

Impact case study (REF3b)

<p>Institution: London Metropolitan University</p>
<p>Unit of Assessment: 19 – Business and Management Studies</p>
<p>Title of case study: Accessibility & User Needs in Transport for Sustainable Urban Environments (AUNT-SUE)</p>
<p>1. Summary of the impact</p> <p>The case study captures and describes the outputs and impacts arising from cumulative research on the theme of accessibility in transport and urban design. Impacts are evidenced both through the research process in terms of end-user engagement, collaborative research and real world test bed research (local communities and neighbourhoods); and through intermediary and professional/practitioner body validation, policy-making and take up of research findings and guidance/toolkits arising. Impacts have also occurred through wider dissemination, follow-up research and collaboration both nationally and internationally.</p>
<p>2. Underpinning research</p> <p>The AUNT-SUE research project was built on influential evidence-based research undertaken by members of the staff team in a field that had hitherto lacked systematic investigation. Shaw had chaired the government’s enquiry into <i>Social Exclusion and the Provision Public Transport</i> with research carried out by Solomon, for the Department of Environment Transport & the Regions. The final report formed the basis for further research by the government and fed into the work the Cabinet Office’s Social Exclusion and Department for Transport’s Mobility units. Solomon with Shaw had also successfully completed an EU-FP5 project (ISHTAR 2001-5) linking transport, health and urban environments for the first time, with planning and software-based impact models arising. This foundation led to the major 6 year research project funded under the EPSRC’s Sustainable Urban Environment (SUE) Programme between 2004-10 and further research arising from this on participatory urban design, accessible transport planning and most recently on obesogenic and age supportive environments (with policy-makers and practitioners in USA and Canada) and E-Mobility (electric vehicles - North Sea Region).</p> <p>A fundamental ‘exclusion/inclusion’ theme emerging early on in the project was that of community safety and fear of crime, as one of the prime barriers to pedestrian and transport access amongst older, younger and particular vulnerable groups (e.g. ethnic minorities). Inclusive urban design research developed ‘design against crime’ and urban environment modelling, integrating urban design quality, community planning and safety measurement with the creation of systematic indices of environmental street quality, supported by spatial (GIS) data visualisation techniques and resultant tools. In particular, consultative and participatory research and engagement methods were developed and further tested through GIS-Participatory fieldwork and spatial modelling. A key finding was that ‘accessibility’ and accessible transport’ benchmarks as defined and legislated for, did not reflect the actual needs and travel behaviour of particular target groups e.g. elderly, or reflect the local barriers to mobility which prefaced access to the transport system and wider social inclusion and participation. A key advance has been the further development, validation and knowledge transfer of these individual research approaches in the transport and social exclusion field, and the development of inter-disciplinary methods across the research teams and the integration of research methodologies and toolkits arising. This also took place across micro, meso and macro scales of transport and urban design planning, operation and decision/policy-making. The concept driving this research has thus been that of the ‘Whole Journey Environment’.</p> <p>Dates carried out:2003-4 Scoping Study (EPSRC); 2004-5 Phase I AUNT-SUE (EPSRC);2005-6 InSITU GIS-Participation study (EPSRC);2007-10 Phase II AUNT-SUE (EPSRC);2011-ongoing Accessibility & E-Mobility</p>
<p>3. References to the research</p> <ul style="list-style-type: none"> • Evans, G.L. (2009) Accessibility, Urban Design and the Whole Journey Environment, <i>Built</i>

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Environment 35(3): 366-85 Special Issue: *Sustainability via Security: A New Look*.

- Shaw, S. (2009) Inclusive journey environments: principles into practice. *Access by Design*, 115: 18-20.
- Shaw, S. & Evans, G.L. (2009) *Inclusive Design for the Whole Journey Environment*. Proceedings of the Inclusive Design Conference, INCLUDE 2009, Royal College of Art/RCA Helen Hamlyn Centre. Available on http://include09.kinetixevents.co.uk/rca/rca2009/paper_final/F35_1512.PDF (22nd August 2013).
- Solomon, J.; Titheridge, H. & Achuthan K. Mackett, R. (2009) Assessing the Extent of Transport Social Exclusion among the Elderly, *Journal of Transport and Land Use*, 2(2): 31-48
- Azmin-Fouladi, N. (2007) Accessibility and user needs in transport. In: Thwaites, K et al. *Urban sustainability through Environmental Design. Approaches to Time-People-Place Responsive Urban Spaces*. Routledge: 112-118

The following grants were awarded to the **Cities Institute** relating to the above [investigators, £ value]:

- AUNT-SUE Scoping Study, 2003-4 EPSRC GR/S18304/01, £156k [Shaw, Evans] *Rated 'Outstanding Benefit to Society'* by reviewers (EPSRC)
- AUNT-SUE Phase I 2004-7 EPSRC GR/S90867/01, £822k [Evans, Shaw]
- InSITU GIS-Participation, 2005-7 EPSRC EP/D011671/1, £154k [Shaw, Evans]
- AUNT-SUE Phase II, 2007-10 EPSRC EP/E040764/1, £255k [Evans, Shaw]
- E-Mobility NSR, 2011-3 INTERREG IVB £133k [Shaw, Evans]

4. Details of the impact

AUNT-SUE exhibition posters and supporting materials (e.g. flyers, report summaries) were shown at consecutive events such as the Inclusive Design conference (INCLUDE 2005/7/9), OS *Terra Futures* conference/exhibition and in practitioner fora overseas - Joburg, S.Africa (city planning/transport/crime prevention); New Orleans, USA (crime prevention); Montreal, Canada (ageing/gerontology). A further EPSRC/Arts Council award *Sustainability and the 24-hour City: A Collaboration with the Creative Arts* (Shaw, Evans) funded two practising artists who were engaged to interpret and exhibit our research results and visualise test bed localities, data/findings and images. Week long exhibitions at the London Festival of Architecture (LFA), including visitor questionnaires and presentations were held at the German Gymnasium, King's Cross/St Pancras (16-25 June 2006) with a follow-on exhibition and presentation of this work at the *North Country* conference/exhibition held at the URBIS Centre, Manchester in April 2007. A further exhibition of findings and toolkit was held at the biannual London Festival of Architecture (LFA) in June 2008, at the Building Centre, London. Attendances at these high profile events (national TV, extensive local/city and professional coverage) were 25,000 and 75,000 respectively with research and community workshops organised and held with local authority chief planners, councillors and ministers/shadow ministers, as well as local communities and firms.

In order to disseminate the project more widely, an AUNT-SUE video was produced by the research team with the assistance of a Digital Media MA student and tutor. The video features PI/Co-PI, researchers, partner organisations and vox pop interviews and street walks within one of the test bed sites (LB Camden). This video was available via the AUNT-SUE website (www.aunt-sue.info) including sub-titles where needed and was distributed at events in DVD format which are also available on request (500 distributed to date). It is now available on YouTube. The film was premiered at the Building Centre LFA event (above), and is regularly shown at conferences, exhibitions and was shown at the Transport Museum cinema following the Final Symposium event, attended by 75 representatives from the transport industry, local/central government, press, as well as academics and the research team. The final symposium also saw the re-launch of the AUNT-SUE website, the prime dissemination and communication vehicle - newly designed and 'populated' - including the full suite of menu-driven toolkits, publications and other outputs, including case

studies, reports and related user guides and project video, with over 4,500 'hits' on this site recorded between January and April 2010 (the site went offline in early 2013 due to unforeseen technical issues, which are currently being addressed).

Further evidence of impact and take-up of research outputs include the following examples:

- AUNT-SUE GIS-based urban environment and audit tool incorporated into Transport for London's (TfL) *Guidance for Submissions of Local Accessibility Schemes*, prepared for all London Boroughs and sub-regional partnerships (March 2007). This was the requisite guidance for all local authorities in their bids to TfL for accessibility improvement capital funding.
- EPSRC People & Systems review (January 2009) - the international reviewers assessment of transport projects including the AUNT-SUE exhibition and supporting materials (Poster Number 58), noted that 'there was good connectivity to users and stakeholders' and in the case of more applied projects such as AUNT-SUE, 'high impact on the user community'.
- AUNT-SUE research findings and tools included in successive Parliamentary annual reports *Research and development work relating to assistive technology*, 2010-11 and 2008-9, Department of Health
- AUNT-SUE consulted on and presented research findings and urban environment tools (Evans & Shaw) to PM Cabinet Office Strategy Unit, for joint publication *An analysis of urban transport* (November 2009) with Departments for Transport, Health, Communities & Local Government (CLG) and DEFRA. Although the research was not directly referenced in the report, the authors adopt the 'inclusive whole journey environment' theme as defined by Evans & Azmin-Fouladi.
- AUNT-SUE consulted on and presented findings/recommendations (Evans) on Indicators/Metrics for sustainable travel, impacts on quality of life and land use/transport interaction, to Chief Scientific Adviser's Unit, Department for Transport (April 2010 pre-General Election). Initial work on transport and social exclusion was recently included in departmental report *Valuing the social impacts of public transport* (2013).

5. Sources to corroborate the impact

AUCKLAND REGIONAL TRANSPORT AUTHORITY: 2009. Bus Stop Infrastructure Design Guidelines. Report. Available on <http://www.aucklandtransport.govt.nz/about-us/publications/ManualsandGuidelines/Documents/AT-ARTA-Guidelines-Bus%20Stop%20Infrastructure%20Guidelines%202009.pdf> (22nd August 2013), p. 5.

CITY UNIVERSITY OF NEW YORK AND LONDON METROPOLITAN UNIVERSITY: 2010. *A Tale of Two ObesCities: Childhood Obesity in London and New York*. Available on http://web.gc.cuny.edu/che/childhood_obesity.pdf (22nd August 2013), p. 40.

CANADIAN INSTITUTES OF HEALTH RESEARCH: 2010. *The Science of Age Supportive Environments*. Study Tour Report. Available on: www.sparc.ac.uk/media/downloads/executivesummaries/age_supportive_environments_monograph.pdf (22nd August 2013), pp. 16.

DEPARTMENT FOR TRANSPORT: 2013. *Valuing the social impacts of public transport*. Final Report. Available on: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226802/final-report.pdf (22nd August 2013), p. 13

DEPARTMENT OF HEALTH: 2010. *Research and development work relating to assistive technology 2009-10*. Available on: <http://www.fastuk.org/pagedocuments/file/S22%20Report%202009-10%20final%20v2.pdf> (22nd August 2013), pp. 25.

2008. *Research and development work relating to assistive technology 2007-08*. Available on: http://fastuk.org/pagedocuments/file/research/fast_reports_and_papers/Section%2022%20008.pdf (22nd August 2013), pp. 16.

GEOGRAPHICAL ASSOCIATION: 2013. Future "greener" urban transport: accessible, mobile and resilient cities? GA Post 16 and HE Phase Committee. Available on http://www.geography.org.uk/download/GA_Greener%20UrbanTransportGeographyMatters.pdf (22nd August 2013), p. 5.

LIVERPOOL PUBLIC HEALTH OBSERVATORY: 2009. Ageing: Future planning - Horizon scanning for those aged 65+. Observatory Report Series No. 74. Available on http://www.liv.ac.uk/PublicHealth/obs/publications/report/Horizon_Scanning_latest.pdf (22nd August 2013), p. 10.

LOCAL GOVERNMENT ASSOCIATION: 2009. *Planning and Designing an inclusive Journey Environment*. LGA Analysis and Research Bulletin. Available on http://www.urbansustainabilityexchange.org.uk/media/presspage/PDFs/P%20AND%20P/LGAARB%20articles_merged.pdf (22nd August 2013), p. 3-4.

MEDIATE: 2008. *Mediate – Methodology for Describing the Accessibility of Transport in Europe*. Mediate Project Report. Available on http://www.mediate-project.eu/fileadmin/WP_Material/MEDIATE_D21_Review_Report_final.pdf (22nd August 2013), pp. 27.

TRAFFIC TRANSPORT & ROAD SAFETY ASSOCIATES: 2008. *TTRSA works with AUNT-SUE*. Website Article. Available on www.ttrsa.com/news-and-views (22nd August 2013), News and Views Section.

5.1. Project Websites

www.aunt-sue.info (2004-2012) Outputs, Publications, Toolkits and Guidance;
www.youtube.com/watch?v=p49d9lQGv_o (2010 onwards) AUNT-SUE video

5.2. Key Contacts

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