

Demystifying Low Traffic Neighbourhoods (LTNs): lessons on community engagement in the UK

Dr David Williams

Senior Project Manager – TRUUD Project

Bristol Medical School, University of Bristol

Dr Jo White

Senior Research Fellow (Marie Skłodowska-Curie Fellow)

University of the West of England

Dr Andy Gibson

Associate Professor in Patient and Public Involvement

University of the West of England

Introduction

Our urban environment and the way we design and use it has a significant impact on our health and the health of others around us. Towns and cities in the UK and across the world have developed and expanded over time adapting to changes in the way we live, travel and use space. The advent of motorised transport in the 20th century led to the creation of *Carscapes* (Minnis and Morrison, 2012) reallocating space from people to accommodate motorised transport. The influential Buchanan Report, released in 1963, sought to resolve the conflicts between cars and people, improving safety and improving journey times (Buchanan *et al.*, 1963). The outcome over 100 years of building roads for motorised transport has led to many poor quality urban environments that increase the likelihood of non-communicable diseases (NCDs) within the population (Black *et al.*, 2022). NCDs are diseases that are not spread through infection, such as cardiovascular diseases, cancers and diabetes. Many of these conditions are caused or enhanced by the design of our urban environments that have led to increasingly sedentary lifestyles.

The research in this extended abstract forms part of the UKPRP funded [TRUUD](#) Project, which explores how we can tackle the ‘upstream’ impacts of urban design to ensure we mitigate or remove the elements of our urban environment that lead to NCDs. The first phase of the TRUUD project involving 123 interviews with people across business and government identified challenges to improving our urban environment and these included: car-centric culture, and planning clarity/responsibility as major challenges to address for reducing NCDs (Black *et al.*, 2024).

Policies that change our urban fabric can be controversial with local communities who may not understand or want changes to be implemented. TRUUD project’s evaluation team, through their work with partner authorities Greater Manchester Combined Authority (GMCA) and Bristol City Council (BCC) have highlighted the value of early deliberative engagement with communities (Peake-Jones and Le Gouais, 2023). This view is supported by Lawson *et al.*’s (2022) review of the existing literature called Public participation in planning in the UK. This approach is important for building trust with communities and enabling policymakers to incorporate health data into health-promoting policies that are designed to make beneficial changes within local areas.

This extended abstract outlines the work of the TRUUD public engagement team and explores the best methods to engage with the public on health promoting policies. The work

asks the question: What interventions work to ensure that communities feel heard when delivering early forms of engagement that explore health-promoting policies?

Tackling Car-centricity

Tackling car-centric culture involves challenging due to what Walker *et al.* (2024) call motornormativity: where car culture has become imbedded in the assumptions and decisions of individuals and policy-makers who see travelling by car as the default. Motornormativity has led to funding for transport solutions that allow for the flow of cars rather than people (Verkade and te Brömmelstroet, 2023). Decisions by politicians and civil servants have led to the majority of transport funding in the UK being provided to car-centric schemes (Williams *et al.*, 2018). Schemes that reallocate road space towards more sustainable modes of travel have existed for years, including the innovative use of modal filters in Nottingham in the mid-1970s. (Vincent and Layfield, 1977). The Covid-19 pandemic led to many temporary schemes being set up to provide social distancing and this included new Low Traffic Neighbourhoods (LTNs) (Lavery *et al.*, 2021), with 189 installed between March 2020 and March 2022 (Cuff, 2022) shifting the use of highway infrastructure towards walking and cycling.

Understanding of Low Traffic Neighbourhoods

LTNs are designed to reduce traffic by preventing drivers using quieter residential roads as through routes. Traffic is reduced through the use of bollards, or giant planters designed to block access for cars, making the road network safer for walkers and cyclists, promoting walking and cycling, which are linked to improved health and wellbeing (Lo *et al.*, 2024). It has been long established that the volume of traffic has an impact on how you use the space around your home and the interactions you have with your neighbours (Appleyard and Lintell, 1972). These interactions are essential for minimising NCDs linked mental health and wellbeing.

Although there is still limited robust evidence on the impact of LTNs (BACCC, 2021), the initial reports from local government are encouraging. LTNs provide a significant benefit to the people that live within them due to increasing levels of walking and cycling (Aldred and Goodman, 2021), reductions in noise (Ipsos, 2024) and air pollution (Yang *et al.*, 2022). LTNs also reduce the likelihood and severity of accidents for cyclists due to the reduced speed limits (Ekmekci *et al.*, 2024) and halved the number of pedestrian injuries compared to the rest of London (Goodman *et al.*, 2021b). Areas where LTNs have been introduced have seen the level of crime, with the exception of bike theft, reduced dramatically (Goodman and Aldred, 2021, Goodman *et al.*, 2021c).

Criticism Low Traffic Neighbourhoods

Despite the benefits LTNs provide they have received significant criticism in the media, leading to some councils removing schemes due to some local opposition (Pal, 2024). In 2023 the Prime Minister Rishi Sunak called for a review into traffic management schemes such as LTNs (Reid, 2023). The subsequent report by Ipsos (2024), published in March 2024 found that the majority of people who lived within LTNs were in favour. Push back for similar schemes in Paris have been attributed to people who fear the impact of such schemes on the value of their property (Horton, 2024). The IPSOS report also supported the arguments about the improvements to safety, health and the benefits to the economy.

A second criticism of LTNs is that they push traffic onto surrounding roads. Thomas and Aldred's (2023) review of 46 LTNs in London showed that the schemes reduced vehicles within the LTN area, and had minimal impact on boundary roads. Thomas and Aldred's 2023 findings support Cairns *et al.*'s (2002) findings from over 100 locations worldwide that traffic 'disappeared' from the network when road space was removed, and the traffic chaos predicted through their implementation did not happen. This was supported by Goodman *et al.* (2021a), who found that emergency service times were not impacted by the implementation of LTNs, negating another argument against their implementation.

Engaging Communities on Contentious Issues

One of the criticisms within the IPSOS report related to the implementation of LTNs and how they were 'forced' on communities. Timings and forms of engagement are essential for public engagement to work (Lynn and Dobson (2021)), as with the case of many of these LTNs, the engagement was too late to allow the local communities a meaningful say in schemes being implemented in their area. Our research on the TRUUD project is designed to identify the best practice approaches to ensure that engagement on seemingly controversial, yet beneficial interventions to public space to ensure that the benefits are realised and cases of NCDs caused by our urban areas are significantly reduced. For this to be effective we need buy-in from the local communities to ensure that public voices are part of the early discussions when before decisions are made, and that these voices include those experiencing inequalities.

Methodology

The TRUUD team will work with partners including Bristol City Council to help the engagement process within the city. Many topics will be discussed as part of this process, with the implementation of LTNs being part of the discussions with the local community. It is anticipated that the early stage conversations take place in July 2024, with the second stage planned for the autumn/winter of 2024. Bristol City Council will be led for the first time by the Green Party, as the largest party, in coalition with the Liberal Democrats. Schemes such as LTNs formed part of the party's manifesto for Bristol to have 'liveable neighbourhoods' (Green Party, 2024), so this provides a key opportunity to identify and implement new ways of engaging on contentious issues. The TRUUD team's method of co-production will include elements of the Bristol Advisory Committee on Climate Change's (2021) (BACCC) guidance to engage through: reassurance, showing compelling evidence, clarifying misconceptions, acknowledging complexities, and challenging sensationalist media reporting.

The team plan to draw out the key steps and pathways forward for engagement and ultimately delivery of LTNs and other interventions that are beneficial to society. This work will build on TRUUD's prior collaboration concerning the inclusion of health data in the planning of initiatives delivered through our Researcher-in-Residence with Bristol City Council, Dr Anna Le Gouais.

Project Outputs

The outputs from this work will include an academic journal publication and the development of a clear set of guidelines for local authorities to follow that refine and explain the implementation of recommendations in a consultation scenario to help demystify LTNs for the wider community. The work will be added to the suite of [research](#), [engagement](#) and [guidance](#) that has been developed by the TRUUD team to tackle the upstream causes of unhealthy urban environments and reduce the prevalence and severity of non-communicable diseases across society.

Acknowledgements

This work was supported by the UK Prevention Research Partnership (award reference: **MR/S037586/1**), which is funded by the British Heart Foundation, Cancer Research UK, Chief Scientist Office of the Scottish Government Health and Social Care Directorates, Engineering and Physical Sciences Research Council, Economic and Social Research Council, Health and Social Care Research and Development Division (Welsh Government), Medical Research Council, National Institute for Health Research, Natural Environment Research Council, Public Health Agency (Northern Ireland), The Health Foundation and Wellcome.

References

- Aldred R., Goodman, A. (2021) "The Impact of Low Traffic Neighbourhoods on Active Travel, Car Use, and Perceptions of Local Environment during the COVID-19 Pandemic." *Findings*. DOI: 10.32866/001c.21390.
- Appleyard D., Lintell, M. (1972) The Environmental Quality of City Streets: The Residents' Viewpoint, *Journal of the American Institute of Planners*, 38:2, 84-101, DOI: 10.1080/01944367208977410.
- Black D., Ayres S., Bondy K., Brierley, R., Campbell, R., Carhart, N., Coggon, J., Eaton, E., Ficheria, E., Gibson, A., Hatleskog, E., Hickman, M., Hicks, B., Hunt, A., Pain, K., Pearce, N., Pilkington, P., Rosenberg, G., Scally, G. Tackling Root Causes Upstream of Unhealthy Urban Development (TRUUD): Protocol of a five-year prevention research consortium [version 2; peer review: 3 approved]. *Wellcome Open Res* 2022, 6:30 (<https://doi.org/10.12688/wellcomeopenres.16382.2>)
- Black, D. (2024) *TRUUD Phase 1 Report: How can we prevent non-communicable disease and health inequalities resulting from UK city property development and transport planning systems*. Available from: <https://truud.ac.uk/wp-content/uploads/2024/02/TRUUD-Phase-1-Report.pdf>. [Accessed 14/05/2024.]
- Buchanan, C., Cooper, G., MacEwen, A., Crompton, D., Crow, G., Michell, G. Dallimore, D., Hills, P. and Burton, D. (1963) *Traffic in Towns: A study of the long term problems of traffic in urban areas*, 3rd ed. London: HMSO.
- Cairns, S., Atkins, S., Goodwin, P. (2002) Disappearing traffic? The story so far, *Proceedings of the ICE - Municipal Engineer*, 151(1), pp. 13-22.
- Cuff, M. (2022) Cycling and walking 'revolution' threatened as 28% of Low Traffic Neighbourhoods are scrapped. Available from: <https://inews.co.uk/news/cycling-and-walking-revolution-threatened-as-28-of-low-traffic-neighbourhoods-are-scrapped-1641558>. [Accessed 14/05/2024.]
- Ekmekci, M., Dadashzadeh N., Woods, L. (2024) Assessing the impact of low-speed limit zones' policy implications on cyclist safety: Evidence from the UK. *Transport Policy* 152 (2024) 29–39.
- Goodman, A., Lavery, A., Thomas, A., Aldred, R. (2021a) "The Impact of 2020 Low Traffic Neighbourhoods on Fire Service Emergency Response Times, in London, UK." *Findings*, May. <https://doi.org/10.32866/001c.23568>.
- Goodman, A., Furlong, J., Lavery, A., Thomas, A., Aldred, R. (2021b) "Impacts of 2020 Low Traffic Neighbourhoods in London on Road Traffic Injuries." *Findings*. <https://doi.org/10.32866/001c.25633>.
- Goodman, A., Lavery, A., Aldred, R. (2021c) "Short-Term Association between the Introduction of 2020 Low Traffic Neighbourhoods and Street Crime, in London, UK." *Findings*. <https://doi.org/10.32866/001c.23623>.
- Goodman, A., Aldred, R. (2021) "The Impact of Introducing a Low Traffic Neighbourhood on Street Crime, in Waltham Forest, London." *Findings*, February. *Findings*. <https://doi.org/10.32866/001c.19414>.
- Green Party (2024) *Bristol Green Party launches manifesto, promising 'hope and action' for Bristol*. Available from: [Bristol Green Party launches manifesto, promising 'hope and action' for Bristol - Bristol Green Party](https://www.bristolgreenparty.org.uk/manifesto). [Accessed 07/06/2024.]
-

Horton, H. (2024) *Why has the '15-minute city' taken off in Paris but become a controversial idea in the UK?* Available from: <https://www.theguardian.com/cities/2024/apr/06/why-has-15-minute-city-taken-off-paris-toxic-idea-uk-carlos-moreno>. [Accessed 07/06/2024.]

Ipsos (2024) *Low Traffic Neighbourhoods: Research Report*. Available from: <https://assets.publishing.service.gov.uk/media/65f400adfa18510011011787/low-traffic-neighbourhoods-research-report.pdf>. [Accessed 07/06/2024].

Laverty, A., Goodman, A., Aldred, R. (2021) Low traffic neighbourhoods and population health *BMJ*. 372:n443. <http://dx.doi.org/10.1136/bmj.n443>

Lawson, V., Purohit, R., Samuel, F., Brennan, J., Farrelly, L., Golden, S., McVicar, M. (2022) *Public participation in planning in the UK*. Available from: <https://housingevidence.ac.uk/publications/public-participation-in-planning-in-the-uk-a-review-of-the-literature/>. [Accessed 07/06/2024].

Lo, G., Richard, M., Kriska, A., McAlindon, T., Harkey, M., Rockette-Wagner, B., Eaton, C., Hochberg, M., Kwok, C., Nevitt, M., Bhakta, P., McLaughlin, C., Driban, J. (2024) Bicycling over a Lifetime Is Associated with Less Symptomatic Knee Osteoarthritis. *Med Sci Sports Exerc*. <https://doi.org/10.1249/MSS.0000000000003449>.

Lynn, T. & Dobson, M. G. (2021) Some lessons from development negotiations in England, *Town and Country Planning*, 90 (1/2).
<https://centaur.reading.ac.uk/96130/1/TCPA%20Paper.pdf>

MacMichael, M. (2023) *Police urge against scrapping low traffic neighbourhood, saying it reduces crime*. Available from: <https://road.cc/content/news/police-back-keeping-ltn-say-it-reduces-crime-299245>. [Accessed 07/06/2024].

Minnis, J., Morrison, K. (2012) *Carscapes: The Motor Car, Architecture and Landscape in England*. London: Yale University Press.

Pal, A. (2024) "My children are not part of any cycling lobby": Residents hit out at council after emails show officials disregarding locals' opposition to removal of LTN as "concerted response from cyclists". Available from: <https://road.cc/content/news/emails-show-council-accounting-ltn-response-cycling-lobby-308529>. [Accessed 07/06/2024].

Peake-Jones, S., Le Gouais, A. (2023) Meaningful Engagement an Approach to Healthier Urban Development and Planning. *Built Environment*, 49, 2, 304-321.
<https://www.ingentaconnect.com/contentone/alex/benv/2023/00000049/00000002/art00010#trendmd-suggestions>.

Thomas, A., Aldred, R. (2023) *Changes in motor traffic inside London's LTNs and on boundary roads*. Available from: <https://www.wearepossible.org/our-reports/changes-in-motor-traffic-inside-londons-ltns>. [Accessed 14/05/2024].

Verkade, T., te Brömmelstroet, M. (2023) *Movement; how to take back our streets and transform our lives*. London: Scribe Press.

Vincent, R. and Layfield, R. (1977) *Nottingham Zones and Collar Study – Overall Assessment*. 805. Crowthorne: Transport and Road Research Laboratory.

Walker, I., Tapp, A., Davis, A. (2024) Motonormativity: how social norms hide a major public health hazard. *International Journal of Environment and Health*, Volume: 11, Issue: 1, Pages: 21 – 33. DOI: 10.1504/ijenvh.2023.135446.

Williams D., Spotswood, F., Parkhurst, G. and Chatterton, T. (2019) Practice ecology of sustainable travel: The importance of institutional policy-making processes beyond the traveller. *Transportation Research Part F*. 62, 740-756.
<https://doi.org/10.1016/j.trf.2019.02.018> .

Yang, X., McCoy, E., Hough, K., de Nazelle, A. (2022) Evaluation of low traffic neighbourhood (LTN) impacts on NO₂ and traffic. *Transportation Research Part D*, 113, 103536. DOI: <https://doi.org/10.1016/j.trd.2022.103536>.