

## Briefing note, October 2013

# Access for All

## Recent Research Insights



As our population is ageing, accessibility is becoming an increasingly important factor in decision making. This note summarises outputs from a high-level impact seminar organised by University College London (UCL) in collaboration with the Department for Transport (DfT), in October 2013. The seminar presented recent academic research and considered its relevance to current policy debates.

### Main conclusions from discussions

- Policy making concerning accessibility should prepare for the impact of an **ageing population**
- **Accessibility has many policy dimensions**, not just spatial and physical (e.g. costs, timing, perceived safety and quality of service)
- Accessibility should be **integrated into different levels and spheres of policies**
- This will require increased **cross-sectoral working across government departments**
- There is a strong case for **partnership working between third sectors, academia and government**
- Research findings that identify accessibility benefits should attempt to express these in **monetary terms**, wherever possible
- **More focus** should be given to **people's well-being**.

### Key messages from the presentations

- **Providing 'Access for All' requires policy actions at various levels** – from local to strategic – and **across sectors**.
- **Investing in improving access for older people** will produce significant benefits to society, including **economic benefits**.
- **Information technology** provides innovative solutions to **gather data** about accessibility on a large scale. This could **better inform policy making**.
- **Network accessibility has a major influence in shaping land use patterns**. **Spatial accessibility** should be more widely used by policies.

### Areas for further research

- Greater **empirical evidence** on the problems caused by poor accessibility across all sectors is needed.
- Measuring the **benefits of improved accessibility**, particularly in monetary term, should be given greater priority.
- **Quantifying the indirect benefits** of accessibility policies is increasingly important (e.g. how transport-led policies benefit health care policies).

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## Summary Presentations

### “Accessibility Planning: recent insights from research” by Professor Peter Jones, UCL Civil, Environmental, & Geomatic Engineering

Most policy analysis at the macro level focuses on spatial locations and travel times between homes and various activity locations. But user-based research shows that many **people’s accessibility is also affected by travel costs, and concerns about safety and security**; in many cases people are heavily constrained by family responsibilities and busy daily schedules which make it very difficult to fit in events such as a visit to hospital, particularly if bus services are infrequent.

It is also important to **place the policy focus on access rather than mobility**, since increasingly the internet provides opportunities for access to activity opportunities without the need to travel (e.g. through internet shopping or a video link between the local GP surgery and a specialist consultant based in a hospital many miles away).

Findings from a study in West Yorkshire and East London have quantified how **local access on foot to public transport is strongly curtailed** for some groups by **factors in the street environment**, such as the need to climb steep gradients, cross busy main roads or walk along poorly lit roads at night.

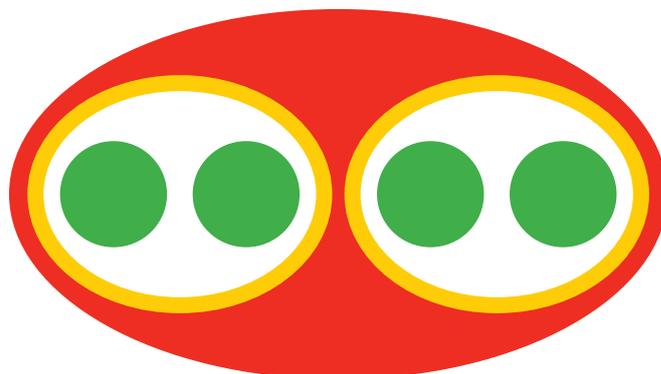
### “Improving accessibility for older people: the benefits for society” by Professor Roger Mackett, Centre for Transport Studies, UCL

The presentation explored the contribution of older people to society, the role travel plays in this, and whether the removal of barriers to access for older people would enable them to make a greater contribution, including economically.

- Increasing age does not reduce the **desire to travel**
- **Older people** make many **shopping, leisure and social trips**, but would like to make even more
- The **barriers to making more** are a combination of aspects of travel, impairments and other factors
- Older people should be consulted about **their needs in the planning process**
- The **success of concessionary bus travel passes** shows that the policy has enabled older people to lead happier, healthier lives

It was argued that investing in improved access for older people will produce significant benefits to society and the economy. Improving access should therefore be seen not as a cost or as carried out because of legislation or for moral reasons, but as a useful investment in an underused resource.

### Accessibility as a ‘nested’ concept



### The costs and contributions of older people in 2010 (at 2007 prices)

Contributions	Trips	£bn
Consumption	Shopping	76
Volunteering	Personal business	11
Routine childcare	Leisure/social	3
Social care	Leisure/social	34
Income tax	Commuting	15
Ni	Commuting	1
VAT	Shopping	15
Excise duty	Shopping, driving	2
Other contributions to the Exchequer		13
Other non-exchequer contributions		7
<b>Total</b>		<b>176</b>
Cost		£bn
Pensions		68
Age-related welfare		23
Age-related health		45
<b>Total</b>		<b>136</b>
<b>Net financial contribution to society</b>		<b>£40bn</b>

Table based on the study ‘Gold Age Pensioners’ published by the WRVS (now the Royal Voluntary Service) in 2011

## Summary Presentations

### “Improving accessibility to public transport” by Dr Catherine Holloway, Civil, Environmental, Geomatic Engineering, UCL

Whilst the accessibility of transport networks has improved vastly over the last decade in the UK, there is still much work to be done to **make public transport fully accessible**. For example, wheelchair users still face difficulties when accessing many public transport services.

Research conducted at the Pedestrian Accessibility Movement Environment Laboratory (PAMELA) has shown that:

- Poor accessibility of the **“last mile”** in a journey can completely subvert efforts made to ensure accessibility of public transport vehicles.
- Simple features such as a high **crossfall gradient** can make a footway inaccessible.

A **new method of data gathering for policy evidence** was proposed, which involves a **multi-stakeholder approach to data collection and interpretation**. This innovative approach based on **information technology** has the potential to gather evidence about accessibility on a large scale.

### “Integrating network accessibility into the planning of cities: an alternative approach” by Dr Kayvan Karimi, The Bartlett School, UCL

This presentation introduced Space Syntax spatial analysis methods as an alternative/complementary approach that can **enhance the way in which network accessibility is understood**.

This approach has several features:

- The network of **urban spaces** is seen as a **major generator of accessibility**. By understanding how any space is linked with any other space, it is possible to establish the patterns of spatial accessibility from a very local to a city-wide, or regional scale.
- The **visibility** and **permeability** of the urban network are used as the basis of the analysis, bringing together the physical and social aspects of networks into one framework.
- It is an **efficient and practical method for using accessibility in the planning of cities and forecasting the outcomes**.

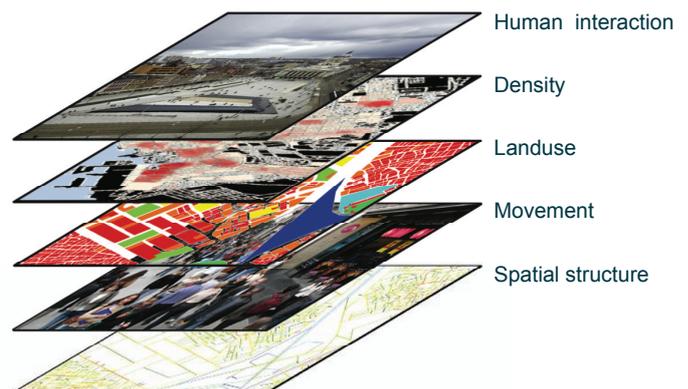
The **method has been successfully used** in designing and optimising urban projects of various scales, from local shopping centres to entire new cities, in many countries.

These spatial analysis methods have **helped to improve the treatment of accessibility** both in current plans and longer-term policy-making, as illustrated on the right.



### ARGMap

Input from user reviews (via a survey) and data from the ‘sensewheel’ measuring tool (via bluetooth) are collected using a smartphone application, stored in a database, and mapped again by the application, and available for users to see.



### Accessibility:

- Should be integrated into the planning and design processes
- Is a powerful tool to assess and forecast the performance of any layout (e.g. local plans, etc)
- Has a strong correlation with human behaviour and pedestrian movement
- Accessibility models could be used for balancing and distributing human activities.

### Policies should use:

- Accessibility patterns to plan, enhance, and optimise land use distribution
- Network accessibility analysis to coordinate and enhance transport systems (lines, hubs, ...)
- Spatial accessibility to create better places

# Summary of the discussions

## Improving policy-making

It was recognised that, even though considerable progress has been made in providing better accessibility, the **ageing population** means that the problem is growing and needs to be further addressed at many levels. Otherwise there is likely to be a negative impact on society and the economy.

Although DfT collects and publishes annually comprehensive data on spatial accessibility by different modes to various services, it would be valuable to decision makers to publish an analysis of **trends over time**. There is also scope to make more use of big data sets and advanced statistical techniques to address accessibility issues.

Financial concerns are an important component of accessibility, but can be over emphasised; **other factors**, ranging from timing constraints to personal security concerns, also need addressing.

The structure of government does not provide suitable mechanisms for **cross-sector policy delivery**, potentially resulting in major hidden diseconomies – this needs to be explored.

The **third sector** has the capacity to play a greater role in realising policy objectives.

Policy-makers should consider **taxis** as a part of the public transport network. **Shared taxis** could be a solution, especially for rural areas and in suburban areas during periods of low demand.



## Next steps:

**Establishing a Forum or other process for holding regular meetings between policy makers, academia and the third sector** was proposed to capitalise on the seminar and achieve significant policy outcomes.

The new UCL Transport Institute could facilitate this process.

The forum discussions should be more focused, and be conducted at **a cross departmental level, while engaging with the third sector and other interested parties**.

## Background

This seminar is part of a programme of activities funded through an EPSRC 'Impact Acceleration Award'. The initiative aims to create bridges between senior researchers, key policy makers and practitioners working in transport to ensure that significant research outputs are rapidly absorbed into policy making and practice, and have practical impact.

This seminar was an opportunity for key policy makers to hear about recent UCL academics' findings and to discuss with the researchers concerned their relevance to policy making and practice. The following institutions were represented:

- DfT
- the Department of Work and Pensions
- the Department for Communities and Local Government
- Transport Select Committee
- Transport for Greater Manchester
- Passenger Transport Executive Group
- Royal National Institute of Blind People
- Derek Halden Consultancy
- University College London

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