Understanding Mobility and Activity **in the Low Traffic Neighbourhood:** The case of East Oxford, UK

SUMMARY OF KEY FINDINGS







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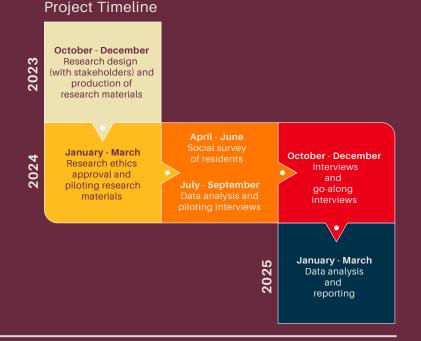
Executive Summary

Since the publication of Colin Buchanan's Traffic in Towns in the 1960s the challenge of tackling the volume and impact of motor traffic in urban areas has not abated. More recent efforts to tackle the impact of motor traffic on residential streets have included the implementation of Low Traffic Neighbourhoods (LTN).

The purpose of LTN is to remove motorised through-traffic from residential areas by strategically blocking streets with bollards and planters but allowing cyclists and other micromobilities (e.g. public hire bikes and electric scooters) to pass through. The LTN has aroused controversy and debates ensue as to the likely 'winners' and 'losers' of such interventions. The aim of this study was to understand residents' perceptions of Low Traffic Neighbourhood (LTN) schemes in East Oxford and impact on personal activity and travel behaviour. The investigation was designed with a focus on understanding life in (and on the boundary of) the LTN and the lived experience of movement and activity in the neighbourhood.

The evidence suggests that, since the LTN was installed, people were adapting car journeys if they could, or using their cars less and walking and cycling more for short journeys. The survey revealed varying, but overall, moderate levels of support for the East Oxford LTN. Higher levels of support were more likely from those living within the LTN as opposed to boundary roads and who relied less on using a car. There were a multiplicity of opinions about LTN. Those 'pro-LTN', while appreciating the transformative effect on their neighbourhood, were not uncritical of LTN implementation, sequencing and design and were not unsympathetic to those who needed to use a car or lived on boundary roads. Among strong voices against LTN, there was tacit acceptance that something needed to be done to tackle car use and support for the need to transition to more sustainable modes of travel (and various views about how this could be achieved).

There was convergence of opinion that communication and consultation on LTN could have been better and that other interventions should have been in place (e.g. bus gates and service improvements and separated cycle lanes on boundary roads) prior to LTN being implemented as part of a more strategic approach to sustainable transport delivery.



Introduction

This report provides a summary of the **Understanding Mobility and Activity in the Low Traffic Neighbourhood** (**UMALTRAN**) project funded by the Rees Jeffreys Road Fund. The report summarises key findings with selected examples of evidence to support these results. It does not provide full evidence, but this will be made available in forthcoming publications arising from the project.

The challenge: traffic in towns

Since the start of the motor age, policy makers have been concerned with how to manage increased demand for space by motor traffic. The dramatic rise in private car ownership and corresponding growth and circulation in towns and cities after the second world war caused concern for governments in more economically developed nations. In 1960 in the UK, Ernest Marples, the then Minister for Transport in the Macmillan Government, appointed town planner Colin Buchanan to investigate the long-term development of motor traffic in urban areas and the impact this might have on British cities. At that time there were around 10 million vehicles on the road and an expectation that this would guadruple. In 1963 Traffic in Towns, the 'Buchanan Report', was published. This laid out a vision for the design of urban areas for the motor age and the relationship between routes and buildings. Buchanan noted how the 'jumbled arrangement of buildings' was as much a cause of traffic difficulties in towns as the narrowness of the streets and frequency of intersections compounding complex journey patterns between activities. In short, the inherited layout of streets was not suitable for the movement of more and more motor vehicles.

Buchanan's prognosis was that ease of access for motor vehicles should be catered for so that vehicles could penetrate without delay and get as close as possible to the destination without restriction. However, he also recognised the problems this could create in terms of environmental damage, pollution, accidents, and intimidation of pedestrians and other road users from fast-moving vehicles. Buchanan came up with the concept of 'corridors' and 'rooms' and using the analogy of movement around a large hospital, highlighted how a corridor system serves to distribute traffic (doctors, nurses, patients, visitors etc.) around the hospital to serve areas of the environment (wards, operating theatres, laboratories etc.)

Although there is movement in the environment areas, this is strictly controlled so that they are protected from through traffic. In this vein, Buchanan argued that streets need to be recognised for their primary function and that residential areas, 'urban rooms', should be protected from rising levels of motor traffic that should instead be distributed along 'urban corridors'. 'There must be areas of good environment – urban rooms – where people can live, work, shop, look about, and move around on foot in reasonable freedom from the hazards of motor traffic, and there must be a complementary network of roads – urban corridors – for effecting the primary distribution of traffic to the environmental areas.' (p59)

Buchanan acknowledged that urban rooms could not be traffic-free if they were to function (e.g. for people to drive to and from their homes or for homes to be serviced by other vehicles) but that the character of these areas should be protected. At the macro level, he envisaged towns as a cellular structure consisting of a network of interlinking distributor roads within which the environmental areas (i.e. 'rooms') were set. Longer journeys would be routed along distributor roads and discouraged from moving through environmental areas. The distributor roads would be arranged in a type of hierarchy with the function of canalising longer movements from locality to locality. Buchanan used the analogy of a tree with a trunk focused on the distribution of longer journeys and twigs corresponding to access roads to serve buildings. Buchanan never defined the size or scale of environmental areas but did suggest the 'maximum acceptable level' of traffic and the trade-off that would need to be made between the acceptable standard of the environment, level of accessibility and cost incurred for physical alterations:

'Consider the case of an area of terraced houses in conventional streets with narrow pavements. The amount of traffic within such an area would obviously have to be curtailed if reasonable standards of environment are to be secured.' (p66).

The Low Traffic Neighbourhood

In recent years, the Low Traffic Neighbourhood (LTN) has gained notoriety as schemes have started to be implemented by Councils across the UK. The purpose of LTN is to remove motorised through-traffic from residential streets while allowing cyclists and other micromobilities (e.g. electric scooters) to pass through by strategically placing bollards and planters at entry roads. Automatic Number Plate Recognition (ANPR) cameras are sometimes installed to facilitate the passage of emergency-service vehicles and public-service vehicles such as buses, licensed taxis, postal service providers and public waste vehicles.



The logic of the LTN

The logic of the LTN is compatible with Buchanan's original premise, namely reinforcing the hierarchy of the road network and (re) establishing urban rooms (where daily life carries on and where maintenance of a good environment is paramount) albeit against a backdrop of much higher motor traffic levels than was the case when Buchanan published his report. Moreover, since the publication of the Buchanan report, rising environmental consciousness and changing values towards the motor car have shifted ideas about what constitutes an accepted standard of the environment within 'environmental areas'

Controversy of LTNs

The LTN has aroused huge controversy. Debates rage as to the likely 'winners' and 'losers' of LTN interventions and the acceptable trade-offs between convenient car access and the right to an environment undominated by motor traffic and the problems associated with it. Supporters highlight the proposed benefits to the community including improved road safety and environmental quality through less motor traffic and the potential to encourage more people to walk and cycle for short journeys. Reduced motor traffic within the LTN also offers the potential for more 'Liveable Streets' (Appleyard, 1980) typified by more social interaction among neighbours and the ability of children to play out in the street. Critics of LTNs on the other hand, argue that traffic is diverted to roads bordering the LTN, often in more deprived areas, resulting in congestion and associated traffic pollution increasing along those routes. A study by Dudley et al. (2022), also funded by the Rees Jeffreys Road Fund, has documented the political tensions and controversies surrounding governance of LTN in England (with specific reference to Oxford) and the challenges for local authorities implementing them.



UNDERSTANDING MOBILITY AND ACTIVITY IN THE LOW TRAFFIC NEIGHBOURHOOD **SUMMARY OF KEY FINDINGS**

Aim and Scope of the Study

The aim of this study was to understand residents' perceptions of Low Traffic Neighbourhood (LTN) schemes in **East Oxford** and impact on personal activity and travel behaviour.

The investigation was designed with a focus on understanding life in (and on the boundary of) the LTN and the lived experience of movement and activity in the neighbourhood as well as the meanings ascribed to this policy intervention that can significantly affect people's lives.

The project focused on the case of the East Oxford LTN. This was selected following consultation with key stakeholders and because this was the most recent LTN in Oxford at the time of planning the study.

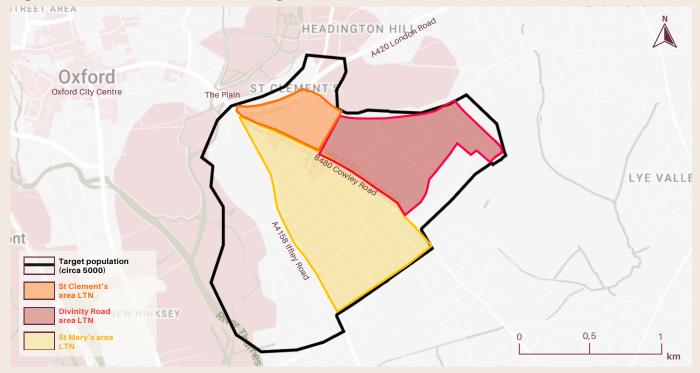
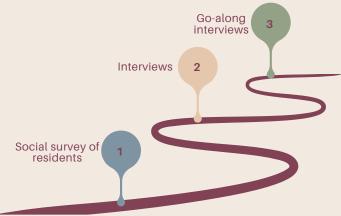


Figure 1. East Oxford Low Traffic Neighbourhoods

Research approach and methods

A multi-method approach was used that involved a social survey of residents within the East Oxford LTN and along boundary roads; interviews with residents who resided either within the East Oxford LTN or along the boundary roads; go-along interviews (interviewing while on the move) with residents while they made journeys in their local area using a variety of different means.



1. Social survey of residents







A letter was distributed to over 5000 addresses across the East Oxford LTN during summer 2024 using the Royal Mail Door to Door® service. This invited householders to take part in an online survey which they could access by scanning a QR code or following a URL to access the survey. There was also the option to request a paper copy (including pre-paid self-return envelope) or for assistance completing the survey. The survey remained open for six weeks after the point of delivery in June 2024. Recipients were asked to answer a series of questions on their perceptions of the LTN and its impact and their overall level of support on a scale ranging from 1 (lower level of support) to 10 (higher level of support). The survey took about 10 minutes to complete. As an incentive to take part, respondents were given the option of being entered into a prize draw to win a £50 shopping voucher. A final sample of 528 usable returns (approx. 10% response) was achieved. The sample was broadly representative of the population of East Oxford but there was a marginally higher response from people who identified as female and the sample was predominantly White. Respondents were also more likely to have access to a car at their household compared to householders in Oxford East boundary as a whole. Spatial analysis of survey respondents' postcodes revealed that ninety per cent lived within the East Oxford LTN and the remainder along its boundary roads.

2. Interviews



Interviews were conducted with 30 survey respondents living at separate addresses spread across the LTN case area (both within the LTN zone and boundary roads) who indicated on the survey form that they wished to take part. Participants were selected to ensure a diversity of people who indicated different levels of support for the LTN in their response. Interviews took place either online or at the participant's home or a mutually agreed space and lasted around 45 minutes. All of the interviews were transcribed and shared with participants for them to confirm accuracy.

3. Go-along interviews



A subset of 15 participants from the initial interviews took part in a go-along interview. This involved accompanying them on a regular journey they made from their home and enabled a situated understanding of their experience of moving through (and in some cases, beyond) the LTN. Selected participants represented individuals who travelled by different means of transport and who had divergent views about LTN.

Ethics

The study was approved by the Oxford Brookes University Research Ethics Committee (UREC Registration No: 231763). For the purposes of confidentiality, all names cited in the following text are pseudonyms.



UNDERSTANDING MOBILITY AND ACTIVITY IN THE LOW TRAFFIC NEIGHBOURHOOD **SUMMARY OF KEY FINDINGS**

Key Findings



Key findings from the social survey

Perceptions of the East Oxford LTN were investigated in the questionnaire survey by asking respondents to score their perception of the impact of the LTN on twelve indicators using a seven-point scale with adjective pairs (e.g. 'increased' and 'decreased'). These are summarised in **Table 1.** The columns show the percentage response and the column on the right hand side of the table shows the mean score (and standard deviation).

Table 1: Perceived Impact of the East Oxford LTN

	+3	+2	+1	0	-1	-2	-3		n= (Mean, SD)
INCREASED my feeling of personal safety	28	15	9	25	6	6	11	DECREASED my feeling of personal safety	489 (+0.74, 1.9)
DECREASED my feeling of danger from road traffic	27	14	13	20	7	8	12	INCREASED my feeling of danger from road traffic	486 (+0.64, 2.0)
made it MORE safe for me or other people in my household to WALK	30	15	9	28	6	4	9	made it LESS safe for me or other people in my household to WALK	482 (+0.88, 1.9)
ENCOURAGED me or other people in my household to WALK (or walk more)	22	10	13	41	5	3	6	DISCOURAGED me or other people in my household from WALKING (or walking more)	478 (+0.69, 1.7)
made it MORE safe for me or other people in my household to CYCLE	32	13	8	23	6	8	11	made it LESS safe for me or other people in my household to CYCLE	467 (+0.73, 2.1)
ENCOURAGED me or other people in my household to CYCLE (or cycle more)	22	11	14	38	3	4	9	DISCOURAGED me or other people in my household from CYCLING (or cycling more)	465 (+0.65, 1.8)
ENCOURAGED me or other people in my household to use PUBLIC TRANSPORT	11	6	13	50	6	6	8	DISCOURAGED me or other people in my household from using PUBLIC TRANSPORT	478 (+0.12, 1.5)
DISCOURAGED me or other people in my household from DRIVING	23	15	16	36	4	3	4	ENCOURAGED me or other people in my household to DRIVE	472 (+0.95, 1.6)
ENCOURAGED me or other people in my household to INTERACT WITH NEIGHBOURS	11	7	12	56	4	4	7	DISCOURAGED me or other people in my household from INTERACTING WITH NEIGHBOURS	474 (+0.27, 1.5)
ENCOURAGED (my) children to play outside	7	6	7	67	1	2	10	DISCOURAGED (my) children from playing outside	397 (+0.06, 1.4)
DECREASED the level of air pollution in my street	29	13	9	24	6	4	14	INCREASED the level of air pollution in my street	477 (+0.69, 2.1)
INCREASED my level of accessibility to local goods and services	10	6	8	36	9	8	23	DECREASED my level of accessibility to local goods and services	485 (-0.45, 1.9)

Note: Results are shown at the +/-5% margin of error (and 95% confidence level)

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Key points to note from Table 1

Respondents perceived that the East Oxford LTN has made a marginally *positive* impact on all indicators apart from 'level of accessibility to local goods and services' where the LTN is perceived to have made a negative impact.

The biggest perceived impact was on car driving with fifty four percent of respondents indicating that the LTN had *discouraged* them or other people in their household from driving.

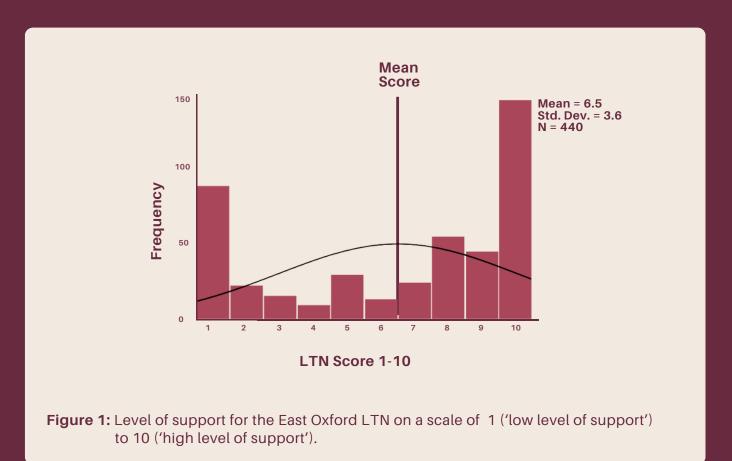
There was also a perception that the LTN had made it safer to walk and safer to cycle (to a lesser extent) and had encouraged the respondent and/or people in their household to walk and cycle more.

The lowest mean positive score was for children's play although twenty percent of respondents indicated that it had encouraged their (or other) children to play outside.

It is notable that a significant proportion of respondents provided a neutral response on all twelve indicators and that this was higher in relation to use of public transport, interaction with neighbours, and children's outdoor play.

Level of Support for East Oxford LTN

The survey also included the question, **'How supportive are you of the East Oxford LTN?'** and asked respondents to score their 'level of support' on a scale of 1 to 10 (with one indicating 'lowest support' and ten indicating 'highest support'). Figure 1 shows a histogram of the distribution of responses and a high frequency of responses at either pole. In other words, there is a high proportion of the population that scored 1 ('lowest support') and a high proportion who scored 10 ('highest support'). A normal curve has been added in the figure to demonstrate slight skew towards higher support for the LTN. For the whole sample, the mean score was 6.5 (SD 3.6) demonstrating that overall there was *moderate* support for the LTN.



Likelihood of Support for the LTN

Further analysis of the data (using regression analysis) revealed that respondents were more likely to support LTN, that is, score more highly, if they lived *within* LTN (as opposed to living on a boundary road), did *not* have access to a car, had access to a bicycle, or lived in a household with children aged under 16 years.

Key findings from interviews and go-alongs

Interviews took place with 30 people with different perspectives on the East Oxford LTN. The interview schedule included questions about how they and their household made journeys in the city and whether this had changed since the implementation of the LTN; whether any other of their other activities had changed since the implementation of the LTN; and perceptions of the general impact of the LTN. Fifteen people from this group were observed as they made a regular journey from their home as part of a 'go-along' interview.



The table shows the characteristics of the people who took part in the interviews (and 'go-alongs') – all participants' real names have been replaced by pseudonyms. The scores represent the level of support for LTN that they indicated on their survey form. The sample was made up of 16 males and 14 females; average age 58 years (youngest 23 and oldest 84); one in five were non-White; four self-described as being in 'fair' or 'bad' health; there was a mix of household types and average duration living at addresses was 23 years (min 6 years and maximum 50 years); five households were located on boundary roads; five households had no access to a car; and, four participants did not have access to a cycle.

The average score for 'level of support' on a scale of one to ten was 6.2 closely resembling the average score from the social survey (6.5). The sample consisted of 16 people who indicated 'high support for the LTN'; 10 who indicated 'low support'; and 4 who demonstrated 'moderate support'.

Table 2: Summary	Table of Participants
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Name	Gender	Age category	Ethnicity	Health status	Economic status	Household type	Duration current address (yrs)	LTN or boundary road	Car Driving Licence	Car Availability hshld	Bike availability	LTN Score	Support for LTN [3 cat]
Kevin	м	40s	White	Very good	In paid full-time work	Couple with child(ren) U16	10	within LTN	Yes	Yes	Yes	10	High
Liam	м	70s	Mixed or multiple ethnic groups	Fair	Retired	Single adult	30	within LTN	Yes	Yes	Yes	8	High
Jackie *	F	70s	Mixed or multiple ethnic groups	Good	Retired	Couple	30	within LTN	Yes	Yes	No	1	Low
Ellie*	F	60s	White	Fair	Permanently disabled	Single adult	47	within LTN	Yes	Yes	No	1	Low
Natascha*	F	70s	White	Very good	Retired	Couple	45	within LTN	Yes	Yes	Yes	10	High
Iqbal*	м	40s	Asian or Asian British	Good	In paid full-time work	Couple with child(ren) U16	7	within LTN	Yes	Yes	Yes	1	Low
Alan∗	м	60s	White	Good	Retired	Couple	40	boundary road	Yes	Yes	Yes	3	Low
Brian	м	60s	Other ethnic group	Good	In paid part-time work	Couple	27	within LTN	Yes	No	Yes	10	High
George*	м	40s	White	Very good	In paid full-time work	Couple with child(ren) U16	9	boundary road	Yes	Yes	Yes	10	High
Martin*	м	80s	White	Very good	Other	Single adult	22	within LTN	Yes	No	No	10	High
Patrick	м	70s	White	Very good	Retired	Couple	50	boundary road	Yes	Yes	Yes	9	High
Henry	м	20s	Black, BlackBritish, Caribbean or African	Very good	In paid full-time work	Adult living with parents	20	within LTN	Yes	Yes	Yes	1	Low
Daniel*	м	60s	White	Good	Retired	Couple	18	within LTN	Yes	Yes	Yes	3	Low
Charles	м	30s	White	Very good	In paid full-time work	Couple with child(ren) U16	6	within LTN	Yes	Yes	Yes	10	High
Isaac*	м	60s	White	Very good	Retired	Couple	20	boundary road	No	Yes	Yes	1	Low
Fiona*	F	40s	White	Good	In paid part-time work	Couple with child(ren) U16	13	boundary road	No	Yes	Yes	5	Moderate
Laura	F	30s	White	Good	In paid full-time work	Couple	17	within LTN	Yes	Yes	Yes	10	High
Natalie*	F	70s	White	Very good	Retired	Single adult	9	within LTN	Yes	No	Yes	10	High
Matthew*	м	50s	White	Good	In paid full-time work	Couple with child(ren) U16	15	within LTN	Yes	Yes	Yes	10	High
Omar	м	60s	Asian or Asian British	Very good	In paid full-time work	Couple	35	within LTN	Yes	Yes	Yes	4	Moderate
Holly	F	80s	White	Very good	Retired	Couple	30	within LTN	No	No	Yes	10	High
Jessica	F	60s	White	Good	In paid part-time work	Couple	20	within LTN	Yes	Yes	Yes	9	High
Katherine*	F	30s	White	Very good	In paid full-time work	Couple	8	within LTN	Yes	Yes	Yes	8	High
Diana	F	50s	White	Very good	In paid part-time work	Couple	35	within LTN	Yes	Yes	Yes	5	Moderate
Emily	F	40s	White	Good	In paid full-time work	Couple	6	within LTN	Yes	Yes	Yes	5	Moderate
Grace	F	60s	White	Bad	In paid part-time work	Couple	25	within LTN	Yes	Yes	No	1	Low
Alice*	F	60s	White	Very good	In paid part-time work	Single adult	8	within LTN	Yes	No	Yes	9	High
Bethany	F	60s	White	Bad	Retired	Single adult	40	within LTN	Yes	Yes	Yes	2	Low
lan	М	50s	White	Good	In paid full-time work	Couple with child(ren) 16+	25	within LTN	Yes	Yes	Yes	2	Low
Frank	м	70s	White	Good	Retired	Couple with child(ren) 16+	35	within LTN	Yes	Yes	Yes	8	High

* denotes people who also took part in a 'go-along' interview. **Note**: All real names have been replaced by pseudonyms. The findings from the interviews presented here are based on different levels of support for LTN. These have been categorised as 'LTN supporters', 'LTN opponents', and 'LTN ambivalents' based on their response to the social survey.

LTN 'supporters'

Most LTN supporters (n=16) lived within the LTN but two lived on boundary roads. The majority had access to a car in their household but mainly walked and cycled for short journeys in their local area.

Travel behaviour

Most stated that the LTN did not have a significant impact on the way they travelled because they already walked and cycled for short distances. However, some did mention that they had reduced their level of driving since the LTN was installed and had started to walk and cycle more for shorter distance journeys.

Perceptions, experience & prognosis

There was a strong perception that the LTN had been transformational in terms of the quality of the environment due to the reduction in traffic and commensurate reduction in traffic noise as well as improvement in air quality. All emphasised that the LTN had made a positive impact on their walking and cycling experience. Participants expressed feeling safer and more comfortable walking and cycling inside the LTN, particularly those who cycled with young children using child-seats and cargo bikes. There was the perception that more people were walking and cycling, especially families cycling with small children. Some participants felt that some areas inside the LTN had become more sociable and that small businesses, especially cafes, had benefited from the transformation.



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Viewpoints on the East Oxford LTN among 'supporters'

Before the LTN, the roads felt chaotic—now, my kids can cycle to school without me worrying constantly.

Kevin, M, 40s, full-time work, lives within LTN.

'I know my neighbours better because I see them. I see them walking too. So that's really nice, actually. I mean, I very rarely walk, even just down to the Co-op at the bottom of Divinity Road without seeing somebody. And that's really nice. It's a nice observation. I like that, yeah, yeah. Nearly always. I go back to my husband and say, "I saw whoever it is I saw." You know, yeah, nearly always'.

Natascha, F, 70s, retired, lives within LTN.

'In a radical way, it's transformational of our personal lives, quieter, cleaner, safer, healthier'.

Martin, M, 80s, semi-retired, lives within LTN.

'We've said, "it feels like being on holiday!". You just come off the very busy road - which I do see has got an awful lot worse. But you turn into any of these side streets... and it's completely different. It's just a lovely place to be'.

Laura, F, 30s, full-time work, lives within LTN.



'Positive experiences. We know a lot of young families with children in this area, and they enjoy now being able to walk or cycle their children or their babies in the streets in this area, and to go to the local park. And for many people it's a small thing, but you know, every day that's part of their lifestyle'.

Charles, M, 30s, full-time work, lives within LTN.

'The way things are now, there are winners and losers. Before the LTNs, some people were winners while others were losers in terms of transport. Now there are slightly different winners and losers. I'm definitely a winner now; before, I was more of a loser because cycling was a lot less pleasant. Now it's more pleasant. My street was small, noisy, and congested, and now it's not. I was previously a loser, but now I'm the winner. Others who were winners before, like car drivers who could get around everywhere quickly or who had specific requirements to get to different parts of the city, are now the losers. Overall, it's beneficial for most residents and for the environment.'

Brian, M, 60s, part-time work, lives within LTN.

Supporters of the LTN were not uncritical of scheme implementation.

Despite the overall positive response among supporters of the LTN there were mixed feelings about the conditions for walking and boundary roads. cvcling along Some appreciated the improvements that had been made on some of the main roads but many felt that conditions had become worse because of the weight of traffic now using those roads. There was also concern about the ability of taxis to drive through parts of the LTN (via ANPR gates), and about the increased number of motorbikes, mopeds and adapted e-bikes moving at speed through the LTN.

There were concerns expressed about the level of vandalism to some bollards and aggression by some drivers when the scheme opened. Concern was raised about County Council handling of LTN scheme delivery notably issues around the lack of depth of consultation and also that communication should have tackled the misinformation that was being shared on social media by some members of the online community who were vehemently against the scheme.

There was also criticism of sequencing; that the LTN should have been delivered after significant improvements to transport services and infrastructure had been implemented. For example, there was frustration that bus gates and replacement of the railway bridge on Botley Road adjacent to Oxford railway station had not been completed prior to implementation of LTN which, it was felt, could have alleviated congestion at key points in the network and reduced negative attitudes towards LTN.

Despite these criticisms, most participants felt that the LTN was a necessary part of reducing car use and developing a more sustainable transport system. Whilst congestion hotspots did not go unnoticed, there was hope that the completion of bus gates and re-opening of Botley Road (the main arterial route west of Oxford) once major roadworks were completed, would help resolve congestion on corridors in the East of the city.

Many participants who lived within the LTN recognised their 'privileged' status and expressed sympathy for those who needed to use their cars for work and also elderly or disabled people who relied on their car for everyday mobility. Some participants, however, did express that the impact of the LTN on car travel times had been exaggerated by some members of the 'anti-LTN' lobby.



'I just want to acknowledge that I am speaking from a super privileged position'.

Katherine, F, 30s, full-time work, lives within LTN.

'The opposition to LTNs isn't about logic. It's about emotion, misinformation, and a deep unwillingness to change. No matter what data you show, some people just won't listen.'

George, M, 40s, full-time work, lives on boundary road.



Overall there was a feeling among supporters that while the East Oxford LTN was a 'step forward', more substantial measures were needed to truly develop opportunities for more people to travel more sustainably.

LTN 'opponents'

All LTN opponents (n=10) had access to a car in their household. The majority lived within the LTN, two lived along a boundary road. Three did not have access to a cycle. Many who were able, expressed that they tried to walk and cycle whenever possible.

Travel behaviour

Most people who used their cars reported trying to be more strategic about their car use. As well as having to re-route along boundary roads some re-routed through LTN zones to avoid traffic on boundary roads. Many, who were able, reported altering the timing of their journeys to try to avoid peak congestion. They also reduced trip making by combining trips where possible, for example, stopping by the supermarket while on another journey, or simply deciding not to travel at all. Those who were retired recognised their travel was more discretionary and they were more likely, whenever possible, to time their car journeys to avoid peak periods. Many people reported no real change in their travel behaviour (i.e. they still drove) often because they felt that they had no choice, for example they still needed to commute to work by car or escort their children to school. However, some did express that they had reduced some of their car use and were making more local journeys to local grocery stores on foot.

Perceptions, experience & prognosis

Opponents of the LTN provided a multiplicity of reasons for their opposition, some because of direct experience and others based on their perception of the impact of the LTN. The main talking point was that journeys by car were taking longer due to congestion at key junctions along boundary roads (e.g. St Clement's & The Plain).

Viewpoints on the East Oxford LTN among 'opponents'



'The impact on us is that [car] journeys take longer. Yeah, and that we have to make different arrangements for some journeys. That's the impact on our life. That's yeah, it's not, in the scheme of things, it's not a big deal'.

Jackie, F, 70s, retired, lives within LTN.

'I had a wheelchair-accessible vehicle and freedom – and now it's been taken away.' 'People who can walk and cycle love it. People like me are just left behind.'

Ellie, F, 60s, permanently disabled, lives within LTN.

'For households like mine, from an Asian background, the shops that serve our essentials—like rice, flour, meat, and other food—we used to be able to drive to Cowley Road, park outside, load the car with a month's worth of shopping, and come back. That's not so easy to do now, and I think people have suffered trying to get to those locations.'

Iqbal, M, 40s, full-time work, lives within LTN.



This was often expressed more strongly by those who felt that they needed to use their car, for example, for work purposes or to escort their children to school or other activities. For some older retired participants, the car was seen as essential for carrying heavy items, for example, when transferring tools to and from the allotment. One disabled participant felt that she had lost the 'freedom' to use her specially adapted car and that LTN had delayed her scheduled care visits by car workers and disrupted her ability to plan her day.

Opponents of the LTN often expressed concern for others, notably older and disabled people, who they perceived had difficulty making journeys on foot and (particularly) by bike. Some opponents also thought that delivery and emergency service providers had been negatively affected by LTN through delay. There was also the perception that pollution and road danger had increased along boundary roads.

While there was recognition that the LTN benefited people travelling on foot or by bike, particularly those travelling with children, there was scepticism as to whether LTN had the desired effect of encouraging more people to walk and cycle or for children to play out in the street. There was also a feeling that local businesses had been negatively impacted due to reduction in trade. Some expressed that blockages on some streets caused problems for service vehicles that had to reverse, and in some cases, this had caused damage to parked vehicles. Some opponents living within the LTN were also concerned about illegal parking and the general lack of maintenance of bollards and untidiness of the curtilage outside of their front door.



Similar to LTN supporters, opponents were critical of the County Council's handling of LTN scheme delivery both in terms of perceived lack of consultation and communication. There was a feeling, particularly among older and disabled participants, that the Council lacked understanding of the challenges that some people faced who needed to use their cars.

There was also a strong feeling of injustice that life had become better within the LTN (the 'winners') but that it had become worse on boundary roads (the 'losers'). However, some opponents who lived along boundary roads, were keen to stress that they were not 'anti-LTN' *per se*, rather they felt that the approach did not go far enough. More radical measures were required to reduce motor traffic using boundary roads so that they could enjoy the same benefits as those living within LTN.

Indeed, there were many comments about how imposition of LTN alone was a 'crude measure' and that broader structural issues needed addressing including investment in sustainable transport infrastructure and improvements to bus service provision including the suggestion that the Council should control the strategic planning of bus routes and fares.

Viewpoints on the East Oxford LTN among 'opponents'

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'I'm not against the LTNs – it might sound like I am, but I'm not. I actually think controlling traffic is really important, but you need to understand that there's commuter traffic trying to cut across East Oxford twice a day, and there are local people who want to make short journeys. The challenge is how to adapt the neighbourhood so short journeys remain viable and relatively green while not putting up barriers that make it difficult for elderly or disabled people who rely on cars'.

Alan, M, 60s, retired, lives on boundary road.

'I might've been a bit frustrated when I gave that rating [scored 1 in survey] but honestly, it's difficult for me to see the positives. I like the idea behind it - lowering emissions and making the neighbourhood safer - those are great things we should push for. But when you come up with a radical idea like this, you've got to try it out, see if it works, and then get feedback from the people and act on it. That's how the experimental method works, right? And I don't feel like they've really done that yet'. Henry, M, 20s, full-time work, lives within LTN.

'I think one of the most disappointing impacts of the LTNs is the amount of local friction that it's caused. You know, I've got two neighbours who still aren't speaking to each other because they were on different sides. And you know it's been very divisive. I think people's reactions to it are largely kind of emotional. It's not a situation that you can really improve, because you can't talk somebody round to your point of view. So. I think that's been one of the really serious impacts. Actually kind of shattered some of the sense of community that there was in places before'.

Daniel, M, 60s, retired, lives within LTN.

'It's been astonishing. When I engage with people who are "pro-LTN", I am often cast as a "petrolhead" or someone in league with [well-known right-wing commentator] which is frustrating. I'm not against reducing car traffic. In fact I love Oxford and I'm passionate about cycling. I want to see Oxford become a city like many in Europe that has successfully reduced car traffic. Even central London has become much more pleasant due to their efforts to reduce traffic. So I'm not "anti-LTN", I'm "anti-car traffic in urban environments"!'

Isaac, M, 60s, retired, lives on boundary road.



LTN 'ambivalents'

Four people were ambivalent about the LTN they scored their level of support for LTN as either 4 or 5 out of ten. This included one person who lived on a boundary road. All had access to a car in the household and also a cycle.

The three interviewees who lived in the LTN noted the dramatic improvement to the streets outside their front doors describing them as quieter, safer and more sociable. While they felt that they had benefited, they were also concerned that the scheme had been detrimental to others who lived on boundary roads as well as older people who tended to rely on their cars more. One (Omar) was conflicted because he primarily walks and cycles and felt conditions for cycling were better but on the other hand he was concerned about the impact to his business because clients had expressed frustration about access by car. He also felt that it would be difficult to get Asian women to cycle.



One person who lived on the boundary road (near a major junction at St. Clement's), was a major proponent of sustainable travel and mainly used her bike to travel in the city, including to transport her children to nursery. She explained how her family had suffered from the increased congestion and pollution and noise outside of their home and that the anger she had witnessed between antagonised motorists was upsetting and hard to bear. She pointed out the improvements for walking and cycling for those 'privileged' enough to live within the LTN but felt that cycling was now more stressful on boundary roads. She wanted to see more radical alternatives to support traffic reduction and a transition to sustainable alternatives. In the short term she and her partner were monitoring the situation and considering moving to a quieter neighbourhood to protect her young family's health and wellbeing.

Ambivalence about level of support for the LTN therefore boiled down to the fact that, while strategies to reduce car use were supported, these needed to extend to people living on boundary roads and that this would require significant improvements to local transport infrastructure and services so that that the benefits of traffic reduction were shared by the rest of the city's inhabitants. There was also reference to the real challenge of getting some people in the community (e.g. Asian women) to shift away from car use.

Views on the East Oxford LTN among people who were'ambivalent'

'I suppose they've added a bit of extra [journey] time. They've changed the way that, or the times and the places I walk my dogs. They've increased my need to cycle and my preference for cycling and they've, yeah, detrimentally affected the lives of quite a few of our older church members who have a lot of more issues in accessing lots of different things now by car particularly'.

Emily, F, 40s, full-time work, lives within LTN.

'I'm sort of in a group of people [Deep Green] who would technically or ethically be in favour of LTNs, and all of my friends are in that group. But I'm absolutely not. I'm there sort of with, you know, the people who are saying, "This is a class issue, actually". And, you know, these comfortably off people in the nice neighbourhoods get less traffic, while the less affluent people on the busier streets get more traffic' [...] [Interviewer]: 'So would you like to see the LTN removed? Say, if there was a referendum. Let's say the Council said, "we are going to do a referendum on whether to rip them [LTN] all out"

[Fiona] 'No! Keep going! You haven't done enough, that's the problem!...It's like you know, "guys, why have you done one thing without doing all of the other things that are possible?!" Because we need people to feel positive about making changes'.

Fiona, F, 40s, part-time work, lives on boundary road.



'I think that on one hand I am looking at the safety and environment. And on the other hand, I'm looking at the business, and the necessity to use the vehicle [car]. So the environment is better, but there's also the business side. I am struggling on those issues, and somehow I managed to get a ticket on my car right in front of my house. Just within ten minutes there was a penalty note. So, that's it. That is the reason I am in the middle'. [...]

'When it comes to Asian women, they are rare. It's very rare for them to ride a bicycle. You may notice it. Young people do that, maybe, but we are talking about mature people who own their houses and that. In this area, they don't tend to use bicycles. Women. And they still prefer to use a car if they can'.

Omar, M, 60s, full-time work, lives within LTN.

Conclusion

This study has revealed varying, but overall, moderate levels of support for the East Oxford LTN among residents.

The evidence also suggests that, since the LTN was installed, people were adapting car journeys if they could, or using their cars less and walking and cycling more for short journeys. This varied depending on personal and household circumstances and benefited some groups more than others. There was also the sense that the East Oxford LTN had been transformational in terms of traffic reduction *within* the LTN but that conditions on boundary roads had deteriorated because of increased traffic.

There was a multiplicity of perspectives on the East Oxford LTN and nuance in stance on its impact from both supporters and opponents of the East Oxford LTN. Despite divergence of opinion, people who supported the East Oxford LTN recognised the difficulties it presented for people who were more reliant on using a car. They were also sympathetic to the impact it has had on those living on LTN boundary roads. Those opposed to the East Oxford LTN recognised the need to reduce traffic in towns but felt that LTN are not the right way to achieve this ambition. Together with people who are more ambivalent about LTN, they recognise that measures are required to provide convenient, safe, reliable and cost effective alternatives to using the car for short journeys in urban areas and that the LTN alone are unlikely to solve the problem of 'traffic in towns'.

There was also convergence of opinion that consultation about scheme implementation and communication of broader transport strategy could have been better. The logic of sequencing, namely the fact that LTN were installed before other significant measures, such as bus gates and service improvements, was a source of frustration. It is worth reminding, however, that local authorities were put in an invidious position by central government to deliver schemes without the time and resources to carry out meaningful consultation prior to implementation (as documented by Dudley et al., 2022) let alone respond to myths and conspiracy theories that continued to circulate about the purpose or impact of LTN. Furthermore, circumstances prevailed where significant measures (e.g. bus gates, Oxford rail station bridge/scheme works) were unable to be implemented prior to the East Oxford (and other city) LTN being installed. Doing so may have significantly smoothed the transition and fostered acceptability among those more resistant to change.

All of this points to the need for LTN to be carefully sequenced within a broader strategy for reducing car use across the city (including boundary roads) and for authorities to be in constant dialogue with communities. Clearly this requires resources and investment in good quality sustainable mobility alternatives that can free-up road space for businesses, essential services, and those for whom car use is a necessity.

References

Appleyard, D. (1980). Livable Streets. Berkeley: University of California Press.

Buchanan, C. (1964). *Traffic in Towns. The specially shortened edition of the Buchanan Report*. London: Penguin.

Dudley, G., Banister, D., & Schwanen, T. (2022). Low Traffic Neighbourhoods and the Paradox of UK Government Control of the Active Travel Agenda. *The Political Quarterly*, *93*(*4*), 585–593.

UK Department for Transport (2024). *Vehicle Licensing Statistics: 2023. Published 15 May 2024.* UK Department for Transport.







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