

Learning from the insights of local users: Community mapping and GIS-P

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Introduction

The VISIT (Visualizing Safe and Inclusive Transport Environments) research team of AUNT-SUE (Accessible User Needs in Transport for Sustainable Urban Environments)¹ has adapted and developed a form of 'community mapping' known as 'GIS-P' (Geographic Information Systems for Participation). This enables decision-makers to capture valuable insights from local residents on how to improve their 'everyday' public spaces. Through this approach, the views of different groups can be compared with one another to ascertain their different perspectives and priorities, identifying points of consensus as well as differences.

Large-scale maps and plans are used to stimulate discussion. Participants survey the 'everyday' pedestrian environment along routes that they regularly use, and annotate maps with 'speech bubbles'. Initially they do so individually. Then, through group discussion, and following procedures established in other participatory methods, they agree key points and priorities for action. The end product is simple and deliberately so: maps produced through the participants' observations and discussion that can be presented to professionals with specialist expertise, especially urban designers, accessibility auditors, engineers, transport and land use planners. User and 'expert' insights are compared and combined to inform solutions.

A survey carried out by local residents in AUNT-SUE test-bed area of Somers Town in the London Borough of Camden refined techniques that were piloted through collaboration between AUNT-SUE and colleagues at Stockholm Environment Institute, University of York in a scoping study funded by EPSRC called 'InSITU'². This approach has also been used with maps in conjunction with interviewer-administered questionnaires³.

The survey engaged participants that many local authorities consider 'hard-to-reach' by more established approaches to public engagement in order to establish:

Profiles: Who we are, our reasons for walking, our regular routes.

Values: What we like or dislike about the street environment and why.

Solutions: What we should like to see changed and why.

¹ View: www.aunt-sue.info

² View www.insitu.org.uk.

³ View: [http://www.distillate.ac.uk/outputs/B4%20Rapid%20Appraisal%20Participatory%20GIS%20-%20Updated%20\(07-05-08\).pdf](http://www.distillate.ac.uk/outputs/B4%20Rapid%20Appraisal%20Participatory%20GIS%20-%20Updated%20(07-05-08).pdf).

Development of the methodology for Map-walks and Panels

A range of approaches and techniques were piloted in the InSITU scoping study:

In '**Rapid Appraisal**' (**RAP-Mapping**), intercept surveys (e.g. using large-scale maps and flags) were carried out to capture people's views in the places that were the subject of discussion at times where the intended users were available.

In a second version called '**Panel-Mapping**' participants visited the site, and then met as a Panel around large-scale maps and plans, often with photographs and simple photomontages. Thus, they visualized options, and designed their preferred walking/ cycling routes, e.g. through existing and new buildings that the developers were proposing. Those who take part may not fully reflect the wider range of users whose views may be captured through RAP-Mapping. However, Panels allow greater scope for reflection, deliberation, and challenging of ideas.

A third variant is the '**Map-walk**' (transect walk). First, the participants walked the route individually, annotating a map as they went to pinpoint significant barriers. Following this transect walk they compared notes and deliberated as a Panel to work out solutions that were communicated on digitized maps to decision-makers. It was apparent that the activity of walking the route enabled the participants to make detailed observations that included a record of semi-conscious actions, e.g. a participant who used a wheelchair recorded his route crossing roads to use an obstacle-free pavement.

Combining and developing Mapwalks and Panels in Somers Town

Around 30 Somers Town residents participated in the pilot surveys that further refined the approach of Map-walks combined with GIS-P Panels. The participants were:

1. Parents with young children (Panel 3rd June, Map-walk 6th June)
2. Women under 30 (Panel 9th June, Map-walk 11th June)
3. Older people (Panel 25th June)
4. Men of Bangladeshi origin under 30 (Panel 30th June, Map-walk 14th July)

The approach sought to capture participants' knowledge of factors that may inhibit journeys on foot with particular regard to: *accessibility* = ease of movement, ability to overcome physical barriers, e.g. obstructions on pavement/entrances to station, lack of dropped kerbs or ramps; *legibility* = ease with which people can 'read' spaces/routes and find their way around; *personal security* = confidence to walk without fear of harassment or attack; *road safety* = confidence to walk un-endangered by road vehicles; *other relevant issues* that might be identified by participants, e.g. (non-) availability of toilets.

Five-step approach to community mapping

Drawing from the scoping study, the research team encouraged participation through an iterative process, rather than a 'one-off' session:

[1] **Recruitment and selection of participants:** Participants were sought by posting notices in local community centres that people in the target groups were known to use, and the Panels were held at times that fitted with their activities, e.g. Sure Start for parents and young children. Some would-be participants were not used because they were not in the group specified on the notices.

[2] **Initial Panel:** As a preliminary, *Panels of about 7/8 people* met for around 90 minutes around large scale maps of the area to express their initial views relating to public space in their neighbourhood. They identified where they lived, and destinations for trips that they made regularly (within last week) on foot and by public transport, e.g. visiting friends and relatives, shops, work, study, social activities.

Using the map, they then discussed the range of problems that deterred them from walking to their desired destinations. They were asked to use colour coded stickers to identify the issues relating to each location with respect to the aspects identified above: physical access, road safety, personal security, legibility and 'other' e.g. availability of toilets. They also discussed walking for pleasure and exercise. Thus, they were asked to identify places they liked and where they felt comfortable walking, e.g. alone or escorting a child.

[3] **Agree survey route:** Participants then *agreed a particular route* to survey together - normally one week later - to illustrate and examine in more detail the points that they had raised. Meanwhile, the research team produced base maps with their route marked out.

[4] **Map-walk:** Where practical to do so, the same people reconvened to do their 'Map-walk' (this was not deemed possible for the older residents). Participants walked along as a group to annotate the maps with comments. They were asked not to confer with other participants for the time being. Typically it took 30 minutes to walk the route.

[5] **Final Panel:** Finally, they met once more as a Panel for around 40-60 minutes to compare notes and annotate a 'group map' that was digitised with their written comments speech bubbles. This iterative approach enabled confidence and rapport to be built up between members of each Panel, and their comments to be critically discussed among peers.

Context: Somers Town

Somers Town, LB Camden is home to over 6000 residents: a densely populated area, north of the Euston Road between Euston and King's Cross-St Pancras International railway stations. The economic and social disadvantage experienced by many of the area's residents is reflected in Multiple Deprivation and other indices. Over the last decade or so, there has been significant public investment, especially to upgrade its older housing estates. This has been accompanied by improvements to the public realm, including traffic calming, closure of some alleyways, and the gating routes of routes through housing estates. Nevertheless, the mix of property owners responsible for different sites within Somers Town and their differing approaches to site management creates a challenge for the Metropolitan Police and other agencies controlling localized crime. Personal security remains an important issue, especially for more vulnerable groups.

LB Camden's (2006: 14) 'Walking Plan'⁴ confirms the continuing need for public realm improvements in Neighbourhood Renewal Areas where '*more people are dependent on getting around on foot*'. Somers Town is targeted for further accessibility improvements as funding becomes available, and the Council reaffirms that this will 'involve working with the community, including people with disabilities, to identify problems in the streetscape'. LB Camden is a Partner in the AUNT-SUE programme, and the findings have been made available to the Council.

Just to the east of Somers Town, planning permission has been given for the Master Plan for 'King's Cross Central' (cf. Imrie 2009: 94)⁵, and development is progressing. Although the railway tracks divide the new development from Somers Town, pedestrian movement has increased: activity associated with St Pancras International and associated commercial premises, such as bars and restaurants. A debate is emerging on whether or not more pedestrian movement should be encouraged where the streets offer 'through' routes for people passing through (between Euston, St Pancras and King's Cross stations) as well as Somers Town residents. Would the creation of more 'penetrable' space make the streets feel safer? Or, should movement be restricted because of nuisance and intrusion?

Initial interpretations of the residents' survey

The residents provided some detailed insights into the effects of street design and management on their daily movements. Though the Map-walks and Panels, they confirmed the significance of walking in their daily routines. In principle, the area is very well served by public transport, perhaps better than anywhere else in London. However, for the parents, young women and older residents, everyday activity and movement was almost entirely within the Somers Town area. A notable exception was the main branch of Sainsbury's supermarket in Camden Town, (about 2km to the north) was visited by almost everyone at least once a week, this being the main reason to travel outside the neighbourhood (on foot or by bus).

⁴ LB Camden (2006) Camden Walking Plan, second edition, LB Camden

⁵ Imrie, R. (2009) 'An exemplar for a sustainable world city', in Imrie, I., Lees, L. and Raco, M. (eds.) Regenerating London: Governance, Sustainability and Community in a Global City, London and New York: Routledge, pp. 93-111.

Everyone used convenience shops, community centres⁶, and services such as Post Offices. Social visits to friends and relatives were also frequent, while older residents made more trips to access health-related services. In a densely populated area lacking in open space, small parks are enjoyed, especially by parents with young children. The young Bangladeshi men said that the street itself provided a place to socialise on sunny days. Indeed, on the Map-walk they sat down on the benches in Chalton Street: 'we sometimes sit there and read or wait for a friend or relative, then go to the shops'. Though 'crowded and noisy', the Friday street-market in Chalton Street was also popular. Nevertheless, some parents with children in pushchairs found it hard to navigate.

With regard to accessibility, parents with young children in particular identified additional places where they thought drop-kerbs were needed, and where unnecessary 'clutter' such as bollards should be removed. Although traffic calming measures had improved road safety overall, there were particular points where residents considered pedestrian crossings to be desirable, and these were marked on the group maps. There was one location (junction Chalton Street/Phoenix Road) where they felt the design of traffic calming ramp had had the opposite effect to that intended by the Council: it had actually increased danger to pedestrians. Understandably, wayfinding was not a particular issue for longer-term residents, but participants newcomers found signage confusing, especially those with limited English.

Many of the observations, and much of the discussion related to personal security issues. Participants confirmed that outside youth centres, teenagers often fight one another, meet in groups and intimidate passers-by. All groups pinpointed particular places where improvements were needed, especially more street lighting and CCTV.

Perhaps the most striking feature that emerged was that the extent to which the everyday routines of walking or getting to public transport are shaped by *avoidance strategies*. Although the older residents, in particular, were determined not to be intimidated by crime or anti-social behaviour, people were choosing routes to keep well clear of places where youths were known to gather, 'hang around' or 'loiter'. These included local schools, the youth centres in Cranleigh and Chalton Street and the small park by Phoenix Road. Mobile hazards included 'youths on mopeds', and abuse or danger from car drivers.

Participants also avoided particular places where the behaviour of people visiting Somers Town - especially the customers of licensed premises – that they regarded as *intimidating or potentially dangerous*, in particular:

1. To the west, where *Eversholt Street* forms the boundary between Somers Town and Euston station. Here, the bus stops that they use are in an unattractive place, not only because of traffic noise and fumes, but also because there is a commercial strip: 'rough' pubs with outside seating, sex shops and 'adult entertainment'. Along this commercial strip (which also includes a pharmacy), the public benches are avoided by local residents. Some felt that these, along with telephone boxes, should be removed.

⁶ For example, St Pancras community centre in Ossulston Street has a lunchtime cafeteria. For the parents, it provides space for childcare, rotating with other local centres on different days of the week, for the young men, English language classes, for the older residents a lunch club.

2. *Within Somers Town*, there are long-established public houses at street-corners, some of which have benches and tables next to the pavement. The parents identified some as potential trouble spots, but as these were sited on crossroads they felt safer: there are 'more escape routes'.
3. At the *southern end of Chalton Street*, there has been some gentrification, and as a result more people who are non-residents - and who are generally wealthier - are present, especially in the evenings. The Bangladeshi men were critical of the behaviour of customers of a gastro-pub, which attracts younger professionals. On summer evenings and lunchtimes, customers sit or stand drinking on the pavement outside. They interpreted loud voices and gestures of (mainly) white male customers as 'abusive' and insisted that the pub should be 'closed down'. Nor did the young women feel comfortable in this area after dark with, and in particular avoided the alleyway that its customers use on their way back to Euston.

Unfortunately, neither drug-dealing nor prostitution is new to Somers Town, but some participants thought that the problems were getting worse. Young women and parents wanted more foot patrols by the police. Though not confined to specific areas, they identified particular trouble spots that they avoided, especially after dark:

1. The commercial strip on the east side of Eversholt Street, noted above.
2. The alleyway between Drummond Crescent and Phoenix Road.
3. Ossulston Street, along the flank wall of the British Library and behind it on Polygon Road: a very different environment from the plaza at the front and the Novotel beside it.

It was notable that the personal experience of residents is augmented by information passed on - presumably word of mouth - from friends, relatives and neighbours - especially about violent crime incidents. Everyone *steers well clear of* particular places at specific times. As a consequence, their personal geographies of the locality included 'places to be wary of'. Thus, the residents' perceptions of the streetscape might be very different to those of visitors. With regard to the question of whether more pedestrian movement passing through Somers Town should be encouraged, a first reading of the participants' comments suggests that the 'fine grain' of the street pattern is important:

- a) One route (east-west) was generally perceived by all groups as a street to avoid after dark and certain other times as it attracts particular forms of crime and intimidating behaviour. Perhaps more people passing through would provide more casual surveillance?
- b) Concern was expressed over the recent impact of new bars, cafes and restaurants along another (north-south), especially regarding the expansion of seats and tables into the street, and behaviour of some customers that some interpreted as intimidating.

Summary and conclusions

The approach facilitated consultation by local authorities with local users of walking routes and public spaces, including people who are less likely to respond to more established forms of consultation, such as public meetings, exhibitions, and questionnaire surveys.

The primary aim was to allow participants to frame the issues, problems and suggested solutions in their own terms, and to present their views and preferences with clarity in a format that could help inform future improvements to the design and management of the public realm. The research team anticipate that the approach could be adapted and applied to a range of scenarios where improvements to walking routes and public spaces are to be carried out:

- To identify walking routes that participants use regularly, and the reasons for making these trips
- To identify walking routes that they use to access public transport for journeys beyond the neighbourhood and the journey purpose(s)
- To enable the participants to express comments and suggestions in their own terms and identify the map locations with precision
- To compare the views of the different groups, highlighting common issues and any differences.
- To present local insights as clearly and transparently as possible to practitioners and decision-makers who can act upon their comments and suggestions.