Community Severance
Southend-on-Sea
case study

& other information on transport and health

Dr Jennifer Mindell
Reader in Public Health, UCL
j.mindell@ucl.ac.uk

@j_mindell
Community severance
Community severance

- Appleyard and Lintell, San Francisco


![Diagram showing relationships between traffic volume and speed, physical activity, independent mobility, use of streets as social spaces, journeys not made, access to services, goods & people, social networks, and mental & physical health & healthy development. The diagram includes positive and negative effect arrows.]
Community severance (CS)

- Traffic volume and speed interfere with normal activities and reduce social contacts; studies demonstrate that reduced social contact and access to goods and services are detrimental to health, e.g., Berkman & Symes Almeida study.
- CS particularly affects older people and children.
- No studies on effects of CS on mental or physical health.
- However, CS cannot be quantified effectively at present.
- Robust interdisciplinary methods to measure the health impact of residential CS need to be developed urgently.
Street mobility and network accessibility: towards tools for overcoming barriers to walking amongst older people

www.ucl.ac.uk/street-mobility

New definition

Transport-related community severance is the variable and cumulative negative impact of the presence of transport infrastructure or motorised traffic on the perceptions, behaviour, and well-being of people who use the surrounding areas or need to make trips along or to cross that infrastructure or traffic.

www.ucl.ac.uk/street-mobility/docs/ucl_streetmobility_paper04
Participatory mapping

Questionnaire survey

Objective measurement
- Space syntax
- Pedestrian environment
- Traffic & pedestrian flows

Stated Preference analysis

Modelling interventions
- Reduction in severance
- Economic benefit

Outcomes
- Suite of tools
- Values for WebTAG
• Street surveys
• Longer interviews
  – community groups
  – individuals
My neighbourhood, my streets questionnaire

Please make sure you have read the information sheet before you complete this questionnaire

STREET MOBILITY & NETWORK ACCESSIBILITY PROJECT

UNIQUE ID# ______
Developing a survey tool

• Pre-existing questions:
  – Demographics
  – Socio-economic factors
  – Self-rated health
  – Longstanding illness
  – Disability
  – Wellbeing (SWEMWBS)

• Developed questions about perceptions of own road, busiest road, and walking around in their area

• Cognitive testing
• Pilot
• Survey of random sample of residents

www.ucl.ac.uk/street-mobility/docs/ucl_streetmobility_paper05
Video surveys

• Motor traffic flows
• Pedestrian flows
• Crossing behaviours

www.ucl.ac.uk/street-mobility/docs/ucl_streetmobility_paper07_

© Gail Seres-Woolfson
Street audit

- PERS (Pedestrian Environment Review System)
- Links
- Crossings

© Gail Seres-Woolfson
Spatial analysis revealed that although main roads have high local to-movement potential – they’re easy to access on foot – most streets that aren’t main ones have low through movement potential – offering pedestrians limited route choice.

......but most streets offer limited route choice
Case study 1: Woodberry Down, Hackney

Case study 2: Finchley Road, Camden

Case study 3: Queensway, Southend-on-Sea

Case study 4: Stratford Road, Birmingham

Omnibus survey across GB
Findings from Case Study 3

Postcard of Southend-On-Sea, c1970
1. Problems
A need to cross Queensway

Many people need to more than once a week

Most recent purpose?

= 71%
= 16%
1. Problems

Summary

- People need to cross Queensway
- But pedestrian environment is poor:
  - Route choice
  - Connectivity
  - Crossing infrastructure
  - Traffic volume on Queensway
  - Pedestrian barriers, eg. guard rails
For more information about this project, see www.ucl.ac.uk/street-mobility
www.ucl.ac.uk/street-mobility/publications

Working Paper 01
Initiating dialogue between stakeholders and establishing a common language for community severance through cross-disciplinary workshops (pdf)

Working Paper 02
Quantifying community severance - A literature review (pdf)

Working Paper 03
The value of the barrier effect of roads and railways -- A literature review (pdf)

Working Paper 04
What do we mean by “community severance”? (pdf)

Working Paper 05
Developing a questionnaire to assess community severance, walkability, and wellbeing: results from the Street Mobility Project in London (pdf)

Working Paper 06
Review of non-academic literature and resources relating to community severance (pdf)

Working Paper 07
Pedestrians avoid busy roads: evidence from video surveys and bus stop data (pdf)

Working Paper 08
How do pedestrians balance safety, walking time, and the utility of crossing the road? A stated preference study (pdf)

Working Paper 09
Pedestrians’ preferences regarding signalised crossings, footbridges, and underpasses (pdf)

To walk to avoid using footbridges and underpasses? See our working paper #9 tinyurl.com/gr77xm

Community Severance
@StreetMobility
How long are pedestrians willing to walk to avoid crossing a busy road? How much would they pay? See our paper #8 tinyurl.com/fkgqgq

Community Severance
@StreetMobility
Do pedestrians avoid busy roads? Evidence from video surveys. Street Mobility Working Paper #7 is available online tinyurl.com/juasq60

Embed View on Twitter
A toolkit to assess community severance

Street Mobility & Network Accessibility project
Community Severance Measurement Toolkit

A. Introduction
B. Participatory mapping / street surveys
C. Pen-and-paper survey questionnaire
D. Other tools
   – Walkability assessment tool
   – Street audits of pedestrian environment eg PERS, Living Streets
   – Video survey / observation of pedestrian and motor traffic
E. Valuing local situation: Stated preference tool
Street mobility and network accessibility

- Prof Peter Jones
- Prof Laura Vaughan
- Prof Muki Haklay
- Prof Nora Groce
- Dr Shaun Scholes
- Dr Paulo Anciaes
- Dr Ashley Dhanani
- Dr Jemima Stockton
- Dr Sadie Boniface
- Ms Louise Francis
- Ms Rebecca Payne
- Ms Barbara Brayshay
- Dr Lusine Tarkhanyan
Other sources of information

TRANSPORT AND HEALTH
Members of the THSG are practitioners, policy-makers, and academics; from transport planning or engineering, public health, and other disciplines; and from public and private sector organisations. It functions primarily as an electronic network, plus occasional meetings. It also responds to government consultations and interacts with other membership groups.
Health on the Move 2

- Downloadable from
  www.transportandhealth.org.uk/?page_id=32

- Free to THSG members
- For non-members, the cost to download and keep is the same as annual membership
Publications

Health on the Move 2

Read Introduction
A vision of life with a healthy transport system
Electronic copy of Health on the Move 2

Quote from Sir Liam Donaldson:

Public health needs ideas, it needs inspiration, it needs champions. Such are the scale and complexity of the challenges that must be addressed.

The causes of ill health, the solutions to some of our major health problems and the sustainability of our environment are intricately interwoven with the way that we move from place to place both locally and across the globe. The scope of any analysis in this area of public health also needs to encompass the way that goods and services are accessed and the ways that groups of people gather.

Health on the Move 2 is a clear and comprehensive account of what would constitute a healthy transport system.

The report is unusual in that it blends evidence, authoritative opinion from experts in their field as well as creativity. It is not only an educational tool and a series of recommendations for policy-makers, it is a powerful basis for advocacy. No-one should underestimate the scale of changes required to realise the vision for the future set out in this ground-breaking report.

If just a small number of towns and cities in the country would act on the ideas and evidence in it then we would begin to see the shape of a new future in which every move is a healthy move.

Sir Liam Donaldson
Journal of Transport and Health
Journal of Transport and Health

• See other flyer
• J Transp Health won the American publishers’ society’s PROSE award 2016 for the best new journal in the social sciences.
• Home page: www.journals.elsevier.com/journal-of-transport-and-health/
• Contents: www.sciencedirect.com/science/journal/22141405/2/4
• To submit a new manuscript: www.evise.com/evise/jrnl/JTH
Editorials and Editor’s Choice papers are ‘Free to access’ for 12 months. E.g.

• Active travel is (generally) good for health, the environment and the economy

• Environment, beliefs and behaviour
  www.sciencedirect.com/science/article/pii/S2214140516000190

• Public transport and health: Publicising the evidence
  www.sciencedirect.com/science/article/pii/S2214140516301487
International Conference on Transport and Health

- ICTH-2015 UCL
- ICTH-2016 USA
- ICTH-2017 Barcelona
Active Living Research

- [http://activelivingresearch.org/](http://activelivingresearch.org/)
- Next conference: 26 Feb – 1 Mar 2017, Clearwater Beach, Florida