

Low traffic neighbourhoods (LTNs) sit within a suite of measures to reduce the harmful health impacts of car use (including road traffic accidents, health harms associated with air and noise pollution, and sedentary time/physical inactivity) and are supported by research evidence.¹ <http://www.slna.org.uk/assets/files/LTNs-Populationhealthstudy.pdf>

In response to your question related to health practitioners' involvement in the monitoring of and research into the health and wellbeing impacts resulting from the creation of LTNs, the NHS does not routinely monitor these impacts. Routine monitoring of the impacts of LTNs is undertaken on behalf of local partners by Hackney Council, using the measures outlined below which are known to be strongly linked to key health outcomes. Directly measuring the health impacts of traffic control measures, such as LTNs, is complicated. It is very difficult to reliably assign cause and effect outside of a controlled study and these types of study take time to design, implement and evaluate. [Such a study](#) in London, funded by the National Institute for Health Research and in which Hackney is participating, will be completed in 2025.

The Council measures the impacts of LTNs through traffic counters, air quality monitoring and active travel data.^{2,3,4,5} We outline the borough-wide impacts of LTNs below, using information that we have collected to date, which shows an overall reduction in traffic flow and improvement in air quality, in line with wider research evidence. We will have more data on walking and cycling impacts towards the end of the year.

In response to your question about how LTNs impact on health inequalities, one of the primary aims of LTNs is to improve public health, with objectives to reduce overall air pollution (as part of broader measures within a borough-wide [air quality action plan](#)) and to encourage active travel for as many people as possible (as part of wider [sustainable transport plans](#)). All of the LTNs and School Streets that have been introduced in Hackney are subject to equalities impact assessments, or EQIAs (information on the evidence base used to guide these assessments can be found [here](#)). These EQIAs acknowledge that there are both positive and negative impacts on protected groups, but conclude that overall the impacts are positive for these groups. Furthermore, a [recent, independent academic study](#) showed that a high concentration of Hackney's LTNs are in the borough's most deprived neighbourhoods; and a similar proportion of 'BAME' and 'White' (as described by the authors) people live inside LTNs. In addition, between 40% to 50% of households in our low traffic neighbourhoods live in social housing.

²<https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/consultations-and-surveys#on-this-page-1>

³<https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-2021>

⁴ <https://activelives.sportengland.org/>

⁵ We also survey Hackney school children every year on how they travel to school ⁶
https://cityhackneyhealth.org.uk/wp-content/uploads/2018/01/Transport_and_travel.pdf ⁷
<https://content.tfl.gov.uk/healthy-streets-for-london.pdf>

⁸ https://www.london.gov.uk/sites/default/files/health_impact_of_cars_in_london-sept_2015_final_0.pdf

⁹ In this context, 'severance' means that destinations that are geographically close cannot be reached easily on foot, due to busy wide roads that may be difficult to cross and perceived to be dangerous

¹⁰ https://www.london.gov.uk/sites/default/files/health_impact_of_cars_in_london-sept_2015_final_0.pdf

Traffic levels

It is known, from widespread research, that most of the impacts of a traffic scheme, good and bad, have a causal link to traffic levels.^{6,7,8} Car use impacts on the health of all Londoners through road traffic injuries and deaths, noise, severance,⁹ air pollution and climate change.¹⁰ Evidence points to LTNs changing travel patterns, with

increases in active travel (walking and/or cycling) and a shift away from cars.^{11,12} Such changes in travel behaviour have the potential to reduce the overall number of road traffic injuries and the risk per trip, with possible differences by travel modes. Recent research has indicated that inside Waltham Forest LTN areas there was a 70% (approximately) reduction in absolute injury numbers and also a 70% (approximately) reduction in risk per trip for walking, cycling and car travel alike.¹³ While there may be some displacement of motor traffic to nearby roads in the short-term in some cases, there is strong evidence that LTNs reduce the overall number of car journeys.¹⁴

In Hackney, traffic counts have been done at nearly 300 locations. Additionally, 24 continuous counters were installed in 2021 that use artificial intelligence to count cycles and pedestrians, as well as motorised traffic, and the Council will be releasing a report using data from the continuous counters by the end of 2022.

Data from the schemes shown below (listed alphabetically) largely support the objectives of the LTNs to reduce motorised traffic and create the conditions for longer-term change towards walking and cycling and, therefore, improve air pollution.

- Clissold Crescent LTN: overall traffic reduced.
- Elsdale Street and Mead Place LTN: traffic levels were down by 2% inside the LTN and down by 15% on boundary roads.

¹¹ <https://westminsterresearch.westminster.ac.uk/item/v341w/the-impact-of-introducing-low-traffic-neighbourhoods-on-road-traffic-injuries>

¹² <https://www.centreforlondon.org/wp-content/uploads/2022/06/CFL-StreetShift-LTNs-Final.pdf>

¹³ <https://findingspress.org/article/25633-impacts-of-2020-low-traffic-neighbourhoods-in-london-on-road-traffic-injuries>

¹⁴ <https://www.centreforlondon.org/wp-content/uploads/2022/06/CFL-StreetShift-LTNs-Final.pdf>

- Hackney Central LTN: following the introduction of the traffic filters on Wayland Avenue and Marcon Place, there was an 11% reduction in traffic on roads around the filters. On boundary roads around the filters, there was a 24% increase in traffic.
- Homerton LTN: traffic was down by 35% inside the LTN and by 5% on boundary roads. Average bus speeds in the area have improved: from 6.9mph in 2019 to 7.2mph in 2021.
- Hoxton West LTN: traffic was down by 46% inside the LTN and by 18% on boundary roads. Average bus speeds in the area have improved: from 9.6mph in 2019 to 11.2mph in 2021.
- London Fields LTN: traffic was down significantly inside the LTN, with a mixed picture on boundary roads. New live traffic monitors have been installed on Dalston Lane and Graham Road and the Council is continuing to monitor traffic levels on these roads. Details on further engagement with local residents can be found [here](#).
- Shore Place LTN: following the introduction of the Shore Place traffic filter, there was a fall in traffic on the roads around the filter of 11.3%, including an 82% reduction in traffic on Shore Place. On boundary roads around the traffic filter, there was a 0.4% reduction in traffic.
- Ufton Park traffic filter route: traffic decreased on roads around the filter, including on Southgate Grove where it decreased by 59%.
- Weymouth Terrace LTN: following the introduction of the Weymouth Terrace traffic filter, traffic reduced in the nearby area - including by 45% on Weymouth Terrace, 27% on Pearson Street, 80% on Cremer Street and 2% on Ormsby Street.

Air Quality

LTNs sit within a suite of measures that are being used to tackle the poor air quality in London. Evaluating air quality impacts (including health outcomes) of local schemes is challenging as air quality is influenced by the wider environment, such as background ambient pollutant levels and the weather. Monitoring air quality during a pandemic has presented additional challenges due to background travel demands being atypical (e.g. travel restrictions and more working from home). Separating out the health impacts of exposure to air pollution in a person's place of residence vs. exposure in other places they regularly travel to/from creates further complexity.

That said, the Council has been seeking to monitor air quality changes following the implementation of local LTNs. Hackney's monitoring network includes passive monitors, which give us monthly averages of nitrogen dioxide (NO₂) and two automatic monitoring stations which provide real-time data on levels of NO₂ and PM10 and PM2.5 particulate pollution. The data collected so far shows reductions in pollution levels overall: across all LTNs and surrounding areas, there are reductions in NO₂ (one of the main harmful air pollutants) at 329 of 388 locations.¹⁵ Details for different LTNs are

summarised below.

- Clissold Crescent LTN: while there are no air quality monitors here, NO₂ levels have reduced in nearby locations where monitors are in place. All nearby monitoring locations fall within the national air quality objective for NO₂ of 40µg/m³.
- Elsdale Street and Mead Place LTN: levels of NO₂ pollution are down at the five monitoring locations in this LTN.
- Hackney Central LTN: while there are no air quality monitors on Wayland Place or Marcon Avenue, NO₂ levels have reduced in nearby locations.
- Homerton LTN: air quality has improved at eight of nine monitored locations in this area.
- Hoxton West LTN: air quality is predicted to have improved at 58 of 62 modelled locations, with increases in pollution of less than one per cent at four of the 62 locations.
- London Fields LTN: NO₂ concentrations are predicted to have decreased at 147 of the 169 modelled locations, with 21 locations showing an increase. None of these locations had NO₂ concentrations that exceeded national air quality objectives.
- Ufton Park traffic filter route: NO₂ pollution at the nearest monitoring site was well within national air quality objectives.
- Weymount Terrace LTN: NO₂ pollution in the surrounding area remained within the national air quality objective for NO₂ of 40µg/m³.

¹⁵ <https://drive.google.com/file/d/1xBj9eP8Pytd5WF1Qx1I7JH0FM0zX-73t/view>

For wider air quality monitoring data collected across Hackney please see the Annual Status Reports published on our website [here](#).

You can also find more detailed information on how Hackney is improving air quality within the borough over the next four years in our [Air Quality Action Plan](#), which was adopted in August 2021. The plan includes measures to reduce negative health impacts caused by high levels of air pollution, with a strong focus on health inequalities.

While the assessment of air quality around LTNs shows reductions in NO₂ at 329 of 388 locations, the Council acknowledges that more can be done to reduce air pollution. The Council has long lobbied for the Ultra Low Emission Zone (ULEZ) and was instrumental in campaigning for Hackney to be included within its current boundary. Recently, the Mayor of Hackney and Lead Member for Environment and Transport wrote to the Mayor of London to ask for stricter standards, further expansion and suggested Hackney as a pilot location for further proposals for road user charging¹⁶.

Walking and cycling

The health benefits of walking and cycling are well known, contributing to higher levels of physical activity which reduces the risk of many preventable diseases (including type 2 diabetes, heart disease and some cancers) and has significant mental health benefits.¹⁷ Physical inactivity is lower among more deprived and some global majority communities, and there are differences also by age and gender, with many of these inequalities widening during the pandemic¹⁸. Walking and cycling are popular and accessible forms of physical activity, and by making it easier and safer for more people to be active as part of their everyday lives (and creating places where people can meet), LTNs can make a major contribution to local strategies to improve population health and reduce health inequalities.

On a London level, boroughs that have tracked changes in cycling over time have found large increases both inside and outside LTNs.¹⁹ As mentioned above, continuous cycle and pedestrian counters were installed across Hackney Sept 2021, so we have 12 months of data currently being analysed which will be made available by the end of the year. Some data have been released as part of the Stoke Newington LTN scheme, and a borough-wide report will be released when the data is analysed. In London Fields LTN, data shows that cycling rates have increased significantly – with cycling up by between 11% and 57% on Richmond Road and Middleton Road²⁰.

Worth noting here is a representative poll of 800 local residents, carried out by an independent polling company, which found that a quarter of respondents were encouraged to increase the amount of walking, running and cycling they do as a result of the LTNs (this is significantly higher than the proportion who reported walking/running or cycling less). Polling data can be found in full [here](#).

Hackney Council will continue to monitor the impacts of LTNs, and is committed to ongoing engagement with residents to ensure we understand how they are working and address issues as they arise. Feedback on Hackney's LTNs can be emailed to streetscene.enquiries@hackney.gov.uk at any time.

¹⁶<https://news.hackney.gov.uk/welcome-ulez-expansion-could-do-more-to-protect-londoners-health/>

¹⁷

<https://cityhackneyhealth.org.uk/wp-content/uploads/2017/07/JSNA-Lifestyle-and-behaviour-Physical-activity-and-inactivity.pdf>

¹⁸ <https://www.sportengland.org/research-and-data/data/active-lives>¹⁹

<https://www.centreforlondon.org/wp-content/uploads/2022/06/CFL-StreetShift-LTNs-Final.pdf>²⁰

https://drive.google.com/file/d/1nk_ly6NIACv5-Ng-MI7IqFVCGxT67k2_/view

Yours sincerely,

A handwritten signature in grey ink, appearing to read 'Sandra Husbands'.

Dr Sandra Husbands

Director of Public Health, City of London & London Borough of Hackney