Introduction to the Street Mobility project and Toolkit

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On behalf of the Street Mobility and Network Accessibility project team:

www.ucl.ac.uk/street-mobility

@streetmobility

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Street Mobility project team

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Mapping for Change

- Louise Francis
- Rebecca Payne
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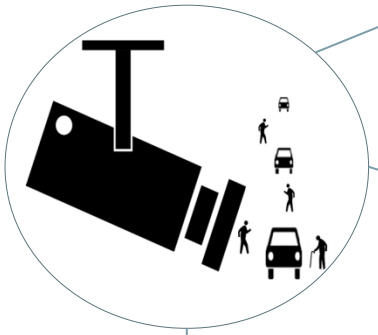
- Claire Baldock

Main objectives

- Increase understanding of residents' perceptions and priorities for addressing Community Severance (CS) on busy main roads
- Develop questionnaire tools to measure CS at the individual level
- Measure local access and walkability
- Develop a CS index for busy roads, based on readily available data
- Obtain estimates of the values to residents and the local economy of reducing CS
- Test these measures on four road corridors
- Analyse the impact of CS on wellbeing and other social outcomes

Main components

Participatory mapping

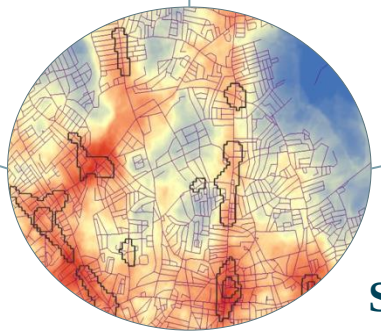


Video surveys

Household survey

The UCL *Street Mobility* project

Street audits



Spatial analysis

Stated preference survey

Case studies

Seven Sisters Road (London)

Finchley Road (London)

Queensway (Southend-on-Sea)

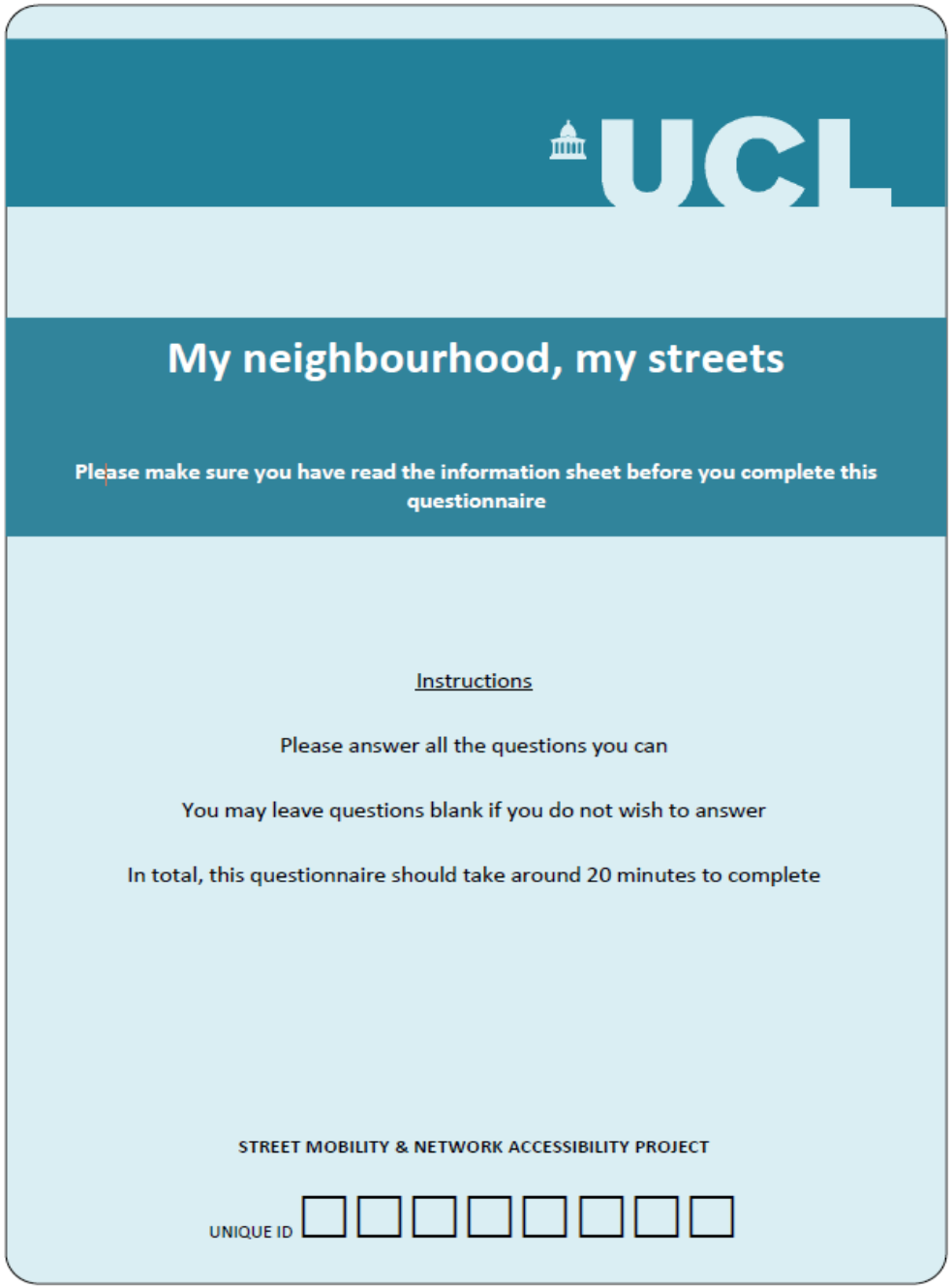
Stratford Road (Birmingham)

Participatory mapping

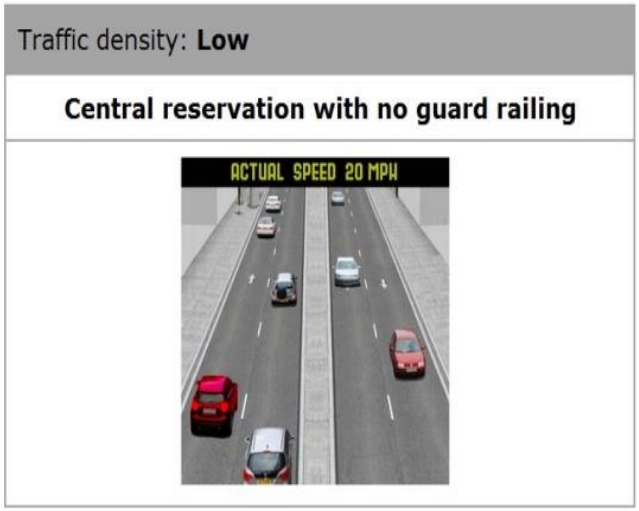
- Informal mapping sessions
- Informal street mapping
- In-depth interviews & participatory mapping workshops

Household survey:

Health and neighbourhood mobility



Stated preference survey



Scenario: there is a bus stop on the other side of the road that is in a cheaper travel zone than the bus stop on this side

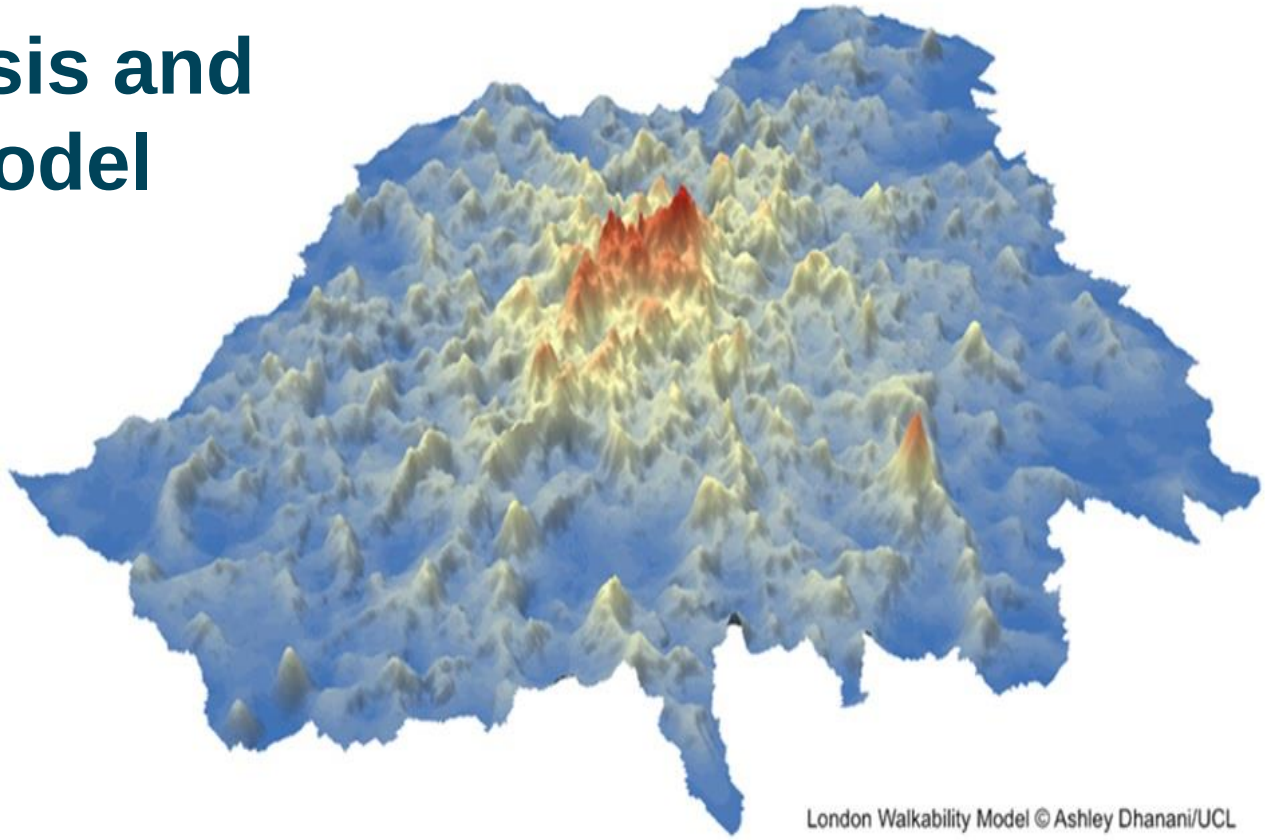
In this scenario, which of the two options would you choose?

Option A	Option B
Cross at this point Saving 80p off your one-way ticket cost	Do not cross the road and pay the higher ticket cost

Option A Option B

- 423 respondents across 4 areas
- Each respondent answered 8 questions, each one with different road conditions

Spatial analysis and walkability model



- **Walkability** – reflects potential for walking
- **Community severance** can occur where high walkability co-exists with high motorised traffic levels

Street audit

PERS

Link Assessment Form

Link Name:

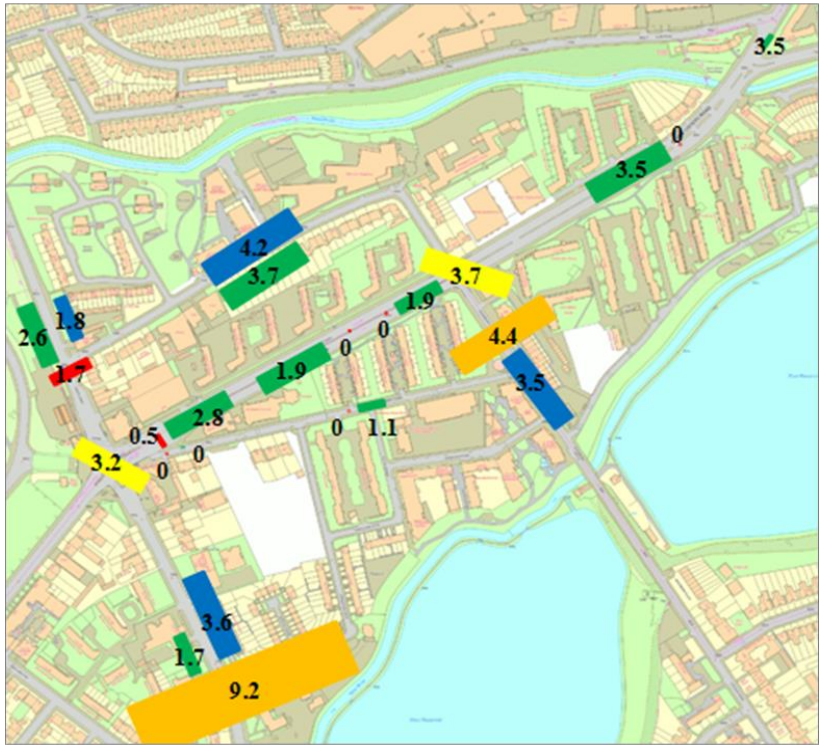
Location:

Reviewer: **Time:**

Parameter	Checklist Factors	Checklist +ve	Checklist +/-	Checklist -ve	Overall Score -3 to +3	Design Comments
Effective width	Width for pedestrian flow					
	Wheelchair accessibility					
	All sections acceptable width					
	Separation from traffic					
	Allowance for obstructions					
	Pedestrian congestion					
Dropped kerbs	Located on desire lines					
	Adequate capacity					
	Level dropped/flush					
	Gradient of drop					
	Consistency					
	Frequency of dropped kerbs					
Gradient	Severity					
	Steps/ramps					
	Rest points					
	Undulations					
	Appropriate handrails					
	Presence of crossfalls					
	Presence of obstructions					
	Location/alignment					
	Overhead obstructions					

Video surveys

% OF MOBILITY-IMPAIRED



- Walk along pavement
- Walk along pavement, crossing side streets
- Signalized crossing
- Zebra
- Informal crossing

Street Mobility Toolkit

- Designed to assist local authorities, consultants and local communities to better understand CS and what to do about it
- Provides advice on how to measure CS, and to assess impacts on local communities
- Some tools aimed at local communities, others at transport professionals

Contents of the Toolkit

- **Introduction:** overview of the toolkit
- **What we know:** summary of the evidence on the effects of busy roads on local people and key project findings
- **Participatory mapping:** approach and case study
- **Health and Neighbourhood Mobility Survey: s**urvey instrument and case study
- **Video surveys:** what to do and case study
- **Walkability models:** overview and case studies
- **Valuation tool:** summary of the interactive tool
- **Other useful tools:** street audits and space syntax

Summary of tools and applicability

Tool	Why use it?	What resources are needed?			
		People	Expertise	Money	Time
Participatory mapping	To get local community members' views on the neighbourhood, including where they do and do not go, why, and how	Local community, NGO[2], social enterprise, university, local government, businesses	Helps but not necessary	£	🕒
Health & neighbourhood mobility survey	To find out the proportion of people locally who are affected by various problems, and which groups are particularly affected	Local community, NGO[2], social enterprise, university, local government, commercial organisation	Helps but not necessary	£	🕒🕒
Video surveys	To measure the amount of motor and pedestrian traffic using roads, and recording where people cross roads	Local government, university, commercial organisation	Siting the cameras; reviewing the films; interpreting the findings	££	🕒🕒
Walkability models	To assess the potential of an area for pedestrian travel	Local government, university, commercial organisation	Using data sources; software; very powerful computer	££	🕒🕒🕒
Measurement and valuation tool	To estimate the cost to local residents and society of the barrier effect of busy roads	Local government, NGO[2], university	Using data sources	£	🕒
Space syntax[3]	To show which street segments are most useful for connecting different areas, and how easy it is to walk from one place to another	Local government, university, commercial organisation	Using data sources; space syntax software; interpreting the findings	£	🕒🕒🕒
Street audits	To assess how pleasant and easy it is to walk around the area	Local community, NGO[2], social enterprise, university, local government, commercial organisation	Consistent assessment of each feature	£ to ££	🕒 to 🕒🕒🕒

The toolkit is available to download from:

https://www.ucl.ac.uk/street-mobility/toolkit

For more information about the project, see:

https://www.ucl.ac.uk/street-mobility/project

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