A study of
Housing in Multiple Occupation (HMO)
in Charnwood

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Executive summary

- Using a novel and innovative approach for identifying Housing in Multiple Occupation (HMOs) through the construction of the Houses in Multiple Occupation Geography Database (HiMOG database) the study provides an unprecedented, original, pioneering, in-depth study of HMO; the first of its kind to be undertaken in a UK town or city.
- The study is therefore of national importance providing an example of good practice for the identification of HMO, and the creation of a rigorous and robust methodology for a more complete and ongoing identification of HMOs via an integration and manipulation of different administrative datasets. Information Sharing Agreements via the Loughborough Campus and Community Liaison Group are now in place for the sharing of constituent datasets and the annual update of the HiMOG database to identify changes in the local HMO market.
- This study has led to the delivery of a more robust evidence-base and the vast improvement on the quality of information and data on HMOs for the Local Planning Authority, to better inform their practices (i.e. planning decisions, appeals and enforcement).
- It also provides a fuller evidence-base of the geographic distribution of different types of HMO to inform HMO policies within the Borough; although the remit for the study is not to undertake a review of existing or future policies for HMO within Charnwood.
- A key achievement of the study is the identification of a total of 2,509 HMOs in Charnwood to provide a fuller and more accurate understanding of the scale and magnitude of HMOs within Charnwood. The study has identified the distribution of an additional 1,653 HMOs within Charnwood (previously unrecorded), compared to previous knowledge of HMOs in the Borough before the start of the study.
- The study shows that the HMO market is growing and reveals that there are two distinct dimensions to the local HMO market. The student HMO market is increasingly 'wrapped' around the North, East and South edges of the campus of Loughborough University, and to a lesser extent, Loughborough College. The non-student HMO market is most marked in the wards of East Loughborough, and, to a lesser extent, in some outlying towns and villages. The study therefore provides a better understanding of the marked differences and dynamics of the local HMO market(s) within the Borough of Charnwood.

- The study thus provides a more complete recording of HMO within the local Land and Property Gazetteer (BLPU) which is used to inform planning decisions and report to central government. Locally, this will have a major bearing on threshold calculations for the total number of HMOs within a specific area, which is a key consideration when determining a planning application or appeals.
- The study shows that students from Loughborough College have minimal impact on the local HMO market within Loughborough, with the majority of college students living in family homes.
- It has proven beneficial to conduct interviews with letting agents to more fully understand the dynamics and differences within the local HMO market. Some key findings are particularly salient to future discussions about Local Authority policies. Most notably, and anecdotally, the overall HMO market within Charnwood is growing, diversifying and spreading into other parts of the Borough; the student HMO market is changing; the non-student HMO market in Loughborough and Charnwood is growing and diverse; there is the presence of vulnerable low income and migrant groups within the non-student HMO market, as well as diverse groups of professionals; the HMO market is agile and dynamic, and the HMO market is embracing technological developments in its change.
- This study has provided the starting point to more accurately understand the percentage of HMOs that are empty or partially void. The HiMOG database provides an opportunity and baseline to annually update of the identification of HMOs and to identify the total number of bed spaces within each dwelling (i.e. total occupancy counts for each dwelling). This baseline can be compared (or adjusted) to the annual total number of occupants within a respective HMO.
- We have been able to identify the occupancy levels for purpose-built student accommodation given the total number of bed spaces in these blocks is known.
 Occupancy levels for purpose-built student accommodation are currently high.
- The study has provided a platform for different stakeholders to articulate their views and opinions about the local HMO market in Charnwood. It is an example of fruitful collaborative and joined-up working between Charnwood Borough Council, Loughborough University and Loughborough College.

1. Introduction

- 1.1 Housing in Multiple Occupation (HMO) is widely recognised as a vital part of the housing market, often providing affordable rental accommodation for many social groups in towns and cities across the UK (Smith et al., 2014). It is an increasing dimension of the UK housing market that has rapidly grown over the last two decades, and continues to rise as 'dwellings' (identified in the Town and Country Planning (Use Class) Order as use class C3: dwellinghouse) are converted to supply housing for 'three or more unrelated people living together that share basic amenities such as a kitchen and bathroom' (use class C4: HMO with 3-6 unrelated individuals sharing amenities or Sui Generis larger HMO with more than 6 unrelated individuals sharing). Nationally, the supply of HMOs is matched to an increasing demand for HMOs from diverse social groups, such as 'generation rent', as private rental accommodation is increasingly sought in light of the lack of affordability within owner-occupied housing markets and lack of availability of social rented housing.
- 1.2 In this context, this study of HMOs in Charnwood is timely given the possible changing dynamics of the local HMO market, coupled to an annually, high stable demand from the student population for temporary rental accommodation within Loughborough. Although new-build, purpose-built accommodation for students has been developed over the last decade, both on- and off-campus, there continues to be a high demand for off-campus student HMOs in Loughborough.
- 1.3 Like other towns and cities within the UK, it is recognised by policy makers and politicians that over-concentrations of HMO in Loughborough can have negative (as well as positive) impacts on existing local neighbourhoods and communities. Since the mid-2000s, studies of HMO within Loughborough have previously been undertaken through the lens of studentification; tending to treat HMOs as a student-specific dimension of the local housing market. These investigations have shown that Loughborough is "emblematic of 'university towns' in the UK", with a high demand from students for private rented properties and the proliferation of HMOs. For example, Hubbard (2008: 325) notes: "This high proportion of students relative to long-term residents suggests that the social impacts of studentification both positive and negative might be more

acutely felt in Loughborough than in a larger city where the proportion is typically much smaller".

- 1.4 To more fully regulate the production of HMOs and more effectively manage the transformative effects of over-concentrations of HMO upon the local character of neighbourhoods within Loughborough, Charnwood Borough Council were proactive in adopting a Student Housing Supplementary Planning Document (Student Housing SPD) in 2005. The Student Housing SPD adopted a threshold approach, which involves "an assessment of the proportion of [student] households within the "neighbourhood" surrounding an application as informed by information gathered from the Council Tax records" (CBC, 2005: 12). The threshold figure outlined was 20% which meant that where student households comprise more than 20% of the "neighbourhood" an application for a further student HMO was more likely to be refused due to the existing concentration of this type of property.
- 1.5 In the context of this study, three issues are noteworthy here. First, Super Output Areas are used as the basis for defining a neighbourhood, providing scope for inconsistencies in the geographical units used to implement the threshold approach. Second, this approach requires robust and consistently updated datasets to provide a sound evidence base for the identification of HMOs. Third, the notion of a C4 HMO did not exist in planning laws in 2005. Therefore, any HMO containing between three and six unrelated individual renters was classified as a C3 dwellinghouse at the time, rendering this approach ineffective for small HMO given that the conversion of properties *within* Use Classes does not require planning permission. At this time only large HMOs of 6 or more unrelated individuals required planning permission. However, the creation of the C4 HMO Use Class in 2010 meant that the Threshold approach could be adopted efficiently once the Article 4 Direction (A4D) was implemented, with a rich policy framework already behind it.
- 1.6 The A4D was invoked in Loughborough effective from February 2012 (CBC, 2010, 2011). A twelve-month grace period was granted for landlords to apply for HMO planning permission prior to its official introduction, to avoid the need for the Local Authority to pay compensation for any loss or damages incurred by the introduction of the regulatory tool (CBC, 2010). The A4D was applied across the town. The rationale behind this was

to prevent the mass production of HMOs within the unregulated areas of Loughborough, given that "no neighbourhood may be considered to be so far removed [from LU] that it could be rejected [by landlords] as being too remote" (CBC, 2010, p. 51).

- 1.7 The initial implementation of the A4D took the Small Output Area (SOA) as defined by the Office of Population Census and Survey as the base geographical unit for implementing the threshold approach, as set out in the Student Housing SPD (CBC, 2005). The calculation would take the SOA containing the property in question (which was termed the Home Output Area HOA), combine it with all the other SOAs with which the HOA shares a boundary, and take a calculation of the proportion of student households from total households within that geographical area (CBC, 2005).
- 1.8 The issue of geographical consistency as discussed above remained with this methodology. Indeed, this approach could lead to an application for HMO being considered within an area ranging from 5 to 7 SOAs, comprising anywhere between 625 and 875 households (CBC, 2005). The calculation was based solely on records of Council Tax Exemptions, which would envelope student HMO given their exemption from Council Tax but exclude non-student HMOs. This highlights that the initial rationale for the planning regulation of HMO was based on the belief that "in Loughborough the drive for HMO conversions is fuelled by the student market" (CBC, 2010, p. 47). In recent years there has been a growing recognition by the Local Authority that demand for HMOs in the town is also driven by non-students: "In Loughborough a large number of HMOs are occupied by students in further and higher education... It is important, however, to keep in mind that not all HMOs are occupied by students or reserved for students" (CBC, 2017a, p. 19).
- 1.9 In May 2017, latest new Housing Supplementary Planning Document (Housing SPD) outlined a new methodology for implementing the threshold approach that would address the issues with using SOAs as the base geographical unit. This method would be replaced by a system that would create a 100-metre radius around the property being considered for HMO planning permission and use this as the geographical area to take a threshold calculation of the number of *HMOs* as a proportion of the total number of *residential properties* within the radius (CBC, 2017a). Any application for a new HMO where the figure exceeds 20% will be considered in light of this existing high

concentration of HMOs and is more likely to be refused, although this decision will also be informed by other factors. The transition from student households to HMO as the basis of the calculation is perhaps recognition of a more diverse HMO market in the town.

- 1.10 CBC also hold a regularly-updated register of licensed HMOs which is made publicly available on their website. This includes properties with 5 or more unrelated people living together in a dwelling with 3 or more storeys. The latest version of this dataset includes 362 licensed HMOs in Charnwood, most of which are located in Loughborough. However, given that not all HMOs will meet the criteria for mandatory licensing, it is plausible to argue that the total number of HMOs in the town is far higher than this figure; the main focus of this study.
- 1.11 This is important given recent studies have revealed that student HMOs have extended from Burleigh and Storer into other parts of the town, such as the Kingfisher Estate in Southfields, and Herrick and Forest areas of the town (Kinton et al., 2016). This 'second wave' of studentification has produced HMO in areas of Loughborough that have traditionally been occupied by families and professionals, in more expensive, higher-quality properties. This represents an extension of studentification from the studentified areas of Storer and Burleigh (the so-called Golden Triangle); areas that are now experiencing processes of destudentification (Kinton, 2013). At the same time, there is a growing acknowledgement in the UK that the production of HMO is increasingly linked to broader processes including internal/international migration, socioeconomic deprivation and processes of family formation and breakdown. It is contended that more mixed HMO markets are forming that include both students and other social groups. The latter includes professionals, international migrant workers, low-skilled workers, benefit recipients and divorcees. Recent academic studies (e.g. Kinton et al, 2016) argue that the geographies of HMO are changing due to more exclusionary housing markets, population change and cultural shifts in perceptions of shared living arrangements within the context of a 'broken housing market'.

2. Remit of study

The main aims of this study are set out below:

- 1. The creation of a comprehensive database identifying HMO in the Borough which can be updated as new information becomes available.
- Sufficient information to assess the value and impact of the student housing policies set out in the Supplementary Planning Document (2005), and to inform a review of the current planning policy framework.
- An understanding of where student HMOs are located within the Borough and the scale of Loughborough College students living in HMOs in Loughborough, as well as Loughborough University students.
- 4. Interviews with key stakeholders including letting agents to better understand the HMO market in the Borough.
- 5. An understanding of the occupancy levels of HMO and purpose built student properties.

3. The identification of HMOs in Charnwood

3.1 What we knew about HMOs in Charnwood before the start of the study

- 3.1.1 Prior to the beginning of the study in July 2015, pre-existing knowledge of the total number of HMOs in Charnwood was tied to the manual identification and recording of HMOs on the Local Land and Property Gazetteer (LLPG). For this purpose, council tax and planning datasets (and information provided by local resident groups and checked by council officers) was used. The recording of HMOs within the LLPG was then manually updated on a periodic basis by the GIS Technician at Charnwood Borough Council (CBC).
- 3.1.2 The LLPG is the official national dataset that records the status of each individual dwelling or building (which is assigned a Unique Property Reference Number (UPRN) and Eastings and Northings [for mapping]) using designated categories, known as the Basic Land and Property Unit (BLPU)¹. The category for HMO is termed: 'HMO not further divided'. There are two other HMO-termed BLPU categories: 'HMO Bedsit' and 'HMO Parent'. These categories are misleading as they refer to individual units within on- and off-campus purpose-built student accommodation blocks, and the shell of blocks of purpose-built student accommodation, respectively.
- 3.1.3 During the early phases of the project, there was approximately 750 HMOs identified within Charnwood, using the 'HMO not further divided' category. Today this figure is 857 HMOs. The total count of HMOs in Charnwood using the LLPG includes HMOs that are recorded on the public register and required mandatory licensing (i.e. 5 or more unrelated people living together in a dwelling with 3 or more storeys). The vast majority of the HMOs on the public register for mandatory licensing tend to be in the studentified areas of Loughborough, which currently totals 362 HMOs.

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¹ The National Address Gazetteer infrastructure is the data storage and set of processes bringing together the existing local authority sourced addressing datasets.

3.2 Improving the identification of HMOs in Charnwood and creating the HiMOG database

- 3.2.1 The main aim of the project was to provide a more complete and efficient recording of HMOs in Charnwood in a comprehensive database. This was based on the premise that the LLPG did not include a full record of HMOs in Charnwood. Importantly, previous analyses of annual university term-time address datasets between 2010-2014 by Professor Smith identified higher numbers of HMOs than were recorded on the LLPG. It was also felt that the system for the manual identification and entry of HMOs onto the LLPG was cumbersome, and an inefficient way to partially record HMOs.
- 3.2.2 A key objective was thus to create a database of identifiable HMOs (coined HiMOG [Housing in Multiple Occupation Geographies]) that could be used to inform the recording of HMOs on the official LLPG. This means that the HiMOG database needed to be created in alignment with the structure and format of the LLPG, to ensure that data from the HiMOG database could be easily imported into the LLPG system. As a starting point for the project, the LLPG was provided as an Excel spreadsheet. For each row representing an area of land or a building, the following information was provided: UPRN, residential information split into three columns (SAON: for sub-divisions within the same building e.g. flat numbers or blocks in halls of residence; PAON: street number or property name; Street name), town, postcode, Basic Land and Property Unit (BLPU) classification, Eastings and Northings.
- 3.2.3 The first task for the creation of the HiMOG database was the identification of the most relevant constituent datasets that were *both* accessible and which could be manipulated to identify individual dwellings with three or more unrelated people living together. It was important that the datasets could be manipulated to enable the individual UPRN (i.e. address details) from the LLPG to be matched to each individual dwelling in each dataset (i.e. address details).
- 3.2.4 Following scoping interviews with a range of stakeholders in Charnwood to evaluate the availability and accessibility of relevant constituent datasets and the recording of variables (i.e. number of residents, surnames of residents, postcodes), a process was created to enable the integration and manipulation of datasets to most effectively identify HMOs in Charnwood. These are outlined in Table 1. Unfortunately, it

was not possible to gain access to housing benefit datasets due to issues of data confidentiality. The delivery of the term-time address datasets from Loughborough College was delayed due to numerous changes in staffing, and this delayed the process of finalising the identification of HMOs.

Table 1: Constituent datasets used for the HiMOG database

Dataset	Unit (1 row	Data size	Source
Dataset	=)	(rows)	Source
Local Land and			
Property Gazetteer	1 property	91,662	Charnwood Borough Council
(LLPG) for			
Charnwood			
Public HMO Register for Charnwood	1 property	346	Charnwood Borough Council
Loughborough			
University student	1 person	16,889	Loughborough University
term-time addresses			
Loughborough			
College student term-	1 person	1,466	Loughborough College
time addresses			
Electoral Register for	1 person	132,236	Charnwood Borough Council
Charnwood			
Chariwood			
List of Council Tax	1 property	1,995	Charnwood Borough Council
Exempt properties	i property	1,333	Chamwood Borough Council

3.2.5 The initial phase for the cleaning and manipulation of the constituent datasets took place between July 2015 and December 2016, as the constituent datasets were provided by partners (see Appendix 1). This was a significant task particularly for the

university term-time address records as some information had been incorrectly entered into the data fields (e.g. 5/S; O/0; 2/Z; 3/8), and individual postcodes had been partially entered (these had to be manually inputted based on other address details and look-up tables).

- 3.2.6 Following the cleaning of the constituent datasets, extensive quality checks were undertaken to ensure that the subsequent analysis would be as accurate and robust as possible. The datasets were then formatted for consistency, to ensure that could be matched and linked to form a single database (i.e. HiMOG). The HiMOG database was constructed by linking the constituent datasets via this system of UPRNs. However, the only datasets that were received with UPRNs attached was CBC's LLPG and the list of Council Tax Exempt properties. Consequently, UPRNs had to be appended to all the other datasets.
- 3.2.7 With differential levels of confidence for identifying HMOs (i.e. 3 or more unrelated people living together), it was decided to use the following ordering for the creation of the HiMOG database:
 - Public Register of licensed HMO;
 - ii) Loughborough University and Loughborough College term-time address datasets to identify dwellings with three or more students living together;
 - iii) Electoral Register dataset to identify dwellings including three or more people with different surnames²;
 - iv) Properties identified on the Land and Property Gazetteer as a HMO not further divided and with one or more students in residence.

3.2.8 Given it is important to not include the double counting of dwellings in the creation of HiMOG, a process was instigated whereby individual dwellings were immediately flagged as HMOs on identification, and excluded from subsequent analyses of the datasets. The ordering of the system is shown below.

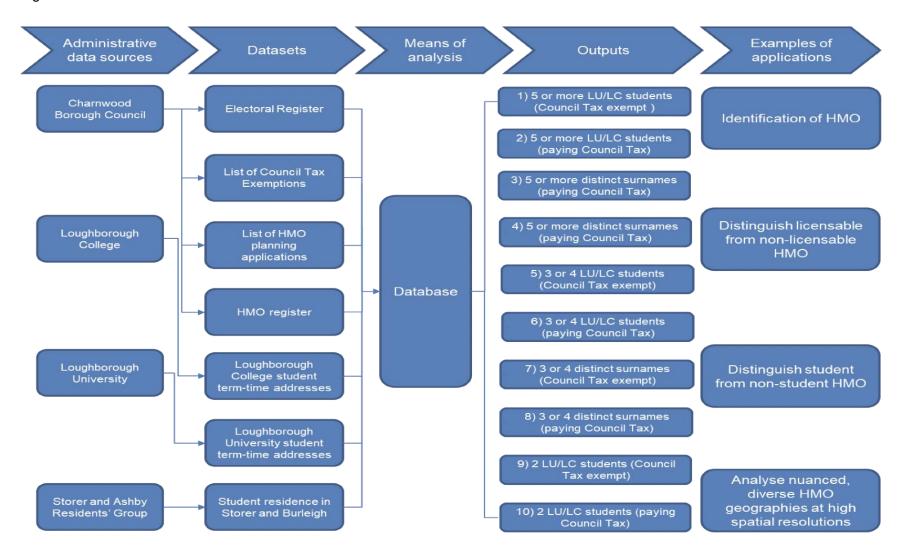
the Project Working Group, it was deemed that these arrangements would be minimal in the dataset of 3 or more people with different surnames, and would be flagged as HMO in HiMOG.

² The use of the Electoral Register dataset has the potential to overestimate the number of HMOs. There are circumstances where the identification of three distinct surnames can incorrectly identify a potential HMO. For example, a live-in landlord is allowed to accommodate up to two lodgers without having to change the Use Class of the property to HMO. In such a case, there would likely be three occupants within the same property with distinct surnames, which would therefore wrongly indicate this property as HMO. More broadly, increasingly complex processes of family formation (e.g. blended/reconstituted families) may result in the incorrect identification of HMO. Nevertheless, following discussions with

For example, all dwellings recorded on the Public Register (362) were not included in the manipulation of the university and college term-time address datasets. Likewise, dwellings identified as HMO from the manipulation of the university and college term-time address datasets (765) were not included on the manipulation of the electoral register.

- 3.2.9 Following the manipulation of the electoral register dataset, it was possible to identify dwellings with one or more students, and to cross-check these dwellings with the LLPG to identify any dwellings which had been recorded as HMO on the BLPU (it is likely that some students may not have entered their address details on registration forms at the university and college and may be missing in the term-time address datasets). Notably, we identified 106 dwellings recorded as HMO on the LLPG with at least one student living there.
- 3.2.10 For all dwellings identified as HMO on HiMOG we were able to match council tax records to identify properties that are exempt from paying council tax and properties currently paying council tax. This allows the identification of wholly-student households (i.e. are exempt from paying council tax) and mixed-households (i.e. have to pay some council tax).

Figure 1: Model for the construction of the database



3.3 Stress-testing HiMOG

- 3.3.1 To stress-test the accuracy of HiMOG, the dataset was cross-checked with an up-to-date, fully anonymised, private rented housing dataset compiled by the Nanpantan Ward Residents Group (NWRG) since 2012. Neither of the datasets include any personal or individual-level data and both are fully anonymised. Records within the two datasets were compared at a row-by-row level of all individual dwellings in the Nanpantan ward (1,700 residential dwellings). The stress-test exercise found the following validation of data:
- 135 dwellings are identified on both datasets as HMOs.
- 47 (additional) dwellings are identified as HMOs on HiMOG but not recorded on the Nanpantan Ward Residents Group dataset.
- 80 dwellings (on Nanpantan Ward Residents Group dataset) are not recorded as HMOs on HiMOG and are identified as other private rented dwellings using the Electoral Register dataset (i.e. family household).
- 46 dwellings were identified on HiMOG (not identified on the Nanpantan Ward Residents Group dataset) that contained one or more college students living with family (identified using the Electoral Register dataset).
- 3.3.2 The cross-checking exercise revealed that HiMOG has identified all of the HMOs identified by Nanpantan Ward Residents Group, as well as nuancing the distinction between HMO and other private rented housing in the ward.

3.4 Key findings – the magnitude and distribution of HMOs in Charnwood

3.4.1 Table 2 shows a breakdown of the total number of identified HMOs in Charnwood using the HiMOG database. It can be seen that there are 2,509 HMOs within Charnwood. This means that the study has identified an additional 1,652 HMOs in Charnwood (see Table 2), when compared to previous method for identifying HMOs (not further divided) using the LLPG (which currently records 857 HMOs). In Loughborough 56% of all HMOs (licensed and non-licensed) are wholly-student HMOs and 44% are non-student HMOs.

Table 2: Total number of HMOs identified in the HiMOG database

Evidence from HiMOG	Total HMOs
Public register – mandatory licenced HMOs	362
3 or more students living together in a dwelling (student term time addresses - not including purpose-built/halls of residence)	765
3 or more residents with different surnames in a dwelling (Electoral Register)	1,276
HMO-identified on Gazetteer with 1 or more students identified on HiMOG	106
Total identified HMOs in Charnwood	2,509

3.4.2 The improved identification of HMOs in Charnwood demonstrates the high value and benefits of undertaking this work to construct the HiMOG database to inform the identification of HMOs on the LLPG. This study has provided a rigorous and robust methodology that has enhanced the quality of information and data to inform the practices of the Local Planning Authority, and identify HMOs across the Borough. Mapping of this data shows that there are distinct geographies to the different strands of the local HMO market, both within the town of Loughborough and within the Borough.

3.4.3 To contextualize the prevalence of HMOs within the wider 'housing market', Table 3 shows the total number of HMOs by ward as a percentage of the total number of 'house' UPRNs (including properties identified on the LPPG as terraced, semi-detached, detached and HMO – not further divided) for wards in Loughborough and the rest of Charnwood. It can be seen that HMOs comprise 3.9% of the total number of 'house' UPRNs in Charnwood. The percentage is higher in the Loughborough wards (8.9%), when compared to the rest of the Borough (1.9%). At ward level, percentages of HMO are highest in Southfields (30.6%), Storer (25.3%) and Ashby (15.3%).

Table 3: The total number of HMOs by ward in Charnwood (as a % of total house UPRNs)

Ward	HMOs	Residential UPRNs	% HMO from UPRNs
Loughborough Garendon	56	2,312	2.4
Loughborough Hastings	117	1,743	6.7
Loughborough Lemyngton	171	2,113	8.1
Loughborough Nanpantan	92	1,574	5.8
Loughborough Outwoods	52	2,324	2.2
Loughborough Shelthorpe	73	3,225	2.3
Loughborough Southfields	573	1,873	30.6
Loughborough Storer	487	1,923	25.3
Loughborough Ashby	184	1,205	15.3
Loughborough Dishley & Hathern	48	2,566	1.9
Total	1,853	20,858	8.9

Ward	HMOs	Residential UPRNs	% HMO from UPRNs
Anstey	45	2,757	1.6
Barrow and Sileby West	40	2,845	1.4
Birstall Wanlip	37	2,807	1.3
Birstall Watermead	26	2,617	1.0
East Goscote	23	1,121	2.1
Forest Bradgate	21	1,361	1.5
Mountsorrel	45	2,770	1.6
Queniborough	14	1,642	0.9
Quorn and Mountsorrel Castle Rothley and Thurcaston	49	2,891	1.7
Shepshed East	38	2,609	1.5
Shepshed West	39	3000	1.3
Sileby	54	3,303	1.6
Syston East	37	2,822	1.3
Syston West	52	2,458	2.1
The Wolds	18	1,261	1.4
Thurmaston	61	3,652	1.7
Wreake Villages	24	1,240	1.9
Total	656	44,100	1.5

3.4.4 The study has found that non-licensed student-wholly HMOs (total 765), not surprisingly, cluster around the University and College campuses in the wards of Storer, Southfields and Ashby, and in a concentrated area of Nanpantan ward. There are no student-wholly HMOs outside of the wards of Loughborough, and a low incidence in the other wards of Loughborough. In total, there are 1,030 licensed and non-licensed student-wholly HMOs in Loughborough.

Table 4 reveals the total number of student HMOs (i.e. 3 or more students living together) as a percentage of total 'house' UPRNs in respective wards. This supports long-standing knowledge in the town that students have a predilection to live near to

their place of study for convenience and to minimize commuting times and costs. The prevalence of students in the Golden Triangle and the Kingfisher Estate are also exemplified by these findings, and Storer (12.2%) and Southfields (15.4%) have the highest concentrations in the town, with other notable concentrations in Nanpantan and Ashby. The number of student HMO in other parts of the town declines rapidly; Garendon, Lemyngton and Outwoods are the only other wards that contain over ten student HMOs.

Table 4: The total number of student HMOs by ward in Loughborough (as a % of total house UPRNs)

Ward	Student HMOs	Total house UPRNs	% HMO
Loughborough Garendon	15	2,312	0.6
Loughborough Hastings	4	1,743	0.2
Loughborough Lemyngton	27	2,113	1.3
Loughborough Nanpantan	54	1,574	3.4
Loughborough Outwoods	17	2,324	0.7
Loughborough Shelthorpe	7	3,225	0.2
Loughborough Southfields	289	1,873	15.4
Loughborough Storer	235	1,923	12.2
Loughborough Ashby	116	1,205	9.6
Loughborough Dishley & Hathern	1	2,566	0.0
Total	765	20,858	3.7

3.4.5 The non-student segment of Loughborough's HMO market exhibits more diffuse geographical patterns, including both licensed and non-licensed HMOs. The studentified wards including Ashby, Nanpantan, Southfields and Storer also contain concentrations of non-student HMO. This, it is argued, provides evidence of the de-studentification of these parts of Loughborough. Whilst previous studies have limited the process to the Golden Triangle (cf. Kinton, 2013; Kinton et al., 2016), the existence of high concentrations of non-student HMO in Ashby and Nanpantan infers that the process is extending more widely in the town. The presence of concentrations of non-student

HMOs in studentified neighbourhoods in Loughborough shows that the town's HMO market is more diverse than previous research suggests.

- 3.4.6 High concentrations of non-student HMO are found in Loughborough East with Hastings, Lemyngton and Shelthorpe containing some of the highest concentrations of non-student HMO in the town. The concentration of HMOs in this part of the town represents a parallel to the student market: a non-student 'Golden Triangle'.
- 3.4.7 Interestingly, non-student HMOs are found in considerable concentrations across the town, opposing the geographical unevenness of student HMO: the lowest concentration of student HMO is found in Dishley and Hathern (1 property), whereas the lowest concentration of non-student HMO is found in Nanpantan (24 properties). This suggests that non-student tenants are more geographically flexible than students. Not having a reliance on living close to their place of study and cultural amenities may explain this geographical pattern. Overall, the evidence provided so far suggests that a geographically diverse non-student HMO market exists in Loughborough.
- 3.4.8 Loughborough East thus contains the highest concentration of non-student HMO in the town, with relatively high numbers of non-student HMOs that pay Council Tax located within these three wards. The Hastings and Lemyngton wards in particular have a high concentration of non-student HMOs.
- 3.4.9 A number of processes may be at work to explain this trend. The availability of cheaper terraced housing for lower rental costs in Hastings and Lemyngton may provide an attractive option for non-student groups. Given that Loughborough East is an ethnically diverse, socio-economically deprived part of the town (Leicestershire County Council, 2007a, 2007b), it can be hypothesised that low- income groups including international migrants, low-skilled workers and Benefit recipients mostly reside in HMO in this part of Loughborough. The location of Loughborough train station provides those living in the town but working elsewhere in the East Midlands convenient transport links. In Shelthorpe, an area with a history of social housing, the concentration of non-student HMO may reflect a tenurial transition from social housing to HMO, as in Ashby ward.
- 3.4.10 High concentrations of non-student HMO are also found in other parts of the town. Dishley and Hathern, Garendon, Nanpantan and Outwoods contain high numbers of non-student HMOs that pay Council Tax. These parts of the town are generally more

affluent, dominated by middle-class, family-oriented households living in owner-occupied housing. Housing in these neighbourhoods are also generally larger, semi-detached dwellings. The proliferation of non-student HMOs into these areas challenges conceptualisations that limit HMO to localities dominated by cheaper terraced housing.

3.4.11 Non-student HMOs have emerged in middle-class, family-oriented neighbourhoods of the town. It is argued that the proliferation of non-student HMO into these parts of Loughborough represent a movement of this housing type into mainstream society spatially and culturally. The HMO properties previously identified as HMO in the LLPG and have at least one student in residence (identified in HiMOG), are concentrated in the studentified wards of Ashby, Storer, Nanpantan, and Southfields. It is highly likely that this is due to individuals (most likely students) not recording their term time address or registering an incomplete or inaccurate term time address, or perhaps an individual not registering on the electoral roll. These properties have previously been identified by CBC as a HMO based on information from planning or council tax datasets.

Table 6 shows findings from analyses of the percentages of wholly-student and non-student HMOs by ward in Loughborough, including both licensed and non-licensed HMOs. It can be seen that the percentage of student HMOs is highest in Southfields (77%), Storer (68%), Ashby (64%) and Nanpantan (60%). The percentage of non-student HMOs are most prevalent in the other wards of Loughborough.

Table 6 Total percentage of student and non-student HMOs (licensed and non-licensed) by ward

Ward	Total HMOs	Student HMOs	Non- student HMOs	% student HMO	% Non- student HMO
Loughborough Garendon	56	16	40	29	71
Loughborough Hastings	117	7	110	6	94
Loughborough Lemyngton	171	36	135	21	79
Loughborough Nanpantan	92	55	37	60	40

Loughborough Outwoods	52	19	33	37	63
Loughborough Shelthorpe	73	7	66	10	90
Loughborough Southfields	573	439	134	77	23
Loughborough Storer	487	332	155	68	32
Loughborough Ashby	184	118	66	64	36
Loughborough Dishley & Hathern	48	1	47	2	98
Total	1,853	1,030	823	56	44

Finally, Table 7 shows the occupancy levels of Loughborough University students in purpose-built student accommodation. It can be seen that occupancy levels have generally increased between 2014/15 and 2016/17. In 2016/17 occupancy levels were high in the majority of blocks of purpose-built student accommodation.

Table 7: Occupancy levels in purpose-built student accommodation: 2014/15 to 2016/17

			LU Student	LU Student	%
		Total bed	Occupancy	Occupancy	Occupancy
Property	Location	Spaces	(14/15)	(16/17)	16/17
Asha House	Woodgate	106	55	103	97.2
	42 Ashby				
The Block	Square	70	51	36	51.4
Waterways	Derby Road	179	115	160	89.4
	575 Ashby				
The Cube	Road	96	62	88	91.7
	58				
Print House	Woodgate	100	34	84	84.0
	43				
Foundry 1	Woodgate	112	86	100	89.3

	4				
	Greenclose				
Optima	Lane	88	53	63	71.6
	194 Ashby				
Essex Lodge	Road	44	18	13	29.5
	192 Ashby				
Westfields	Road	22	11	14	63.6

4. Exploring the processes underpinning the patterns of HMO geographies in Charnwood

- 4.1 Semi-structured interviews with letting agents, local government officers and Council Elected Members were conducted to: i) critically explore the nuances of the processes underpinning the diverse geographies of HMO in Loughborough; ii) to add a depth of understanding to the outputs of the database, outlined above; iii) provide a deeper insight into patterns of student and non-student geographies of HMO. Overall, 22 semi-structured interviews and 2 paired semi-structured interviews were conducted between October 2016 and December 2017.
- 4.2 The group identified as the starting point for interview was the letting agents. If an established non-student HMO market exists in Loughborough, the narratives of letting agents managing the properties would provide an ideal starting point to explore it. 29 letting agents were identified for initial contact. Student letting agents were included as it was possible that some may also be involved in the management of non-student HMO as well. Each agent was visited between September to December 2016, to arrange an interview with an employee that had knowledge of the town's HMO market. Interviews were conducted with 15 letting agents representing 10 companies.
- 4.3 The next group identified for interviews were Local Government Officials. Their expertise with this housing type would provide valuable insights. Overall, 2 semi-structured interviews and 1 paired semi-structured interview were arranged with Local Government Officials. Councillors within CBC were also identified as a core group of participants for interview due to their unique local knowledge of Loughborough. Overall, 1 paired semi-structured interview and 7 semi-structured interviews were conducted with this group.

4.1 Key findings from the interviews

Some common findings from our interviews are listed below. Notably, we highlight eight key findings which will be most salient to future discussions about future HMO policies, and which reveal the ongoing dynamics and changing HMO markets in Loughborough and Charnwood.

4.1.1 The HMO market within Loughborough is growing, diversifying and spreading into other parts of the Borough

- There is a tendency for HMOs to cluster in areas with already-high concentrations of HMO and other private rented properties. However, there is a proliferation of HMO into local neighbourhoods typically dominated by family- oriented, owner-occupied households within Loughborough. HMOs are spreading to parts of the town not traditionally associated with shared living in HMOs.
- The town's HMO market has previously been understood as one geared mainly, if
 not exclusively to its student population. To continue to conceptualise
 Loughborough's HMO market solely as a student housing market is outdated, given
 the identification of diverse non-student HMO markets across the town and other
 towns and villages of the Borough (see below).

4.1.2 The student HMO market is changing

- There is a tendency for students to live close to their place of study and cultural
 amenities for convenience. There is an increasing movement of studentification into
 the Forest and Herrick areas, as well as the prevalence of students in Kingfisher
 Estate.
- In Storer and Burleigh, landlords are now renting out empty rooms in student HMOs to non-students, as is consistent with processes of de-studentification in these neighbourhoods.
- HMO landlords use 'individuals' that are not students as a 'backup' market if they
 cannot fill their properties with students. Crucially, the dynamic between the two
 markets is centred on the timing of the academic year; if student HMO landlords do
 not fill their properties with students by October, they will usually market their
 properties to non-student renters.
- Student HMO landlords now rent out rooms in their properties over the summer period to non-students in need of rooms on a short-term, *ad hoc* basis. This Airbnb-

- style use of HMO provides innovative solutions to the 'ghost-town effect' in the university town.
- Young professionals and low-income individuals such as benefit recipients and individual Accession 8 (A8) European migrants may fill voids left by students in HMO in the town as part of the process of de-studentification.

4.1.3 The non-student HMO market in Loughborough and Charnwood is unfolding and diverse

- A diverse non-student HMO market has been identified in Loughborough. Nonstudent HMO exhibits distinctly different geographies to the student market, although there is a degree of overlap, particularly in studentified parts of the town.
- The HMO market in Charnwood is changing due to many external influences. One
 key factor is a shift to HMO becoming an increasingly common housing type for
 diverse young adults. Traditionally, living in HMO has been associated with 18-25
 age group, particularly students. HMO is becoming more common for diverse
 individuals aged under-35.
- In parts of the town dominated by middle-class, family-oriented households living in owner-occupied housing, such as the Nanpantan, Garendon and Outwoods wards, further concentrations of non-student HMO are forming. The penetration of non-student HMO into these parts of the town represents a movement of HMO towards mainstream society spatially and culturally, as traditional neighbourhoods become accustomed to living in close proximity to individuals residing in non-familial shared living arrangements.

4.1.4 There is the presence of vulnerable low income groups within the nonstudent HMO market

Although Loughborough's non-student HMO market is generally spread more evenly
across the town than the student market, relatively high concentrations of nonstudent HMO have been identified in Loughborough East, particularly in the
Hastings and Lemyngton wards. The existence of non-student HMO in this
ethnically diverse part of the town, with high levels of socio-economic deprivation, is
consistent with data from interviews stating that these HMOs are occupied mainly by
low-income earners, benefit recipients and international migrant workers.

- The high concentration of non-student HMO in Shelthorpe, an area with a high proportion of former social housing, reflects tenurial shifts from social housing to HMO that can also explain the high concentration of HMOs in the Ashby ward.
- On the other end of the income spectrum, low-income workers were identified as living in HMO, particularly in Loughborough East. These tenants may be in some form of employment, but their income only allows them to live in a room within low-quality HMO in socio-economically deprived neighbourhoods of the town. For some low-income workers, HMO is the first alternative to homelessness owing to the competitive nature of Loughborough's PRS. HMO serves an important role at the bottom end of the PRS by providing affordable accommodation for those with the lowest incomes in the town.
- Benefit recipients were also found to be living in HMO in deprived neighbourhoods mainly in Loughborough East, as well as the Golden Triangle. This may point to the extension of the SAR is funnelling benefit recipients in the town into HMO. It is argued that this residential pattern goes beyond de-studentified parts of the town and is more common in Loughborough East. Given that these benefit recipients are also at the lower end of the income scale, it is argued that HMO may serve a similar role for them as the 'first rung' on the rental ladder, and a primary alternative to the threat of homelessness.

4.1.5 There is the presence of vulnerable migrant groups within the non-student HMO market

- HMO provides an important source of accommodation within Loughborough for international migrants. Brexit may have implications for England's HMO market.
- International migrants also reside in HMO in various parts of Loughborough including the Golden Triangle and other parts of Storer, Dishley and predominantly Loughborough East. International migrant workers are geographically flexible within the town. However, the competitive nature of Loughborough's PRS limits low-income migrant workers to the cheaper neighbourhoods within Loughborough East particularly within the Hastings and Lemyngton wards.
- Two main groups of migrants were identified as living in HMO in the town. First, South Asian international migrants working in and around the town mainly in the catering industry were identified, from countries including Bangladesh, India and Pakistan.

- The second group of migrants living in HMO in Loughborough are A8 European migrants from countries including Poland, Romania, Lithuania and Bulgaria. Diverse jobs ranging from farming & agriculture, agency work in manufacturing industries, taxi driving, and more professional occupations were all mentioned by interviewees.
- International migrant workers from other ethnic backgrounds were also found to be living in HMO in the town, including migrants from the Middle East, e.g. Qatar, Saudi Arabia, Iraq and Afghanistan, as well as Vietnam and Algeria. Properties with migrants from these backgrounds were found in the Nanpantan ward.
- Identifying and exploring HMO containing migrants is difficult due to a lack of suitable data on both HMO and international migrants.

4.1.6 The non-student HMO market includes diverse groups of professionals

- Professionals are also living in HMO in Hastings and Lemyngton wards. The location of the town's train station and several large employers in these wards is influential here.
- There are several different types of professional residing in HMO including graduate employees, but also flight attendants, Olympic athletes and military personnel in training. The diversity of professionals residing in HMO in the town emphasises the point that HMO in the town now caters for diverse individuals.

4.1.7 The HMO market is agile and dynamic

• The demand for short-term, flexible accommodation among non-students ebbs and flows with the changing economic structure of Loughborough. Examples include the opening of an Amazon distribution hub in Coalville, the expansion of employers such as 3M and the closure of a manufacturing plant of the Brush Group. LU emerged as one of the major employers in the town for professionals living in HMO, and as a magnet for other businesses to locate in the area. The continued growth of the university through the Science and Enterprise Park may reinforce and expand this influence on the town's economy. The supply of HMO in the town facilitates a flexible and dynamic population of non-students who can meet the demand for mobile labour from employers in and around the town. As long as the labour market demands a flexible and mobile workforce, HMOs will continue to be in high demand in locations across England, including Loughborough.

4.1.8 The HMO market is embracing technological developments in its change

The importance of web-based platforms such as SpareRoom, Gumtree and
EasyRoommate for the operation of the town's HMO market cannot be understated.
Online platforms were mentioned by several interviewees as crucial for the
operation of Loughborough's non- student HMO market. These online platforms
allow HMO landlords in the town to cheaply and flexibly advertise rooms. This helps
to explain the lack of a niche letting agent specifically advertising and managing
non-student HMOs in Loughborough.

Appendix A

Constituent datasets used in HiMOG database

- HMO mandatory licensing register (sourced from Charnwood Borough Council's website in January 2016, and updated on HiMOG thereafter)
- Planning dataset (sourced from Charnwood Borough Council on 18th October 2016)
- Loughborough University student-term address dataset (sourced from Loughborough University for 2014-15; updated for each academic year)
- Loughborough College student-term address dataset (sourced from Loughborough College for 2016-17 academic year and updated for each academic year)
- Electoral Register (sourced from Charnwood Borough Council on 30th September 2015; updated 21 February 2018)
- Council Tax exemptions (sourced from Charnwood Borough Council on 23rd September 2015; updated 5 February 2018)

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