMO mismanagement score to create the “overall HMO risk ratio”.

11.3 Overall HMO risk ratio scores above 50% will be considered both significantly mismanaged and HMO dense locations. If more than half (50%) of the HMOs in highly HMO dense locations are being mismanaged – this could call for further exploration of further HMO controls, in those specific streets only.

11.4 Only streets with a ratio of 20%+ HMO density (classified as medium and high risk streets) and also a 30%+ HMO mismanagement ratio (classified as medium and high risk streets) will have the overall HMO risk rating applied. (See appendix 2).

11.5 30% HMO mismanagement ratio score has been chosen as the threshold for this final step – due to this figure being 20% below the definition of “significant” or “high” levels of mismanagement and will capture any properties on the periphery of the tests required. See figure 3 below.

11.6 20% HMO density has been identified as a threshold for this step – due to this figure also representing medium risk streets that will

capture any properties on the periphery of the tests required. See figure 3 below.

11.7 Figure 3 – To Summarise the Data Thresholds (Seen in Appendix 2)

Step	Included in data analysis	Significant threshold
HMO Density ratio	20%	25%
HMO Mismanagement Ratio	30%	50%
Overall HMO Risk Ratio	50%	50%

Step 1 – HMO Density

- HMO density is calculated for each street with a licensed HMO.
- Streets with 20%+ HMO density scores considered as at risk

Step 2 – HMO Management

- HMO mismanagement calculated for all streets
- Streets with 30%+ mismanagement scores considered at risk

Step 3 – Overall HMO Risk Ratio

- Only streets with both HMO density and HMO mismanagement can be considered for further controls. **By adding HMO density percentages to the HMO mismanagement scores the overall HMO risk ratio is calculated.**
- Only streets that have 20%+ HMO density **and also** 30% HMO mismanagement can be considered for further controls.
- **20% + 30% = 50%: The entry level for HMO density (20%) to be considered at risk, that is added to, the entry level for HMO mismanagement to be considered at risk (30%) = Overall HMO Risk Ratio (minimum of 50%)**

- It is important to note that the overall HMO risk ratio cannot be lower than 50% and this is the reason the threshold in Figure 6 is set at 50% for the HMO overall risk ratio.

NB: The risk levels of HMO density are arbitrary and set by this reports permeameters only. They are not national standards and only prescribe the risk level of HMO density so that HMO density can be quantified and then used as categorical data (ie: the risk groups) to help understand the relationship between HMO mismanagement and HMO density.

12 Data collection

Data Range

- 12.1 The data collected regarding reports to the Council and other agencies is in relation to the last 12 months. The last 12 months (February 2022-February 2023) was used as the data range as this report's purpose is to see if the picture has changed since the data was last analysed in 2021. It is also important to use the most recent data as historic reports may relate to historic HMOs that are no longer in existence – thus any inferences from historic data used to assess current events would be unreliable. Historic HMO mismanagement data can be seen in the 2021 Overview and Scrutiny Committee report (linked papers) – the 2021 report identified there was no significant mismanagement historically and at the time of writing the report. That 2021 Overview and Scrutiny Committee report only analysed the streets with the most HMOs, as opposed to this report that analyses all streets with a HMO.

Data Type

- 13.2 This report has been led by the data and the data chosen to be analysed has been led by the legislation. Data considered for

- evaluation are those that are both quantifiable for testing and recorded by robust/trusted organisations. However, there are a number of data limitations when external services or organisations provide data – see paragraphs 14.2-15.4.
- 13.3 It is important to note that any data that is anecdotal, subjective or irrelevant to the hypothesis will not be evaluated.
 - 13.4 The data includes reports relating to confirmed HMOs, Investigations with HMO as a key word (see data limitations, paragraphs 14.2-15.4) and licensed HMOs. The data includes HMOs of all types from multiple sources. Data from external agencies relate to HMOs of any type and any size. Data examined from Regulatory services relates to reports relating to confirmed or licensed HMOs. Data presented by planning enforcement relates to any type of investigation with HMO as a key word. Data from waste services relates to any type of HMO (see data limitations, paragraph 14.2-15.4).
 - 13.5 Council tax student exemption data indicates that there are (reliably) approximately 320 potential smaller HMOs (occupied by 3-4 persons). Council tax student exemption data captures properties where there are 3-4 persons registered at an address with a student exemption for paying Council tax. HMOs with 3-4 persons are deemed smaller HMOs and do not require a licence to operate. An Additional HMO licensing scheme would require these properties to be licensed.
 - 13.6 Electoral role data indicates that there are approximately 10,500 properties with 3-4 electors registered at an address. Unfortunately, it is not possible to identify how many of these 10,500 properties have multiple surnames at 1x address and could, therefore, be HMOs. Therefore, such data cannot be used reliably for the purposes of identifying potential HMOs.

Study Area

13.7 This report analyses an enhanced amount of study areas than the report considered in November 2021 by the Executive Advisory Board (EAB) committee. The objective of using an enhanced initial study area is to identify HMO density in smaller streets/roads/closes/drives that contain a licensed HMO. This extra layer of data captures smaller communities that may be more affected by HMO mismanagement than larger, urban areas where HMOs may be more acceptable to those local communities. This report now includes all streets in Guildford that contain at least 1x licensed HMO. The data also captures smaller HMOs in those streets that are occupied by 3-4 persons (as indicated by Council tax data) and also contains Purpose Built Student accommodation (PBSA's). In other words, every street in the Borough that contains a HMO occupied by 3 or more persons, including PBSA's, have been included in the data analysed in this report.

Data Included

13.8 Reports of the following:

- i. Reports relating to Purpose Built Student accommodation (PBSA) addresses
- ii. Eviction/harassment
- iii. Damp & Mould
- iv. Dwelling conditions/Poor housing conditions
- v. Tenancy Issues
- vi. Letting agent redress scheme
- vii. Drainage
- viii. Overcrowding
- ix. Unlicensed HMO
- x. Residential bonfires
- xi. Dog related ASB
- xii. Dog Fouling

- xiii. Filthy & Verminous
- xiv. Land Accumulations
- xv. Condition of Premises/Garden
- xvi. Domestic Light Pollution
- xvii. Noise - Barking Dogs
- xviii. Noise – Domestic
- xix. Odour – Domestic
- xx. Insects, Pigeons & Rats

New Data Included

14.1 New data included in the report is as follows:

- i. Reports to Planning Enforcement
- ii. Reports to University of Surrey
- iii. GBC Waste Services data
- iv. Enhanced data relating to reports to the Council
- v. Enhanced study area

Data not Included & Why: School Placement Data

14.2 Councillors reported during the O&S committee in July 2021 that they were being informed by residents that school places had dropped significantly – threatening the survival of some schools and this was directly relatable to HMOs in and around the area, reducing the number of family homes.

14.3 Reducing school places does not constitute HMO mismanagement, but it was agreed to be analysed as part of the wider picture/context. Councillors were keen to have data analysed to see if there were fewer school places due to HMOs. After liaising with senior officers in Surrey County Council (SCC) it became apparent that the reason for the reducing school placements was in fact due to the declining birth rate – that is a national trend.

- 14.4 There are a number of factors that affect how many children go to specific schools, especially in urban areas, where there may be a number of schools to choose from. Surrey saw considerable growth in the school population up to about 2018, as a result of a rising birth rate.
- 14.5 The birth rate in an area is a key factor affecting need for school places. The number of births has declined in Surrey by 13 per cent between 2012-13 to 2019-20, with 1,785 fewer children being born between 2019 and 2020 compared to 2012 to 2013. In Guildford the reduction has been even greater at 22%.

14.6 Figure 7 – To Display Declining Birth Rates in Surrey

Year	Births	change	% reduction
2019-20	1,254	359	22%
2018-19	1,339	274	17%
2017-18	1,350	263	16%
2016-17	1,475	138	9%
2015-16	1,551	62	4%
2014-15	1,466	147	9%
2013-14	1,570	43	3%
2012-13	1,613		

Local Housing Affordability

- 14.7 This is a subjective term that will vary from borough to borough, ward to ward and street to street. Regulatory Services do not have the specialisms to evaluate this variable. Housing affordability is not connected to HMO mismanagement.

14.8 Affordability of housing may affect established communities and those moving in and around the Borough. HMOs do provide affordable housing in Guildford, in the current climate and in a Borough with above national average house costs – affordable housing demand is likely to be increasing over time.

Local Parking Disputes

14.9 Liaising with internal departments there is no data relating to parking disputes and HMOs that can be extracted and evaluated against HMOs.

13 Data Restrictions/Limitations

Planning enforcement data

15.1 Data collected from the planning enforcement team is based on allegations, rather than confirmed HMOs.

Waste collection data:

15.2 The following criteria is applicable to waste collection data...

- a) Crew reports cannot be filtered for just HMOs without a filtering reference, such as Unique Property Reference Numbers (UPRN).
- b) Due to the nature of crew reports waste services are heavily reliant on the crews reporting accurately and promptly.
- c) The reports have not come from residents, as waste services have no way of pulling this kind of report from Salesforce (since April 2021), or prior systems.

- d) The best indication that waste services has that a property is or is not a HMO, is whether the property has an additional refuse bin due to there being “5 or more” persons residing. Waste services cannot guarantee that all of these are HMOs, or that HMOs appear on the data set at all. This data is an indication only and is not final. It may also be that some properties no longer qualify for an extra refuse bin, but waste services have not identified this just yet.

University of Surrey data

- 15.3 The data provide by the University does not include specific addresses. The data is taken on the assumption that they relate to a HMO. There is of course the limitation that some data may not actually reflect a HMO.
- 15.4 The University data does not contain the type/nature of the reports made and as such reports could vary from very minor reports to serious complaints. There is no way to identify what the nature of each complaint to the university was, however - this data has been included in the analysis to help build the wider picture of reports relating to HMOs in Guildford.