# PROJECT SONoS

## Smoking Outdoors & Noise Survey

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Project Report

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**Background to Project**
Following the smoking ban in March 2006, complaints were received by local authorities from residents in relation to being disturbed by noise as a result of smokers congregating outside. The aim of Project SONoS is to identify the type, range and quantity of noise issues over a 12 month period.

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**Supported by:**
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**Project Contractor:**
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## 1. EXECUTIVE SUMMARY

This report presents the results of an investigation into noise complaints from residents living near licensed premises during the second year of the smoking ban in a sample of both urban and rural areas of Scotland. An on-line questionnaire was used to record and collate the complaints covering 25 different questions, completed during the initial contact with the complainant. The questionnaires recorded complaints against 57 licensed premises giving a complaint ratio of approximately one complaint for every 68 licensed premises over the sampled areas.

The study reveals that smokers congregating in groups of six or more, often in surges during breaks in 'live' televised sporting events are likely to trigger complaints, as is noise breakout due to the opening of doors attributed to clientele exiting to smoke outside. Sleep was identified as the activity affected most by the noise generated by smokers. Overall the recorded complaints are significantly below the number reported in the media during the initial implementation of the smoking ban. The paper will discuss the results and relationship to distance factor, glazing specification and group size in triggering complaints.

## 2. INTRODUCTION

The smoking ban in public places of Scotland was introduced in March 2006[1]. This would lead to an improved internal environment for staff and clients of public spaces. Many of the press and media headlines focused on the threat this would have on the economy, licensed premises and the breach of smokers human rights. However, the potential impact of noise on residents situated near licensed premises as smokers congregate outside was not analysed.

Although not an entirely new noise source, the noise from people congregating to smoke outside licensed premises has raised noise complaint issues since the introduction of the Smoking Ban. Since its implementation in March 2006, various articles and reports have suggested that since the introduction there has been a severe increase in the amount of noise complaints made to Local Authority departments. It has been reported that complaints to the Edinburgh Community Mediation service doubled between 2005 and 2006, which was particularly linked to the number of smokers congregating outside public houses following the introduction of the smoking ban[2]. However, little research has been carried out that verifies the amount of complaints made or that analyses the complaints in detail.

This report examines the amount of complaints made to a sample of Local Authority departments in Scotland during the second year of the smoking ban. Analysis is made via questionnaires which were completed by Local Authority staff who completed the questionnaire on the complainants' behalf at the time of the complaint.

## 3. METHOD

### A. The study areas

Six study areas across Scotland were used for the assessment. The six study areas comprised of city centres, suburban and rural areas. The areas had varying levels of licensed premises and different dwelling types. The study will focus on the 57 licensed premises that the complaints were attributed to.

### B. Questionnaire

The questionnaire comprised of 25 questions over a broad range which were used to create a general impression of each individual complaint. The questionnaire was hosted on-line and was accessible at all times to Local Authority staff. The questions put to the respondents ranged from; describing their dwelling type, describing the licensed premises in question and the timing of the noise. Residents were also asked which activity the noise impacted on most. The questionnaires were completed by the Local Authority staff during telephone discussions with the complainant.

## 4. RESULTS

### A. Location of the complaints

The complainants were defined into three location categories where complainants were then sub divided depending on their accommodation type. Additionally, the complainant specified the horizontal distance between their residence and the noise.

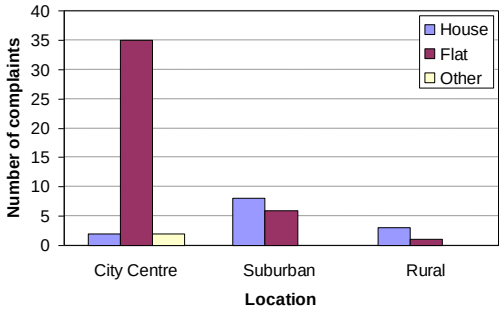


**Figure 1:** Complaints grouped by accommodation type in each location

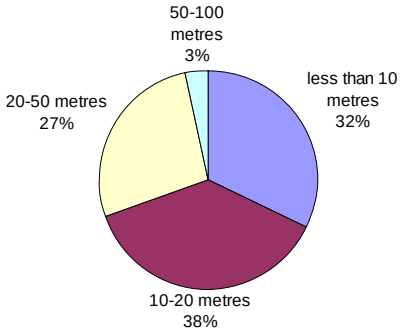


**Figure 2:** Horizontal distance between complainants' residence and the noise

Figure 1 illustrates that the greatest amount of complaints were made from people living in a flat in a city centre location. This response is not surprising given that 38% of accommodation in Scotland is flatted and 728,000 classified as either tenement or four-in-a-block[3] which are commonly located in and around city centre areas, where numbers of licensed premises are highest. The dense population and proximity of licensed premises may lead to a potential greater incidence of complaints.

The distance factor, as illustrated in Figure 2, has shown a localisation of the noise. The figure illustrates that 70 % of residents were located within 20 metres of the noise source. This supports the earlier suggestion that residents of tenements and four-in-a-block flats, who are more likely to be located close to the licensed premises, are affected more.

No recorded complaint was due to a single incident and for more than half of the complaints the noise problem has existed for longer than 12 months. In 58 % of cases the resident has complained to other organisations, usually the police but some have also contacted the owner of the licensed premises.

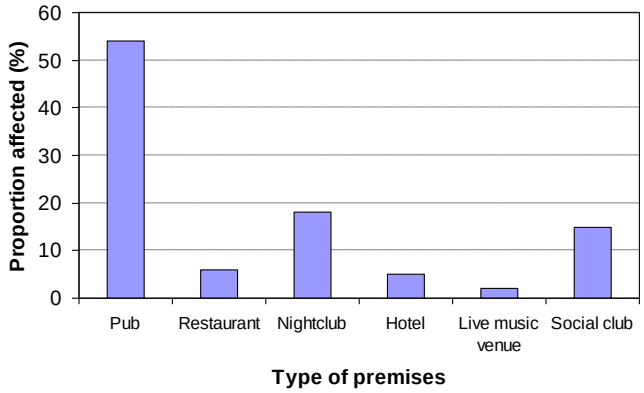


**Figure 3:** Proportion of each type of licensed premises attributed to complaints

The study recorded complaints against 57 licensed premises, giving a complaint ratio of approximately one complaint for every 68 licensed premises over the sampled areas.

The most common source of complaint was associated with pubs. Social clubs with function facilities were also identified to trigger complaints, perhaps as a result of 'one off' events (i.e. birthday parties, fundraising events) where the noise becomes more noticeable in comparison with the normal ambient noise level. Interestingly nightclubs affected only 18 % of the residents. This may be attributed to a higher existing noise environment already being experienced in this area and the increase due to noise from smokers having less impact. Nightclubs are also likely to be located further away from residential dwellings.

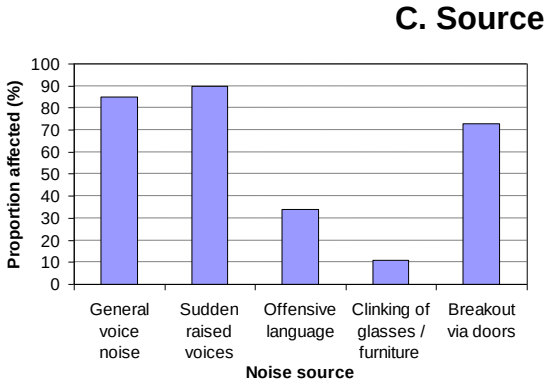


**Figure 4:** Proportion affected by each type of noise source attributed to smokers (more than one answer may be provided)

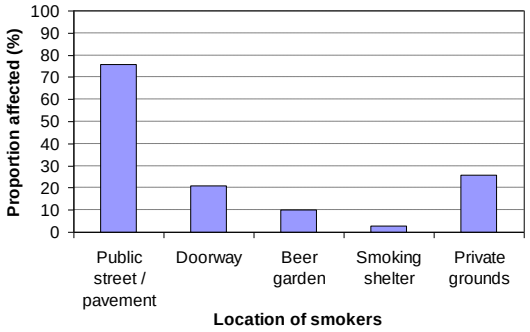


**Figure 5:** Where the smokers are located while making the noise (more than one answer may be provided)

Figure 4 illustrates that the most common noise source is due to voice noise, with 90 % of complainants describing the noise as sudden raised voices (including laughing,

shouting and singing). Figure 5, on the right hand side illustrates the most common location of smokers who are creating noise was on the public street or pavement.

In 73 % of reported cases the breakout of noise and music was audible via the doors, this highlights a potential problem where smokers may repeatedly exit and re-enter the premises and the opening and closing of the doors leads to noise breakout. This problem is potentially made worse due to the fact that 21 % of smokers were reported to be located at the doorway, where in some instances they may leave the door open. In addition, this may cause another potential problem of secondary smoke entering the premises via the door and a potential smoke and fire hazard.

Only 8 % of complainants' who reported noise breakout via the doors described the premises as having a lobbied entrance. In over two thirds of cases the door was only described as a single door. This suggests that creating a lobbied door entrance has the potential to reduce noise breakout from the licensed premises. This is worthy of further investigation in relation to the regulation of licensed or function premises involving amplified music or noisy events.

Figure 5 illustrates that in only 10 % of complaints, smokers were located in the beer garden. This suggests that either noise from the beer garden is already deemed as acceptable or that positive action has been taken by the proprietor, whereby the beer garden is closed at a fixed time.

## D. Congregation of smokers

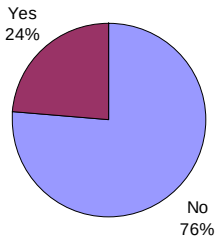


**Figure 6:** Excluding a beer garden has seating been provided by the proprietor

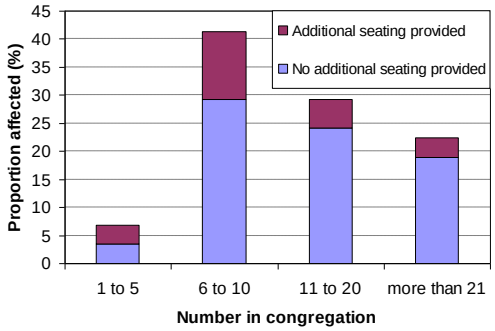


**Figure 7:** The amount of people who congregate to make the noise categorised to whether additional seating has been provided.

In approximately one in four cases extra seating was provided outside by the proprietor (Figure 6). Figure 7 demonstrates that when a complaint was made, it was most likely there were more than five people. Analysis has shown that providing seating may encourage groups to congregate, particularly smaller groups. Providing seating has possible implications such as encouraging people to spend more time outside and to take their drinks with them. During the course of this study discussions with managers of licensed premises indicates that strict adherence to permission times for outside seating and the removal of such facilities at set curfew times has led to reduced complaints.

There is also evidence to suggest that surges of smokers, often during breaks in live televised sporting events are more likely to trigger complaints. It has been indicated that there is a potential problem of non smokers joining smokers outside to socialise. A potential solution would involve limiting the amount of people who are allowed to gather outside the premises at any one time, although this may be hard to enforce.

Possible mitigation measures include removing furniture or preventing clientele from taking drinks outside. These solutions may also reduce sources of noise such as the clinking of glasses and tables and chairs being moved, cited in Figure 4.

## E. Noise environment at the time of complaint

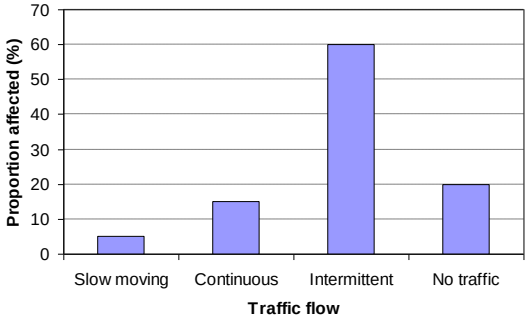


**Figure 8:** Traffic flow prior to the complaint

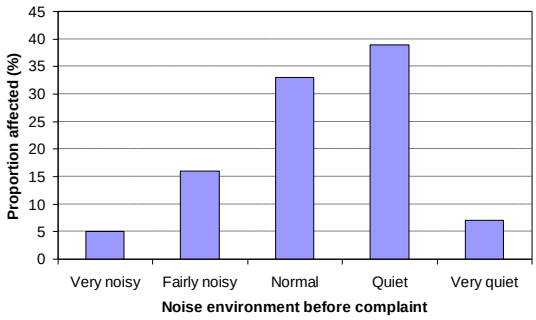


**Figure 9:** Noise environment prior to the complaint

The background noise levels (that is the noise level in the absence of smokers) will have an influence on how loud the smokers appear to be. In 80 % of cases complainants described the traffic flow as intermittent or no traffic at the time of disturbance (Figure 8). This response links well with the response to Figure 9 where only 21 % of complainants described the noise environment outside their residence as noisy prior to the complaint. This indicates that most of the environments are not noisy in the absence of the smokers' noise. This is because there is little or no 'anonymous' traffic noise to mask the more specific/annoying noise from smokers.

## F. Glazing influence

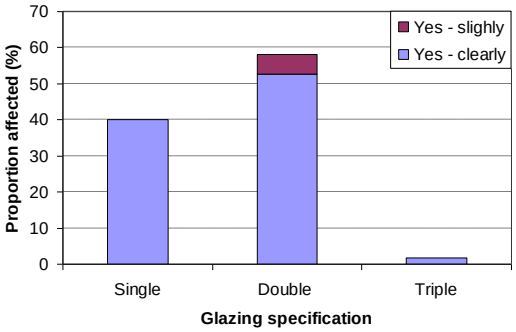


**Figure 10:** Is the noise still audible when your windows are closed

All respondents acknowledged that the noise was audible when their windows were closed. Figure 10 illustrates that when the resident had a single glazed window

specification the noise was clearly audible when the window was closed. Of note is that even with double glazing and windows closed the noise in most cases was still audible. As such increasing the specification of windows in residences overlooking such premises may not directly lead to an improvement for dwelling/resident occupants. This suggests that it is the sudden step change in noise level, between normal ambient noise and noise from smokers, which may be the trigger for noise complaints.

## G. Days of the week and time of complaints

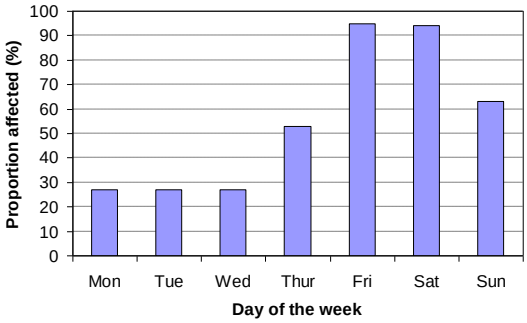


**Figure 11:** Day of the week the noise can be heard
(more than one answer may be provided)

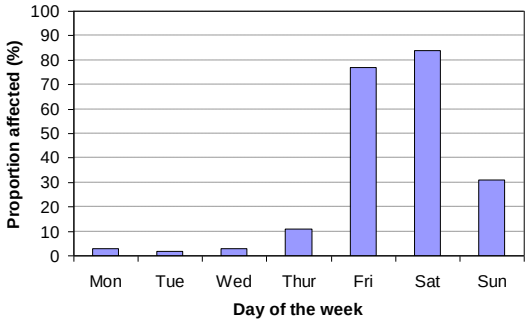


**Figure 12:** Day of the week the noise is particularly worse than others
(more than one answer may be provided)

Noise from smokers exists on all days of the week (Figure 11) however Fridays and Saturdays are clearly the days when the noise bothers the complainant the most, as demonstrated in Figure 12. The rise on a Friday and Saturday night may be attributed to the fact that more people are out during these nights (general street footfall and people in licensed premises).

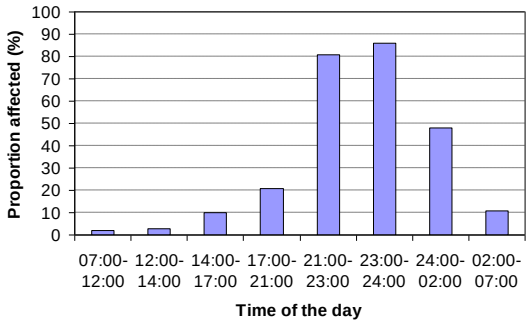


**Figure 13:** The time periods when the noise bothers the complainant
(more than one answer may be provided)

Figure 13 shows the time periods when the noise bothers the complainant. The responses suggest that the noise from smokers is worse between 21:00 hrs and 02:00 hrs although the noise still bothers residents out with these hours. It is expected that between 21:00-02:00 hrs sources are not exclusively from smokers and that there is also a contribution from general footfall traffic, people leaving pubs as they close, transport taking people home and people queuing for nightclubs.

It is unsurprising that residents are particularly affected between 21:00 hrs and 24:00 hrs as these are the hours when residents may be more susceptible to noise as they try to sleep.

## H. Noise effect of smokers

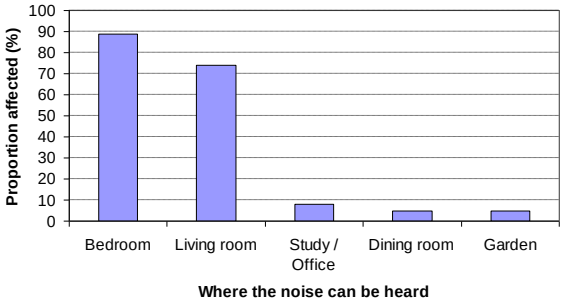


**Figure 14:** The locations where the noise can be heard
(more than one answer may be provided)

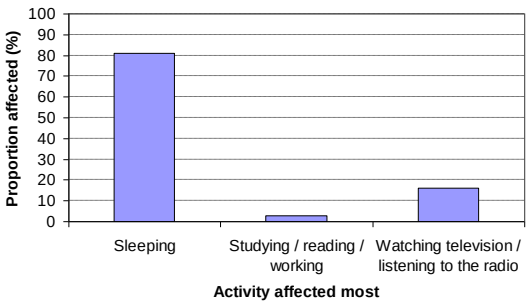


**Figure 15:** The activity which is affected the most as a result of the noise

Figure 14 illustrates that the bedroom and living room are the most common areas that the resident hears the noise and Figure 15 shows that sleeping is the activity affected most. These factors link with the responses given in Figure 13, where respondents identified the time between 21:00 hrs and 24:00 hrs as the time when the noise bothered the complainant most. This is the residents' personal time, where they are expecting an environment which will allow them to relax and rest.

## 5. CONCLUSIONS

Overall the recorded complaints are significantly below the number reported by the media during the initial implementation of the smoking ban. In addition, the study has found no evidence to support the 1000 % rise in noise complaints, which were reported by the media in Spring 2006.

The study indicates that groups of five people or less are less likely to cause disturbance. Smokers congregating in groups of six or more, often in surges during breaks in live televised sporting events, are more likely to trigger complaints, as is noise breakout due to the opening of doors attributed to clientele leaving to smoke outside. Sleep was identified as the activity most affected by such noise.

The study has provided useful information relating to the "distance factor" likely to trigger complaints, influence of ambient background noise and glazing specifications.

Positive action by staff in licensed premises to both remove outside seating and prevent clientele taking drinks outside during evening and night time periods has the potential to reduce disturbance. The study has indicated that incorporating a lobbied entrance may also help reduce noise breakout complaints.

## ACKNOWLEDGMENTS

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## REFERENCES

1. Smoking, Health and Social Care (Scotland) Act 2005, Edinburgh, 2005, HMSO

2. Noise and Vibration, Edinburgh, 2007, Edinburgh City Council

3. Communities Scotland, Scottish House Condition Survey 2002, Edinburgh, 2002, Scottish Executive