



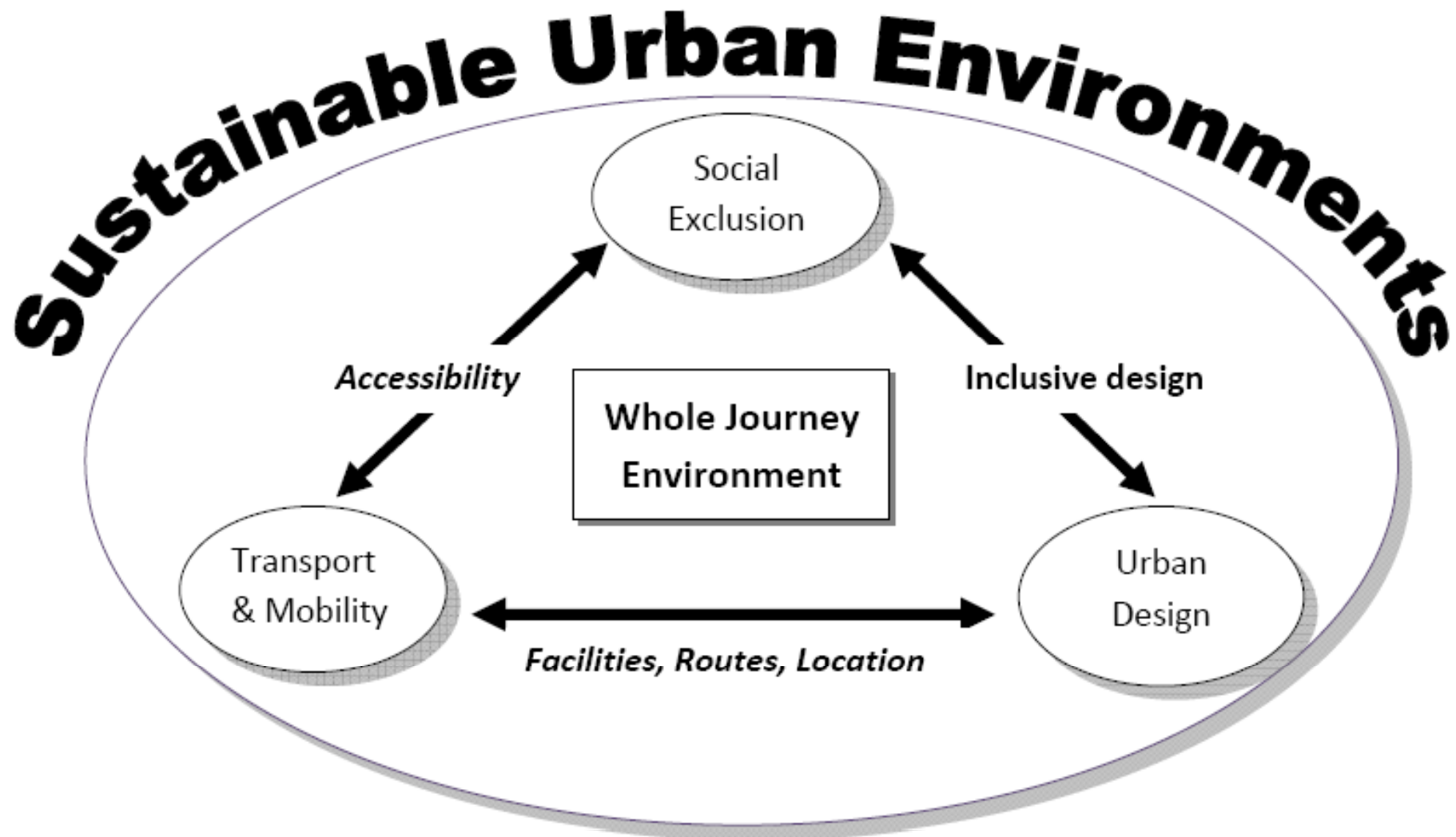
AUNT-SUE

Accessibility &  
User  
Needs in  
Transport for  
Sustainable  
Urban  
Environments

*Introduction:*

Prof Graeme  
Evans, PI

# key themes



# problem domains

## in social inclusion, urban design + transport

- lack of planning standards on what constitutes ‘reasonable’ transport provision and ‘accessibility’
- lack of analytical tools to assess the impacts of transport and urban development on social inclusion
- need for a holistic approach to the *whole journey environment* and *inclusive design*
- lack of effective dissemination and take-up of guidance, decision support tools and knowledge transfer

# why is social exclusion important?

**...because social exclusion coexists with (or can in fact be caused by) inclusion, research on exclusion cannot be disconnected from the analysis of change on the 'included' side of society**

*[ Social Indicators: Problematic Issues, EC1998 ]*

**good design for people with disabilities is frequently good design for everyone**

*[RNIB, 2003]*

**social exclusion is a complex, messy phenomenon, as such it is not one that can be reduced to simplicities in terms of either questions or answers**

*[Le Grand, CASE 1998]*

**We need to meet people's needs for access and economic progress in better ways. New technologies and cleaner cars will be part of the solution, but new approaches to travel, living and working will also be needed**

*[Sustainable Development Strategy, 1998 ]*

*[ EPSRC ]*

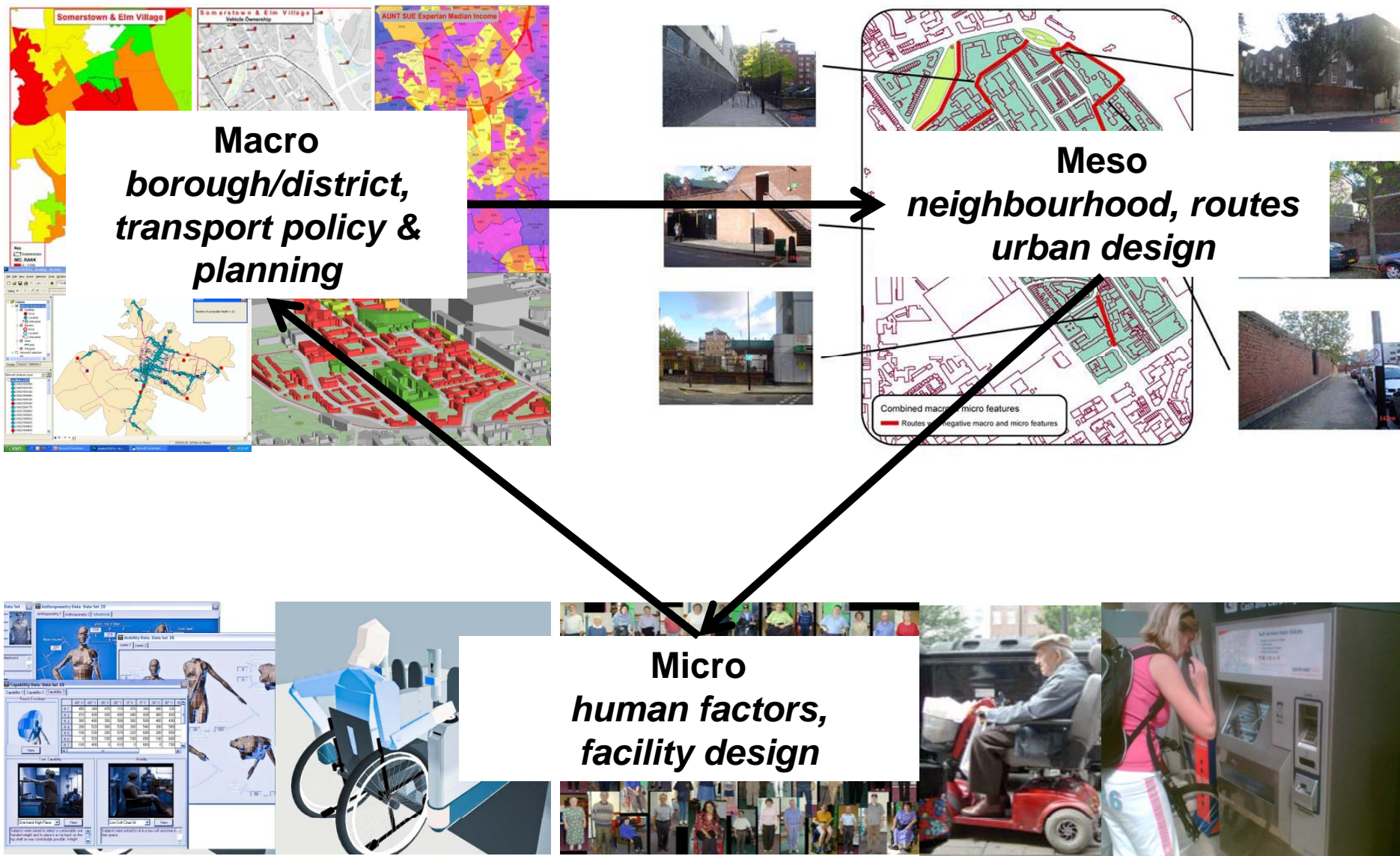
**AUNT-SUECONSORTIUM**

**TOWARDS A SUSTAINABLE URBAN ENVIRONMENT | URBAN DESIGN + TRANSPORT | THEME: SOCIAL INCLUSION**

# AUNT-SUE vision

**the shared vision is to produce rigorous methodologies for sustainable policies and practices that will deliver effective socially inclusive design and operation in transport and the public realm from macro down to micro level**

# Scale matters



[ EPSRC ]

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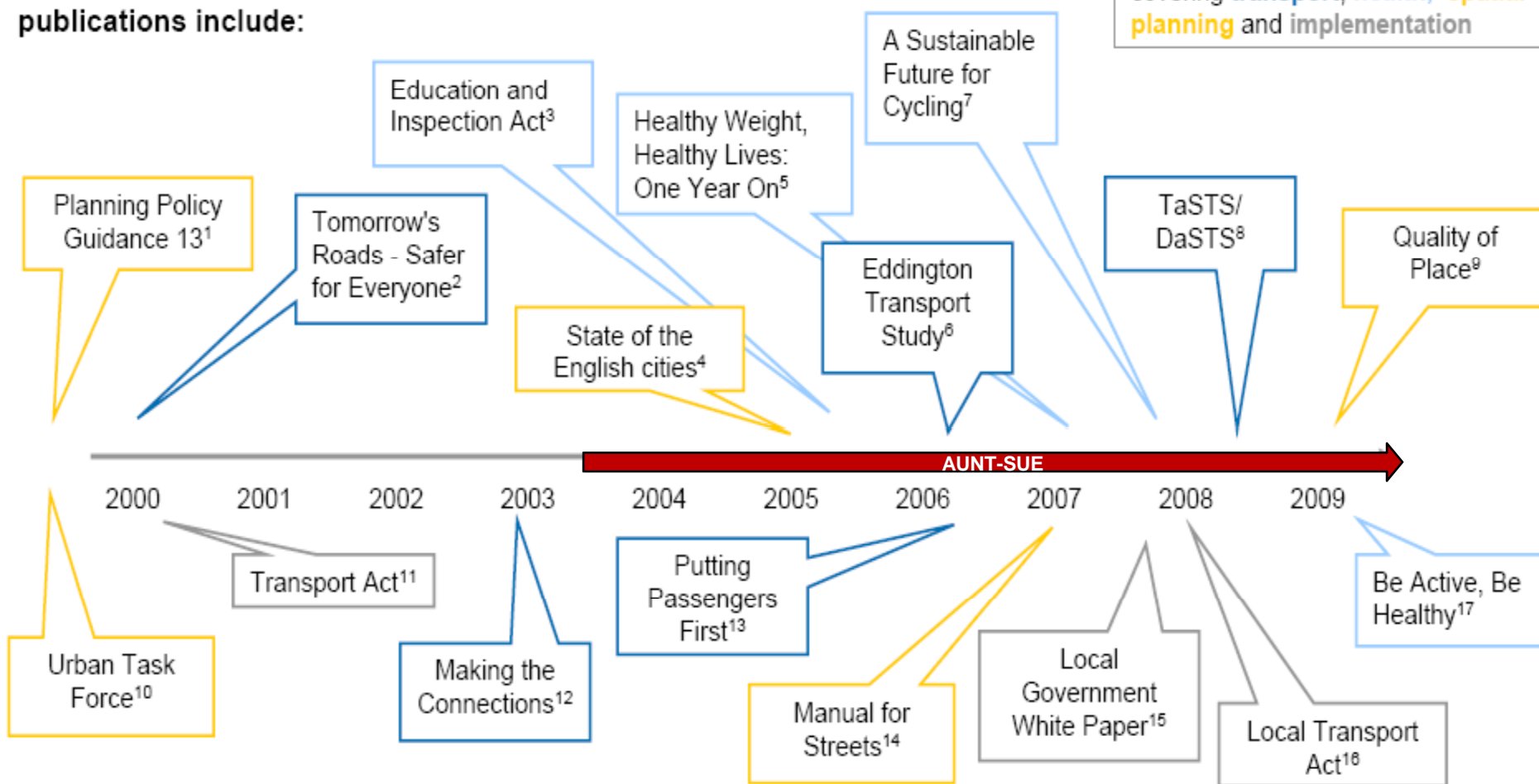
## principal aims to deliver the vision

- to examine current policies and practices
- to develop test bed areas and sites
- to develop methods incorporating views of excluded people
- to identify the barriers to inclusive and sustainable policy, design and operation
- to develop sustainable & inclusive evaluation methodologies
- to develop practical tools to evaluate social exclusion and the impact of interventions
- to develop transferable solutions and dissemination of best practice

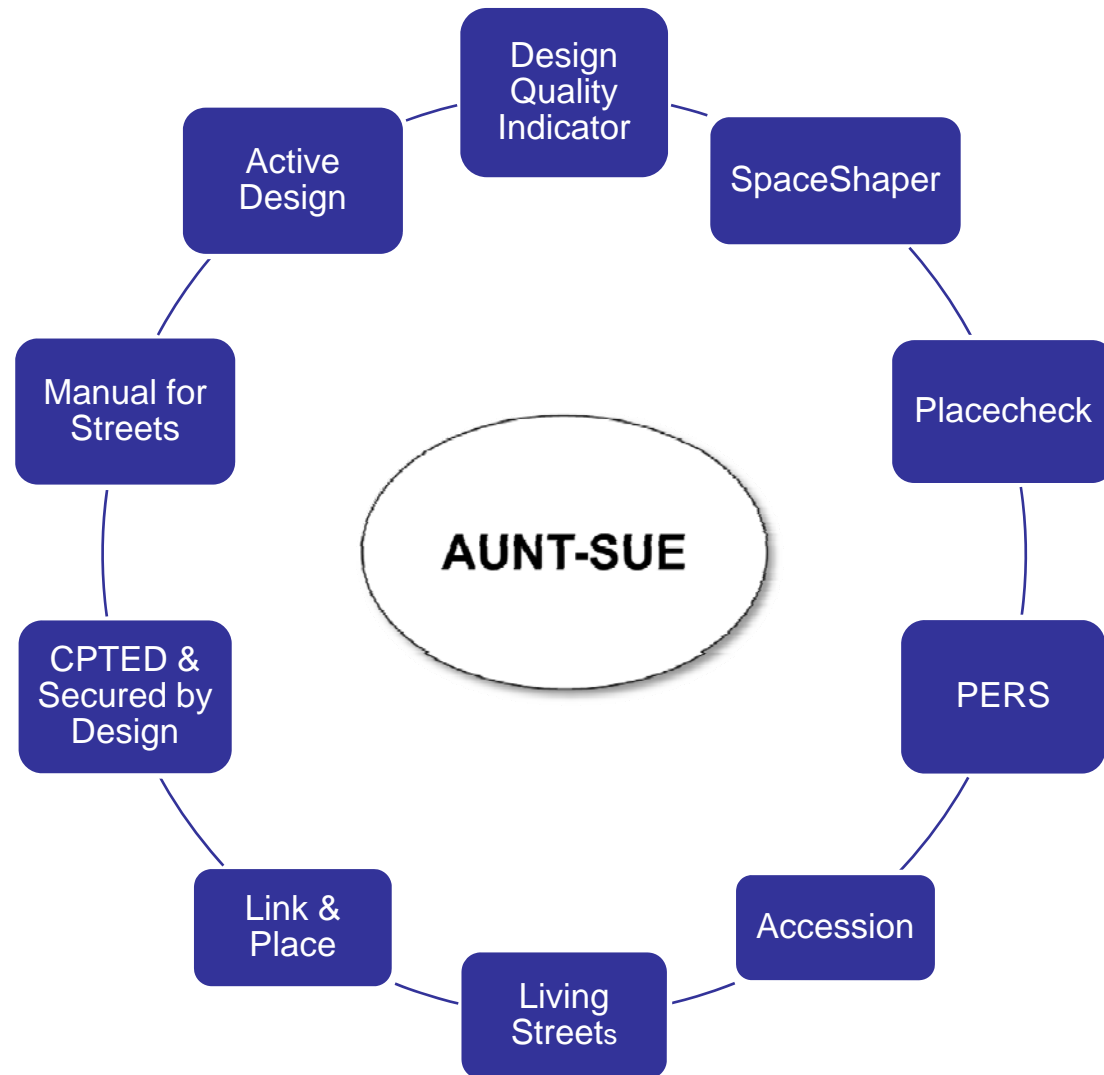
# transport and urban development

There has been no recent focus on using transport to affect urban success holistically. Relevant policy publications include:

Selection of policy documents covering **transport**, **health**, **spatial planning** and implementation



# Guidance & Toolkits... *Good Practice, Inclusive?*



# key methods and approaches

## POLICY

- benchmarks
- develop accessibility model
- incorporate benchmark into tools
- interaction with practitioners
- use of tool for consulting socially excluded

## DESIGN & OPERATION

- HADRIAN CAD design/virtual simulation
- collect transport-relevant data from individuals
- urban design
  - street + facility audits
  - GIS mapping, GIS-Participation
- street environment design index
- fear of crime analysis & iteration
- interchange access design

## EVALUATION

- testbed sites/areas
- lab-based models
- user/journey surveys
- database/integration
- evaluate policy/benchmarks
- visualisation, scenarios
- case studies
- *Agents of Change* and practitioner networking
- dissemination

# Research tools and application

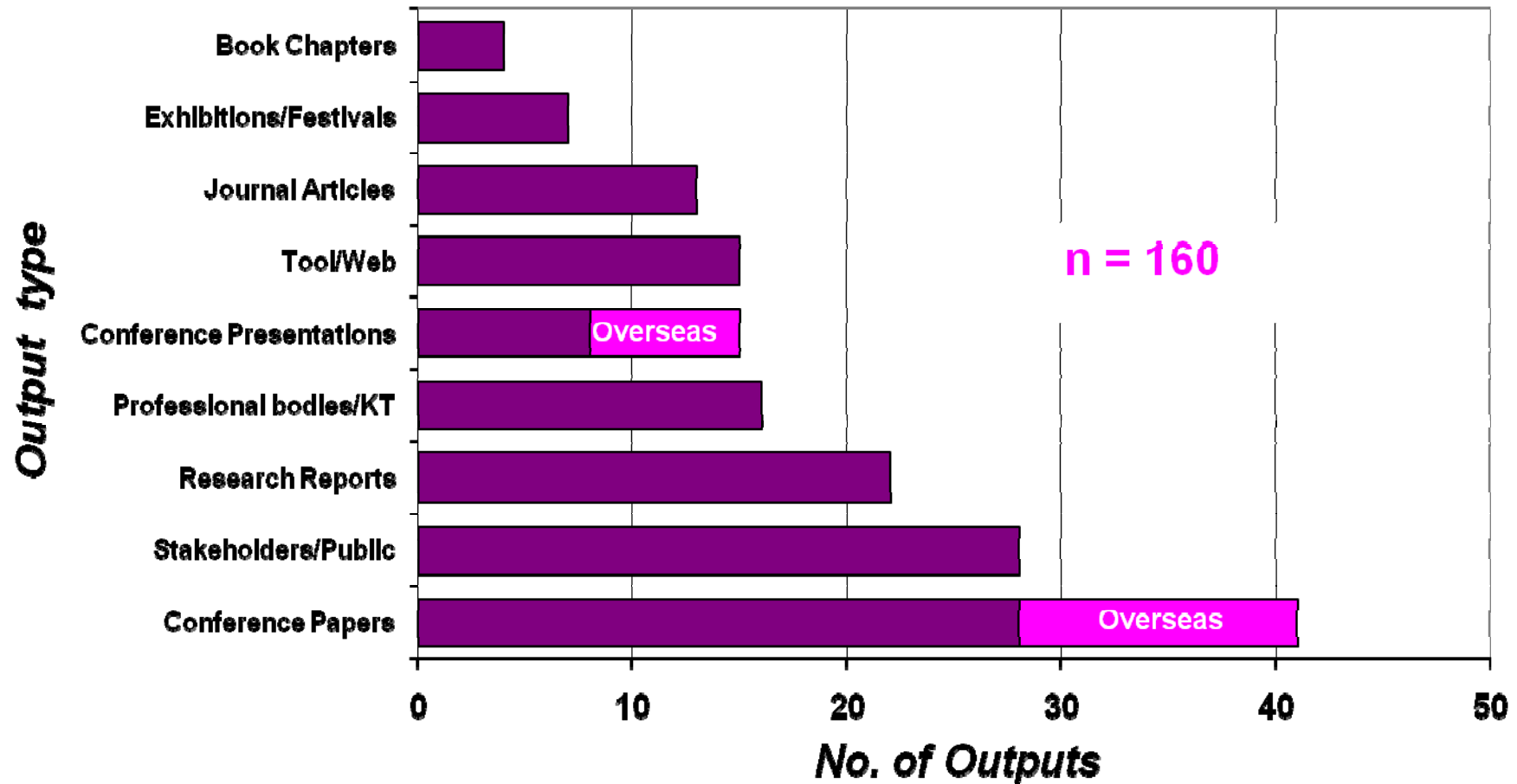
Research Tool	Purpose	Key method / platform
Benchmarking	Reasonable levels of accessibility	Target (focus) group needs & aspirations, NTS analysis
VISIT - <i>Visualising Safe &amp; Inclusive Environments</i>	Design of interchanges, routes and facilities	GIS-P, Mapwalks, 2D/3D visualisation, Street audits
AMELIA - <i>A Method for Enhancing Life by Increasing Accessibility</i>	Transport Policy, planning and impacts	GIS accessibility model, PP-GIS, Consulting about Accessibility
Street Design Indicator (SDI)	Design quality audit, Community safety	Urban design analysis, GIS community mapping, GIS-P, resident surveys
Street Environment Index (SEI)	Mapping fear, Prospect Refuge	Isovists, GIS-P, professionals survey, GIS synthesis
i-Journey	Inclusive Journey Planner	Web database prototype
HADRIAN	Inclusive Design, Journey Stresstimator	3D CAD human modelling database, web route planner

# examples of outputs

- Benchmarks and indicators for policy guidance and transport planning
- Geographical Information System (GIS) based modelling for policy guidance, transport planning and participation
- Street design quality and Street environment index
- Computer-aided design (CAD) visualisation of facilities, information systems and amenities
- Practitioner network and 'testbed' facility; research tool user guides and good practice case studies
- Workshops, presentations, conference, academic and trade papers, web resource [www.aunt-sue.info](http://www.aunt-sue.info) , AUNT-SUE information system and database
- Professional development and knowledge transfer through partner organisations and Practitioner Network

# AUNT-SUE OUTPUTS

## AUNT-SUE Research Outputs (2004-9)



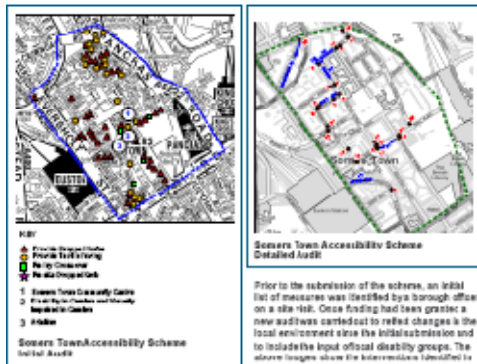
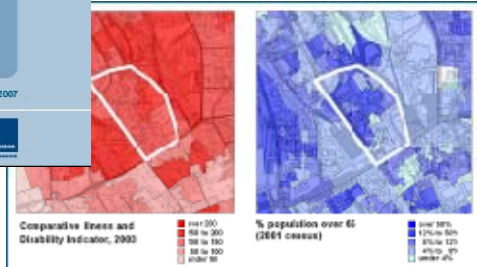
# Impacts and take up of research

## Guidance for Submission of Local Accessibility Schemes

Prepared for all London Boroughs and Sub-regional Partnerships



March 2007

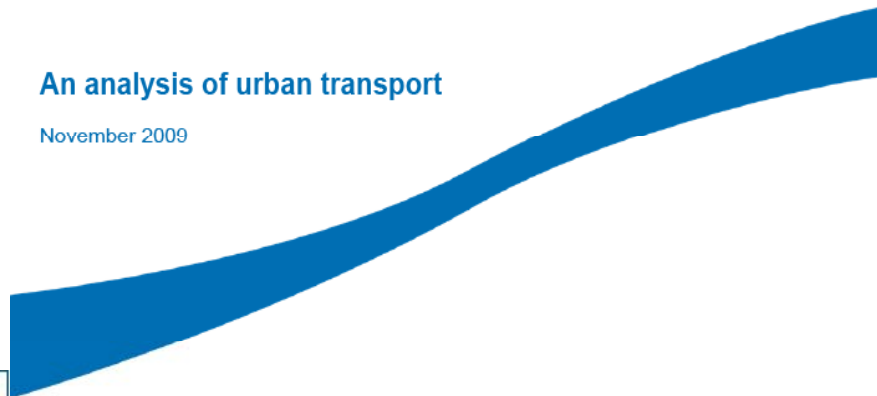


**CabinetOffice**  
The Strategy Unit

This is not a statement of Government policy

## An analysis of urban transport

November 2009



Department for Transport

DH Department of Health

defra

department for children, schools and families

**BURA**  
BUREAU OF URBAN REGENERATION AND TRANSPORT ANALYSIS

Railway stations around the country are the focus of major regeneration plans. This BURA forum will explore the practical aspects of transforming railway stations and creating sustainable transport...

# INTERCHANGES

How are we going to do what needs to be done?

Docklands Light Railway

amec  
Developments

LCR

'Interchanges' is welcomed by Councillor Conor McAuley Newham's Mayor Adviser for Regeneration

Successful delivery relies upon a shared vision from the key stakeholders. BURA has brought representatives together 'reality check' the key issues

[ EPSRC ]

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Ten years ago, a knowledge gap was observed by Boarnet and Crane (2000, p.14) *'it is not that urban design and transportation behavior are not linked, or that urban design should never be used as transportation. Rather, we conclude that we know too little about the transport aspects of the built environment'*.

AUNT-SUE, in adding the social exclusion dimension to sustainable urban transport and design, has sought to bridge the divide between the socio-medical ('evidence-based') and environmental-technological ('deterministic') approaches to access and accessibility, through the development of an inclusive design approach to the whole journey environment, from a community perspective.



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