

USING STREET AUDIT APPROACHES TO DETERMINE NEIGHBOURHOOD PRIORITIES

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The day-to-day decisions and actions of the population are shaped by the quality of the built environment and the extent to which resources for living can be conveniently reached. A number of modern day societal challenges are influenced by how places are designed and maintained, including inactivity and car dependency, the social cohesiveness of communities and the extent to which people engage in neighbourhood decision-making. As a way of encouraging the development of pedestrian-friendly, liveable and sociable places, street audits involve evaluating the quality of streets to help identify priorities. This briefing paper provides evidence and information on

how street audits can be effectively carried out to support community involvement in neighbourhood decision-making and for prioritising physical improvements. Lessons from research into the impact of a street audit undertaken in a Glasgow neighbourhood are presented alongside evidence and examples of similar approaches used elsewhere, including desk-based audits which can be completed using online street imagery. The findings presented and the resources and examples included are intended to aid the future use of street audits for service providers and local groups.

KEY POINTS

Community street audits involve walking around a neighbourhood to identify local needs. Learning from our study on the effectiveness of a street audit for establishing and implementing neighbourhood priorities highlighted the importance of ensuring that everyone in the community has an opportunity to participate, that expectations are set out at the start of the process and that consideration is given to how population groups might be differentially affected by change. Also important is that plans are in place to ensure the long-term maintenance of changes, and that the process is used as part of a wider visioning exercise for the development of the area. Despite some challenges, community street audits provide a comprehensive, focused and community-oriented approach to place development, offering a potentially effective way of identifying

neighbourhood priorities and starting conversations between communities and local organisations.

As an alternative approach to community audits, desk-based audits using street imagery are increasingly being used to evaluate and/or compare places based on the quality or quantity of street features. Desk-based audits have been found to be effective at quickly assessing how well resourced places are, having the important benefit of allowing large geographical areas to be assessed from one location. Both qualitative community-led approaches and more quantitative approaches to street auditing can be used in complementary ways, providing different depths of understanding of strengths and needs within or between areas.

INTRODUCTION

This briefing paper highlights findings from a qualitative study into the effectiveness and impact of a street audit as an approach for identifying and delivering physical improvements¹. The findings are based on community and stakeholder perceptions of neighbourhood changes following the completion of a street audit in 2010, with four community walkabouts and stakeholder interviews taking place in 2013 to assess the extent to which agreed priorities were delivered. A full report on the key findings was published in 2014, which included a series of recommendations that were relevant to the future development of the area being audited. Here, only generic findings which could support the future use of street audits across all settings are included. The findings are presented alongside evidence from other recent studies on the efficacy of street audits as an approach for assessing streets or engaging communities in neighbourhood-level decision-making. This paper is intended to assist others involved in implementing street audits in the future, including those working within Planning, Health Improvement, Regeneration, Housing or third sector organisations.

THE STREET AUDIT PROCESS

The street audit involved a group of local residents, business owners and other stakeholders assessing the connectivity, identity and quality of a defined area on foot. This process helped to identify strengths and weaknesses around key themes, with funding being secured from a range of sources to take forward six projects. Some of these were based on small scale 'quick wins', while others were identified as longer-term priorities. Several contextual factors shaped the way in which the audit was delivered and the priorities were taken forward, including the characteristics and design of the neighbourhood, the area's history and identity, the perceived impact of regeneration activity in neighbouring communities, past community experience, the amount of funding available and the range of local organisations involved.

APPROACH AND METHODS

The research undertaken was largely qualitative, exploring the attitudes, experiences and perceptions of those involved in the street audit, as well as local residents that were not involved, but who lived in the affected community. Each group was asked to highlight aspects of the neighbourhood that they felt had changed in the period since the audit was undertaken (both positively and negatively) by taking photographs as part of a community walkabout. From this, scrapbooks were produced to bring together the photographs and quotes from each community group involved.

Telephone and face-to-face interviews were also conducted with professionals involved in the street audit or the delivery of the priorities identified. These interviews covered perceptions of the street audit aims, the progress and changes that had been made since it was carried out, and any perceived organisational changes that had come about. To contextualise this research and to illustrate the potential value in the use of street audits, relevant evidence derived from published articles and resources from grey literature were searched. This revealed a growing interest in the development of tools to conduct virtual street audits using street imagery. Comparisons are drawn between desk-based virtual street audits and community street audits to illustrate the potential value and limitations of both approaches.

BACKGROUND

The quality of the built infrastructure and the range of amenities available in a community can impact on health and health-related behaviours such as travel choices and the way in which people socialise^{2,3}. Poor quality neighbourhood environments are often characterised by a range of social problems, stigmatisation and poor wellbeing outcomes within the population⁴, and it is increasingly recognised that disparities in the quality of neighbourhoods are a key driver of inequalities in health^{5,6}. The creation of more walkable neighbourhoods (defined as pedestrian-friendly places in which a range of facilities are within a five minute walk)⁷ continues to be an important policy goal. This is on the basis that increasing levels of walking can bring vibrancy to streets, can contribute to reductions in car use and can help to increase the number of people meeting physical activity guidelines. In the Scottish Government's new national walking strategy⁸, three strategic aims set out the vision for a nation where everyone benefits from walking. These can be summarised as creating a culture where everyone walks more often as part of their everyday travel, ensuring that walking is an easy, safe and convenient form of travel for all, and creating better walking environments⁸. Although upgrading existing routes for recreational walking may help to meet the last of these aims, improving the connectivity and aesthetic quality of the streetscape in some urban areas may be a more effective and widely beneficial way of addressing the need to increase levels of walking throughout the population.

In addition to the influence of spatial and environmental factors in shaping population health outcomes, annual population surveys have shown that people living in more socioeconomically deprived parts of Scotland feel less able to influence decision-making than those from more affluent areas⁹. As a statutory requirement in planning practice¹⁰ and a key component of regeneration practice in Scotland¹¹, community engagement has long been recognised as being integral to the creation of successful places and for improving relations between developers, planners and local residents. However, effective engagement around development issues can be challenging due to time constraints, limited resources, ensuring a democratic and accountable process and managing expectations^{12,13}. Further, due to the range of approaches available and the need to consider the context in which discussions take place, there remains no 'gold standard' in terms of how community engagement is successfully

carried out. To encourage more participation, it is increasingly being recognised that approaches which enable local people to take a more proactive role in delivering small-scale regeneration projects should be encouraged. This might be achieved through effectively sharing good practice, by policy changes or through initiatives which create conditions for communities to more easily influence decisions at a neighbourhood level.

Figure 1: Examples of pedestrian environments in Glasgow.



Through policy developments such as the Christie Commission report into the Future Delivery of Public Services¹⁴, the Community Empowerment and Renewal Bill¹⁵ and proposals to bring forward a Land Reform Bill in 2015¹⁶, there is now a legislative move in Scotland towards more people-centred approaches to the delivery of public services and community-led land-use. This shift is also being recognised through the ongoing development of a Place Standard for Scotland, which has brought together the Scottish Government, Architecture and Design Scotland and NHS Health Scotland to develop guidance that can be used to shape the development of high quality places through community engagement and placemaking approaches. Within Glasgow, community groups are increasingly making a contribution to development in parts of the city where development has been delayed, with the Stalled Spaces initiative allowing local groups to apply for funding from Glasgow City Council to develop vacant land on a temporary basis¹⁷. Further attempts to stimulate community-led action and to improve the quality of environmental conditions throughout the city have been initiated through asset mapping, street audits and more comprehensive neighbourhood audits. These have been applied locally across a range of Glasgow neighbourhoods (Appendix 1), and have also been recognised as being potentially useful for addressing persistent social challenges and health inequalities at a wider scale through the Thriving Places approach, which is part of Community Planning's New Single Outcome Agreement for Glasgow¹⁸. This approach involves targeted and intensive action in Glasgow neighbourhoods (three initially, rising to nine), including the use of comprehensive neighbourhood audits as a way of identifying local assets and agreeing on appropriate communication and engagement activities.

USING STREET AUDITS TO SHAPE NEIGHBOURHOOD DECISION-MAKING

What are street audits?

There is a growing body of literature on the measurement or assessment of the built environment and its features¹⁹, with neighbourhood data being collected through a range of approaches such as community street audits, quantitative audit tools and spatial mapping²⁰. Using easily-accessible online street imagery, objective audit tools have been developed which enable neighbourhood features to be compared based on the availability of amenities or the quality of the built environment^{21,22}. This can be useful for efficiently determining where resources should be prioritised across a large geographical area. These audits generally involve an objective process of rating street features, with a range of tools being developed to capture information.

As an alternative or complementary approach to desk-based quantitative audits, community street audits involve walking around a neighbourhood to identify local needs. These audits are generally carried out by community members to identify and prioritise neighbourhood improvements, and can be an effective way of lobbying for funding or initiating conversations between service providers and community organisations. The process of capturing information can be gathered through photography, by completing checklists, making general notes based on observations or by drawing on maps. Appendix 2 includes a series of resources on how to conduct a community street audit.

Virtual audits versus community street audits

Much of the evidence around the potential value of quantitative audit tools has come from North America, where advances in street imagery have led to the development of a series of audit tools to assess the availability of amenities, the ‘walkability’ of streets (sometimes defined by the availability of local amenities) or the suitability of places for undertaking physical activity^{23,24}. In recent years there has been a growing interest in the use of Google Street View as a resource for enabling virtual street audits to be carried out. This can be accessed through Google’s online maps application, allowing users to conduct a virtual walk-through of an area by accessing panoramic views of streets from around the world. Street features can be accurately viewed by using the zoom facility, with a number of studies showing that the use of street imagery is broadly comparable with field-based audits in accurately identifying street features²⁵⁻²⁸. Virtual street audits can also be completed relatively quickly from one location, meaning that there are no potential safety risks for the auditors involved²¹. A range of electronic resources and applications for assessing the quality of streets are outlined in Appendix 3.

Despite their utility, however, audits based on street imagery may not always be a suitable alternative to community-based audits. Although useful for enabling most street features to be accurately identified, some studies have found that virtual audits do not allow detailed or rapidly changing street features to be accurately observed^{29,30}. This is because they rely on street images that have been captured at a time point in the past³¹, meaning that some neighbourhood features will not be accurately represented. Although Google Street View has virtually complete UK coverage, images in some areas are several years out of date and updates are more frequent in some places than others. Table 1 details some of the strengths and limitations of virtual street audits based on the evidence reviewed.

Table 1. Strengths and limitations of virtual street audits.

Strengths	Limitations
Reasonably reliable measure of street characteristics and land use, especially for more permanent and quantifiable street features.	Cannot be used to assess temporary or detailed street features (e.g. litter, pop-up spaces, pavements).
Resource and time efficient (e.g. low costs, can be completed quickly).	Provides view of street from perspective of car user rather than pedestrian.
Can be used to audit large geographical areas.	Image clarity can vary.
Allows comparisons between places (e.g. using validated scoring system for quality of neighbourhood features).	Street images captured at previous point in time.
Can be completed by one person or a group of people.	Does not allow temporal street features to be considered (e.g. traffic levels throughout the day).
Some street features can be easily measured using online features (e.g. distance between places, width of pavements).	Does not allow subjective aspects of environment to be considered (e.g. place identity, feelings of safety).
	Not always focused on the delivery of improvements.

As a locally-led approach to assessing the quality of places, community street audits can be completed with limited costs and can be adapted to suit the local characteristics of an area. Community audits also provide the important benefit of allowing all senses to be used as part of the audit experience³⁰, as well as enabling local knowledge to be effectively harnessed to influence the process. This can help to establish why places function the way they do and what neighbourhood actions might be appropriate within a particular setting. Although there is limited empirical evidence on the effectiveness of community street audits as a way of determining neighbourhood priorities, the approach represents a holistic and inclusive way of

assessing places, allowing neighbourhood features that are important for subjective reasons to be accounted for. If delivered effectively, community street audits can support increased social contact between members of the community, can help to create a better quality neighbourhood environment and can foster a shared sense of ownership over community assets³². They can be also useful for initiating conversations between service providers and local communities, allowing local priorities to be agreed through a developmental approach. The strengths and limitations of community audits are outlined in Table 2.

Table 2. Strengths and limitations of community street audits.

Strengths	Limitations
Captured in real time.	Resource and time intensive (e.g. staff, costs, generating interest organisation).
Led by local people based on their perceptions of strengths and needs.	Difficult to audit a large geographical area.
Can use subjective or objective measures of assessment.	Reliant on community input (challenges include: other commitments, lack of interest, bad weather, representing interests of whole community).
Ideas generated iteratively through conversations between a group of auditors.	Potential safety concerns and disruption to the community.
Can assess how street features shape behaviour and attitudes of local people (rather than quantitative assessment).	Requires commitment of people involved to prioritise and implement actions (e.g. budget allocations, support of local organisations, regular communication and agreements around delivery and maintenance).
All human senses can be used to audit place in an experiential way.	
Holistic and comprehensive approach which allows community involvement from inception to delivery of priorities.	
Encourages communication between local organisations and communities.	

KEY FINDINGS FROM A COMMUNITY STREET AUDIT IN GLASGOW

The findings below outline the experiences and perceptions of community groups and stakeholders consulted as part of an evaluation of a street audit process conducted in a Glasgow neighbourhood. To promote the use of the learning from this process for future audits, a checklist of good practice for delivering a successful street audit based on stakeholder and community feedback is provided at the end of this section.

Summary of key findings

Involvement in the street audit

Community members who had participated in the street audit were generally positive about it. Most enjoyed the experience and felt that community views were valued.

Many people felt that the format of the walkabout and subsequent feedback session worked well, stating that “it felt like people in the community were in charge”. Officers also highlighted that the walkabout worked well as a training exercise, and many participants stated that the street audit had helped to build relationships and understanding between community members and public service providers.

Community members highlighted a range of ways in which they, individually and collectively, had been involved in discussing and implementing neighbourhood improvements. However, it was clear from the responses that a portion of the community did not feel engaged in the process, either because they did not know about it or because they did not feel welcome. It was also apparent that existing groups in the community had different agendas and priorities, and communication between groups was irregular. It was also felt that some groups – such as minority groups – did not have a particularly strong voice in the community.

Perceptions of change and its impact

Community members commented that although some changes had occurred as a result of the street audit, there was not always sufficient support to maintain changes. Despite some progress on many small-scale issues such as the provision of new lighting, crossing points and growing facilities, large-scale issues which required

a more strategic approach such as the remediation of vacant land and derelict buildings remained unresolved. Further, potentially positive changes did not always realise their potential as they were not always accessible to all, or had brought unintended consequences on certain groups or individuals within the community. The key message to emerge in relation to impact was that although small-scale changes or ‘quick wins’ were important in keeping people positive about influencing decision-making, it was not always sufficient if larger-scale issues remained unresolved.

Impact on health and wellbeing

Improving health and wellbeing was not at the front of people’s minds in relation to the changes delivered. Most changes were on a relatively small scale, and therefore not considered likely to make a lasting difference to people’s health and wellbeing. However, those that had influenced change expressed having a positive effect on their mental health and greater self-esteem as a result.

Lessons learned

The review identified a number of clear lessons learned based on evidence of what worked well and what was less successful.

Value in approach

This research highlighted that there can be clear value in adopting a more community-led approach to neighbourhood improvement. Community members who were closely involved saw real benefits and felt more involved in neighbourhood decisions.

Physical improvements can make a difference

Physical improvements or the provision of new community facilities can have positive individual and community impacts (such as a reduction in antisocial behaviour, making people feel safer and increasing levels of walking), particularly when they are supported by local people and are accessible to all. However, momentum needs to be sustained and it should be recognised that social issues are unlikely to be solved through physical improvements alone.

Range of involvement

The street audit, and subsequent engagement, involved a small group of community members, led strongly by one community group. Future audits could be more effective if a wider-ranging approach was adopted, working to ensure that people with different experiences and perspectives have opportunities to be involved. Communities are diverse and not everyone wants to, or can be, involved in the same way. There can be tensions between community groups, and it is important to make sure that the most vocal residents do not dominate decision-making.

Ongoing involvement

This research found that opportunities for in-depth involvement in decision-making about neighbourhood improvements could have included a wider range of community members. Following through from an initial idea to implementation could help to give the community a greater sense of ownership over the changes taking place in their area. Ongoing involvement could also help communities to understand the progress being made on longer-term issues which require a strategic approach, such as tackling vacant and derelict land.

Support and maintenance

The neighbourhood changes largely involved capital investment in physical improvements to the area. However, there was limited investment in ongoing support and maintenance to embed these changes. The research found that ongoing support could have helped initially successful ideas to be sustained and that future approaches should join up the capital investment with actions to support an area's ongoing maintenance.

Responsibility for action

Following the street audit, no clear delivery mechanism was identified for taking forward community priorities. Closer ongoing partnership working between local authorities and other organisations operating in an area could have helped to ensure that priorities and issues identified by local communities were effectively addressed.

Checklist for delivering a successful street audit

- Ensure that everyone in the community has an opportunity to participate in the audit and think carefully about how to reach those that have not previously engaged in community activity.
- Allow the community to decide which streets to focus on and highlight the importance of focusing on community needs rather than those that are important to individuals.
- Set out expectations at the start in terms of the availability of funding and the different roles and expectations of the people involved.
- Have a clear and comprehensive plan of how the street audit will be conducted, how the findings will be written up and how recommendations will be delivered in the short and medium term.
- Establish both 'quick wins' and medium- to long-term priorities for key spaces in the area.
- Consider the impact of changes in terms of how certain population groups might be differentially affected.
- Ensure that the community are involved in taking forward priorities, both in terms of identifying funding and delivering identified priorities.
- Have plans in place to ensure the long-term maintenance of changes.
- Ensure that opportunities exist for continued engagement after the street audit has been conducted.
- Use the street audit process to train staff in their effective use.
- Use the findings to shape future plans in the area, such as local action plans or more strategic local authority neighbourhood plans.

DISCUSSION AND CONCLUSIONS

Increasing opportunities for community-led regeneration is important to the creation of well-functioning places. Having walkable neighbourhoods where people can meet their everyday needs is important for improving health, strengthening communities and for helping to create more interesting and distinctive places. Community street audits can help to improve understanding of locally-important features within a neighbourhood, allowing conversations to be initiated between community members and local organisations. Our experience is that street audits can be an effective tool for identifying neighbourhood priorities, but that they are best seen as being part of a process that can be used to feed into a broader strategic vision for an area.

With continued technological advancement and the growing number of tools to make use of street imagery, it is possible that virtual audits could become more commonplace as a way of assessing streets and prioritising improvements. To encourage more participation in local regeneration activity, the development of a widely applicable tool based on street imagery could become a valuable resource for establishing local priorities. Although street imagery is becoming an increasingly viable way of capturing broad information about the quality of places, community audits are potentially a more effective way of increasing levels of local participation and encouraging community-led forms of regeneration. In light of financial constraints, future street audits could help to facilitate long-term community involvement by raising awareness of opportunities for the development of underused local assets and land, either on a temporary or permanent basis.

The complexity of places demands that both subjective and objective approaches are adopted in attempting to assess their quality and for establishing future priorities. Although many street features can be quantified accurately, important aspects of what makes a place function well, such as having a sense of community or a distinct identity, are very difficult to measure. While virtual audits can be used effectively to assess land use or permanent street features across a large area, community audits allow consideration to be given to the impact of street features on the behaviour and attitudes of the people affected by the quality of the environment. This paper suggests that desk-based and on-site audits can be used in complementary ways, providing different depths of information to help support decision-making. With opportunities for local people to influence neighbourhood decision-making increasing, street audits offer an effective and relatively straightforward approach for identifying neighbourhood priorities.

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