STREET MOBILITY PROJECT
Introduction

March 2017

STREET MOBILITY PROJECT TOOLKIT: MEASURING THE EFFECTS OF BUSY ROADS ON LOCAL PEOPLE

This document is an introduction to the toolkit that contains a number of tools we have developed so that local government and local communities can assess community severance in their area.

INTRODUCTION

Most people want to live in pleasant areas that are clean and quiet, and where it is easy to walk or cycle around the neighbourhood. Busy roads can cause problems for people who want to walk along them or to cross them, and also for people living nearby. In addition to noise and air pollution, the main difficulties are caused by:

- the volume, or sometimes the speed, of traffic;

- too few crossings; and

- not enough time to get across.[1]

All these can be unpleasant, but they can be more than that too – they can affect people's health and wellbeing. The impacts can be direct, for example from air pollution. They can also be indirect: for example, health can be affected when busy roads separate local residents from goods, services, or other people. This barrier effect is sometimes called 'community severance'. The UCL Street Mobility team has developed this toolkit, offering a suite of research approaches to identify, assess and value this barrier effect or 'community severance'.

MOTOR TRAFFIC FORMING A BARRIER TO PEDESTRIANS CROSSING FINCHLEY ROAD

IMAGE © UCL STREET MOBILITY PROJECT

The Toolkit

This toolkit contains tools developed to help local government and local communities assess, and value the costs of, community severance in their area. Knowing what the problem is in more detail helps to make a case for change.

The toolkit is divided into eight sections, as follows:

Introduction (this section) provides background information about the purpose of this project. It includes a table summarising the various tools for assessing the barrier effects of busy roads and what resources are needed to use them.

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[1] Other problems, such as poor quality pavement, poor lighting, and fear of crime can occur as well, but are not specific to busy roads.

What we know summarises the evidence about what 'community severance' is and how it affects people's lives, including their health and wellbeing. It also includes some references, for anyone who wants to read more about this. All work produced by UCL Street Mobility team members is available to all (open access). Where possible, we have used freely available sources for referencing other people's work, but access to some studies may be restricted.

The next five sections explain the tools we have created to help local government and communities measure the effects of busy roads (Participatory mapping, the Health and Neighbourhood Mobility survey, Video surveys, Valuation, and Walkability).

The last section describes other, existing tools that we have found useful (Space syntax, Street audits).

Which tool (or tools) you use depends on:

▪ What you want to find out and/or measure; and

▪ What resources you have available (time, people, expertise, money).

Table 1 (below) will help you decide which tool(s) to use. It lists the tools, describes what they are for, and what resources you need if you want to use them. Each of the tools can be used independently, but can also be used in combination with any of the other tools, and in any order.

For example, a community group might use participatory mapping and a street audit. A local authority might start with the Health and Neighbourhood Mobility survey and the valuation tool. A single tool can provide useful information, but using a range of tools will provide a more comprehensive assessment. The tools allow the problem to be broken down into smaller sections that can be dealt with by different people or groups. The toolkit also helps to forge links across sectors and departments. Local community groups and local government staff working together can produce the best information.

Certain people, such as children and the elderly, or those with physical or mental health impairments, may be particularly sensitive and vulnerable to the effects of busy roads. Several of the tools contained in this toolkit can be used to identify and assess such inequalities.

The tools will generally be used to measure the current barrier effect. However, some of the tools can be used to predict what the effects might be if there are changes. They can contribute to a vision of what streets can be like. They can also be used to monitor or evaluate the effects of interventions.

FINCHLEY ROAD UNDERGROUND STATION AND JOHN BARNES' DEPARTMENT STORE, 1978

IMAGE © BEN BROOKSBANK, CC BY-SA 2.0

Table 1. Tools in this toolkit, their uses, and the resources needed to use them

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 🕐🕐🕐

[2] NGO: Non-Governmental Organisation (also called 'Third Sector' organisation, such as a local or national charity, or a community group).

[3] Resources listed are for creating a new model. Few resources and less expertise are needed to use an existing model.

Next steps: what happens after using these tools?

This toolkit has been produced to help local authorities and community groups identify, assess and evaluate community severance; it does not provide solutions. After using one or more of the tools you will know whether or not there is a community severance problem to solve, and how it affects different groups in the population. If you have used the valuation tool, you will also have an estimate of the cost of the effects of community severance on the local community.

Once you know the problem, there are a number of ways to begin to address it.

Potential solutions may be suggested by local residents or by local government staff, using their expert knowledge. Below, we list a range of organisations and further resources which may be able to offer you support in taking action to reduce or eliminate community severance in your area.

Reports

The Carnegie UK Trust and IACD (International Association for Community Development). *Assets in your community: Mapping exercise. (*A guide to conducting community mapping to help strengthen communities). https://www.foe.co.uk/sites/default/files/downloads/assets-your-community-mapping-exercise-48301.pdf

The **Healthy Streets** website contains a range of documents and other advice for 'Healthy streets': https://healthystreets.com/

Mindell JS, Cohen JM, Watkins SJ. *Health on the Move 2. Policies for health-promoting transport. Stockport:* Transport and Health Study Group, 2011. (An evidence-based report on the effects of transport on health and inequalities, and on the policy implications). www.transportandhealth.org.uk/?page_id=32

Data sources

The *Office for National Statistics* provides counts and percentages for particular characteristics, health conditions and the wellbeing of people living in neighbourhoods across the UK. https://www.ons.gov.uk/peoplepopulationandcommunity

The *Department for Transport* provides street-level traffic data for every junction-to-junction link on the 'A' road and motorway network in Great Britain. https://www.dft.gov.uk/traffic-counts/

Organisations that can provide support or information

My Community supports community-led projects and plans to build and strengthen communities across England through information, advice and funding. http://mycommunity.org.uk/take-action/getting-started/

Living Streets aims to get people of all generations to enjoy the benefits that walking brings and to ensure all our streets are fit for walking. https://www.livingstreets.org.uk/

Sustrans works with communities, policy-makers and partner organisations so that people can choose healthier, cleaner and cheaper journeys and enjoy better, safer spaces where they live, including helping with Safe routes to Schools. www.sustrans.org.uk