

Paper to be presented at the International Conference on Mobility and Transport for Elderly and Disabled Persons (TRANSED 2012), Delhi, India, 17-21 September 2012

## **CONSULTING OLDER AND DISABLED PEOPLE ABOUT THEIR LOCAL ACCESSIBILITY NEEDS**

**Mackett, Roger L, Titheridge, Helena and Achuthan, Kamal**  
**Centre for Transport Studies, University College London**  
**London, WC1E 6BT, United Kingdom**  
**E-mail: [r.mackett@ucl.ac.uk](mailto:r.mackett@ucl.ac.uk)**

---

### **SUMMARY**

The purpose of this paper is to present a methodology that has been used to consult elderly and disabled people about their local accessibility needs, the barriers that need to be overcome and the translation of the findings into the planning process. The work builds on the AUNT-SUE programme of work. AUNT-SUE (Accessibility Accessibility and User Needs in Transport for Sustainable Urban Environments) was carried out jointly at University College London (UCL), London Metropolitan University and the University of Loughborough. At UCL the software tool AMELIA (A Methodology for Enhancing Life by Increasing Accessibility) was developed. This is a policy-oriented user-friendly interface to a GIS (Geographical Information System), for use by local transport planners to test whether their policies increase social inclusion. A key part of the project was to consult groups in the community about whether AMELIA was a good representation of how they consider accessibility issues, and to see whether it could serve as a consultation tool. Consultations have been held with several groups one of which was a group of elderly and disabled people in St Albans in Hertfordshire in Great Britain. The consultation exercises included both general discussions about accessibility and exercises based on AMELIA. For practical and ethical reasons it was not possible to consult with the participants outdoors. Three imaginary journeys were taken by the group using photographs taken by the researchers linked to a projected image of a map of the centre of St Albans to stimulate discussion about the obstacles along the routes and the provision of useful facilities and level access to buildings. The information about the barriers to movement collected from these exercises was input into AMELIA to see how much access would be increased if the barriers were removed. The results were fed back to the group to see their reaction to the findings. The work was reported to the St Albans City Forum, which is a consultative body that provides an opportunity for the St Albans City Council to communicate with representatives of community groups, stakeholders, businesses and members of the public. The findings were subsequently incorporated into the St Albans Public Delivery Strategy. It is shown how AMELIA can be used to translate the often rather subtle requirements of those who find barriers to movement that do not apply to most members of society, into robust findings in the language and methodology used by policy makers, both political and professional.

**Key words:** consultation; accessibility; elderly people; disabled people

## **PURPOSE OF THE STUDY**

The purpose of this paper is to describe a methodology used to consult groups in society about the barriers to movement in urban areas. It has been carried out as part of the research programme of the AUNT SUE (Accessibility and User Needs for Sustainable Urban Environments) Consortium being funded by the Engineering and Physical Sciences Research Council (EPSRC) under the SUE programme (see <http://www.aunt-sue.info/>). AUNT-SUE (Accessibility Accessibility and User Needs in Transport for Sustainable Urban Environments) was carried out jointly at University College London (UCL), London Metropolitan University and the University of Loughborough. Part of the research carried out in the Centre for Transport Studies at University College London has involved the development of a software tool called AMELIA (A Methodology to Enhance Life by Increasing Accessibility) [Mackett et al., 2008b]. The purpose of AMELIA is to show the impact of a policy change on groups within the community. It can be used either to examine the impact of a particular policy action or to allow the user to compare a set of possible policy actions relevant to the policy objective being considered, and then to quantify and map the effects of these policy actions to help the user to assess which is the most effective. It is described more fully elsewhere [Mackett et al., 2008a,b, 2012; Titheridge et al., 2009]. AMELIA embodies a number of assumptions about accessibility by different groups in society, so it was necessary to assess the validity of the assumptions, and to see how useful AMELIA is as a focus of consultation exercises with the public. Consultations have been held with a group of elderly and disabled people and with two groups of young people. The focus of this paper is on the former. The latter are described elsewhere [Titheridge et al., 2011].

## **THE ORGANISATION OF THE CONSULTATION EXERCISE**

The initial set of policies considered with AMELIA were ones that would mostly affect elderly people and people with disabilities [Mackett et al., 2008b], so it was decided to consult with a group of such people to see if the assumptions made in using AMELIA were valid. It was important that consultation exercise was held in the place to which AMELIA had been applied. This was St Albans in Hertfordshire, a small city in Britain about 30 km north of London. It was found to be more difficult to find people to consult with than originally envisaged, but contact was established with the St Albans Access Group which had asked its members if they would be willing to be part of the consultation exercise after the research team from UCL had given a presentation on the work and explained the need for the consultation exercise. As a consequence, four meetings were held over the period June 2009 to January 2010 in the St Albans Civic Centre. The provision of meeting facilities and refreshments by the St Albans City Council was useful as it not only provided excellent facilities for the meetings, it also meant that the City Council was involved in the project. The structure of the consultation exercise is shown in Figure 1.

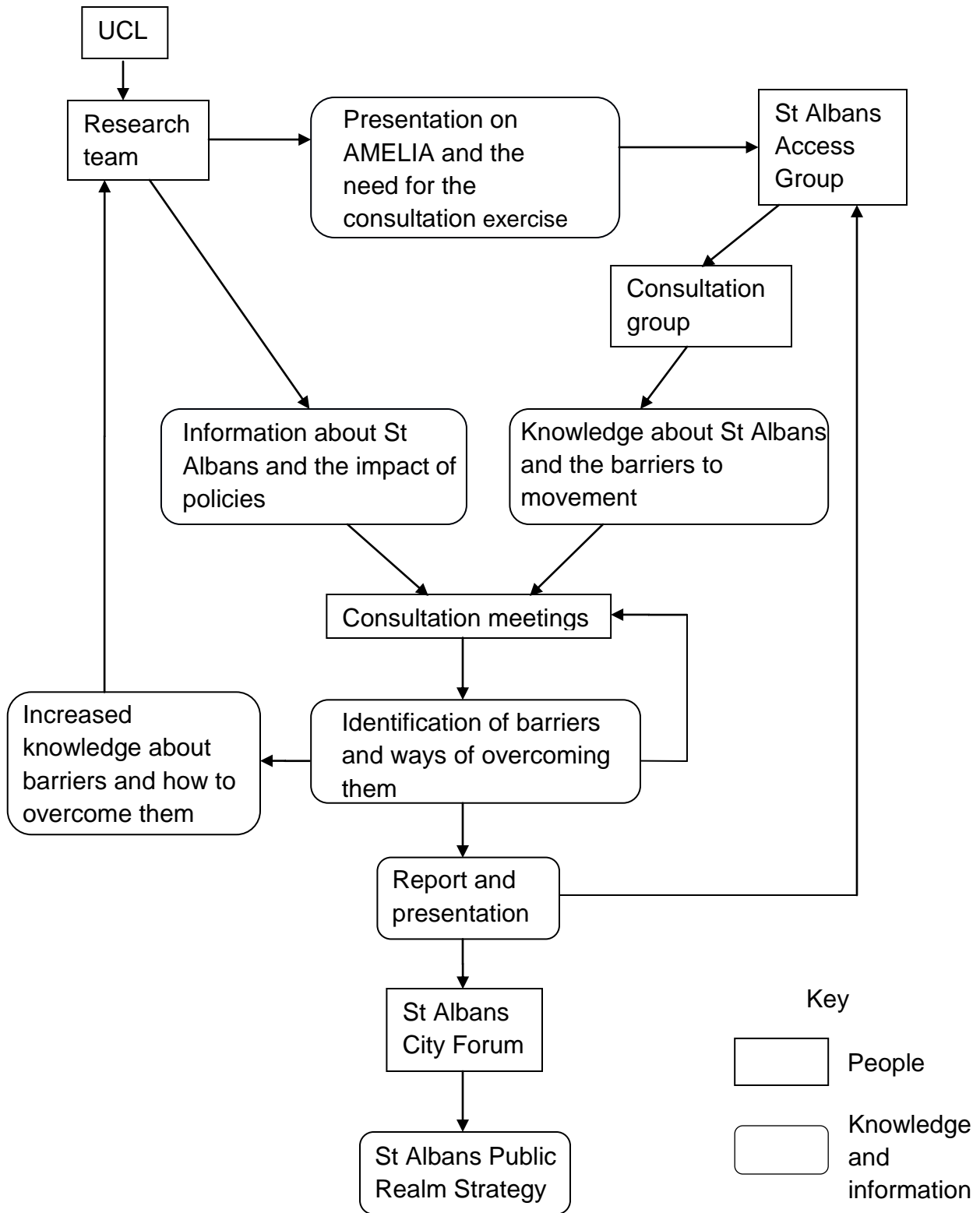


Figure 1 The consultation process

The group consisted of six people with various disabilities, plus one carer and an observer from the Disability Information Service for Hertfordshire (DISH). The disabilities of members of the group included visual impairment, hearing impairment, and being in a wheelchair with communication difficulties. All except the person in a wheelchair were over sixty years of age.

The meetings consisted of a mixture of presentations, discussions and synthesis of views. The intention was to build up a rapport between the researchers and the group by starting with general discussion about accessibility problems in St Albans and elsewhere and then to move onto more complex methods of elucidating views.

The first meeting began with a brief introduction about the project including an explanation about the way the meetings would be run. The participants were asked to provide written consent to taking part in the exercise. After general discussion about the perceived barriers to movement in St Albans, discussions were held about the barriers in a number of situations, for example crossing the road, moving along the pavement, including going up and down hills and making bus, rail, taxi and car journeys. Then there was discussion about some policy actions which the local authority could undertake in order to try to establish which were perceived as the most important and to discuss the idea of prioritising policies, for example, because of limited funding. These policy actions included removing obstacles from the pavement, better street lighting, providing more seats and reducing street crime

In the second meeting the initial theme was the role of information, for example, the adequacy of waymarking and other information in St Albans, and improvements that could be made to it. Three virtual walking journeys were taken by the group to St Albans Abbey, St Albans City railway station and St Albans City Hospital from the St Albans District Council offices in the Civic Centre, using photographs taken by the researchers linked to a projected image of a map of the centre of St Albans to stimulate discussion about the barriers along the routes. The information was collected from the participants by using eBeam hardware that enabled the research team to 'write' descriptions of the barriers to access onto the projected map. This information formed the basis of a prototype web-based information system that was designed using the data collected for use with AMELIA plus the photographs used in the virtual walks. The findings from the consultation are discussed elsewhere [Mackett et al, 2010, 2011].

Between the second and third meeting the following actions were examined using AMELIA:

- The effects of removing obstacles on the street for people in wheelchairs and people with visual impairment;
- Providing more disabled parking spaces in car parks;
- Providing more public conveniences with facilities for people with disabilities;
- Providing level access to buildings;
- The effects of the Post Office Closure Programme.

The results were presented and discussed at the third meeting. The report on the findings from the consultation [Mackett et al., 2010] was drafted between the third and fourth meetings and presented and discussed at the fourth meeting (and was read out in full to ensure that all present were aware of all the contents, including those with visual impairment).

## **IMPLEMENTATION OF THE FINDINGS**

The written report on the consultation [Mackett et al., 2010] and the map of the barriers were presented at a meeting of the St Albans Access Group with some staff from St Albans City Council present. The work was subsequently discussed at a meeting of the St Albans City Forum in December 2010. This is a consultative body that provides an opportunity for the St Albans City Council to communicate with representatives of community groups, stakeholders, businesses and members of the public. The councillors present recommended that the written report be referred to the planning department of the City Council and to Hertfordshire County Council, which is the transport authority for the area, with a view to the implementation of the recommendations. The city planners decided to implement the recommendations as part of the the Public Realm Delivery Strategy to improve accessibility in the City Centre. A meeting was held between the research team, the consultants developing the Public Realm Delivery Strategy and a member of the St Albans City planning staff. The research team presented written comments on the draft Strategy and was invited to comment on it at the meeting of the City Forum in December 2011. The strategy was subsequently published [St Albans City and District Council, 2011].

The report on the consultation exercise is cited in the Strategy as one of the twelve documents used to inform the proposals and is the only one explicitly on inclusion. Inclusion is one of the eight principles of the Strategy:

*Think Inclusive*

*A place that makes people of all ages and abilities, especially children, older people and disabled people, feel welcome, safe and comfortable. The largest number of people should be able to not only use, but enjoy the public realm and want to spend time in it. Streets and spaces should be easy to understand, with intuitive routes through implicit design supported by explicit way-marking where appropriate. [St Albans City and District Council, 2011, page 11].*

Whilst it is not possible to be certain that some of the proposals in the Strategy relating to inclusion would not have been there without the consultation exercise, it is possible to identify ideas and recommendations within the Strategy that reflect issues that came up in the consultation.

Concepts mentioned in the Strategy that were discussed in the consultation include:

- Missing dropped kerbs;

- Narrow footways;
- Illegal and inconsiderate parking;
- Poor street lighting;
- Footway obstructions such as A-signs;
- Steep gradients;
- Wayfinding.

Various ways of overcoming the barriers are mentioned in the Strategy that came up in the consultation, for example:

- Improving road crossings;
- Paying attention to detail on the street;
- Widening the footway;
- Improving bus shelters while ensuring that their location minimises congestion on the street.

Table 1 shows the links between some of the main barriers identified in the consultation and the recommendations in the Strategy. For crossing the road, the difference in the level between the pavement and road was an issue for wheelchair users and those unable to way up or down small steps. Dropped kerbs are used in St Albans but the Strategy advocates stronger measures. A key theme of the Strategy is to reduce clutter on the streets which would probably make it easier to manoeuvre wheelchairs. Narrow pavements are a problem in some parts of St Albans, partly because of its historic nature. Taking space from the carriageway used by cars to widen the pavement and the reduction in clutter should make it easier to proceed particularly for those with mobility difficulties. Whilst the operation of buses was outside the scope of the Strategy, it does suggest removing traffic from St Peters Street which is the main bus interchange (there is no bus station) which should reduce variability in bus travel time and so increase reliability. Removing some bus routes might also reduce traffic there, but could make it more difficult for those wishing to change between buses. In the Strategy, car parking is seen as an issue with a relatively large number of car parks near the city centre but no clear strategy for parking. There is no mention of disabled car parking which was seen as a major issue in the consultation.

The following emerged from the consultation and might have been mentioned explicitly in the Strategy but were not:

- Lack of accessible public conveniences;
- The need for more disabled parking spaces within easy reach of the city centre;
- The need to ensure the railings on pavements and traffic islands allow sufficient space for wheelchairs to be manoeuvred;
- The need to link on-street waymarking which was mentioned, with on-line information, which was not.

The following came out of the consultation and were not included in the Strategy because they are outside its scope:

- Green time on traffic signals for crossing the road for pedestrians too short;

- Pedestrian information at traffic signals badly placed;
- Steep cambers on pavement;
- The need for better training of bus drivers;
- More seating in shops;
- The difficulty of accessing hospital facilities;
- The difficulties caused by the Post Office closure programme.

Table 1 Summary of some barriers identified in the consultation that had solutions proposed in the St Albans Public Realm Delivery Strategy

	<b>Barrier identified in the consultation exercise</b>	<b>Proposal in the St Albans Public Realm Strategy</b>
Walking around the city	General progression along the pavement	Somewhere to sit should be provided every 100 metres in the city centre and along key radial routes
	Poor lighting	Better lighting should be installed in the city centre to national standards using historic lighting columns accommodating other street furniture to reduce obstructions on the pavement
	St Albans city centre is a 'no-go' area during the evening at weekends	If streets are closed in the city centre, bus and taxi movements and local access in the evening should be retained to provide natural surveillance particularly in the evening
Proceeding along the pavement	Narrow pavements	Adopt a consistent narrower road carriageway width with correspondingly wider footways
	Obstructions on the pavement	Ensure pavements are detailed in a way that makes it easy for pedestrians to move along. Undertake a full de-cluttering audit and pedestrian guardrail audit with a view to removing, relocating and merging existing items of street furniture. Bollards should be used sparingly with alternative items of furniture used to achieve the same result.
Crossing the road	Difference of level between pavement and road	Introduce lower kerb heights and raise pedestrian crossings to footway level
	Lack of space on pavement and traffic islands for manoeuvring wheelchairs at crossings	<i>Not explicitly mentioned, but the proposal to widen the footway, declutter the streets and only install pedestrian guardrailing when necessary on safety grounds should help</i>
Public transport	Need for more reliable bus services (mainly in terms of actually turning up rather than being on time)	Investigate removing some bus routes and removing general traffic from St Peters Street to improve bus reliability
Travelling by car	Lack of disabled parking spaces	<i>Development of a car parking strategy is recommended but there is no explicit mention of disabled parking</i>

Note: text in italics in the third column shows comments on proposals rather than actual proposals

## DISCUSSION

The consultation exercise seems to have been successful: it produced useful outcomes and is being taken forward by the local authority. However, a great deal of time was spent in making the initial contacts, and it was fortunate that one of the many emails sent to possible contacts facilitated the contact with the St Albans Access Group. Once the initial contact had been made, a good working relationship was set up, but progress was slow because of the need to co-ordinate attendance at meetings. Whilst there was initially some hesitation by some members of the consultation group about the exercise, particularly those with visual impairment, a good rapport emerged fairly quickly.

One concern was whether the participants would understand the concept of AMELIA and use of the interactive hardware being used to collect the information. They understood AMELIA and the hardware to the extent they needed to in order to participate in the exercise. The method of having the routes for the virtual walks on the screen with photographs embedded in the software, inviting comments and then 'writing' the barriers on projected map encouraged a very good discussion and made it possible to obtain some very useful information. Particular sensitivity had to be shown to the two blind members of the group. The procedure was helped by the fact that the participants were very knowledgeable about access issues. For this reason, they were not typical of many older people, but this does not negate the value of the exercise.

We were very pleased with the reception the work has received from both the Access Group and the St Albans City Council. The Access Group were particularly pleased with the map of barriers to access and the way in which the report gave them an opportunity to raise issues that they saw as important in a more comprehensive way than they would normally. The City Council welcomed the report and map because they are keen to address these issues and saw this as a free piece of consultancy which fitted in well with the Public Realm Delivery Strategy. We were pleased to have the opportunity to meet one of the objectives of the research project and to learn more about the reality of a subject that we believe is very important. The information obtained suggested that the assumptions built into AMELIA are reasonable. It also reinforced a view that we had already formed that there is little sound evidence on the physical capabilities of different members of the community and how many people have the various capabilities.

The method is replicable by others, providing they have a suitable starting point. We started from AMELIA and the need to see whether the assumptions built into it represent reality. Whilst we, almost certainly, would not have undertaken the consultation exercise if we had not been carrying out the AUNT SUE programme, it was not essential that the starting point was a piece of accessibility software.

Perhaps the most valuable aspect of this work has been the way that AMELIA has been able to help translate the often rather subtle requirements of those who find barriers to access that do not apply to most members of society, into robust findings in the



language and methodology used by policy makers, both political and professional which may well be implemented for the benefit of large parts of society.

## **CONCLUSIONS**

The conclusions from the consultation exercise can be summarised in terms of the following key lessons:

- Finding suitable people to consult with can be difficult and time-consuming, so allow sufficient time for this and, if necessary, explore a variety of possible channels to establish contact with suitable people;
- Ensure that all those conducting the consultation behave ethically throughout the process both individually and collectively, for example, ensuring that the participants fully understand what is involved in the process and that they can leave at any time they wish without having to explain why;
- Build up a good rapport with the group and make them feel appreciated;
- Ensure that the consultation exercise is interesting, by using a variety of approaches and using different people to lead the various exercises;
- If a particular exercise does not seem to be working, move onto another one, which means having more exercises available than are likely to be needed;
- Be flexible in your timetabling so that areas of particular interest to the participants can be explored to their satisfaction, but also ensure that you finish at the time specified since some participants may have other appointments or have made arrangements to be escorted home;
- Give the participants feedback from the exercise;
- Make yourself aware of the capabilities of all the members of the group, and ensure that everyone feels confident to participate for example, provide adequate commentary to participants with visual impairment in making presentations;
- Do not be afraid to use sophisticated analytical methods, but be aware that they must be explained fully;
- Take advantage of modern technology to facilitate communication;
- Produce a report of a high standard, both in terms of content and presentation, so that it will be taken seriously by policy-makers and others; it should strike the right balance between being written in terms that ensure that professionals take it seriously and being understood by the participants, politicians and the public;
- Do not assume that others that you communicate with are aware of all the issues, even if they seem obvious to you, such as the barriers that exist to movement;
- Use every opportunity to make key people in the policy-making process aware of the consultation exercise and the report.

## **ACKNOWLEDGEMENTS**

This paper has been written as part of a project entitled 'Accessibility and User Needs in Transport' which is being funded by the UK Engineering and Physical Sciences

Research Council (EPSRC) under grant GR/S90867/01 as part of its Sustainable Urban Environments Programme. The co-operation of the Environment Department of Hertfordshire County Council and St Albans City Council is appreciated. Special thanks go to the St Albans Access group and those who took part in the consultation exercise.

## REFERENCES

Department for Transport. 2005. *Inclusive mobility*, originally published 2002, updated 2005. Available from <http://www.dft.gov.uk/publications/inclusive-mobility> (accessed 2 March 2012).

Mackett, R. L., Achuthan, K. and Titheridge H. 2008a. "AMELIA: Making streets more accessible for people with mobility difficulties", *Urban Design International*, Volume 13, pp. 80-89.

Mackett, R. L., Achuthan, K. and Titheridge, H. 2008b. "AMELIA: A tool to make transport policies more socially inclusive", *Transport Policy*, Volume 15, pp. 325-412.

Mackett, R. L., Titheridge, H. and Achuthan, K. 2011. *Improving Access in St Albans – Report on a Consultation Exercise*, Report produced in the Centre for Transport Studies at University College London as part of the research programme of the AUNT-SUE Consortium, available from <http://www.aunt-sue.info/toolkit/amelia/consultation.html> (accessed 15 March 2012).

Mackett, R. L. Titheridge, H. and Achuthan, K. 2011. "A methodology for consulting the community about walking: AMELIA", Paper written for the WALK 21 12<sup>th</sup> Annual Conference, Simon Fraser University, Vancouver, Canada, 2-5 October 2011, available from [http://www.walk21.com/papers/Poster%20Monday\\_Mackett\\_AMELIA.pdf](http://www.walk21.com/papers/Poster%20Monday_Mackett_AMELIA.pdf) (accessed 15 March 2012).

Mackett, R. L., Titheridge, H. and Achuthan, K. 2012. "The impact of changes in access to local facilities on the wellbeing of elderly and disabled people", Presentation at TRANSED 2012, held in Delhi, India, 17-21 September 2012.

St Albans City and District Council. 2011. *St Albans Public Realm Delivery Strategy*, available from [http://www.stalbans.gov.uk/Images/St%20Albans%20Public%20Realm%20Delivery%20Strategy%20%28December%202011%29\\_tcm15-21470.pdf](http://www.stalbans.gov.uk/Images/St%20Albans%20Public%20Realm%20Delivery%20Strategy%20%28December%202011%29_tcm15-21470.pdf) (accessed 2 March 2012).

Titheridge, H., Achuthan, K., Mackett, R. and Solomon, J. 2009. "Assessing the extent of transport social exclusion among the elderly", *Journal of Transport and Land Use*, Volume 2, pp. 31-48, available from <https://www.jtlu.org/index.php/jtlu/article/view/44/56> (accessed 2 March 2012).

Titheridge, H., Mackett, R. and Achuthan K. 2011. "Can AMELIA be used for consultation?" Presentation at the CUPUM Conference, held in Lake Louise, Canada, 5-8 July 2011.