Appendix 3

LB Haringey

Houses in Multiple Occupation:

Housing Stock Condition and Stressors Report

August 2023

London Borough of Haringey

Houses in Multiple Occupation: Housing Stock Condition and Stressors Report

August 2023

Executive Summary

Metastreet were commissioned by the London Borough of Haringey to review Houses in Multiple Occupation in the borough and assess stressors related to the private rented subtenure.

The detailed information provided in this report will facilitate the development and delivery of Haringey ’s housing interventions and enable a targeted approach to tackling poor housing.

The main aim of this review was to investigate and provide accurate estimates of:

- Information on the number of Houses in Multiple Occupation (HMOs) as a subset of the PRS.
- Levels of serious hazards that might amount to a Category 1 & 2 hazard (HHSRS) within the HMO population.
- Other housing related stressors, including antisocial behaviour (ASB), waste & service demand linked directly to HMOs.
- Assist the council to make policy decisions, including a possible redesignation of property licensing schemes under Part 2 of Housing Act 2004.

Metastreet has developed a stock-modelling approach based on metadata and machine learning to provide insights about the prevalence and distribution of a range of housing stressors and factors.

The housing models are developed using unique property reference numbers (UPRN) as a data key, which provide detailed analysis at the property level.

Data records used to form the foundation of this report include but are not limited to:

Council tax	Property licensing	Other council interventions records	Tenancy deposit data
Housing benefit	Private housing complaints and interventions records	ASB complaints and interventions records	Energy Performance data

Key Findings

- The known HMO population in Haringey is 4,830.
- HMOs that share basic amenities (3,927) (s254) and converted properties with multiple flats that share common parts which are generally defined as less than two thirds owneroccupied (903) (s257).
- Additional licensed HMOs (2,237) are more numerous than Mandatory HMOs (1,690).
- HMO property types in Haringey are typically houses (63%).
- The HMO tenant population in Haringey is likely to exceed 21,735 residents. This represents 8.2% of Haringey's 2021 census population estimates.
- On average an HMO is occupied by 4.5 tenants.
- The average number of households per property is 3.3.
- Haringey has 2,537 unique HMO licence holders. The average number of licences per licence holder is 1.4.
- Most HMO licence holders manage just one property (2,129).
- Haringey recorded 492 complaints from tenants and others linked to HMOs over a 5-year period.
- During 1,129 HMO property inspections, officers identified 1,140 hazards (Category 1 & 2, HHSRS) across 315 properties.
- 27% of inspected properties were found to have serious hazards.
- Fire was by far the most common hazard identified (659), followed by Damp and Mould Growth (42) and Excess Cold (15).
- The most common location for a hazard was the kitchen (47%) and Bedroom (33%).
- 1,609 HMO properties in Haringey are likely to have at least 1 serious housing hazard (Category 1 & 2, HHSRS).
- Significant levels of noise ASB events (2,474) have been linked to HMO properties across the borough over a 5-year period.
- Noise ASB emanating from HMOs is made up of 6 main types; music and voices (78%), DIY (9%), machinery (5%), alarms (3%), barking dogs & other (2%.).
- 1,359 waste complaints have been received by the authority linked to 793 licensed HMOs over a 5-year period.

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Introduction & Project Objectives

Metastreet were commissioned by the London Borough of Haringey to review its HMO housing stock with a focus on the following key areas:

- Distribution of HMOs
- Housing conditions of HMOs
- Quality of management of HMOs
- Other HMO related stressors, including Anti-Social Behaviour (ASB), waste & service demand

The report provides the council with the evidence base for developing housing and service interventions. The report also assists with the council's responsibility to review its housing stock as set out under Part 1, Section 3 of the Housing Act 2004.

For the purposes of this review, it was decided that a ward-level summary is the most appropriate basis to assess housing conditions across Haringey, built up from property level data.

Predictive tenure models (Ti) have been developed as part of this project which are unique to Haringey, they include:

- Serious housing hazards (Category 1 & 2)

All data used in this report is taken from Haringey's own service records over the last 5 years and other open-source property level data. An updated data frame focused on HMOs has been developed specifically for this project.

The appendices to the report contain a summary of the data and a more detailed report methodology.

1 London Borough of Haringey and HMOs

Haringey is a London borough in North London. It covers an area of 28.5km². The borough borders six other London boroughs including Enfield, Waltham Forest, Hackney, Islington, Camden, and Barnet. [1]

Houses in Multiple Occupancy (HMO) identified as part of this study have been divided into two main categories and three separate licence types. The first category are HMOs that share basic amenities (Housing Act 2004, Section 254) that have been licenced under either mandatory or additional licensing powers. The second category are converted properties with multiple flats that share

[1] Wikipedia, June 2020, https://en.wikipedia.org/wiki/London_Borough_of_Haringey

common parts which are generally defined as less than two thirds owner-occupied that have been licensed under Section 257 Housing Act 2004.

Any HMO meeting the following criteria requires a **mandatory licence** in Haringey

- Dwellings inhabited by five or more occupiers, residing in two or more distinct households, and sharing common amenities like a kitchen or bathroom. This regulation applies irrespective of the number of floors.
- Self-contained flats located within a building comprising up to two flats. If either or both of these flats are inhabited by five or more individuals from two or more separate households, licensing is mandatory.

Any HMO meeting the following criteria requires an **additional licence.**

- Dwellings inhabited by 3 or 4 occupiers, residing in two or more distinct households, and sharing common amenities like a kitchen or bathroom.

Any HMO meeting the following criteria requires a **Section 257 licence (s257).**

- This type of HMO is a converted block of flats where the standard of the conversion does not meet the relevant building standards (Building Regulations 1991) • Fewer than two-thirds of the flats are owner-occupied.

2 Methodology

Tenure Intelligence (Ti) uses council held and publicly available data to identify tenure and analyse property stressors, including property conditions and ASB. Metastreet has worked with the council to create a residential property data warehouse focused on the known HMO population. This has primarily been developed by using licence holder and application flags held by the authority. Therefore, there is a very high confidence that the study group are 'known' HMOs because they have been assessed and, in many cases, inspected by the authority to establish their tenure. For this report no HMO tenure prediction data has been used, work on hidden HMOs will be presented separately.

The project has included linking large amounts of council and externally held data to unique property references (UPRN).

Machine learning has been used for property condition predictions based on training data taken from a contemporary sample of known outcomes. Results are analysed to produce a summary of housing stock, predictions of Category 1 & 2 hazards (HHSRS). Different combinations of risk factors were systematically analysed for their predictive power in terms of key outcomes. Risk factors that duplicated other risk factors but were weaker in their predictive effect were systematically eliminated. Risk factors that were not statistically significant were also excluded through the same processes of elimination.

It is important to note that this approach can never be 100% accurate as all large datasets and statistical models include some level of error. A more detailed description of the methodology and the specific factors selected to build predictive models for this project can be found in Appendix 2.

All specified and requested council held longitudinal data is 5 consecutive years, from April 2018 – March 2023 unless otherwise specified.

Where appropriate and where the data allows, the findings for Additional licensing, both Section 254 and Section 257 have been presented separately.

3 HMO Population & Distribution & Occupancy

3.1 HMO population

The HMO population in Haringey is made up of two main categories (described above); HMOs that share basic amenities (3,927) (s254) and converted properties with multiple flats that share common parts which are generally defined as less than two thirds owner-occupied (903) (s257). The total licensed HMO population in Haringey is therefore 4,830.

The HMO population is distributed across all wards. Harringay (785) has the most HMOs, Alexandra Park has the least (63) (Figure 1).

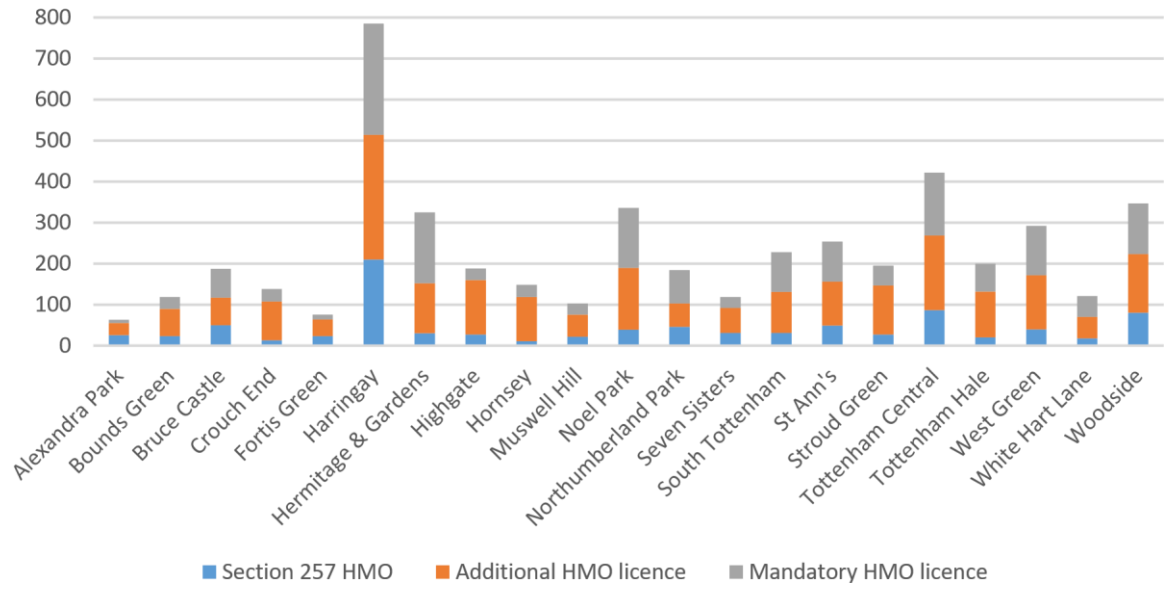


Figure 1. Total licensed HMO population (section 254 & section 257) by ward

Shared HMOs (s254) form the majority of HMOs in Haringey (3,927). For this category, Harringay (575) and Tottenham Central (335) ward have most HMOs (Figure 2).

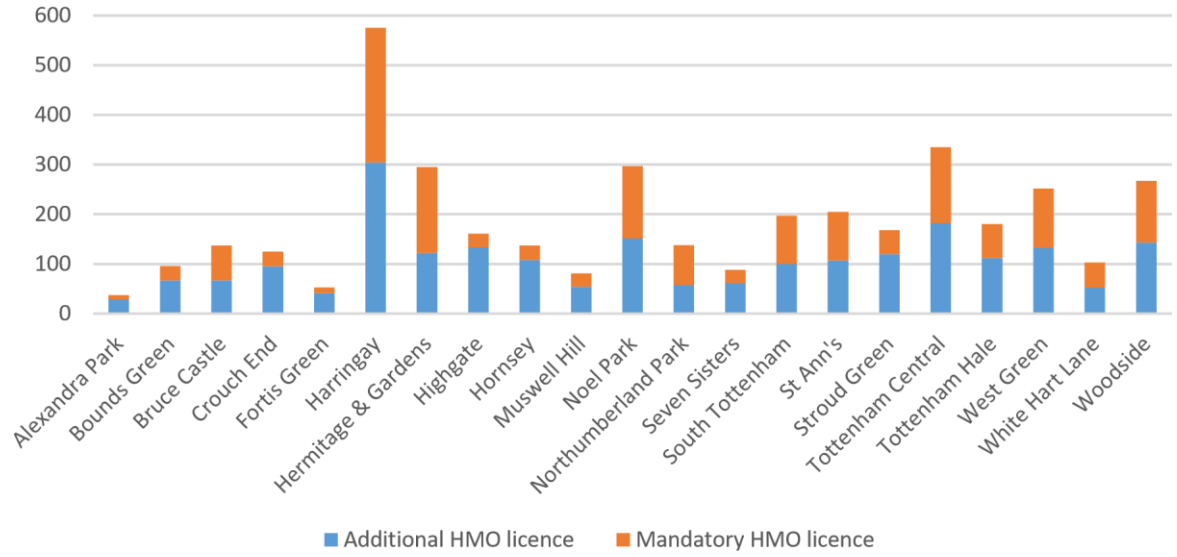
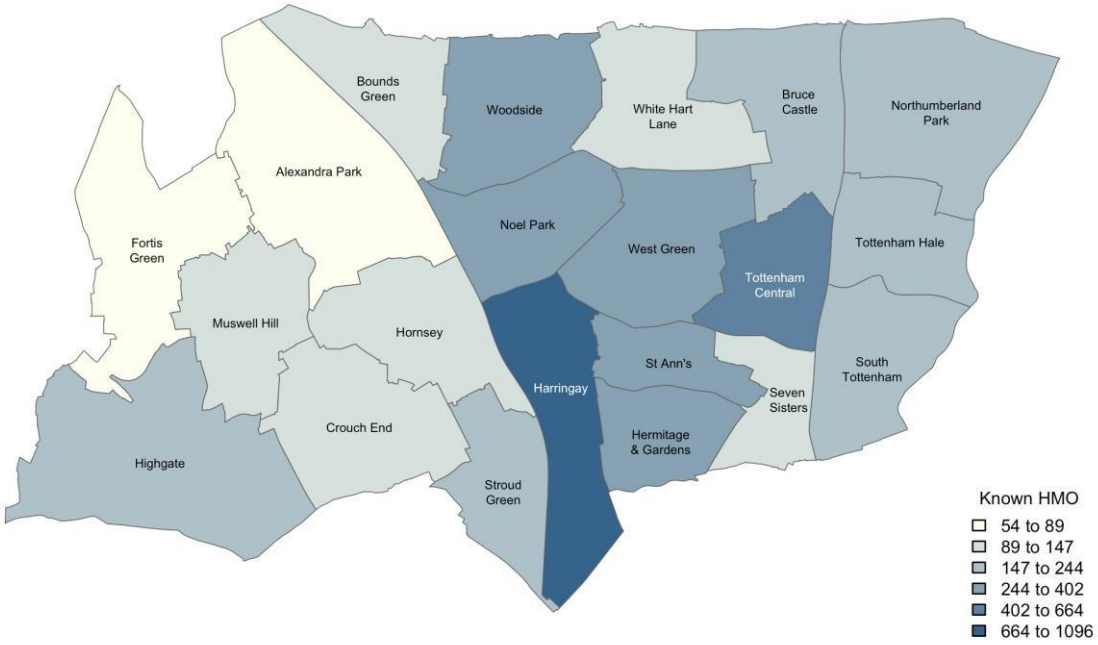


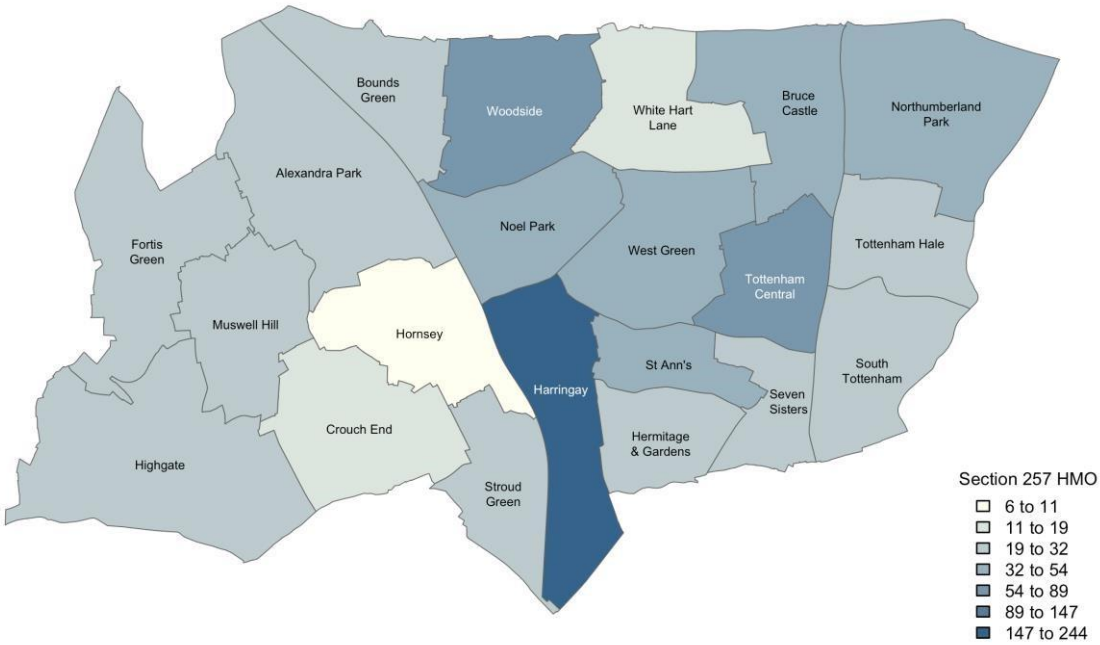
Figure 2. Number of shared amenities HMOs (s254) (Additional and Mandatory) by ward (Source Ti 2023).

HMOs (all types) are distributed across all wards; central and eastern wards have greater concentrations of HMOs (Map 1).



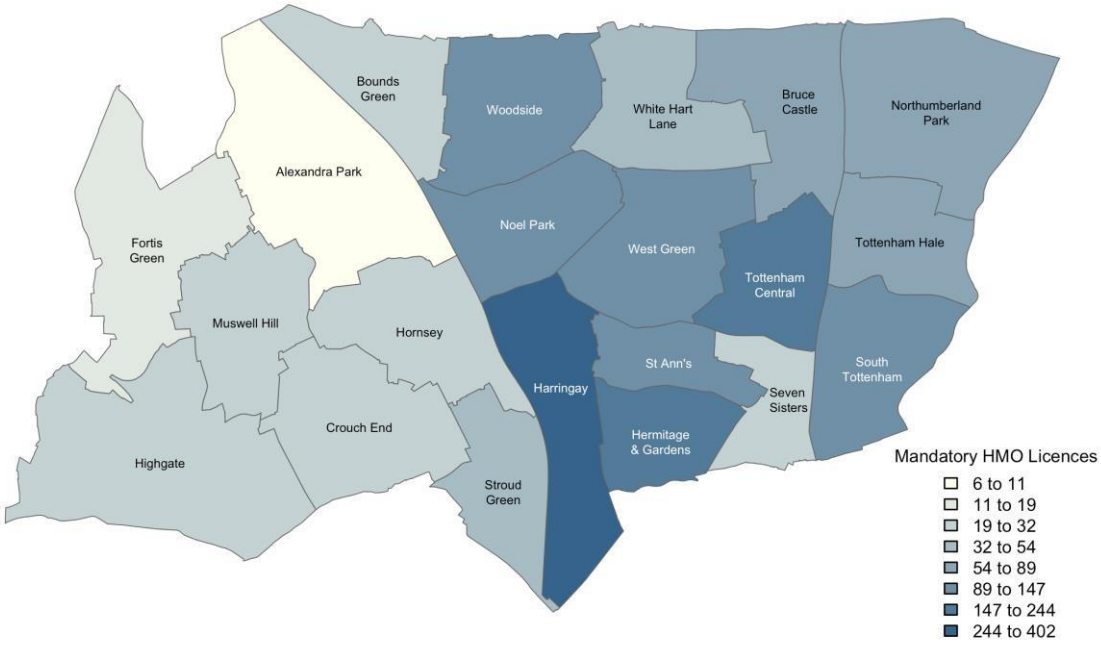
Map 1. Distribution of licensed HMOs (all types) by ward (Source: TI 2023, Map by Metastreet).

Section 257 HMOs are also distributed across all wards. Harringay (210) has the highest concentration (Map 2).

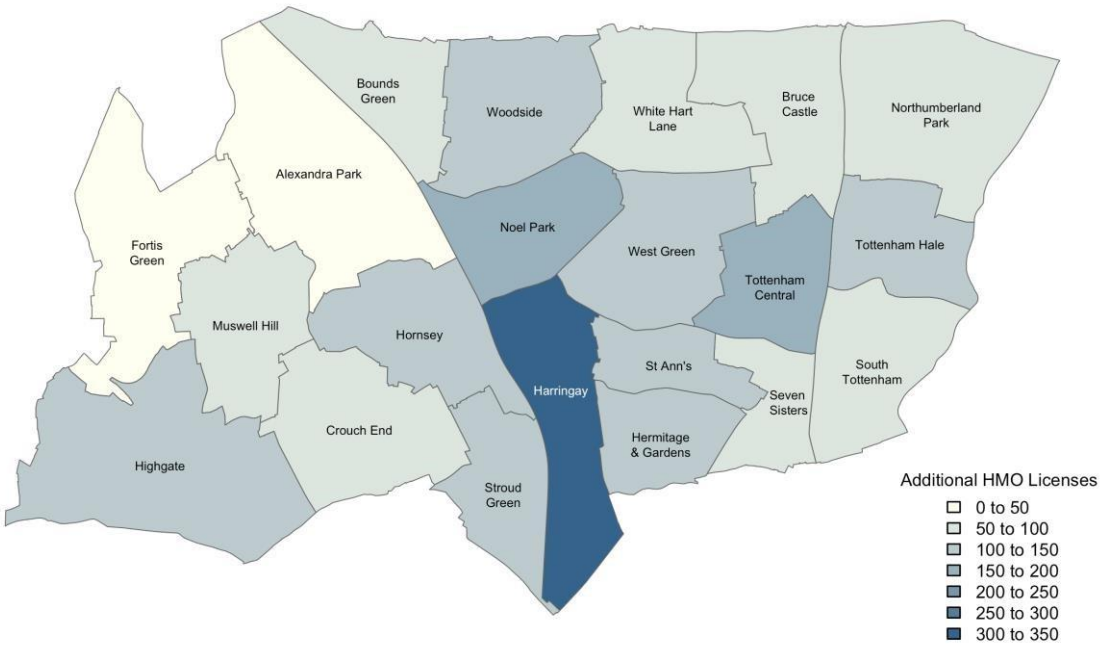


Map 2. Distribution of licensed s257 HMOs (converted properties) by ward (Source: TI 2023, Map by Metastreet).

Additional licensed HMOs (2,237) are more numerous than Mandatory HMOs (1690). Harringay ward has the highest number of Additional (304) licences and Mandatory (271) licences (Figure 1 & map 3 & 4).



Map 3. Distribution of licensed Mandatory HMOs (5 or more persons) by ward (Source: TI 2023, Map by Metastreet).



Map 4. Distribution of licensed Additional HMOs (3 & 4 persons) by ward (Source: TI 2023, Map by Metastreet).

3.2 Property type

HMO property type profile offers an indication of HMO density and construction type. The most common HMO property type in Haringey are houses (63%), while bungalows are the least common property types (< 1%) (Figure 3).

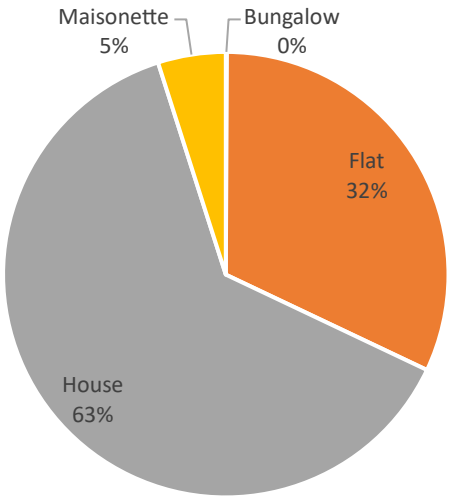


Figure 3. HMO property types (Source Ti 2023).

3.3 Tenant population

Occupancy data for HMO licence applications provides insights into how HMOs in Haringey are occupied.

Licence application data was analysed for occupancy and revealed a total of 15,356 tenants occupy 3,363 HMOs in Haringey, forming 10,977 households. Note, not all licence applications were available for analysis. Each HMO is occupied by 4.5 tenants on average. The number of tenants occupying HMO properties ranges between 19 – 3 persons. The average number of households per property is 3.3.

Extrapolating the known tenant occupancy per HMO (4.5) to the remaining known HMO data (4,830), the HMO tenant population in Haringey is likely to exceed 21,735 residents. This represents

8.2% of Haringey's 2021 census population estimates (264,200) [2].

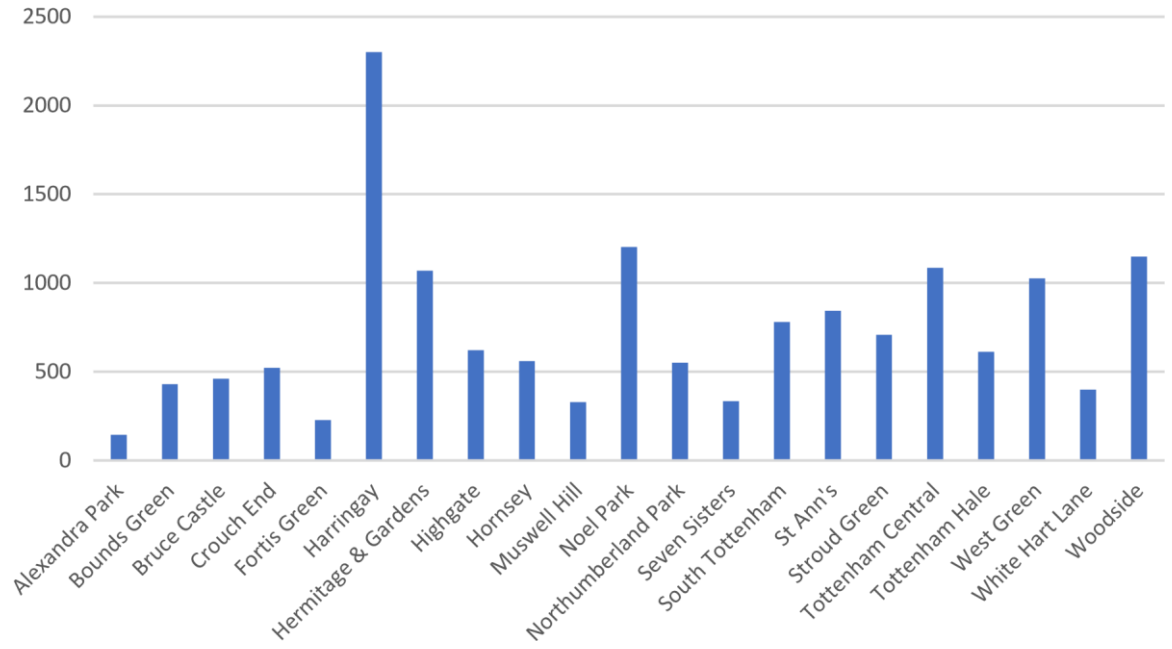


Figure 4. HMO occupants by ward (Source: TI 2023).

Harringay ward has the highest number of HMO occupants (2,301) and households (1,703) in the borough (Figure 4 & 5).

[2] Census 2021 Population and household estimates, 2021, https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/populationandhouseholdestimatesenglandandwales/census2021unroundeddata

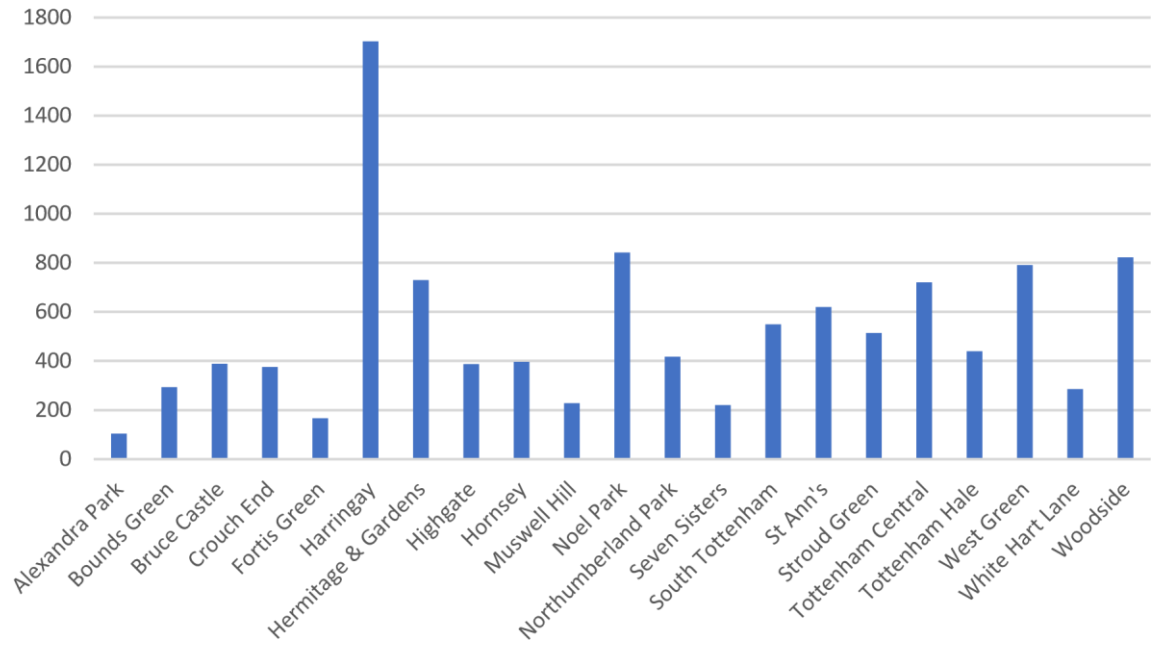


Figure 5. HMO households by ward (Source: TI 2023).

3.4 HMO licence holders

Each HMO property licence has a named licence holder. Analysis of HMO license holder data for 3,474 HMO licences identified 2,537 unique licence holders.

The average number of licences per licence holder is 1.4. The number of licences per licence holder ranges between 1-32 licences. Most HMO licence holders manage just one property (2,129) (Figure 6).

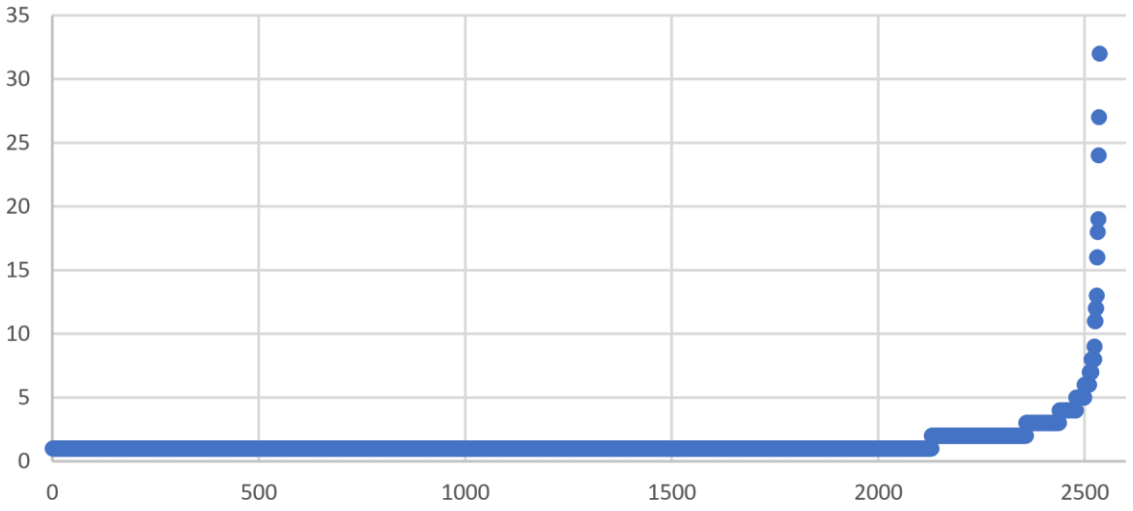


Figure 6. HMO licence holders by licensed HMOs (Source: TI 2023).

4 HMO Standards & Management

Housing conditions are affected by the level of maintenance, quality of repair & management, the age of the property, thermal efficiency, and type of construction.

Proper management of HMOs is necessary to safeguard the tenants and the wider community. The HMO Management Regulations require the manager to keep all parts of the HMO safe, clean and well maintained. They also place a duty on tenants of HMOs to cooperate with the manager and not damage any fire safety equipment. [3] HMOs can exhibit some of the poorest housing conditions of any tenure if poorly managed. Therefore, HMO managers are required to comply with licence conditions and HMO Management Regulations. These include space standards, repair obligations, fire precautions and testing, waste management and tenancy management.

4.1 Complaints from tenants and others

Complaints made by tenants and others to Haringey Council regarding poor property conditions and inadequate property management are a direct indicator of low quality and poorly managed HMOs. Haringey recorded 492 complaints from tenants and others linked to HMOs over a 5-year period (April 2018 – March 2023) (Figure 7).

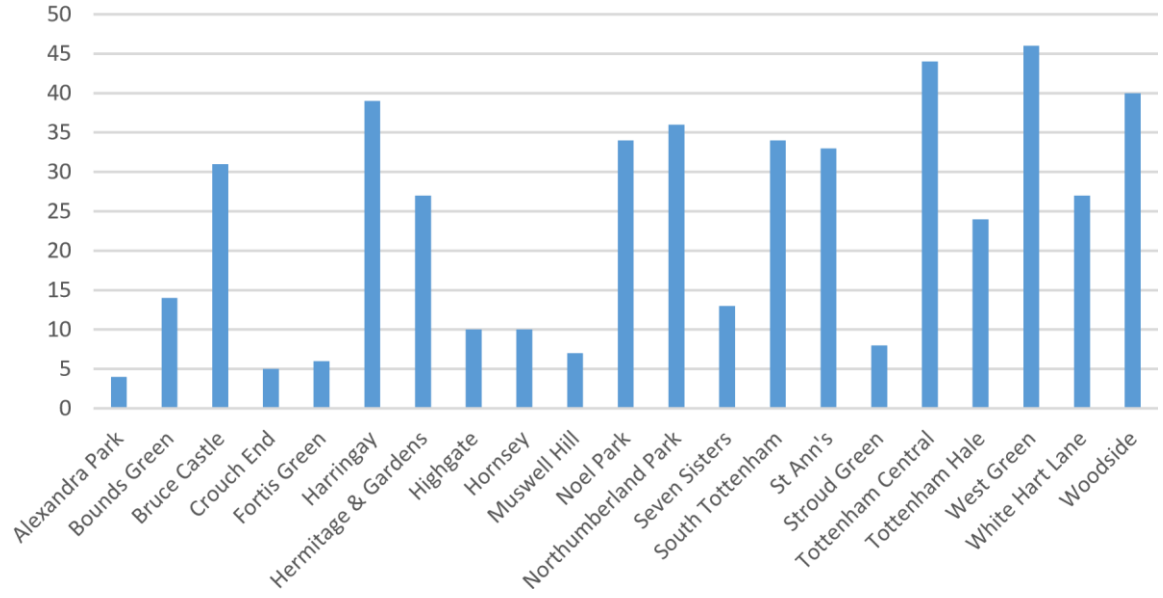
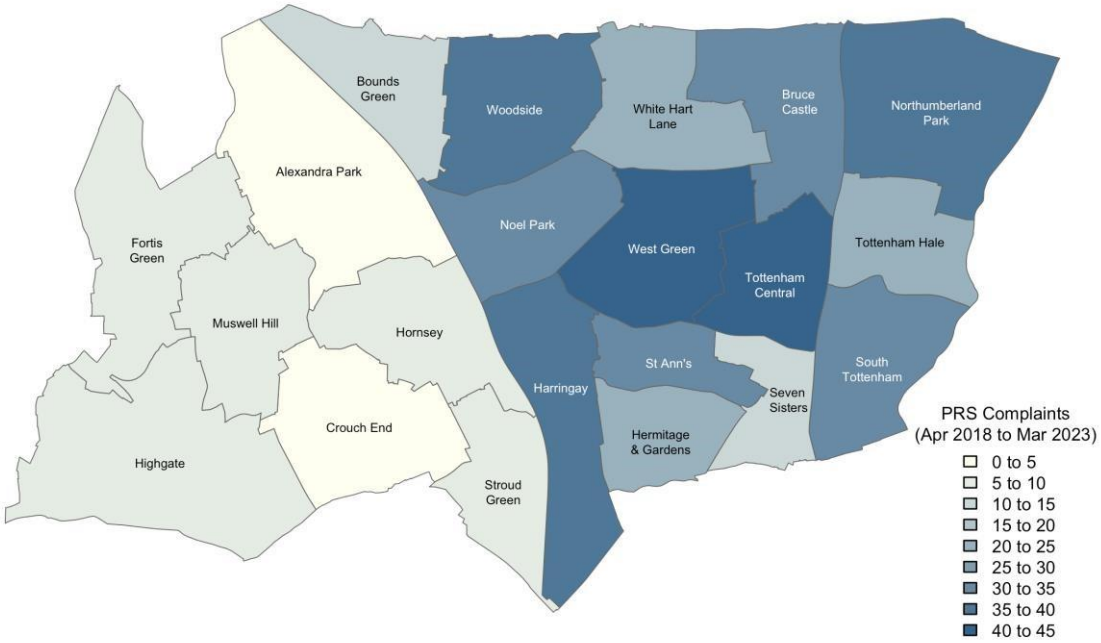


Figure 7. Complaints from tenants and others linked to licensed HMOs (all types) by ward (Source: TI 2023.

[3] The Licensing and Management of Houses in Multiple Occupation (Additional Provisions) (England) Regulations 2007, https://www.legislation.gov.uk/uksi/2007/1903/contents/made

West Green (46) and Tottenham Central (44) received most complaints from private tenants and others (Figure 7). Complaints are distributed across the whole borough. Concentrations of complaints come predominantly from the central and eastern wards (Map 5).



Map 5. Distribution of complaints from tenants and other linked to licensed HMOs (all types) by ward (Source: TI 2023, Map by Metastreet).

147 complaints made by tenants and others to Haringey Council are linked to Additional HMOs (s254). Tottenham Central (19) has the highest number of complaints (Figure 8).

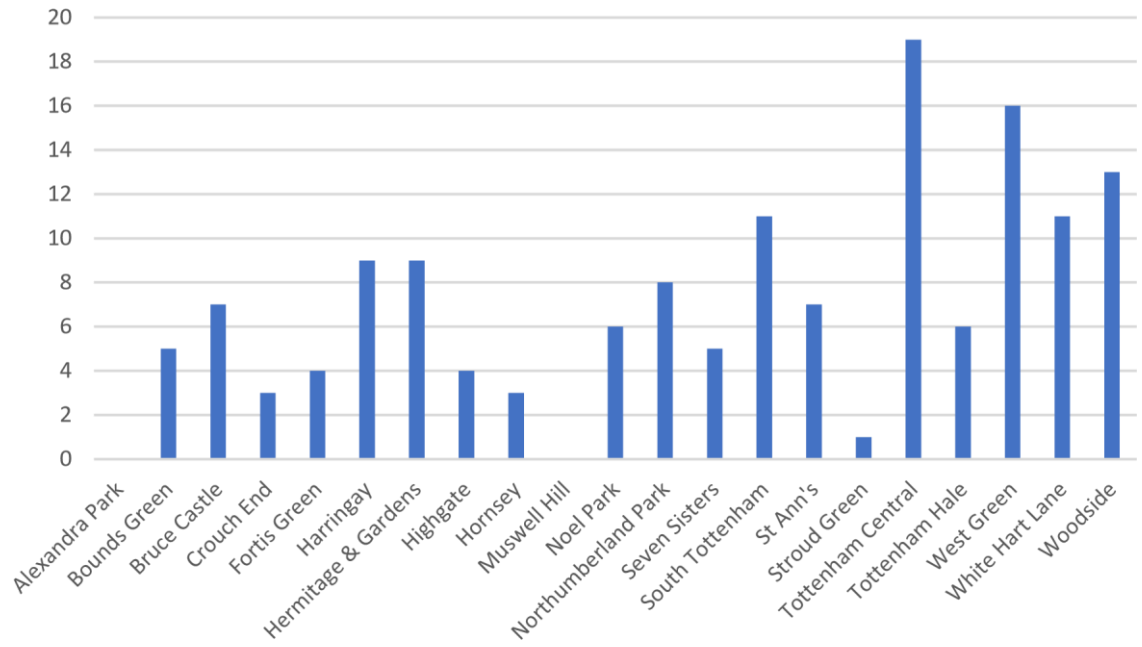


Figure 8. Complaints from tenants and others linked to Additional licensed HMOs (s254) by ward (Source: TI 2023).

118 complaints made by tenants and others to Haringey Council are linked to Additional HMO (s257) (Figure 9). Tottenham Central as the highest number of complaints (14).

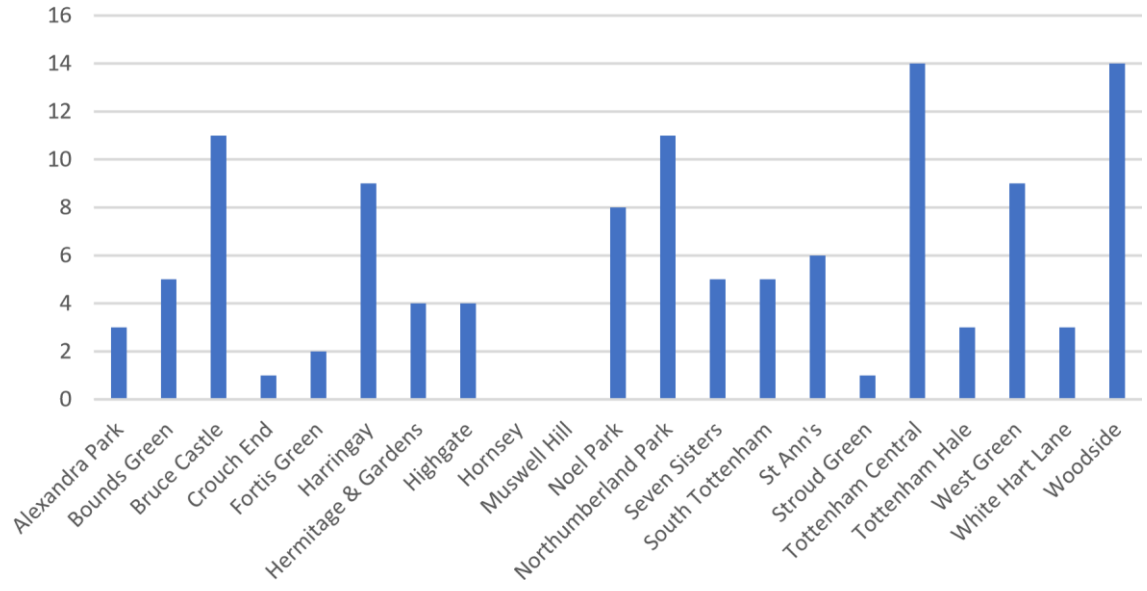


Figure 9. Complaints from tenants and others linked to Additional licensed HMOs (s257) by ward (Source: TI 2023).

4.2 Fire precautions

As part of the HMO licence application process, applicants are asked about the fire precautions in the HMO to be licensed. Out of a total of 3,208 applications, 1,112 (34.7%) responded 'no' and 2,096 (65.3%) responded 'yes' to the following question, *Does the property have fire doors fitted to the kitchens?* (Figure 10).

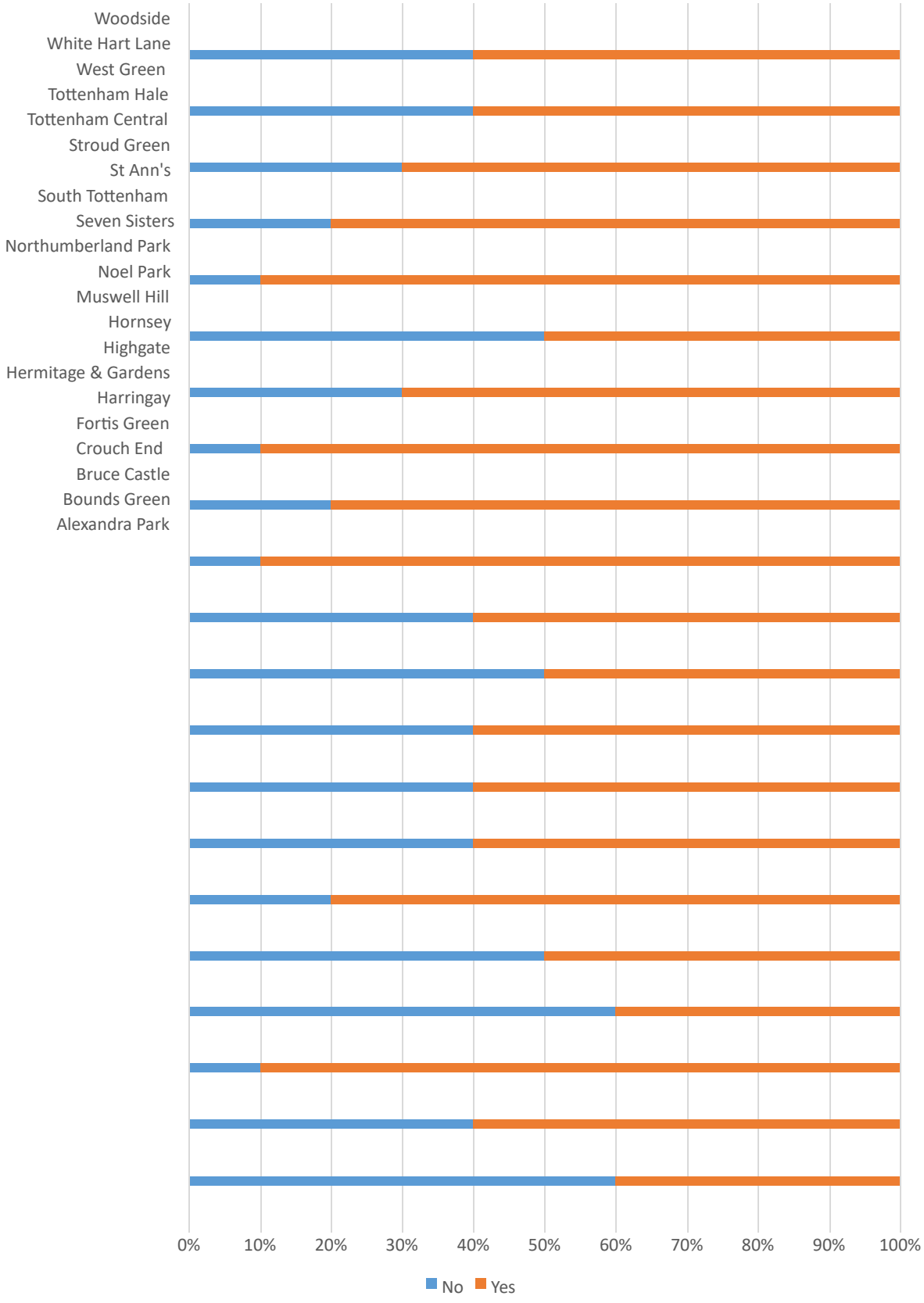


Figure 10. Does the property have fire doors fitted to the kitchens? Results by ward. (Source: TI 2023).

Out of a total of 3,208 applications, 746 (23.3%) responded ‘no’ and 2,462 (76.7%) responded ‘yes’ to the following question, Does the property have a mains powered fire detection system? (Figure 9).

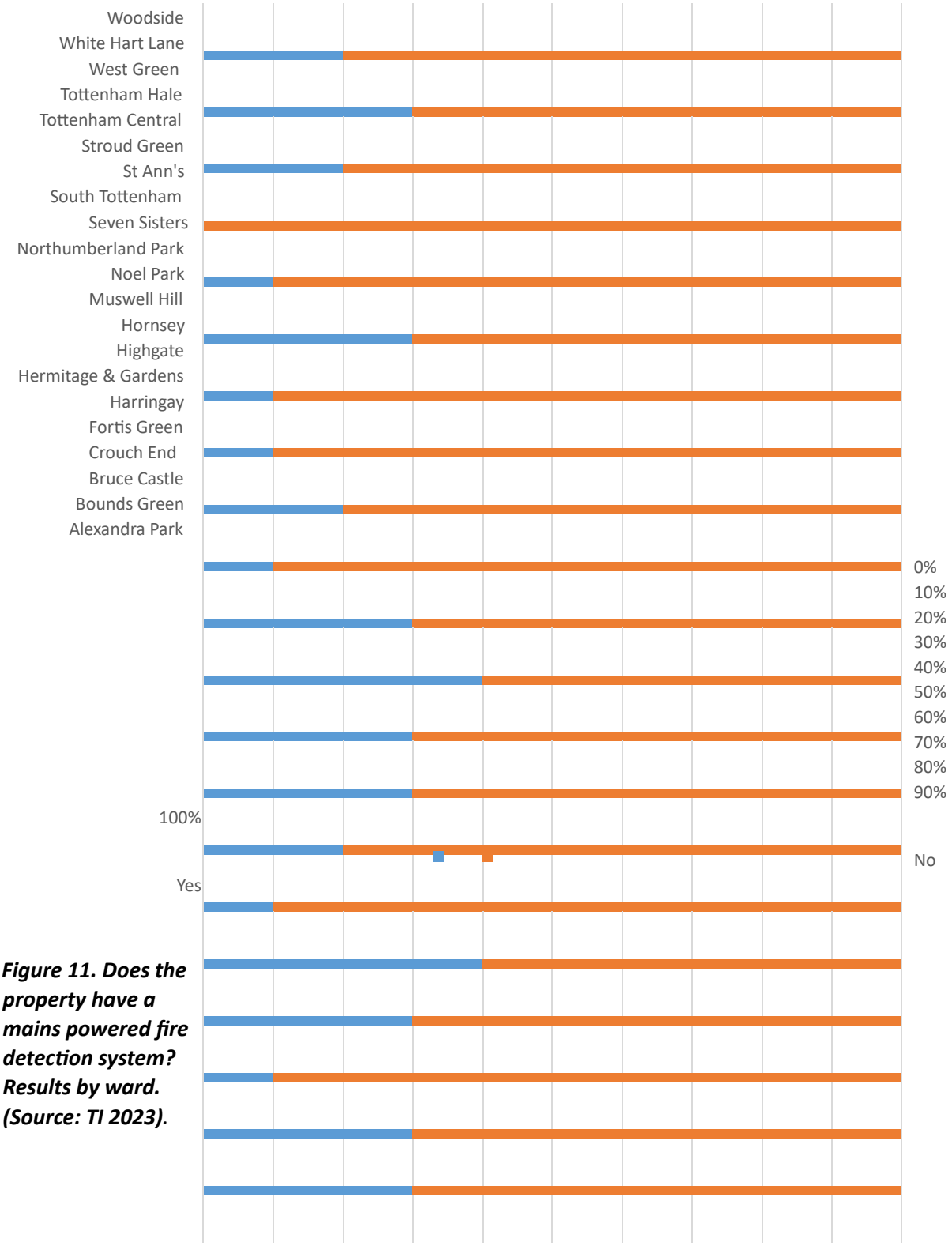


Figure 11. Does the property have a mains powered fire detection system? Results by ward. (Source: TI 2023).

4.3 Inspection results

Haringey has an active HMO inspection programme. Between 2019-2023 Haringey officers undertook 1,129 HMO property inspections.

The Housing Health and Safety Rating System (HHSRS) is a system for assessing housing conditions. A hazard is any risk of harm to the health or safety of an actual or potential occupier of accommodation that arises from a deficiency in the dwelling, building or land in the vicinity.

During officer HMO inspections, 1,140 hazards (Category 1 & 2, HHSRS) were identified across 1,129 properties. 27% of inspected properties were found to have serious hazards (Category 1, HHSRS).

Hazards identified during officer inspections are distributed across all wards. Harringay (166) and Northumberland Park (127) have the highest number of identified hazards (Figure 10).

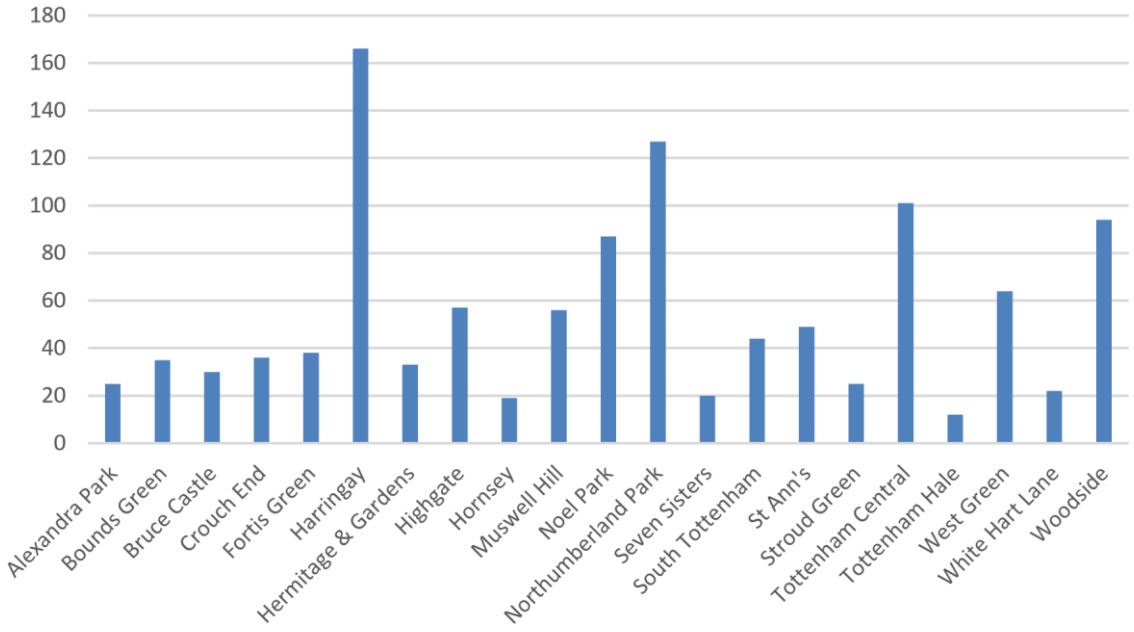


Figure 12. Hazards identified during inspections (2019-2023) (all types) (Source: TI 2023).

Of the 1,129 inspections undertaken by Haringey officers, the majority were Additional, s254 (665). The highest number of hazards were also found in Additional s254 properties (612). S257 HMOs have the highest hazard rate per 100 properties inspected (164.7).

HMO licence type	Inspections recorded	Number of hazards identified	Hazard rate per 100 properties
S257 HMO (Additional)	150	247	164.7
S254 HMO (Additional)	665	612	92.0
Mandatory HMO	314	281	89.5

Table 1. Hazards identified during inspections (2019-2023) by licence type (Source: TI 2023)..

During inspections of Additional HMOs (s254) officers identified 612 hazards (Category 1 & 2, HHSRS) in 202 properties. Harringay ward has the highest number of identified hazards (HHSRS) (Figure 13).

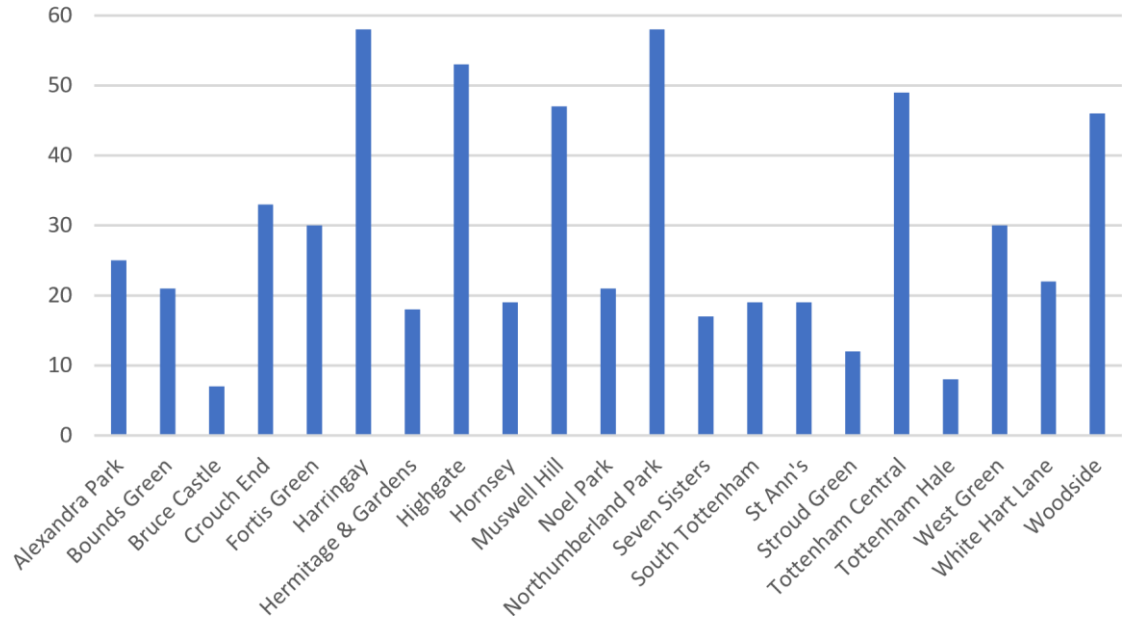


Figure 13. Hazards identified during inspections (2019-2023) (Additional HMO, s254) (Source: TI 2023).

During inspections of Additional HMO (s257) officers identified 247 hazards in 62 properties. (Category 1 & 2, HHSRS). Harringay has the highest number of identified hazards (HHSRS) (Figure 14).

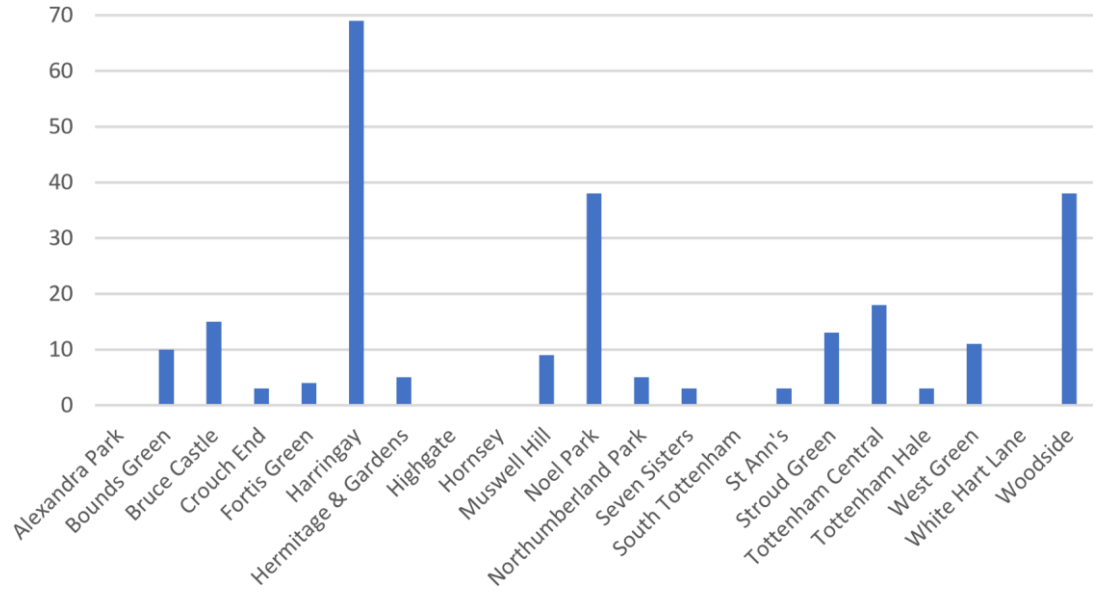


Figure 14. Hazards identified during inspections (2019-2023) (Additional HMO, s257) (Source: TI 2023).

Currently the HHSRS assessment identifies 29 hazard types that give rise to hazards, under 4 main public health categories; physiological requirements; psychological requirements; protection against infection; protection against accidents. [4] Serious hazards (Category 1 & 2, HHSRS) hazards have a physiological or psychological impact on the occupant and may result in medical treatment. [4]

Haringey Inspecting Officers identified 18 different hazard types while inspecting HMOs(all types) . Fire was by far the most common hazard identified (659), followed by Damp and Mould Growth (42) and Excess Cold (15) (Figure 15).

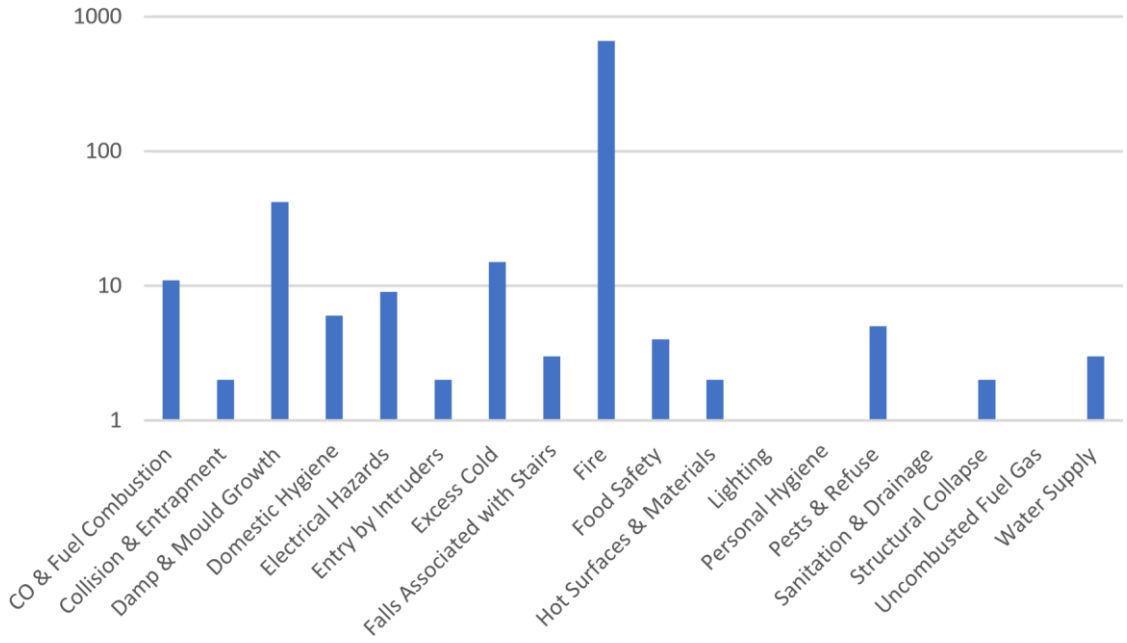


Figure 15. Hazard types identified during inspections (2019-2023). (Source: TI 2023 (10 Logscale)).

[4] Housing Health and Rating System, Operation Guidance, 2006, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/15810/142631.pdf

During inspections, officers identify the location of hazards within a property. The most common location for a hazard was the kitchen (47%) and Bedroom (33%) (Figure 16).

[4] HHSRS) operating guidance, https://www.gov.uk/government/publications/hhsrs-operating-guidance-housing-act2004-guidance-about-inspections-and-assessment-of-hazards-given-under-section-9

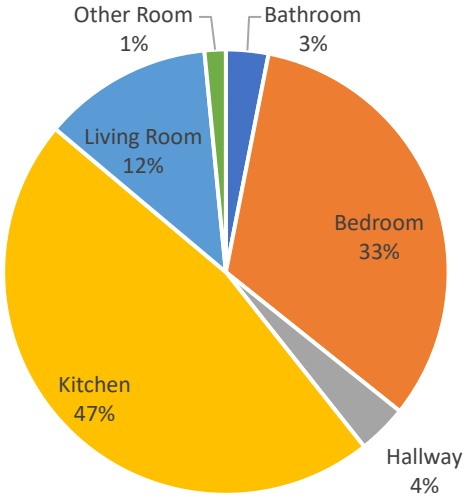


Figure 16. Room location of hazards type identified during inspections (2019-2023). (Source: TI 2023).

4.4 Predicted property hazards

Using a sample of properties that are known to have at least one serious housing hazard (Category 1 & 2, HHSRS), it is possible to predict the number of PRS properties with at least one serious hazard across the borough (Figure 17). Note, for converted property HMOs (s257), there are no predicted hazards. Further details of the methodology can be found in Appendix 2.

There are 1,609 HMO properties in Haringey that are likely to have at least 1 serious housing hazard (Category 1 & 2, HHSRS). This represents 33.3% of the known HMO population, more than double the PRS national average (14%).[5]

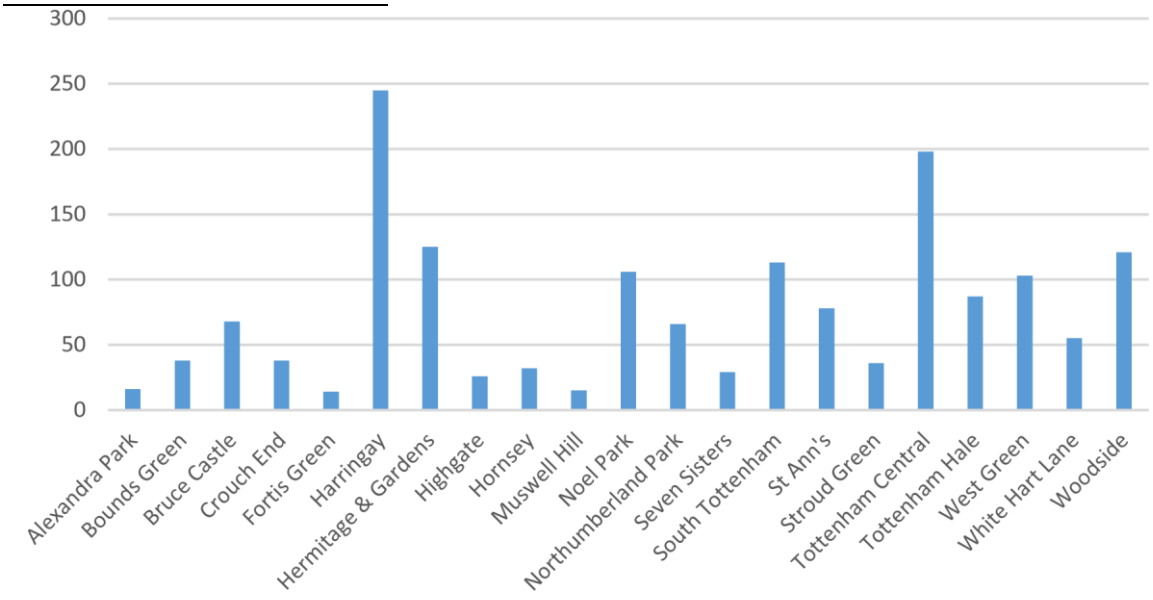
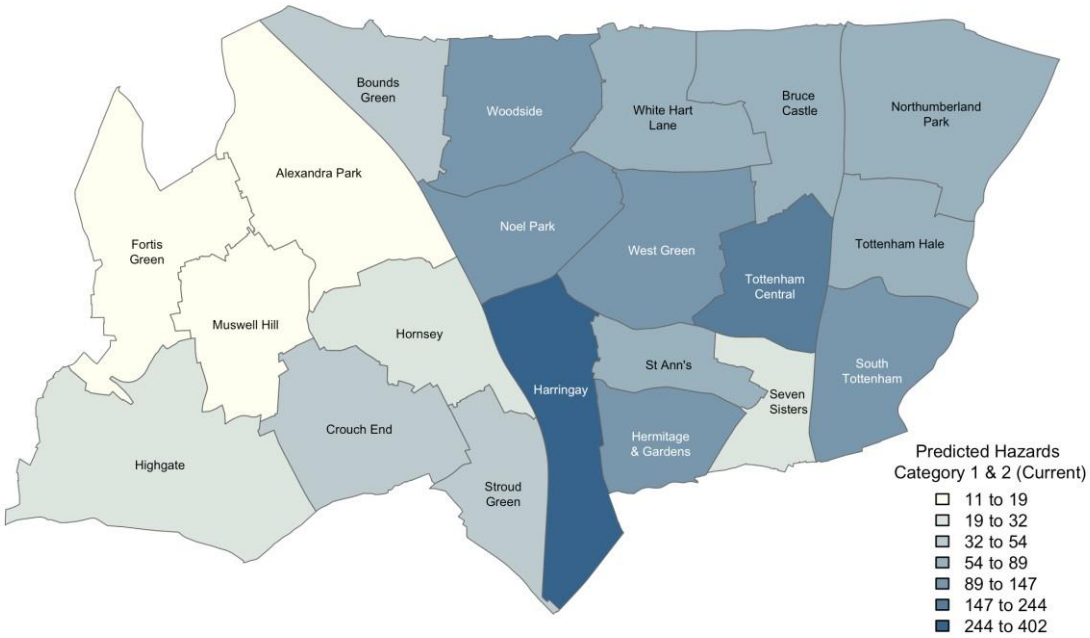


Figure 17. HMOs with one or more predicted serious hazards by ward (excluding s257 HMO) (Source: Ti 2023).

Harringay (245) and Tottenham Central (198) wards have the highest number of HMOs with predicted serious hazards (Figure 17). Serious hazards in the HMO population are distributed across the whole

[5] English Housing Survey 2021 to 2022, 2022, https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-headlinereport

borough. Notable concentrations of properties with serious hazards can be found predominantly in the eastern wards (Map 6).



Map 6. Distribution of HMOs with one or more predicted serious hazards by ward (April 2018 – March 2023 (Source: Ti 2023, Map by Metastreet).

There are 731 Additional HMOs s254 properties in Haringey that are likely to have at least 1 serious housing hazard (Category 1 & 2, HHSRS). Tottenham Central has the highest number of predicted hazards (104) (Figure 18).

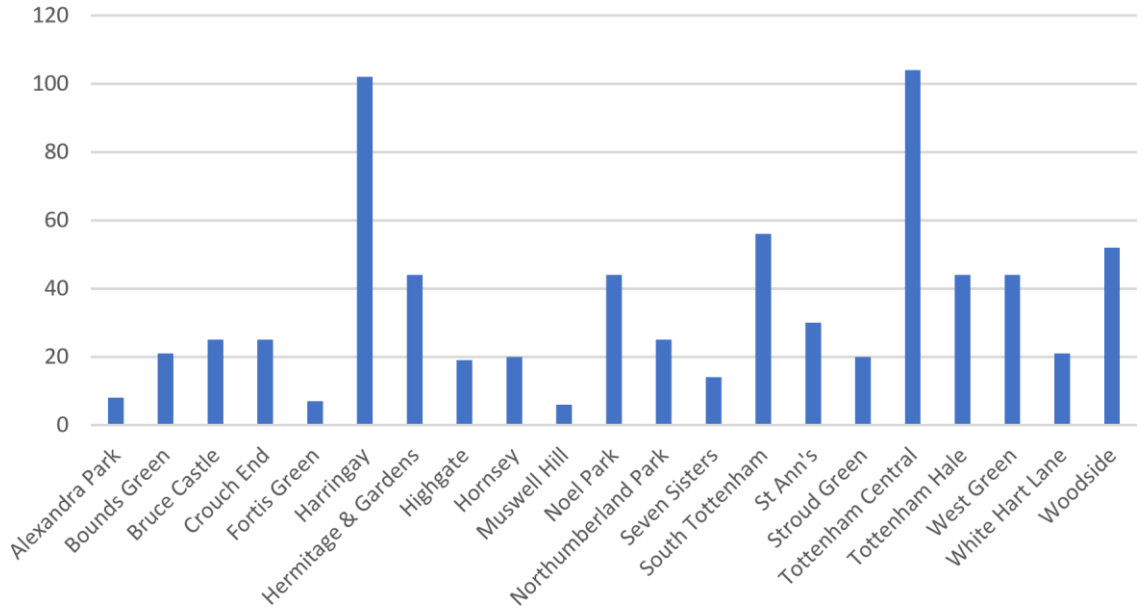


Figure 18. HMOs with one or more predicted serious hazards by ward (Additional HMO, s254) (Source: Ti 2023).

4.5 Energy performance

An EPC rating is an assessment of a property's energy efficiency. It's primarily used by buyers or renters of residential properties to assess the energy costs associated with heating a house or flat. The rating is from A to G. A indicates a highly efficient property, G indicates low efficiency.

The energy efficiency of a dwelling depends on the thermal insulation of the structure, on the fuel type, and the size and design of the means of heating and ventilation. Any disrepair or dampness to the dwelling and any disrepair to the heating system may affect efficiency. The exposure and orientation of the dwelling are also relevant.

As part of this study, 3,757 EPC ratings were matched to HMO properties (Figure 19). All figures have been modelled from this group.

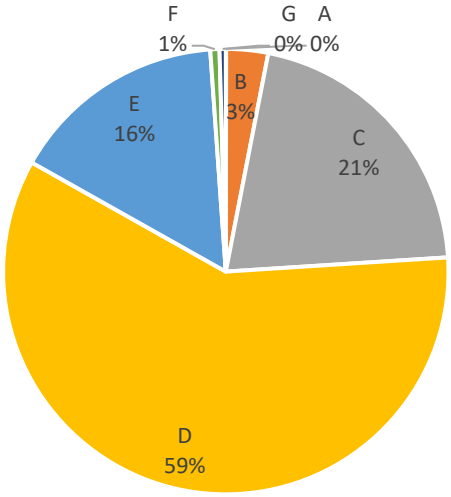


Figure 19. EPC rating distribution for HMOs (A-G) (Source: Ti 2023).

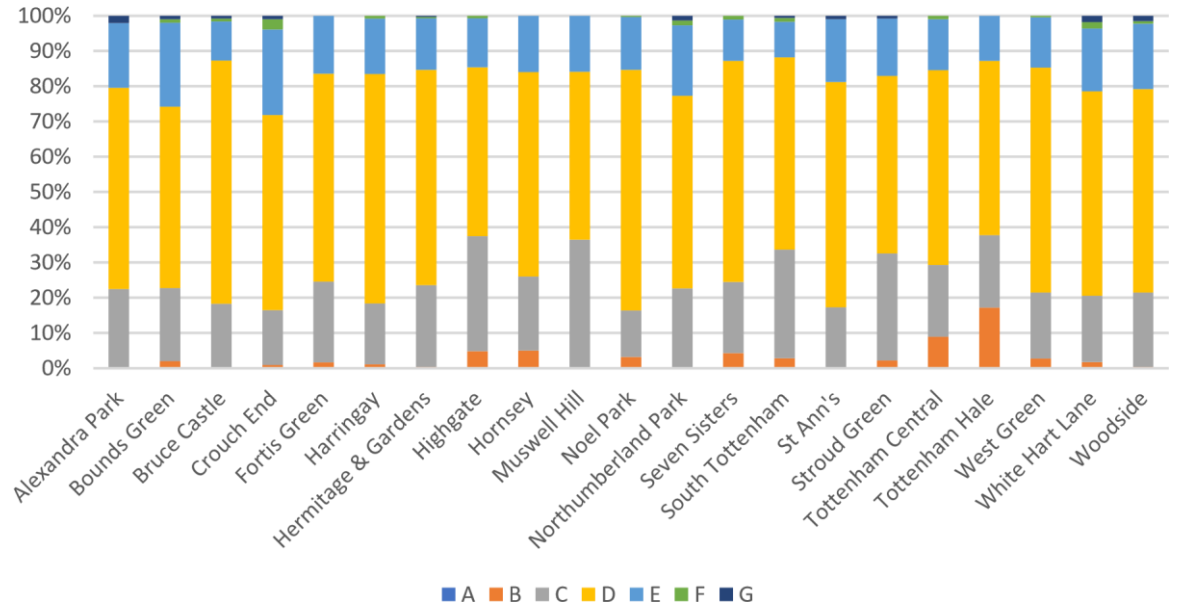


Figure 20. EPC rating distribution for HMOs by ward (A-G) (Source: Ti 2023).

The Minimum Energy Efficiency Standard (MEES) came into force in England and Wales on 1 April 2018. The regulation applies to PRS properties and mandates that all dwellings must have an EPC rating of E and above to be compliant. It has been calculated using the matched addresses that 1.1% (42) of HMO properties in Haringey have F and G rating. Its is possible that these properties have been excluded from the MESS regulation requirements on technical grounds.

5 HMO Anti-Social Behaviour (ASB)

Different types of ASB incidents recorded by the council over a 5-year period (April 2018 – March 2023) have been linked to HMO properties and analysed.

ASB and statutory nuisance records have been separated into two categories, noise ASB incidents and waste ASB incidents. Combined, 3,795 incidents have been matched with individual HMO properties. It is important to note, where incidents could not be matched directly at the property level with HMO, ASB incidents have been discarded from this study. For example, ASB incidents investigated on a street corner that cannot be directly linked to an HMO property have been excluded.

5.1 Noise ASB

Noise ASB incidents (2,474) have been linked to HMO (all types) properties across the borough (Figure 21). Harringay (421), Noel Park (249) & St Ann's (248) have the highest levels of noise ASB.

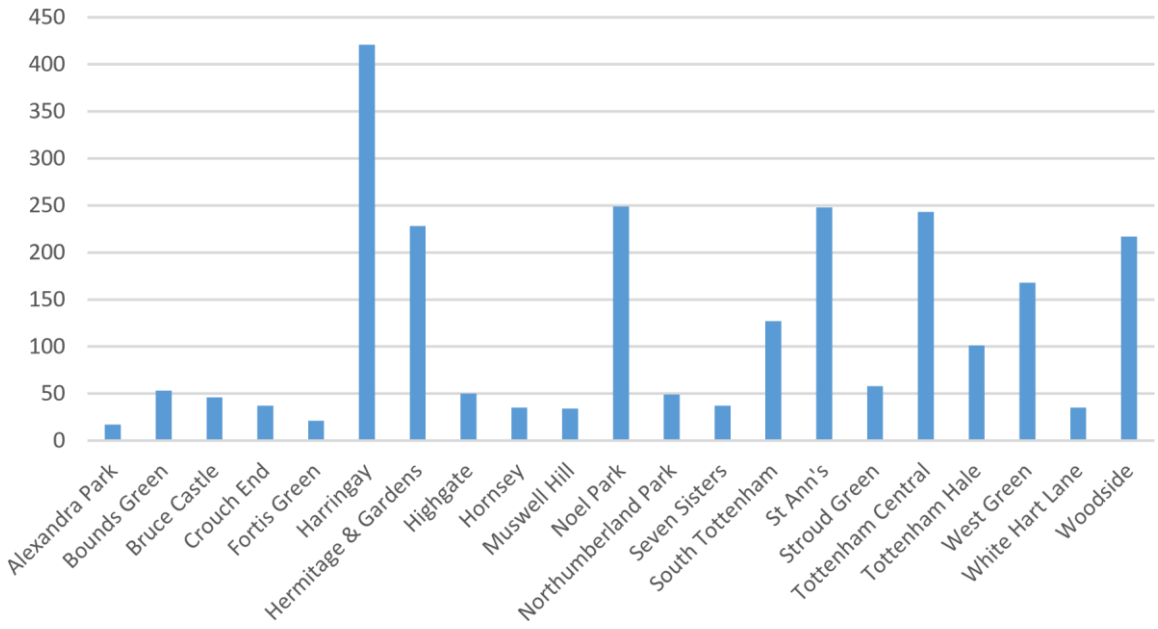
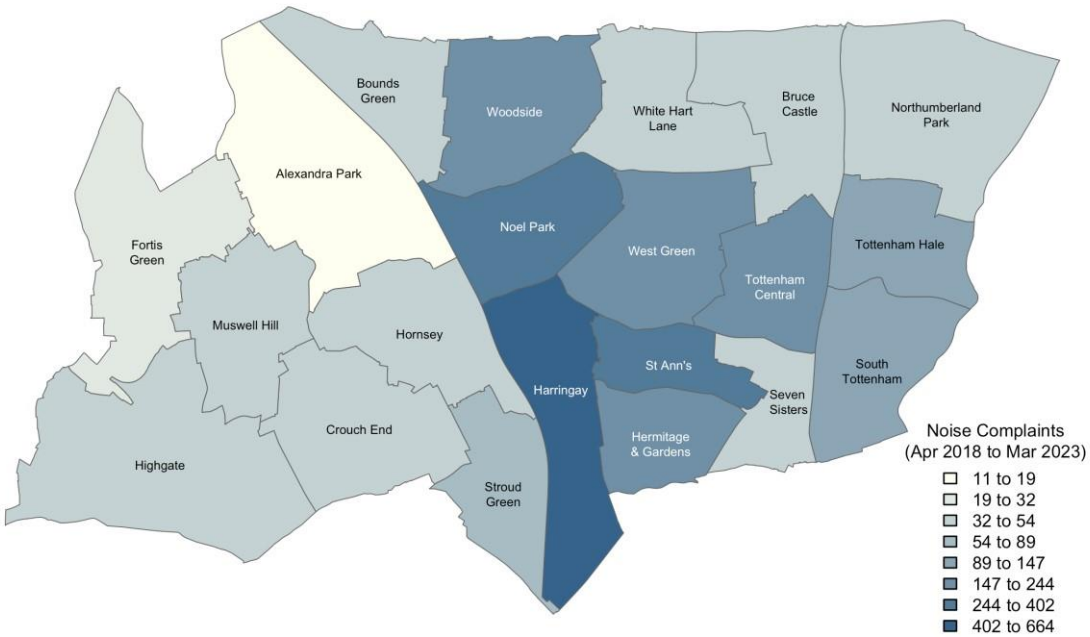


Figure 21. Noise ASB linked to HMOs (all types) by ward (April 2018 – March 2023). (Source: Ti 2023).

All wards have noise ASB linked to HMOs with central and eastern wards having higher concentrations (Map 7).



Map 7. Distribution of noise ASB linked to HMOs by ward (April 2018 – March 2023) (Source: Ti 2023, Map by Metastreet).

835 noise ASB incidents have been linked to Additional HMOs, s254. Woodside has the highest number of ASB incidents (Figure 22).

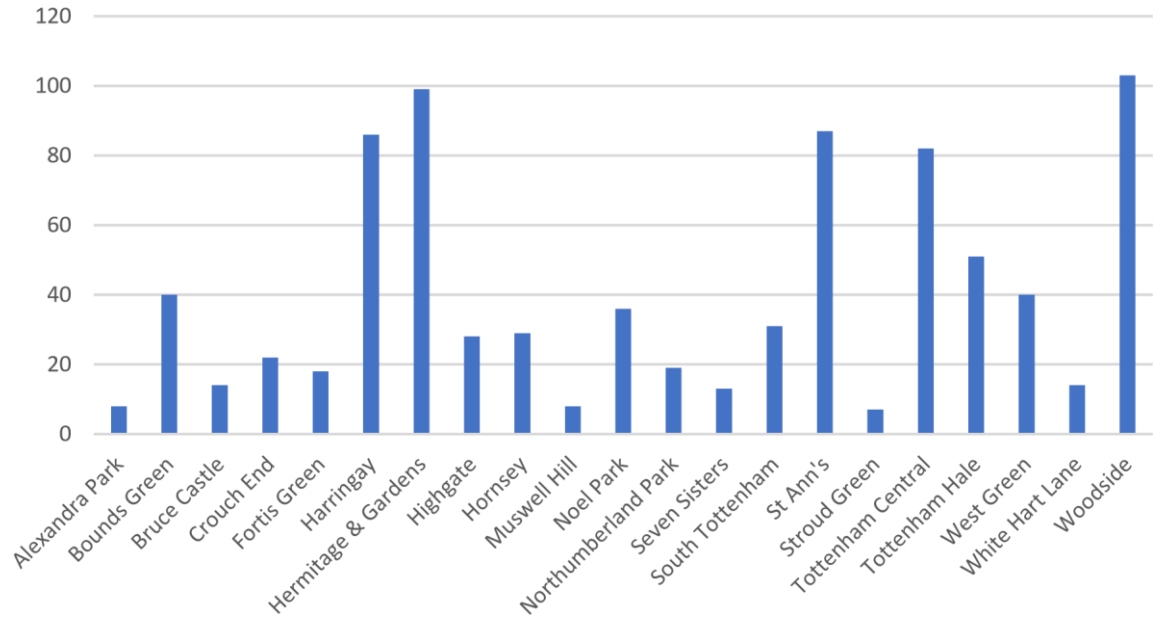


Figure 22. Noise ASB linked to Additional HMOs (s254) by ward (April 2018 – March 2023). (Source: Ti 2023).

441 noise ASB incidents have been linked to Additional HMO, s257. Harringay ward has the highest number of ASB incidents (Figure 23).

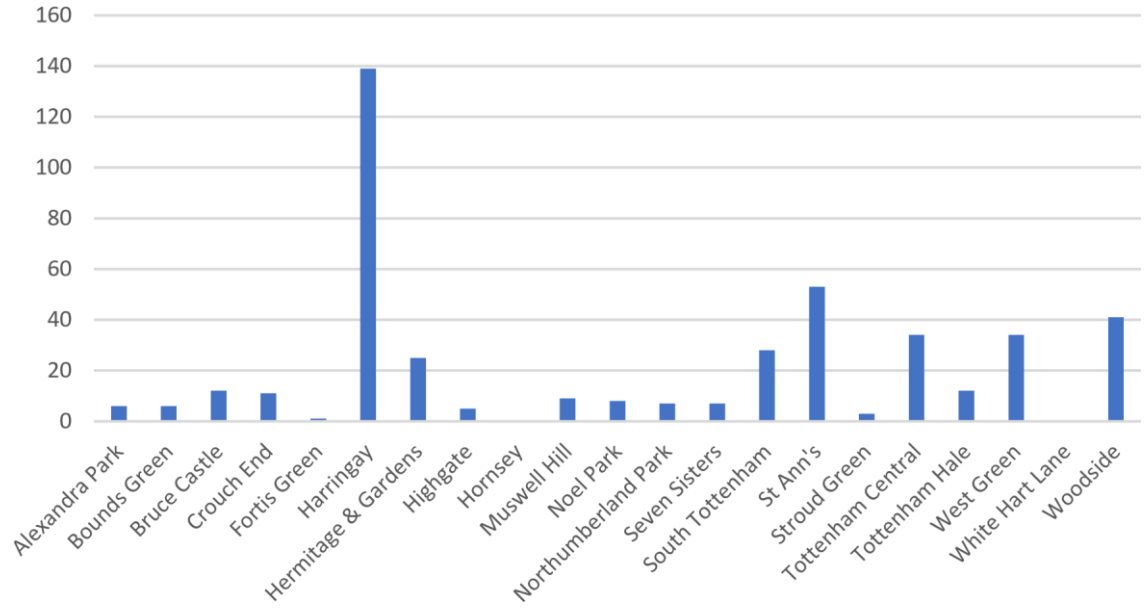


Figure 23. Noise ASB linked to Additional HMOs (s257) by ward (April 2018 – March 2023). (Source: Ti 2023).

Noise ASB emanating from HMOs is made up of 6 main types; music and voices (78%), DIY (9%), machinery (5%), alarms (3%), barking dogs & other (2%.) (Figure 24).

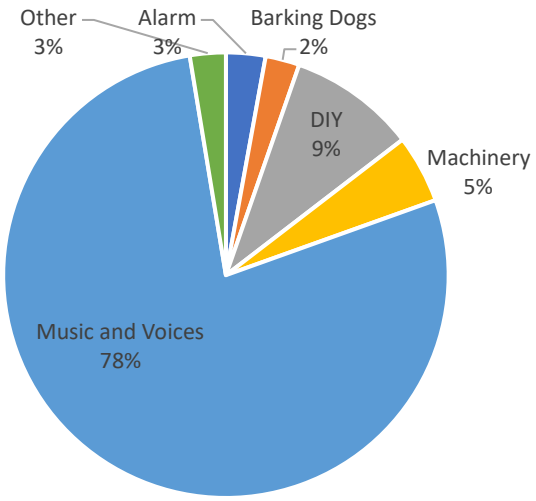


Figure 24. Noise ASB linked to HMOs (all types) by ward (April 2018 – March 2023). (Source: Ti 2023).

Noise ASB link to HMOs has been persistent over the last 5 years (Figure 25).

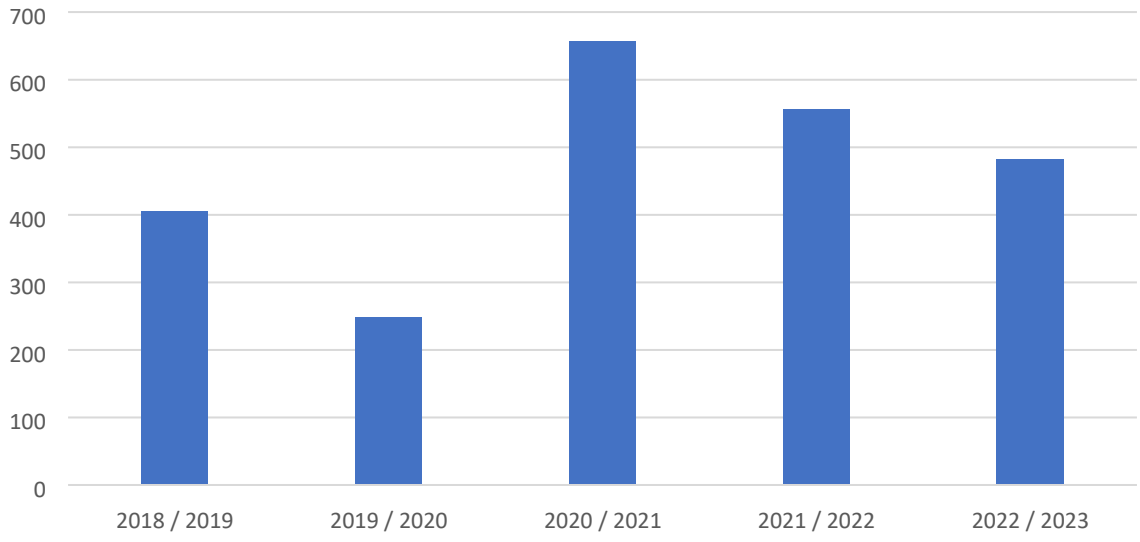


Figure 25. Noise ASB linked to HMOs (all types) by financial year (April 2018 – March 2023). (Source: Ti 2023).

5.2 Waste issues

Haringey Council deals with a significant number of waste issues that can be directly linked to HMOs. The same methodology used for the noise ASB data has been used for waste issues.

Over a 5 year period, 1,359 waste complaints have been received by the authority linked to 793 licensed HMOs. Harringay (199) and Woodside (162) wards have the highest levels (Figure 26).

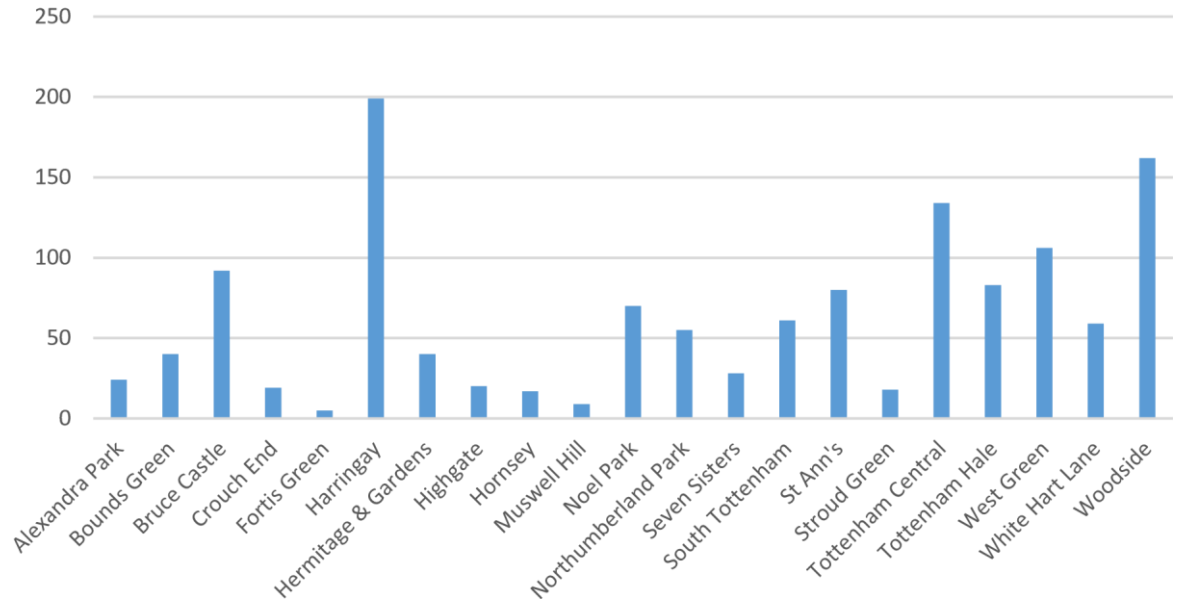
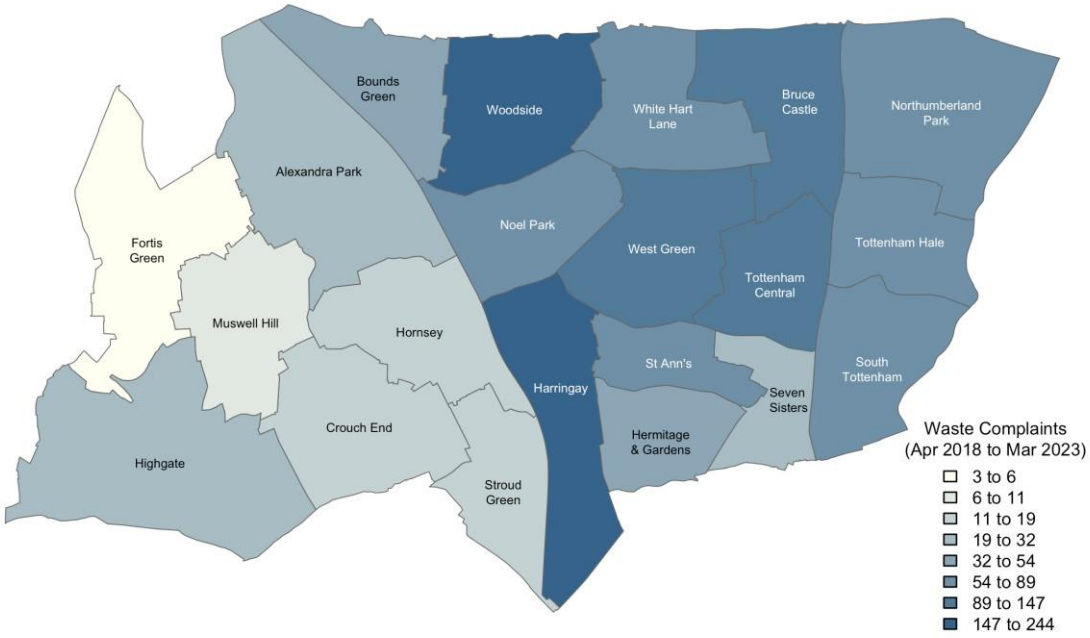


Figure 26. Waste complaints linked to HMOs (all types) by ward (April 2018 – March 2023). (Source: Ti 2023).

Waste complaints have been linked to HMOs across all wards, with concentrations in central and eastern wards (Map 8).



Map 8. Distribution of waste complaints linked to HMOs (all types) by ward (April 2018 – March 2023 (Source: Ti 2023, Map by Metastreet).

332 waste complaints have been linked to Additional HMO, s254. Harringay (37) ward has the most waste complaints (Figure 27).

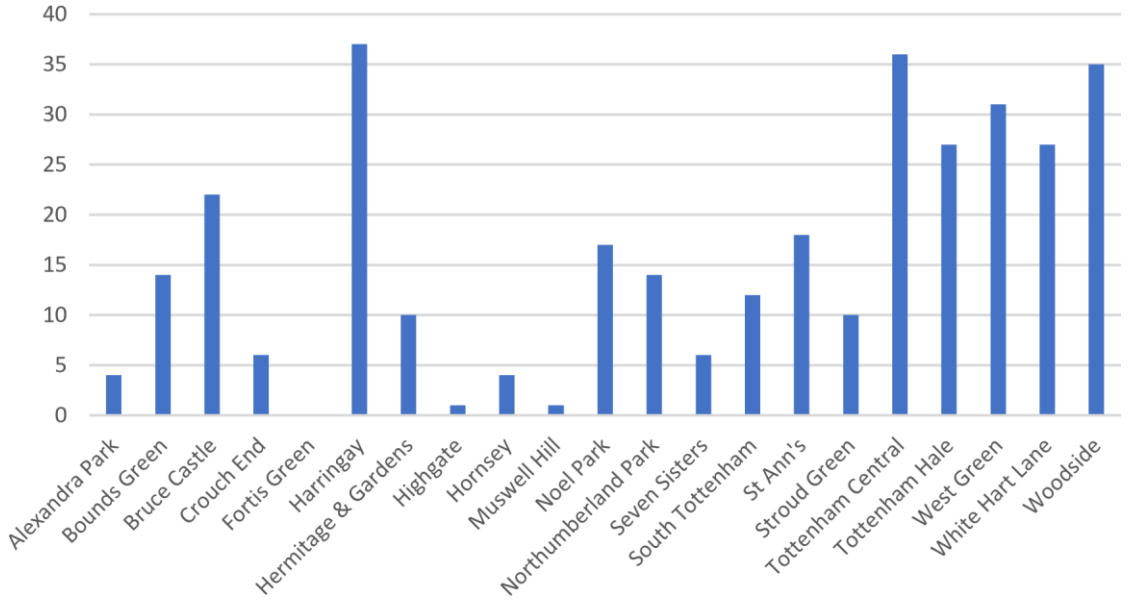


Figure 27. Waste complaints linked to HMOs (Additional, s254) by ward (April 2018 – March 2023). (Source: Ti 2023).

445 waste complaints have been linked to Additional HMOs, s257. Woodside (82) has the highest number of waste complaints (Figure 28).

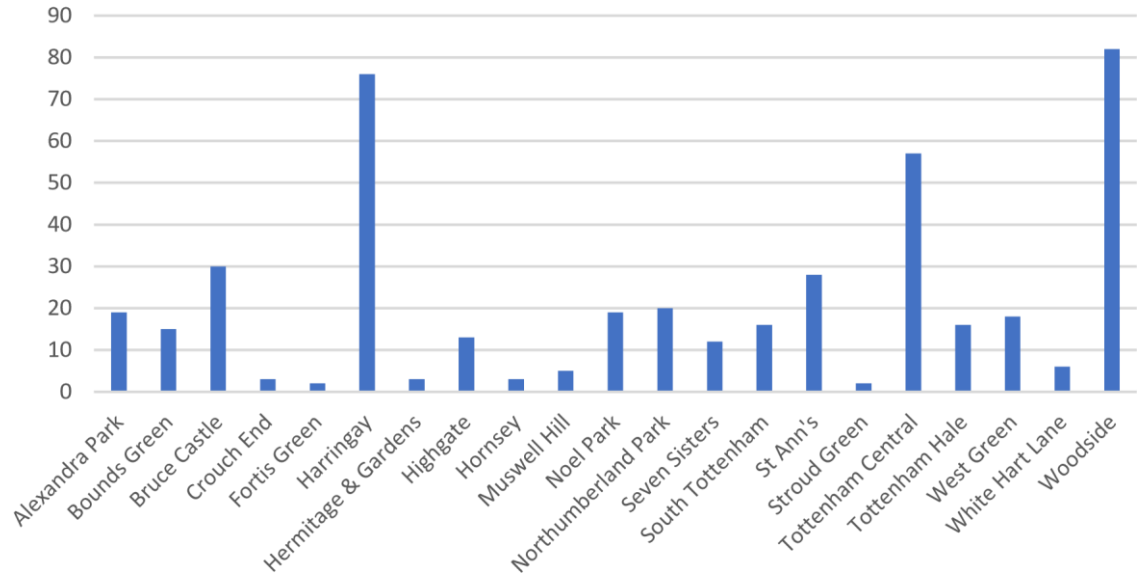


Figure 28. Waste complaints linked to HMOs (Additional, s257) by ward (April 2018 – March 2023). (Source: Ti 2023).

Waste complaints linked to HMOs over the last 5 years have remained persistent (Figure 29).

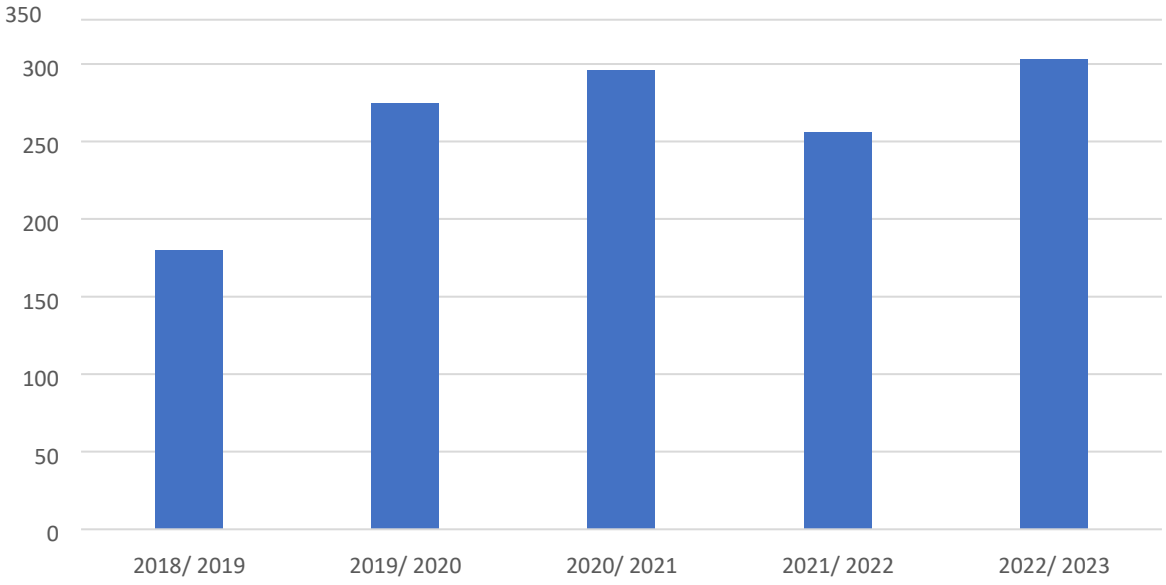


Figure 29. Waste complaints linked to HMOs (all types) by year (April 2018 – March 2023). (Source: Ti 2023).

Waste notices are served on persons or organisations that are responsible for waste issues. Over a 5year period 96 waste notices were served by the authority linked to known HMOs. Harringay (24) and Northumberland Park (12) wards received the most notices (Figure 21).

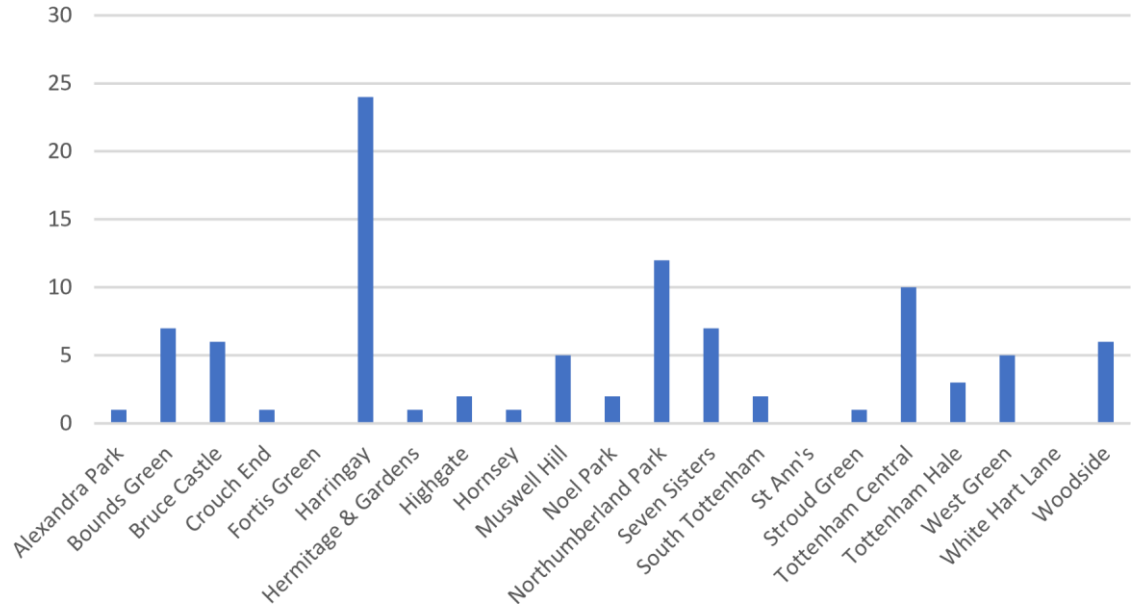
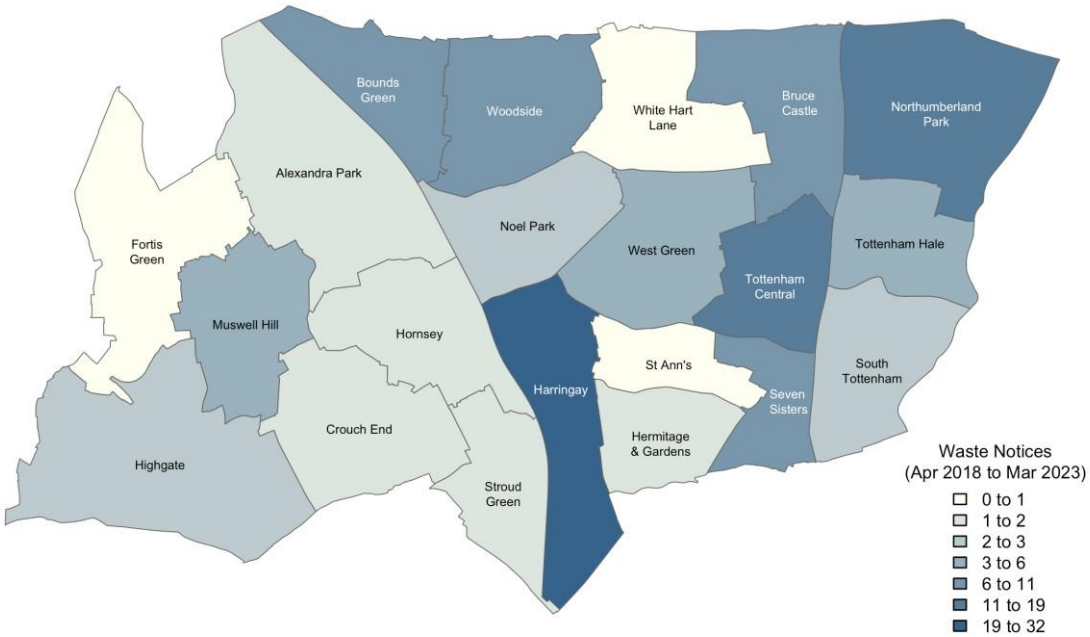


Figure 30. Waste Notices linked to HMOs (all types) by ward (April 2018 – March 2023). (Source: Ti 2023).

Waste notices were served on HMOs across the majority of Haringey wards.



Map 9. Distribution of waste notices linked to HMOs (all types) by ward (April 2018 – March 2023) (Source: Ti 2023, Map by Metastreet).

20 waste notices have been linked to Additional HMOs, s254. Bounds Green (5) has the highest number of waste notices (Figure 31).

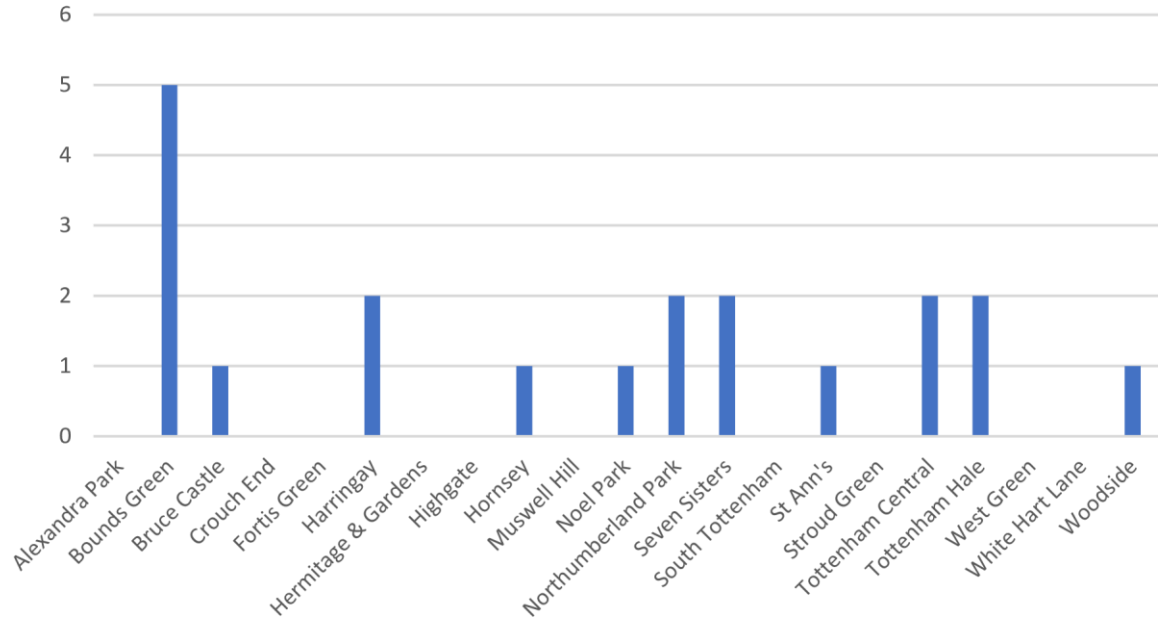


Figure 31. Waste Notices linked to HMOs (s254) by ward (April 2018 – March 2023). (Source: Ti 2023).

49 waste notices have been linked to Additional HMOs, s257. Harringay (15) has the highest number of waste notices (Figure 32).

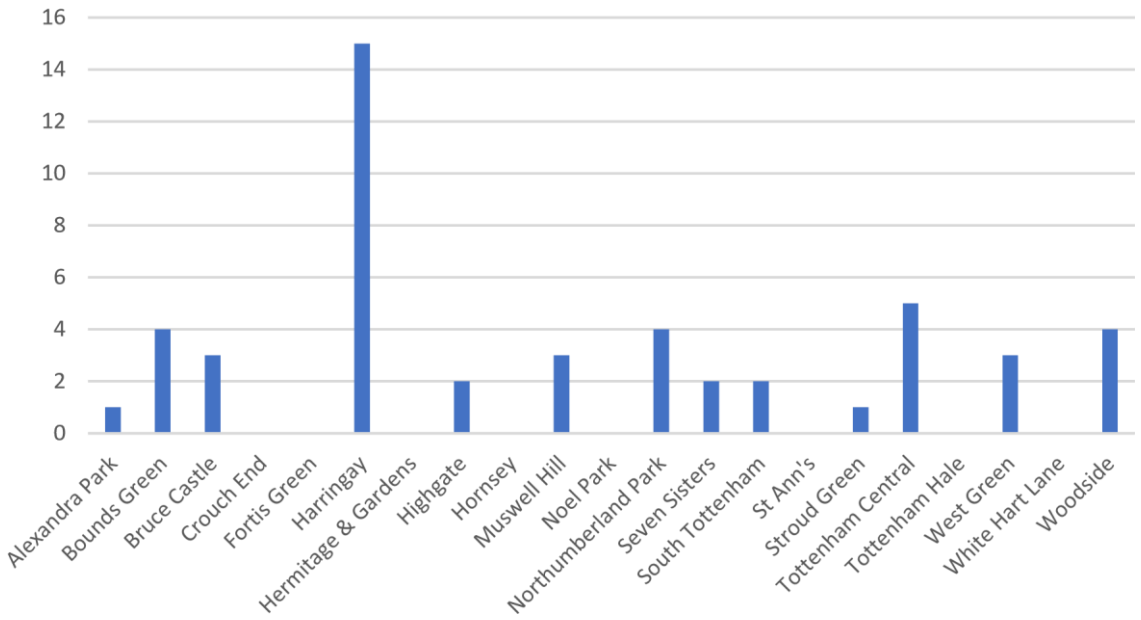


Figure 32. Waste Notices linked to HMOs (s257) by ward (April 2018 – March 2023). (Source: Ti 2023).

A similar picture is revealed when waste financial penalty notices (FPN) are linked to HMOs. Harringay (38) and Noel Park (18) received the most waste FPNs (Figure 33).

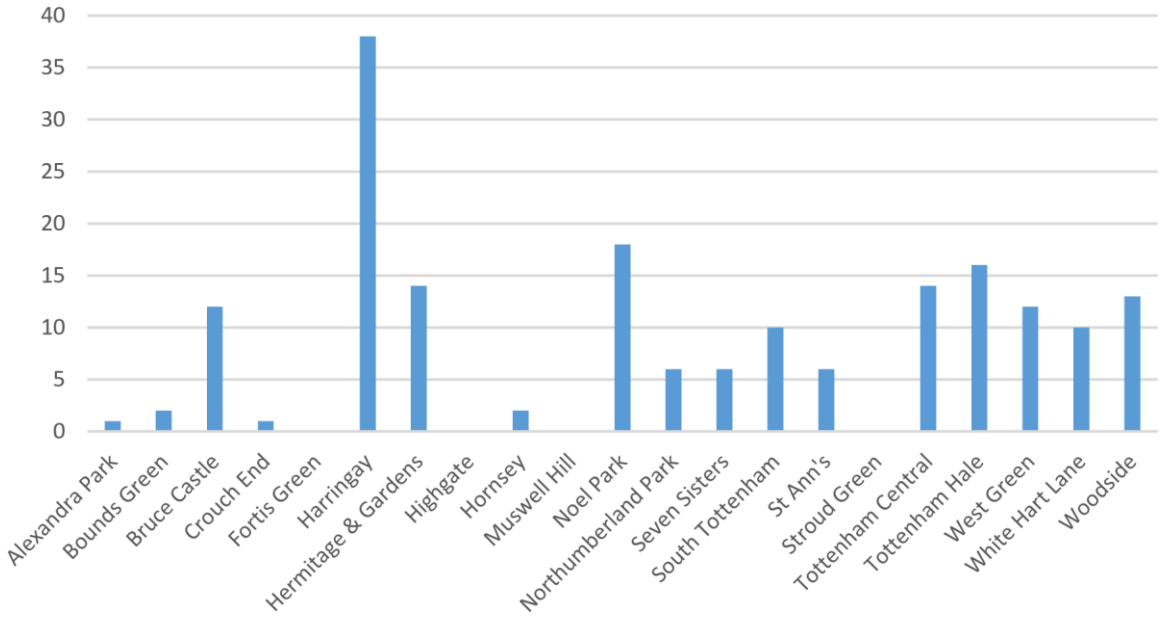
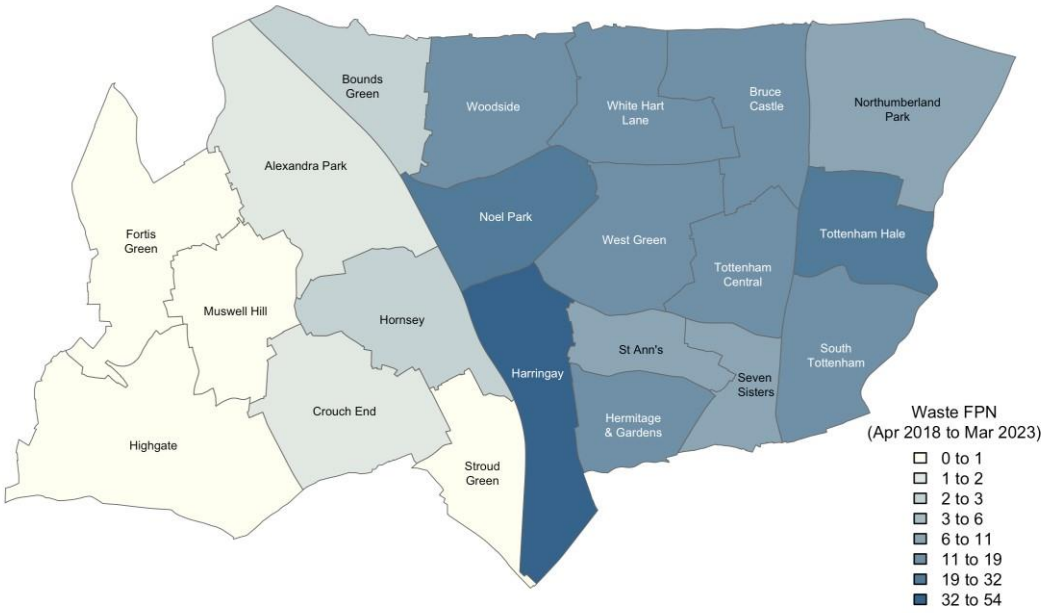


Figure 33. Waste FPNs linked to HMOs (all types) by ward (April 2018 – March 2023). (Source: Ti 2023).

There is a clear concentration of waste FPNs in the central and easter wards (Map 10).



Map 10. Distribution of waste FPNs linked to HMOs by ward (April 2018 – March 2023 (Source: Ti 2023, Map by Metastreet).

All wards have HMOs that have had multiple ASB incidents (noise or waste) over a 5-year period (Figure 34).

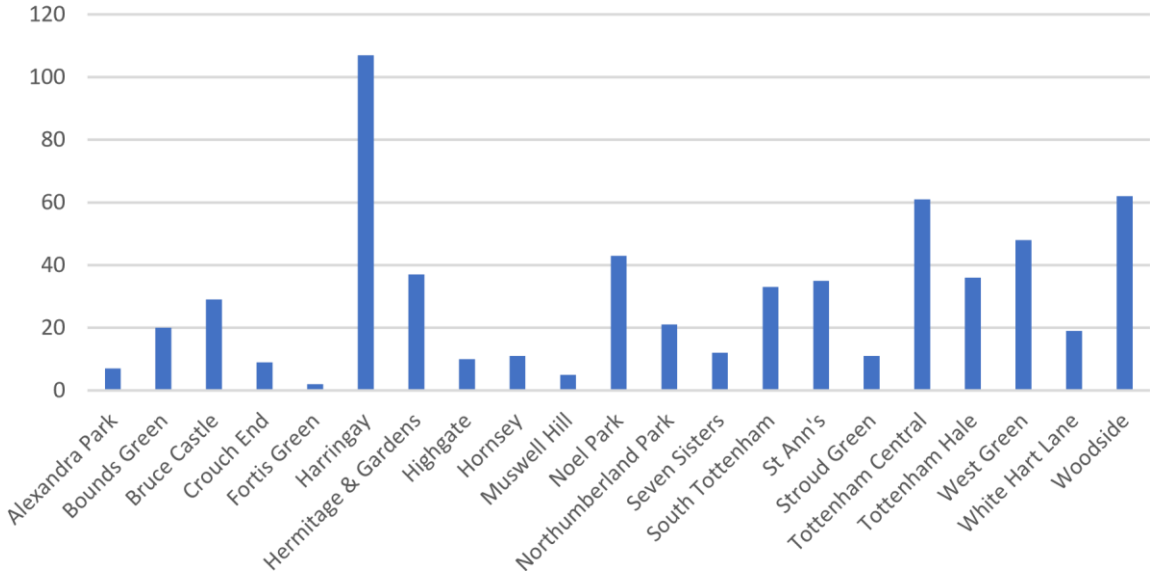


Figure 34. HMO (all types) properties with 2 or more reoccurring noise or waste ASB incidents by ward (April 2018 – March 2023). (Source: Ti 2023).

6 Conclusions

The HMO population in Haringey is made up of two main categories; HMOs that share basic amenities (3,927) (s254) and converted properties with multiple flats that share common parts which are generally defined as less than two thirds owner-occupied (903) (s257). The total licensed HMO population in Haringey is therefore 4,830.

The HMO population is distributed across all wards. Harringay (785) has the most HMOs, Alexandra Park has the least (63) (Figure 1).

Shared HMOs (s254) form the majority of HMOs in Haringey (3,927). For this category, Harringay (575) and Tottenham Central (335) ward have most HMOs (Figure 2).

Additional licensed HMOs (2,237) are more numerous than Mandatory HMOs (1,690). Harringay has the highest number of Additional (304) licences and Mandatory (271) licences (Figure 1 & map 3 & 4).

The most common HMO property type in Haringey are houses (63%), while bungalows are the least common property types (< 1%) (Figure 3).

A total of 15,356 tenants occupy 3,363 HMOs in Haringey, forming 10,977 households. Each HMO is occupied by 4.5 tenants on average. The number of tenants occupying HMO properties ranges between 19 – 3 persons. The average number of households per property is 3.3.

Extrapolating the known tenant occupancy per HMO (4.5) to the remaining known HMO data (4,830), the HMO tenant population in Haringey is likely to exceed 21,735 residents. This represents 8.2% of Haringey's 2021 census population estimates (264,200). Harringay has the highest number of HMO occupants (2,301) and households (1,703) in the borough (Figure 4 & 5).

Analysis of HMO license holder data for 3,474 HMO licences identified 2,537 unique licence holders. The average number of licences per licence holder is 1.4. The number of licences per licence holder ranges between 1-32 licences. Most HMO licence holders manage just one property (2,129) (Figure 6).

Complaints made by tenants and others to Haringey Council regarding poor property conditions and inadequate property management are a direct indicator of low quality and poorly managed HMOs. Haringey recorded 492 complaints from tenants and others linked to HMOs over a 5-year period (April 2018 – March 2023) (Figure 7). West Green (46) and Tottenham Central (44) received most complaints from private tenants and others (Figure 7). Complaints are distributed across the whole

borough. Concentrations of complaints come predominantly from the central and eastern wards (Map 5).

1,112 (34.7%) responded 'no' and 2,096 (65.3%) responded 'yes' to the following question, Does the property have fire doors fitted to the kitchens? (Figure 8). 746 (23.3%) responded 'no' and 2,462 (76.7%) responded 'yes' to the following question, Does the property have a mains powered fire detection system? (Figure 9).

Haringey has an active HMO inspection programme. Between 2019-2023 Haringey officers undertook 1,129 HMO property inspections. During officer HMO inspections, 1,140 hazards (Category 1 & 2, HHSRS) were identified across 315 properties. Therefore 27% of inspected properties were found to have serious hazards, with each affected property having an average of 3.6 hazards. Hazards identified during officer inspections are distributed across all wards. Harringay (166) and Northumberland Park (127) have the highest number of identified hazards. Haringey Inspecting Officers identified 18 different hazard types while inspecting HMO. Fire was by far the most common hazard identified (659), followed by Damp and Mould Growth (42) and Excess Cold (15). The most common location for a hazard was the kitchen (47%) and Bedroom (33%).

There are 1,609 HMO properties in Haringey that are likely to have at least 1 serious housing hazard (Category 1 & 2, HHSRS). This represents 33.3% of the known HMO population, more than double the national average (14%). Harringay (245) and Tottenham Central (198) wards have the highest number of HMOs with predicted serious hazards.

1.1% (42) of HMO properties in Haringey have F and G rating. It is possible that these properties have been excluded from the MESS regulation requirements on technical grounds.

Noise ASB incidents (2,474) have been linked to HMO properties across the borough. Harringay (421), Noel Park (249) & St Ann's (248) have the highest levels of noise ASB. Noise ASB incidents have been persistent over a 5 year period. Noise ASB emanating from HMOs is made up of 6 main types; music and voices (78%), DIY (9%), machinery (5%), alarms (3%), barking dogs & other (2%.).

1,359 waste complaints have been received by the authority linked to 793 licensed HMOs. Harringay (199) and Woodside (162) wards have the highest levels. Waste incidents have been persistent over a 5 year period. 96 waste notices were served by the authority linked to known HMOs. Harringay (24) and Northumberland Park (12) wards received the most notices. A similar picture is revealed when waste financial penalty notices (FPN) are linked to HMOs. Harringay (38) and Noel Park (18) received the most waste FPNs.

Appendix 1 – Ward summaries

Wards	Licensed HMO	Complaints (April 2018 – March 2023)	Hazards identified (2019-2023)	Waste complaints (2018 – 2023)	Noise complaint (2018 – 2023)	HMOs with predicted serious hazards	% of HMOs with serious predicted hazards
Alexandra Park	63	4	25	24	17	16	**25.4**
Bounds Green	119	14	35	40	53	38	**31.9**
Bruce Castle	187	31	30	92	46	68	**36.4**
Crouch End	138	5	36	19	37	38	**27.5**
Fortis Green	76	6	38	5	21	14	**18.4**
Harringay	785	39	166	199	421	245	**31.2**
Hermitage & Gardens	325	27	33	40	228	125	**38.5**
Highgate	188	10	57	20	50	26	**13.8**
Hornsey	148	10	19	17	35	32	**21.6**
Muswell Hill	103	7	56	9	34	15	**14.6**
Noel Park	336	34	87	70	249	106	**31.5**
Northumberland Park	184	36	127	55	49	66	**35.9**
Seven Sisters	119	13	20	28	37	29	**24.4**
South Tottenham	227	34	44	61	127	113	**49.8**
St Ann's	254	33	49	80	248	78	**30.7**
Stroud Green	195	8	25	18	58	36	**18.5**
Tottenham Central	422	44	101	134	243	198	**46.9**
Tottenham Hale	200	24	12	83	101	87	**43.5**
West Green	292	46	64	106	168	103	**35.3**
White Hart Lane	121	27	22	59	35	55	**45.5**
Woodside	347	40	94	162	217	121	**34.9**

Table 2. HMO overview (Source Ti 2023).

Appendix 2 - Tenure Intelligence (Ti) – stock modelling methodology

This Appendix explains at a summary level Metastreet's Tenure Intelligence (Ti) methodology (Figure 35).

Ti uses big data and machine learning in combination with expert housing knowledge to accurately define outcome at the property level.

Council and external data have been assembled as set out in Metastreet's data specification to create a property data warehouse comprising millions of cells of data.

Where necessary, machine learning is used to make predictions of defined outcomes for each residential property, using known outcome data provided by the council.

Results are analysed by skilled practitioners to produce a summary of housing stock, predictions of levels of property hazards and other property stressors. The results of the analysis can be found in the report findings chapter.

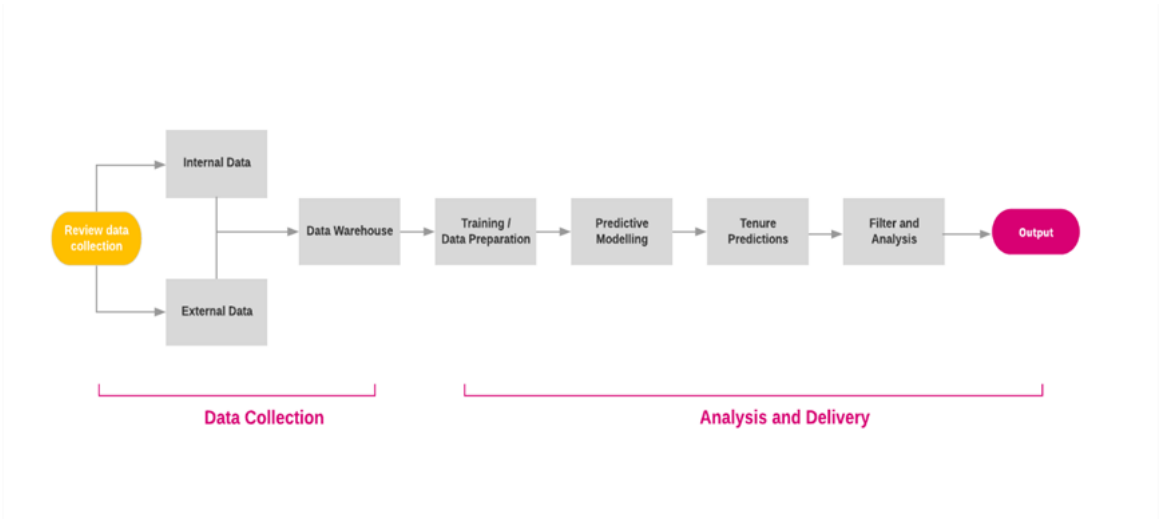


Figure 35. Summary of Metastreet Tenure Intelligence methodology.

Methodology

Metastreet has worked with Haringey to create a residential property data warehouse based on a detailed specification. All longitudinal council held data is 5 consecutive years, from April 2018 – March 2023 unless otherwise specified.

Once the property data warehouse was created, the Ti model was used to predict tenure and stock condition using the methodology outlined below.

Machine learning was utilised to develop predictive models using training data provided by the council. Predictive models were tested against all residential properties to calculate risk scores for each outcome. Scores were integrated back into the property data warehouse for analysis.

Many combinations of risk factors were systematically analysed for their predictive power using logistic regression. Risk factors that duplicated other risk factors but were weaker in their predictive effect were eliminated. Risk factors with low data volume or higher error are also eliminated. Risk factors that were not statistically significant are excluded through the same processes of elimination. The top 5 risk factors for each model have the strongest predictive combination.

Using a D^2 constant calculation it is possible to measure the theoretical quality of the model fit to the training data sample. This calculation has been completed for each model. The D^2 is a measure of "predictive capacity", with higher values indicating a better model.

Based on the modelling each residential property is allocated a probability score between 0-1. A probability score of 0 indicates a strong likelihood that the property tenure type is *not* present, whilst a score of 1 indicates a strong likelihood the tenure type *is* present.

Predictive scores are used in combination to sort, organise and allocate each property to one of 4 categories described above. Practitioner skill and experience with the data and subject matter is used to achieve the most accurate tenure split.

It is important to note that this approach cannot be 100% accurate as all mathematical models include error for a range of reasons. The D^2 value is one measure of model "effectiveness". The true test of predictions is field trials by the private housing service. However, error is kept to a minimum through detailed post analysis filtering and checking to keep errors to a minimum.

A continuous process of field testing and model development is the most effective way to develop accurate tenure predictions.

The following tables include detail of each selected risk factors for each model. Results of the null hypothesis test are also presented as shown by the Pr(>Chi) results. Values of <0.05 are generally considered to be statistically significant. All the models show values much smaller, indicating much stronger significance.

Category 1 (HHSRS) hazards model

Numerous properties where the local housing authority has recently taken action to address serious hazards were sampled for training data. Specifically, this included Housing Act 2004 Notices served

on properties to address Category 1 hazards. The model results show that each of the model terms is statistically significant, with the overall model having a "predictive capacity" of around 91% (Table 3).

Table 3. Category 1 (HHSRS) hazard predictive factors.

Risk factors selected	**Pr (>Chi) ***
Ctax liability order obtained over 5 years	0.0051228
EPC ENVIRONMENT_IMPACT_CURRENT	2.2e-16
Total service requests	0.0074925
PRS complaints	2.2e-16
Training data, n= 453	
D^2 test = 0.91**	

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