

Oxford Low Traffic Neighbourhood Review: Impact on road casualties, air pollution and retail business – October 2026 –



Five years of Oxford LTNs: Over 100 injuries avoided, cleaner air, and shops outperforming the UK

Summary

Oxford's Cowley and East Oxford Low Traffic Neighbourhoods (LTNs) have now been in place for about five years¹. In that time, road casualties have been reduced by over 100, air pollution has been reduced, and Cowley Road shops have outperformed national trends.

The LTNs have reduced road casualties both in the LTN areas, and on surrounding roads, by an average of just over 20 a year, over 100 since they were introduced. The Cowley LTNs are reducing casualties by 12 a year, the East Oxford LTNs by 8 a year. Most of the benefit is seen at boundary road junctions because of reduced collisions from rat-running traffic turning in or out of the residential streets, benefitting all users of these roads. The economic benefits of this since the implementation of the LTNs exceeds £8 million.

Since the LTNs were installed, air pollution has fallen within the LTNs, where homes are closest to the streets. Pollution has also reduced on boundary roads and elsewhere in the city, showing no evidence that pollution has been displaced elsewhere. Air pollution causes heart and lung diseases and stunts children's development, so it's vital to reduce it.

Retail vacancies (empty shops) have also reduced slightly, bucking the national trend for more closures. 12 vacancies were recorded in a 2018 survey for the Oxford Local Plan. Using the same method, three surveys since the LTNs have shown fewer shops are now empty, with only 11 vacant in September 2026. If Cowley Road had followed national trends, we would expect three more empty shops, but instead we see one fewer.

"East Oxford residents are less likely to be harmed by collision or pollution thanks to the Low Traffic Neighbourhoods. In addition, Cowley Road shops are doing better than national trends.", said Robin Tucker, Co-Chair of CoHSAT, the Coalition for Healthy Streets and Active Travel. "The reduction in rat-running traffic means it is safer for people to walk, wheel or cycle to the shops or the bus stop. That's visible in the data, and in the people you meet in the streets."

Sushila Dhall, Chair of the Oxford Pedestrians Association said, "OxPA has very much welcomed the LTNs, which have made it much easier to walk, wheel and cycle in Oxford for people of all abilities, and means we can hear the birds, and see children safely playing

¹ An average of five-and-a-half years for the Cowley LTNs and four-and-a-half years for the East Oxford LTNs.

Cover photo: Mostro Coffee at Truck Store, next to the Rectory Road modal filter on Cowley Road

in public spaces. The main issue we've seen is people parking cars and vans at the ends of LTNs on Cowley Road, which block wheelchair users from getting along the street."

Cyclox Trustee Richard Scrase lives near an LTN, he said, "Before they put the LTN in right near where I live, we used to have people roaring up the hill late at night cutting through between Cowley Road and Holloway. That noise, often enough to disturb our sleep, has gone. When I walk to the bus there is no longer a queue of cars emitting fumes and trying to get onto Cowley Road. When I do drive, it's easier to get onto the main road. Best of all, I see far more children cycling to school at Spires and parents taking their small children to nursery in cargo bikes"

Hannah Kirby, Chair of Headington Liveable Streets said, "These data, along with residents' personal accounts, show the health and economic benefits of the LTNs, and how they are improving people lives. Headington is now one of the few areas of Oxford where residents are not protected from through traffic by LTNs. Plans were developed in 2022, but then shelved. We'd like this report to restart the process of delivering LTN public health benefits to the thousands of people in Headington."

Views from residents of east Oxford show that many people value the safety that the Low Traffic Neighbourhoods have brought, and how that has improved health, community contact and independence for children.

Resident views

Lorraine², a mother living just off Iffley Road, who bought a cargo bike because of the LTNs and the removal of parking on Iffley Road, finds it saves her money and connects her to friends. "Soon after getting the cargo bike, we got rid of our car, and feel so much less stressed, and are also saving lots of money. The LTNs and cargo bike have given us lots of freedom, and connected us with our community better. There is rarely a trip in St Mary's where I don't wave at stop and chat with a friend. That never happened before. We never want to move, as the LTNs are one of the things that make Oxford so enjoyable to live in."

Linda, a mother from east Oxford, finds it safer to walk and cycle with her young son. "My husband, young son and I live in one of the Cowley LTNs. It has made our neighbourhood so much safer and more pleasant to walk and cycle through to my son's school. My son can cycle to church with us safely as well. We sold our car last year and use our electric cargo bike for shopping. Lots of our neighbours followed suit and we regularly see each other cycling to and from school, work and the shops which makes it feel so much more sociable than driving."

² Some names changed to protect identities due to previous violence and threats by anti-LTN campaigners

Kathy, a mother with two children, living in Cowley was previously frightened of the traffic, and describes how the LTNs have made the area safer and her life easier. "When the LTNs first went in my children were little and I was terrified of them falling off the pavement into the constant stream of cars going down my road. It felt like walking along a narrow cliff with a life-threatening drop if you fell off. The crossing at the end of my road was incredibly dangerous for pedestrians and a lady was knocked down by a driver and sustained serious fractures. It is hard to describe the huge difference that the LTNs made. Our area became safer, quieter, calmer, my anxiety around my children being knocked down reduced, I could talk to my neighbours across the street without having to shout and without having to be separated by a river of cars. What I hadn't realised would happen, six years on from the Cowley LTNs being in place, is the freedom and independence that my children have, now teen and tween, in moving around their neighbourhood on bike or foot. This is so important for them and is good for their confidence and health. It also makes the ongoing life/ children/ work juggle easier for me and frees up time that I would have spent ferrying them around."

Oliver, a father living just outside the East Oxford LTNs finds they give his daughter independence. "My 10-year-old has started walking to school without an adult. She's been looking forward to this all summer, but her parents would have been much more anxious if it weren't for the quiet streets in the East Oxford LTNs. The main roads are safer to walk along, too, because drivers aren't constantly turning in and out across side streets. The LTNs have let her experience the joy of independence."

Jacqueline, mother of an eight-year-old, does more local shopping and is more connected to the local community. "I can't quite explain it, I always drove places before, but in time it simply became easier and more pleasant to cycle. I now don't drive inside the ring road. I bought a second-hand cargo bike, learned to click-and-collect the Big Shop with it, and now shop more locally in Magdalen and Cowley Roads. And my son can ride to school with me, safely. An odd benefit is that I am more connected to the community. Walking or riding, you meet friends and neighbours, which I never did when driving."

Claudia, a woman living in Cowley for 36 years, has been delighted to see safety improved for cycling, particularly for children in the local area. "As a student in the 1980s I lived abroad in Germany and Austria and experienced the great cycle infrastructure there and in France and Netherlands too. I've been campaigning for better cycling conditions here for all that time and so in the last 5 years it feels like a miracle to finally be getting some of what Europe has enjoyed for decades. I've loved seeing more children cycling with parents and more cargo bikes as each year passes. I've met a lot of people locally who have only recently started to cycle as

they feel safe in the LTN areas. I've also felt the area is safe enough to help as a volunteer for a local school Bike Bus in the last year which is a great joy."

Karen, a mother of two noted how the LTNs removed an inequity that excluded less confident people from travelling the way they wished to. "When I first started cycling to work, I felt this incredible anger that roads are designed in a way that excludes less confident cyclists and that I had not been able to travel in this healthy, fun, green way before. There is a real inequity in the way our roads are designed. The combination of the Cowley and East Oxford LTNs together with the quickways has been transformative. It has created a safer route to work, and I can cycle to work every day."



A Low Traffic Neighbourhood modal filter in East Oxford

The Low Traffic Neighbourhoods

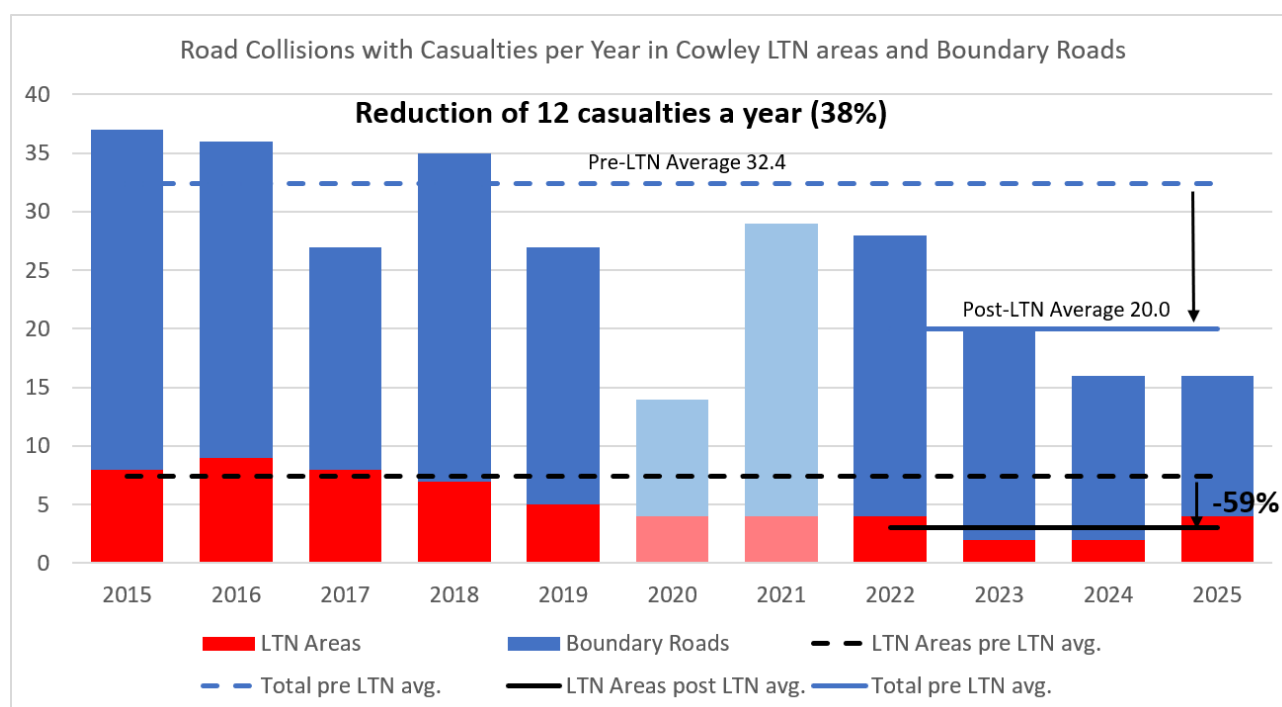
Low Traffic Neighbourhoods (LTNs) are residential streets where through motor traffic is restricted by physical or signed restrictions – it is possible to drive *to* anywhere in them, but not *through* them. (Sometimes some classes of vehicle, such as emergency services or buses are permitted through). LTNs reduce injury risk and other traffic harms for residents. They are a common feature of modern housing developments, and many older streets, designed before cars were popular, have been retrofitted as LTNs to restore low traffic levels.

Two areas in Oxford, in Cowley and East Oxford, were retrofitted as LTNs in April 2021 and May 2022 respectively. Here, we report on the results of this on road casualties, air pollution and retail vacancies.

Road Casualty reductions

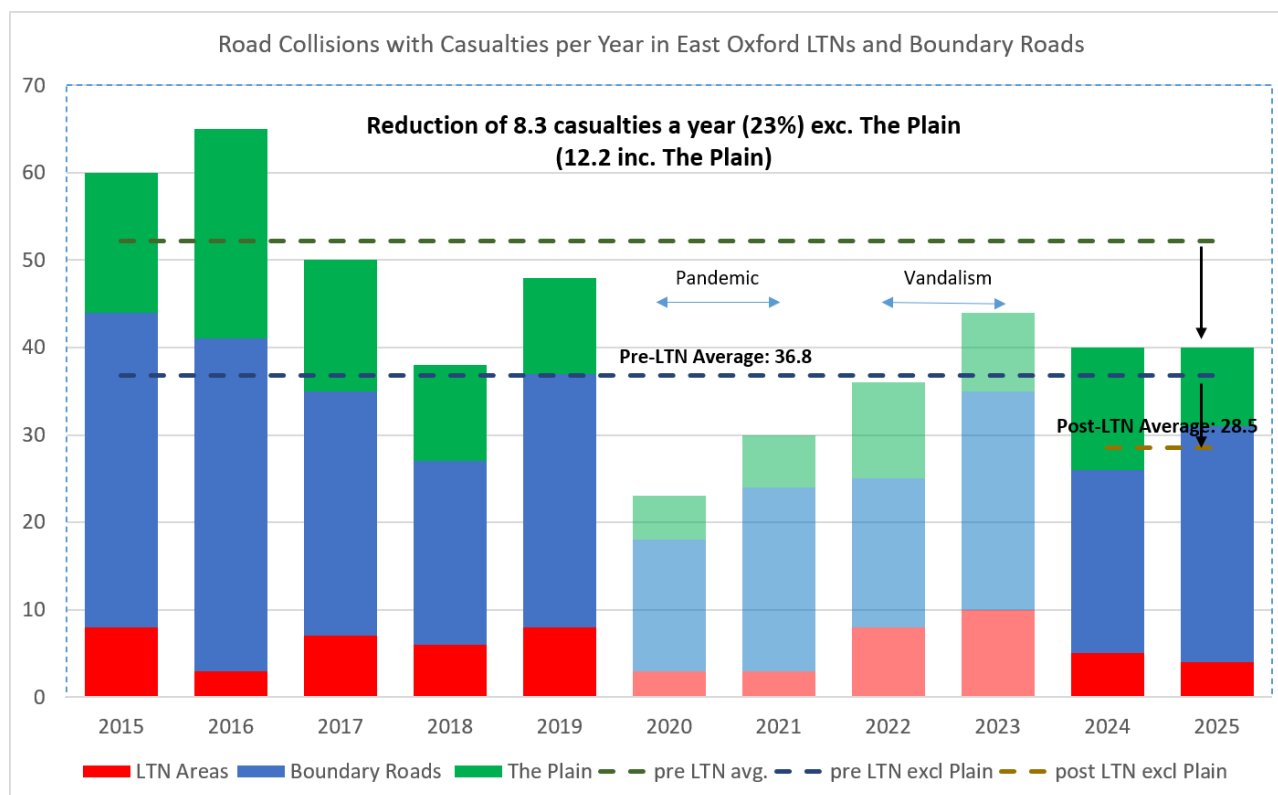
Road casualties are reported by the Department for Transport (DfT) based on Police reports. We count collisions in which a casualty occurred – a reported collision may have one or more human casualties, although in practice most have one. We obtained these data using tools such as crashmap.co.uk to count the casualties in each LTN area.

For the Cowley LTNs, the average number of collisions with casualties reduced from 32.4 before the LTNs to 20 afterwards – a reduction of 12.4. Casualties inside the LTNs have fallen from 7.4 per year average to 3.0, and on boundary roads from 25.0 to 17.0. The road with the biggest reduction was Oxford Road.



For the East Oxford LTN areas, the average number of collisions with casualties reduced from 36.8 before the LTNs to 28.5 afterwards – a reduction of 8.3. Casualties inside the LTNs have fallen from 6.4 per year average to 4.5, and on boundary roads from 30.4 to 24.0. The road with the biggest reduction was Cowley Road.

At The Plain, there was a further reduction of 3.9 casualties over this period, showing there was no adverse effect due to the LTNs, and possibly a beneficial one. New cycle lanes were installed on Iffley Road and Morrell Avenue at the same time as the LTNs. However, studying the pattern of casualties before and after the LTNs, most of the casualty reduction is at the side road turns in/out of the LTN Areas.



The individual roads with the biggest reductions to casualties were boundary roads with many side roads: Oxford Road and Cowley Road, benefitting many people who use these roads. We believe therefore that most of the reduction of casualties here is due to the reduced amount of turning in/out.

A [study of 113 LTNs in London](#) by the University of Westminster, also found that removing through-traffic reduces collisions and casualties at junctions.

In 2022 the bollards suffered from extensive vandalism and at least two casualties can be attributed to motorists driving into pedestrians where bollards had been removed. In 2023, the plastic bollards were replaced with more secure wooden bollards and the East Oxford LTNs were made permanent, with some streets in both Cowley and East Oxford LTNs having bollards replaced with ANPR enforcement with exemptions for taxis, post and some service vehicles. This means that 2022 and 2023 had partial LTN effects, and 2024 onwards has fully implements LTNs but some traffic due to the ANPR filters.

Economic benefits of casualty reduction

The Cowley and East Oxford LTNs are in total reducing casualties by over 20 a year. Over their life to October 2026 (about 5½ years for Cowley and 4½ years for East Oxford), they will have in total avoided over 100 casualties.

The total economic benefit³ for these avoided causalities is over £8 million. This is based on “estimated real costs for lost output, medical and ambulance, police, insurance and admin and damage to property”. The LTNs also produce additional benefits through increased walking and cycling, and reduced air pollution.

Walking and cycling

By preventing through-traffic, LTNs reduce both traffic volume and speed. This is because the only people driving on the roads are residents or people visiting or delivering to residents. Those people tend to drive more slowly and safely because they know and care about the people who live there, whereas rat-running drivers are mainly focused on saving time or following their satnavs.

This makes the roads safer, which leads to more people feeling able to walk and cycle – and having a much nicer experience when they do. Walking and cycling have numerous [physical and mental health benefits](#)⁴, improving quality of life for people who do it and reducing public health costs⁵. Parents feel comfortable letting their children walk and cycle to school, leisure and social activities by themselves, increasing children’s independence and saving parents’ time. People walking and cycling provide “passing trade”, supporting local businesses, and retail/leisure areas become nicer places to spend time in without the noise, smell and danger of cut-through traffic⁶.

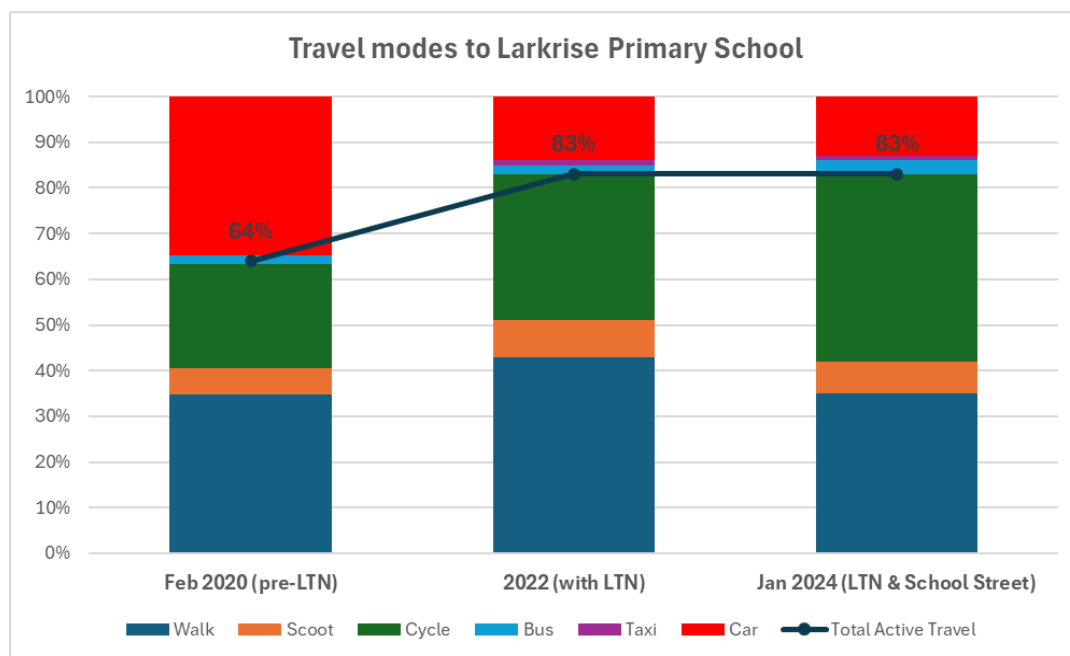
Larkrise Primary School in East Oxford provides a strong example. The share of pupils arriving at school by ‘active’ modes such as walking, scooting or cycling rose from 64% (16 in a class of 25) to 83% (21 in a class of 25) after the LTNs were implemented.

³ Based on the Average value of prevention of reported road collisions for built-up roads, DfT [RAS4001](#)

⁴ Also <https://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health>

⁵ Physical inactivity costs the NHS in the UK around £1 billion per year ([The King's Fund: Making the case for public health interventions](#) and [Scarborough et al. 2011](#)). Including costs to wider society, this rises to around £7.4 billion a year ([Public Health England: Everybody active, every day: an evidence based approach to physical activity](#)). (<https://www.nice.org.uk/guidance/ng90/chapter/Context>)

⁶ <https://www.livingstreets.org.uk/policy-and-resources/our-policy/high-streets>;
<https://tfl.gov.uk/corporate/publications-and-reports/economic-benefits-of-walking-and-cycling>



Travel modes to Larkrise Primary School in East Oxford

Air pollution

Oxford City Council measures air pollution at over 100 sites within the city. Since the LTNs were installed, [air pollution has reduced](#) at all of the LTN monitoring sites. Air pollution has also reduced at all LTN boundary road sites, and at all other monitoring sites in Oxford. Other factors, such as electric buses will have reduced pollution, but there is no evidence for displacement of pollution from LTNs. This [trend continued](#) into 2025.

Air pollution is important because there is strong evidence that nitrogen oxides and particulate pollution, of which motor vehicles are major sources, are very harmful to people, affecting [heart and lungs](#), [mental health](#), particularly for [children](#). Reductions in air pollution by reducing harmful motor traffic have been shown to [improve children's lung health](#).



An LTN modal filter on Cowley Road

Retail vacancies on Cowley Road

We have tracked retail vacancies (empty stores) on Cowley Road since the inception of the LTNs, comparing them to a baseline study commissioned by Oxford City Council in 2018 to support Oxford Local Plan development.

Our latest survey, conducted in September 2026 shows 11 vacant units, compared with 12 in the 2018 baseline survey. The number of vacancies fluctuates, as typically 15 stores open and close every year, and a single store opening or closing affects the vacancy rate by 0.6%, but our surveys in 2023 and 2024 also showed fewer vacant stores than the baseline.

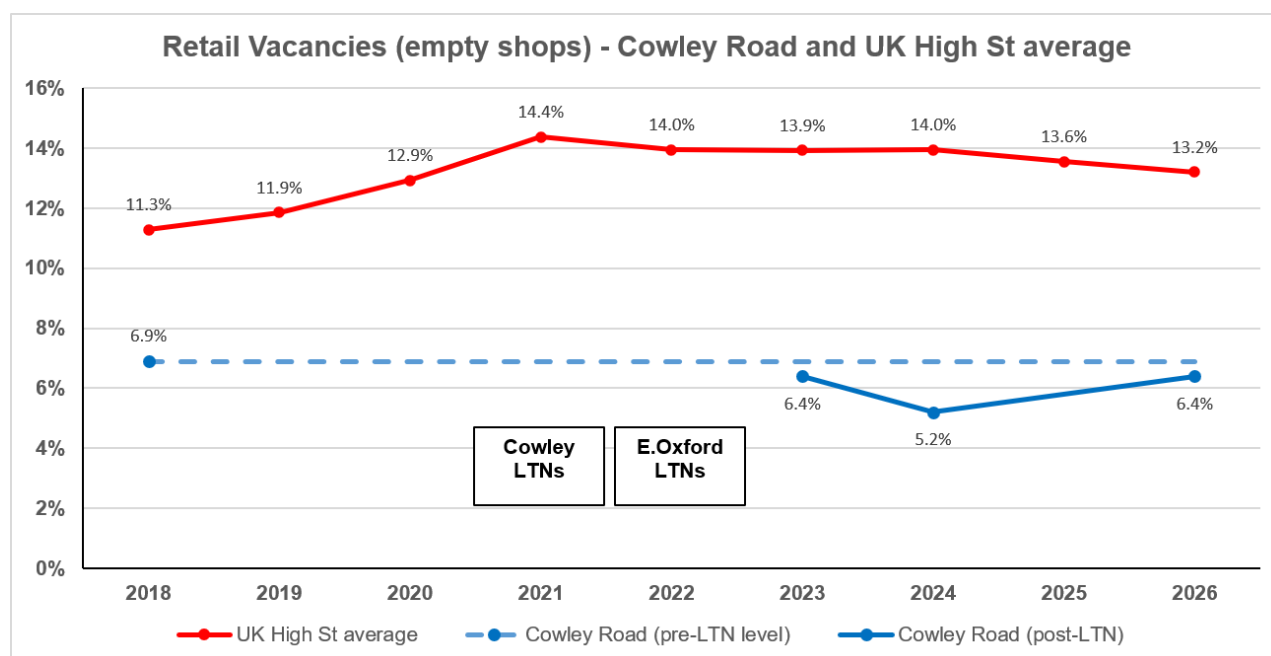
On 13th November 2018, there were 12 retail vacancies in Cowley Road.

North Side	Survey from 1 (Vacant) to 267 (Scott Fraser)	64 units
Vacancies	1 (converted to office, retained for consistency), 7, 17, 47/49, 131, 169, 189/191	7 vacancies
South Side	Survey from Cape of Good Hope and 34 (Thy Spa) to 300 (Christian Life Centre)	109 units
Vacancies	72, 114 (6), 132, 134, 134A	5 vacancies
Total 12 vacancies, 173 units, 6.9% vacancy rate		

On 24th September 2026, this had reduced to 11 retail vacancies in Cowley Road.

North Side	Survey from 1 (Vacant) to 267 (Scott Fraser)	64 units
Vacancies	1 (office kept for consistency), 119 (ex-BrewDog), 125 (ex-Sandwiches Shop/Karak Cafe) 185 (ex-Fred's Discount Store), 205 (ex-Beeline Bicycles)	5 vacancies
South Side	Survey from Cape of Good Hope and 34 (Thy Spa) to 300 (Christian Life Centre)	109 units
Vacancies	68 (Hi Lo Jamaican Eating House), 92 (ex-Atomic Burger), 134A (ex-Superdrug, but planned site for GDK and we believe Greggs), 186 (ex-Istanbul Grill), 232 (Golden Scissors – may be temporary closure) 286 (Sunny Chinese)	6 vacancies
Total 11 vacancies, 173 units, 6.4% vacancy rate		

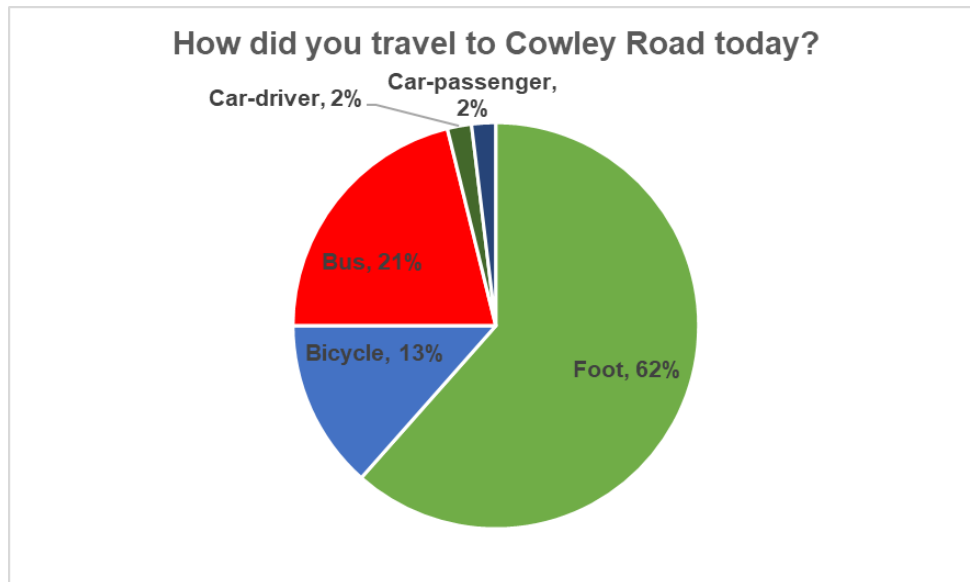
For comparison, High Street retail vacancies nationally have risen from 11.3% to 13.2% over the nearest available same period. If Cowley Road had followed this trend, we would expect *3 more empty stores* rather than *one fewer*. Cowley Road has performed significantly better than the average UK High Street since the nearby LTNs were introduced.



We have considered why Cowley Road might outperform other High Streets. The Southeast region has not greatly out-performed the UK average. The dynamic nature and the strong local customer base (40,000 people live within one mile) of Cowley Road are shared with many other UK High Streets.

The LTNs and improved walking and cycling access are a significant difference. Cowley Road's better performance may be because the LTNs enable better access by low-cost

transport – walking and cycling, which would be more resilient in times of economic difficulty. A 2017 survey showed that three-quarters of people already travelled to Cowley Road’s shops by foot or bicycle. Making walking and cycling easier would enhance that proportion. Further research could test this hypothesis.



Mode of travel to Cowley Road (Source: Street Survey, NEMS 2017)

Questions and Misinformation

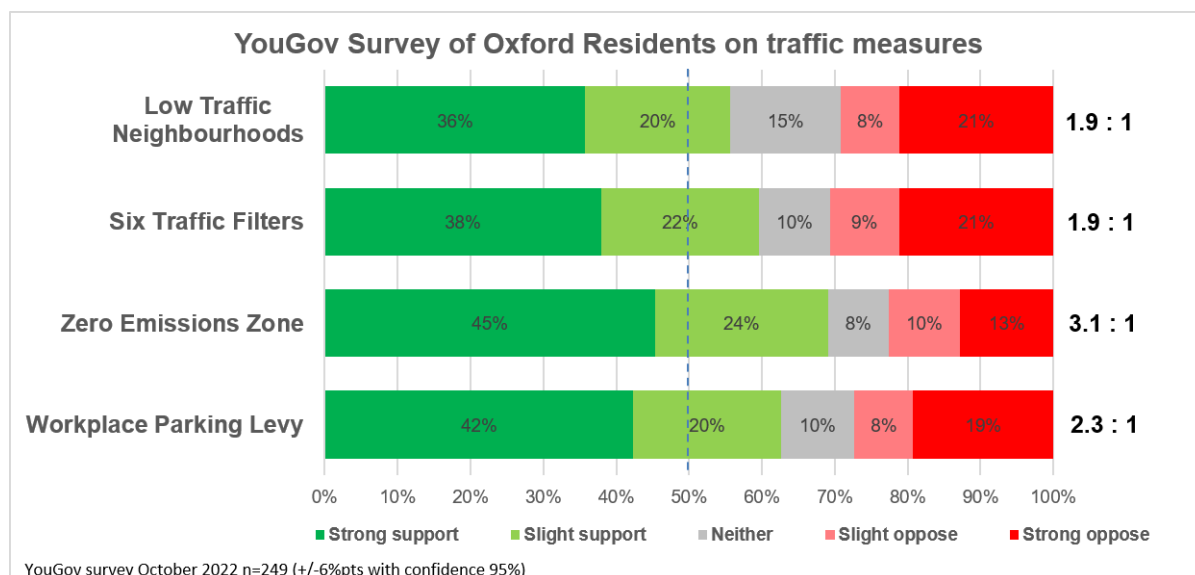
A lot of questions, myths and misinformation surround LTNs, often generated by opponents who used to use the residential streets for rat-running between main roads, which the casualty data clearly shows to be dangerous. Our previous report generated a substantial amount of misinformation in response, so this report aims to tackle that from the outset.

Q: Are LTN controversial?

A: LTN opponents would like them to be seen as controversial. The media would also like them to be controversial, because this attracts readers, listeners or viewers. But in fact they have been a standard part of street design for decades and if you ask anyone if they would like to live in a street with high traffic or low traffic, they will say ‘low traffic’.

Only one survey has been conducted in Oxford with a representative sample and a balanced question⁷ asking if people supported Low Traffic Neighbourhoods, by YouGov in 2022. This showed almost twice as many people supporting them as opposing them.

⁷ Question: ‘Low Traffic Neighbourhoods’ are residential areas where driving cars and other motor vehicles is restricted other than for access to the neighbourhood. Having read the above, would you support or oppose such a measure? (5 point scale from ‘Strongly support’ to ‘Strongly oppose’). Sample 249 Oxford adults 18+, weighted by Oxford demographics.



Q: Have the LTNs caused ‘traffic displacement’ onto other roads?

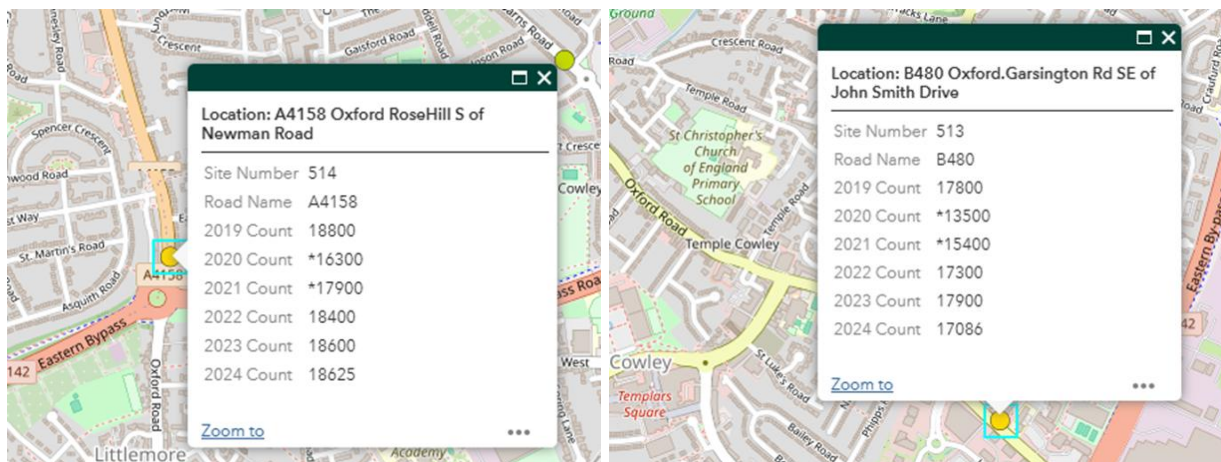
A: It is often claimed that LTNs have increased traffic congestion on main roads due to ‘traffic displacement’ onto main roads. There are some big problems with this claim.

The first issue is ‘false equivalence’. Low Traffic Neighbourhoods reduce injuries from road traffic crashes, some of which can be life-changing. They reduce NOx and particulate pollution – which cause heart, lung and brain disease and development problems – from residential areas where people, particularly young children with developing lungs and brains, would be breathing it 24/7. The inconvenience of traffic congestion should not be held in comparison with the direct physical harm of collisions and air pollution. When issues of congestion are raised, the question should be brought back to whether we should prioritise a saving on journey times over the significant number of injuries and other health harms it causes to people.

The second issue is that the traffic congestion is caused by too many people choosing to travel by car. “You are not stuck in traffic, you are traffic.” – as originally coined by satnav maker TomTom. When these streets were laid out in the late 19th Century and early 20th Century traffic volumes were much lower, and congestion and ‘rat-running’ were not significant problems. Failure to address the rising tide of traffic and its harms earlier should not be a reason not to tackle it now.

Thirdly, there is no evidence that traffic volumes have increased on the main roads around the LTNs since the LTNs were implemented. Traffic on main roads has only ever risen to the levels that it was before the Covid-19 pandemic.

The [traffic count data](#) for Rose Hill, Oxford Road, or any of the boundary roads, shows a similar pattern – the traffic falls in 2020 and 2021, and then returns to a level similar to the 2019 pre-pandemic level.



Traffic jams were already a [long-standing](#) problem on these roads before the LTNs and before the Covid pandemic – [this 2016 Oxford Mail article](#) mentions Cowley Road, London Road and Iffley Road among Oxford's 'Nightmare Roads'. The plan for Traffic Filters in Oxford, originally launched in 2015, was developed because of these traffic jams. The jams were one reason that drivers were rat-running down residential streets, making Low Traffic Neighbourhoods necessary to protect the residents.

Why all the complaints then? Possibly people have got stuck in the jams caused by traffic returning after Covid, looked for something to blame, and now had the LTNs to point at – [an example of 'confirmation bias'](#).

Q: Collisions may be down in LTNs, but they will be up on Boundary Roads, The Plain, some other unspecified roads.

A: Our analysis includes collisions and casualties on relevant boundary roads, where they have reduced. Casualties have also reduced on The Plain, although we do not claim that this is a benefit of LTNs. Road casualties have reduced overall in Oxford and Oxfordshire, with LTNs contributing to this but not causing the whole reduction, but there is no evidence that they are being displaced elsewhere.

Q: Did LTNs cause a particular business to close?

A: More retail businesses are now open on Cowley Road than previously, bucking the national trend, so it is clear that LTNs have not harmed the overall business environment. Some businesses have closed and others have opened in this time. Some people have claimed that some of the closures are caused by the LTNs, but the evidence for why these businesses were forced to close while others are continuing is scant. Some of the most publicised closures have been linked to the retirement of the owners and the later takeover of the sites by successful new operators or conversion into housing.

Q: Shops on Cowley Road are of lower quality than they used to be (e.g. 'vape shops'), or are paying less rent than they used to.

A: This may or may not be true. You wouldn't call the Michelin-listed Arquebina or the amazing Tribe low-class, and there is no data to measure this assertion. However, if this is happening, it is happening all over the UK, and still Cowley Road has fewer vacant units than other High Streets. Vacancies are a key measure for the retail industry because they are easy to define and check.

Q: Are LTNs only implemented in one part of the city, or on a 'class' basis?

A: LTNs are [widely spread across Oxford](#). The Cowley and East Oxford LTNs also cover a [wide demographic range](#), based on the Index of Multiple Deprivation, and much of their area is in the middle of the of the demographic range.

*Robin Tucker
Co-Chair, CoHSAT
October 2026*



Divinity Road LTN at night



CoHSAT Members