

Transport

Research outputs from EPSRC'S Sustainable Urban Environments (SUE) programme

The
ISSUES
Project

Transport Planning for Accessibility

Potential users/Target audience: Local Authorities; Transport Planning Practitioners and Researchers; Accessibility related software developers

The AUNT-SUE consortium has developed the AMELIA (A Methodology for Enhancing Life by Increasing Accessibility) software tool. AMELIA is a GIS based tool that can be used by transport planners to establish how many people meet accessibility benchmarks as a result of policy interventions.

website <http://www.aunt-sue.info/>

contact Prof. Roger Mackett at rlm@transport.ucl.ac.uk

AUNT-SUE

Inclusive Design for Transport Systems

Potential users/Target audience: Local Authorities; Transport Planning Practitioners and Researchers; Accessibility related software developers

The AUNT-SUE consortium has produced HADRIAN, a computer based inclusive design tool including an enhanced journey planner that compares an individual's physical, cognitive and emotional abilities with the demands that will be placed upon that individual depending on the mode(s) of transport available and the route options.

website <http://www.aunt-sue.info/>

contact Dr. Russell Marshall at r.marshall@lboro.ac.uk

AUNT-SUE

Accessibility Assessment for Transport

Potential users/Target audience: Local Authorities; Transport Planning Practitioners and Researchers; Accessibility related software developers

The Street Design Index GIS tool developed by the AUNT-SUE consortium has been created to enable designers and planners to model the urban environment more comprehensively, and to understand how its diverse features can affect users' perceptions of streets and public areas. It is being designed to help identify areas that are perceived negatively by pedestrians and so have the potential to restrict their movements.

Drawing on good practice and techniques developed from various approaches including accessibility, 'living street', design against crime and design quality audits, the Street Design Index widens the scope to perceptual factors such as fear of crime, natural

surveillance, key amenities such as WCs, furniture, signage and legibility, and uses a more comprehensive mapping of neighbourhoods, communities and routes.

website <http://www.aunt-sue.info/>

contact Prof. Graeme Evans at g.evans@londonmet.ac.uk

AUNT-SUE

Relationships between urban form and car use

Potential users/Target audience: Transport Planning Practitioners and Researchers; Local Authorities

The CityForm consortium investigated the relationships between urban form and car usage and found that traditional urban forms and high-density developments have a reductive affect on car usage. This is through a mix of restricting the feasibility of households owning two or more cars and greater provision of services locally.

website

contact Dr. Neil Ferguson at n.ferguson@strath.ac.uk

CITYFORM

Strategies and option generation for transport systems

Potential users/Target audience: Local Authorities, Regional and National decision-makers.

The KonSULT tool, developed by DISTILLATE, is a knowledgebase which provides an assessment of the potential contribution to policy of some 40 transport and land use policy instruments. The aim is to broaden the range of policy instruments which are considered, rather than to dictate a particular approach. Users will be able to focus on their objectives, problems or performance indicators, specify their relative importance, indicate the overall strategy which they wish to pursue and identify the context in which they are working. The option generator will then use the assessment scores for each instrument in KonSULT to identify those instruments which are likely to contribute most.

website <http://www.konsult.leeds.ac.uk>

contact Prof. Anthony May at A.D.May@its.leeds.ac.uk

DISTILLATE

Predictive Modelling in transport systems

Potential users/Target audience: Transport planners, fleet managers, Local Authorities

DISTILLATE have worked on predictive modelling of public transport systems, demand restraint analysis (used to aid the development of cordon pricing schemes) and policy impacts on metropolitan areas over prolonged time periods. The DISTILLATE Strategic Transport Model is a multimodal transport model used to assess a range of public transport related policies under different land use planning scenarios.

website <http://www.distillate.ac.uk/outputs/products.php#productsB>

contact Prof. Anthony May at A.D.May@its.leeds.ac.uk

DISTILLATE

Funding and Appraisal for Transport Schemes

Potential users/Target audience: Local Authorities, Regional and National decision-makers.

The DISTILLATE consortium has produced a Funding Toolkit which can provide decision-makers with an overview of potentially available funding sources to use for a variety of schemes and projects. The Toolkit provides advice on using various sources of funding, including private sector, central, regional or local government initiatives, initiatives by governmental organisations or bodies, and the voluntary/charitable sector. It also provides descriptions of existing sources, the types of schemes that they can be used for, case study examples of the funding sources used in practice, and the potential benefits and disadvantages of using the source.

website <http://www.distillate.ac.uk/outputs/products.php#productsB>

contact Prof. Anthony May at A.D.May@its.leeds.ac.uk

DISTILLATE

Carbon footprinting (SUE2¹)

Potential users/Target audience: Central government, Local Authorities, Carbon footprinters

The 4M consortium (Measurement, Modelling, Mapping and Management) will be investigating the reduction of emissions and pollution from transport, through the adoption of green travel schemes and clean air zones, shifts in fuel type and the adoption of hybrid or clean-fuel vehicles. This will form part of the development of a carbon footprint of Leicester.

website

contact Prof. Margaret Bell at margaret.bell@ncl.ac.uk

4M

Role of transport technologies in future urban mobility

Potential users/Target audience: Local authorities, Department for Transport, other transport professionals

The FUTURES consortium has deployed a range of quantitative and qualitative research methods, in partnership with stakeholders, to develop fundamental understandings regarding the role of a range of transport and transport-related technologies in future urban mobility. Specifically, this has involved research into practices such as: Tele-working lift sharing and the use of traveller information services (including dedicated services for older people); the use of way-finding technologies (including navigation systems); the environmental impacts (noise and air quality) of travel in urban areas; and the use of toll lanes in urban areas.

website www.sue-futures.org

contact Dr Mark Beecroft – meb@soton.ac.uk

FUTURES

¹ 'SUE2' indicates that the consortium is one of the second round of Sustainable Urban Environment consortia. These are beginning their work between late 2007 and mid 2008.

Policy Guidance

Potential users/Target audience: Local authorities, Department for Transport, other transport professionals, planning consultants

The final output from the SOLUTIONS programme will be a policy and practice guide reflecting all the elements of the project. It will include recommendations to government on strategic planning, balancing the merits of the compact city with the advantages of freeing up the housing market; and recommendations to local authorities, developers and planning consultants on the most sustainable forms for neighbourhood design. The consultation draft is expected early in 2009.

website www.suburbansolutions.ac.uk

contact Prof Hugh Barton Hugh.Barton@uwe.ac.uk

SOLUTIONS

London Report

Potential users/Target audience: Local authorities, Department for Transport, other transport professionals

The main case study from the SOLUTIONS work focuses on the Greater London Area.

website www.suburbansolutions.ac.uk

contact Dr Tony Hargreaves - ajh91@cam.ac.uk

SOLUTIONS

Physical activity and neighbourhood design

Potential users/Target audience: Local authorities, public health professionals, planning consultants and master-planners

Concern has often been expressed about increasing car reliance for short trips, the decline in local facilities and the resulting exclusion of non car users from opportunities open to the rest of the population. Yet little is known about how much people use local facilities and how they get to them. To remedy this the SOLUTIONS project has completed a major household survey across 12 contrasting suburban /exurban localities in 4 cities – Bristol, London, Tyne and Wear and Cambridge. The results show surprising variety in behaviour in different places, influenced by income/car ownership, local culture and spatial arrangement of the area. But there is also some consistency of behaviour allowing us to derive criteria for neighbourhood design: how far will people normally walk to get to particular activities? How does that vary for older people? What kind of localities are best at enabling high levels of local use and walking?

The website includes some early results and examples of neighbourhood designs tested against accessibility criteria (see the Cambridge Report). Fuller results should be available before the end of 2008.

website www.suburbansolutions.ac.uk

contact Professor Hugh Barton - Hugh.Barton@uwe.ac.uk

SOLUTIONS

GIS-Participation

Potential users/Target audience: Local Authorities – Town Planning, Urban Design, Conservation, Transport, Tourism

The InSITU consortium (Inclusive and Sustainable Infrastructure for Tourism and Urban Regeneration) has produced a Geographic Information System (GIS) participatory planning and design tool. This is effective at neighbourhood, pedestrian route and destination facility level of application. Particularly useful for inclusive design and hard to reach groups, using large scale annotated maps, subsequently digitised and visualised for further iteration and design solutions.

website	http://insitu.org.uk/index.html
contact	Steve Shaw at s.shaw@londonmet.ac.uk

INSITU