

Is 20 plenty for health? Evaluation of the 20mph speed limit networks in Edinburgh and Belfast on a range of public health outcomes

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Project overview

The 'Is 20 plenty for health?' study aims to evaluate the impact of new signage-only twenty mile per hour speed limits in Edinburgh and Belfast on health outcomes, including casualty rate and severity, and walking and cycling levels. The project will run from 2017-2020, and is funded by the National Institute for Health Research (Public Health Programme 15/82/15).

Background

- Traffic speed is an important determinant of health (WHO, 2017).
- Prevalence of 20mph speed limits in UK increasing (Tapp, 2015).
- Little evidence on impact of 20mph speed limits on walking and cycling behaviour and health inequalities (Cairns, 2015).

Aims of 'Is 20 plenty for health?'

- To understand the implementation processes and health impacts of 20mph speed limits in Edinburgh and Belfast.
- To undertake a theory-based evaluation, using a realist perspective (Pawson, 1997), based on programme theory (Figure 2).
- Evaluation consists of four work packages, combining to provide a comprehensive understanding of the intervention.

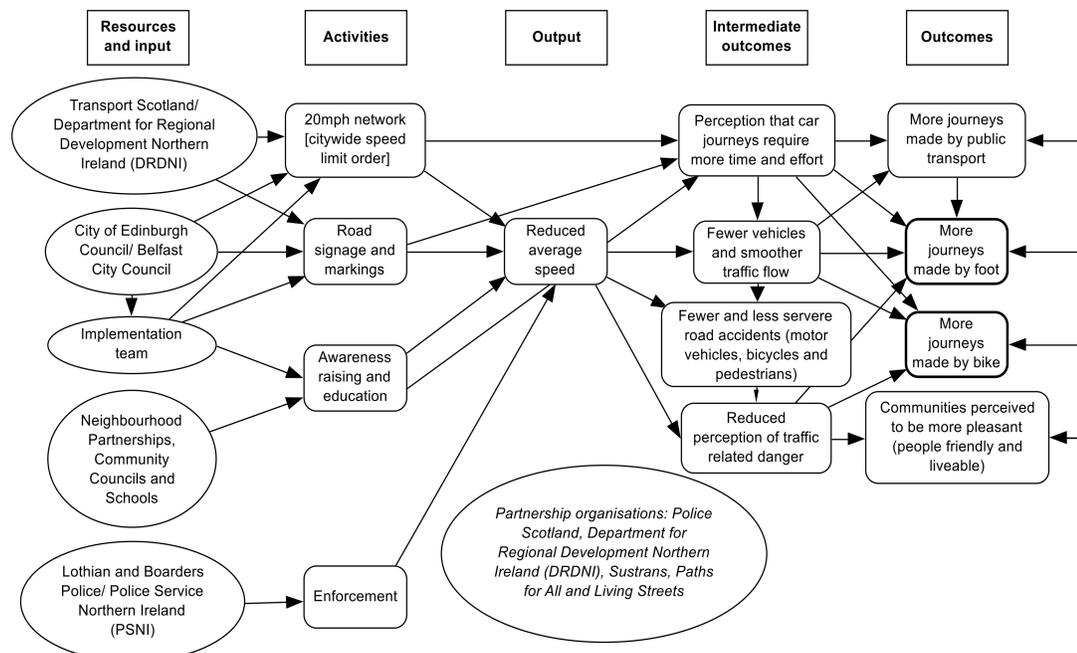


Figure 2. Provisional programme theory presenting how 20mph speed limits in Edinburgh and Belfast could impact health outcomes.



Photo 2. 20mph signage in Belfast City Centre.



Photo 3. Awareness-raising on bus-back in Edinburgh.

Intervention details: Edinburgh

- City Council implementing phased scheme (six geographical areas), from 2016-2018 (Figure 1); signage-only.
- 80% of city's streets with legally enforceable 20mph limits.
- Awareness-raising and education component (Photo 3).

Intervention details: Belfast

- Northern Ireland Department for Infrastructure introduced scheme in Feb 2016; signage only (Photo 2).
- Scheme covers city centre only.



Figure 1. Map of phased introduction in Edinburgh.



Photo 1. Sign informing public of new 20mph speed limit.

Work package (WP) objectives

WP1

To assess impact of intervention on traffic and health outcomes
To utilise: routine data; primary survey data

WP2

1) Provide detailed understanding of implementation
 2) To investigate how and why intervention changes behaviour
To utilise: primary qualitative data

WP3

1) Investigate policy/political factors that led to implementation
 2) Explore transferability of 20mph speed limits to other UK cities/areas
To utilise: primary qualitative data; workshops

WP4

To carry out an economic evaluation of the intervention
To utilise: data collected in WP1 + intervention costs

Implications

- The project will address research gaps around how 20mph speed limits influence active travel and health inequalities.
- Results will help inform policy makers of the usefulness of 20mph speed limits in improving public health outcomes.

References

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