

The Impact of Oxford Cowley LTNs on Road Collisions 12 October 2023

The three Low Traffic Neighbourhoods (LTNs) implemented in Cowley, Oxford in April 2021 appear to have reduced road collisions by about half in the LTN area, saving 3 to 4 casualties per year, based on our analysis of newly available police collision data for 2022. Reductions were 46% in the LTNs. There was no significant change to collisions on boundary roads.

Partly because of the small number of collisions some caution is needed with the low numbers and we will monitor the casualties as new data is released each September.

Robin Tucker, Co-Chair of CoHSAT commented, “The halving of road crash casualties in low traffic neighbourhoods mirrors exactly studies across 72 LTNs in London. It comes from the removal of cut-through, sometimes called ‘rat-run’ traffic, leaving only drivers who are living or have business in the area.”

Method

The 2022 data on road collisions and casualties reported to the Police, through the STATS-19 process is now available from the Department of Transport¹. We used a combination Crashmap.co.uk and our own mapping to analyse the impact of the Cowley LTNs implemented in Cowley.

We counted the collisions in all three categories (fatal, severe and slight – although there were no fatal casualties in the area and period of study), from five years before the LTNs and before pandemic (2015-2019), and through to 2022 in each street.

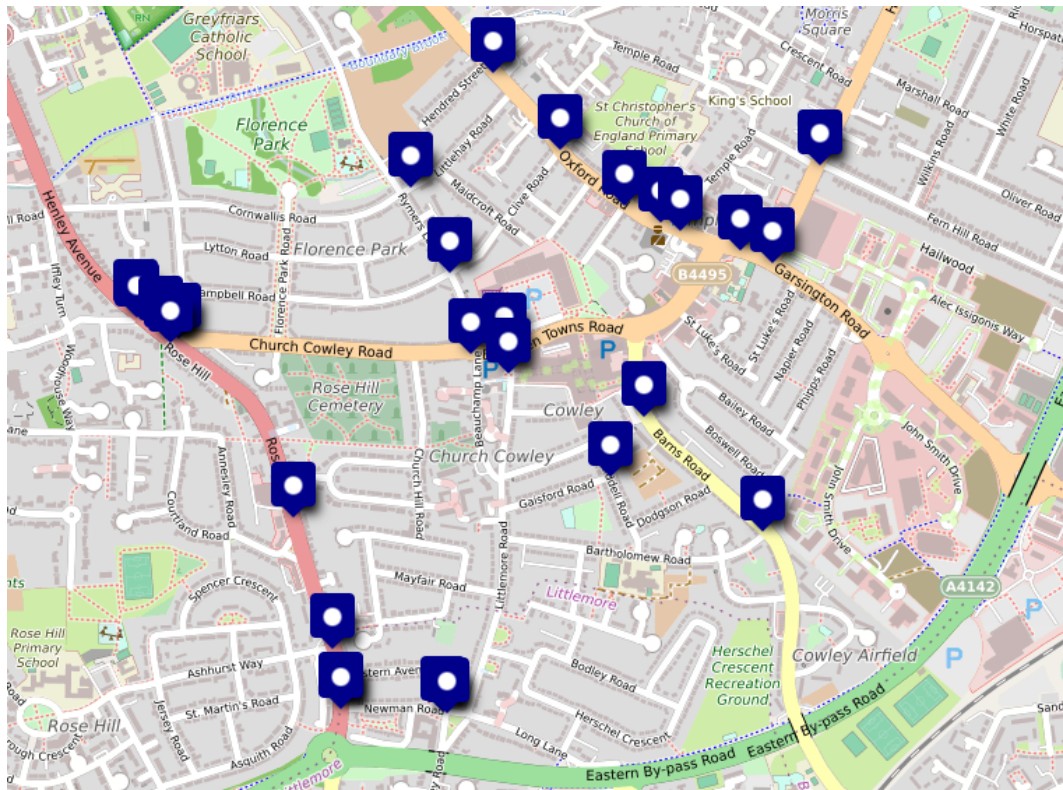
The LTNs and Boundary Roads included were:

LTNs	Boundary Roads
<ul style="list-style-type: none"> • Church Cowley • Florence Park • Church Cowley 	<ul style="list-style-type: none"> • Henley Ave/Iffley Rd (from Newman Rd to Cornwallis Rd) • Church Cowley Rd/Between Towns Rd • Barns Rd (Shops at #37 to Between Towns Road) • Oxford Rd (from Marsh Rd to Hollow Way) • Hollow Way (from Oxford Rd to Temple Rd) • Newman Road (due to its traffic not its residential nature)

¹ <https://www.gov.uk/government/statistical-data-sets/reported-road-accidents-vehicles-and-casualties-tables-for-great-britain> (Open Data download of Collisions used for 2022)

2020 and much of 2021 are affected by Covid, 2021 was also the year of installation of the LTNs, so we did not use these two years in our analysis.

Casualty Map 2022



The 28 reported collisions with casualties in 2022 (some points hidden by others)

The four collisions inside the LTN areas in 2022 were:

- Crowell Road when a cyclist was injured by a car driver, on the morning of Sunday 30th October 2022, a time that the bollard on Crowell Road was illegally removed.
- A motorcyclist who hit a wall or fence at the corner of Gaisford Road and Liddell Road on 19th January 2022.
- A collision between two motorcyclists at the junction of Rymers Lane and Campbell Road on 4th June 2022
- A motorcyclist who skidded, hit the kerb and was seriously injured on Littlehay Road on 22nd November 2022.

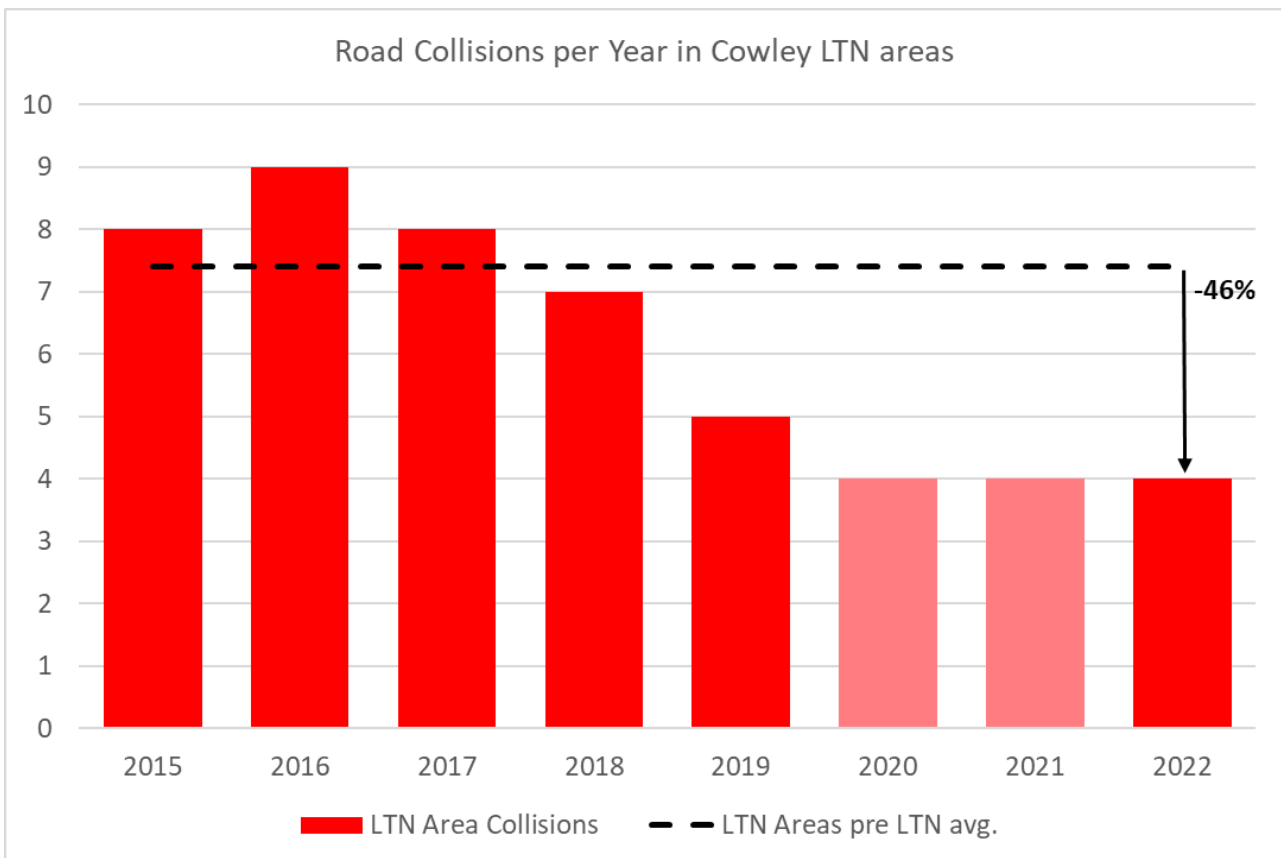
All of these roads had prohibitions to through motor traffic at these times, but we do not know if the vehicles involved breached these prohibitions.

Results

The results are in the tables below. The first table shows the basic numbers of casualties in each area and period, and the second the change between the pre-LTN and post-LTN annualised period. We used 2015-2019 as our pre-LTN and pre-Covid baseline.

Number of Collisions	2015	2016	2017	2018	2019	2020	2021	2022
LTN Areas	8	9	8	7	5	4	4	4
Boundary Roads	29	27	19	28	22	10	25	24

Number of Collisions	Pre-LTN Average (2015-2019)	Post-LTN (2022)	Change	Change (%)
LTN Areas	7.4	4	-3.4	-46%
Boundary Roads	25.0	24	-1.0	-4%
Total	32.4	28	-4.4	-14%



Compared to the baseline, road casualties in the LTNs were 46% (3.4) lower

Interpretation

We should be cautious with only one year of data, but the initial signs are for a substantial reduction in collisions.

Given the nature of the 4 collisions, effective enforcement against illegal cut-through driving by drivers and motorcyclists could reduce casualties further.

Much of the reduction will be related to reduction in motor traffic, down 40-50% within the LTN areas, although cycling has increased by 22.5%². The nature of motor traffic has changed as well, with cut-through traffic excluded, leaving only residential and delivery traffic.

The main collision site within the LTN areas before implementation was the junction of Rymers Lane with Cornwallis Road and Littlehay Road, with 10 casualties in the five pre-LTN years, two of them serious. Since the LTN there has not been a collision here.

On boundary roads, the results suggest a focus on junctions, in particular the junction between Iffley Road and Church Cowley Road.

These results align with the two main academic studies of road casualties after recent UK LTN implementation, which have also shown large reductions.

- A study of 72 London LTNs³ found a 49% reduction in casualties, with no significant change on boundary roads.
- A longer-term analysis of Waltham Forest LTNs⁴ found a 69% reduction in casualties inside the LTNs, with no significant change on boundary roads.

Conclusions

This early data shows that the Cowley LTNs are making the streets safer for people who walk, cycle and drive, reducing the human and financial cost of mobility.

Robin Tucker
Co-Chair, CoHSAT
12 October 2023

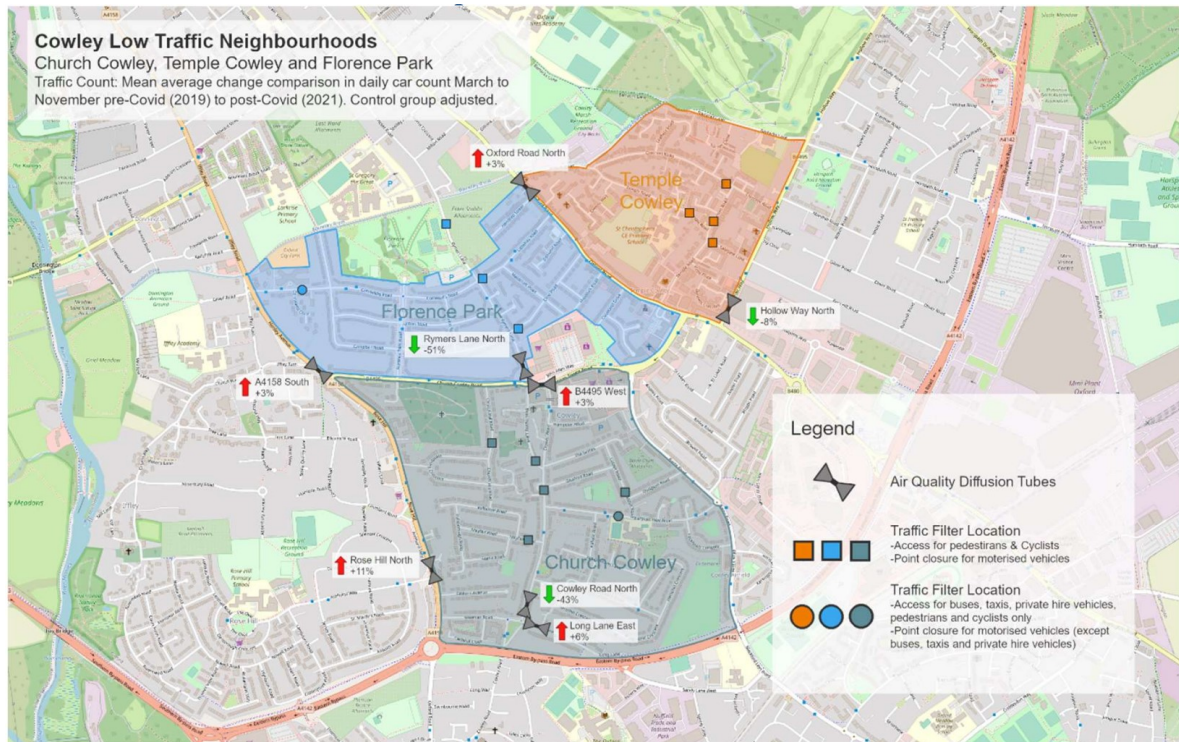
² Oxfordshire County Council, Emergency Active Travel Tranche 1: Cowley LTN Evaluation report, Feb 2022

³ <https://findingspress.org/article/25633-impacts-of-2020-low-traffic-neighbourhoods-in-london-on-road-traffic-injuries>

⁴ <https://findingspress.org/article/18330-the-impact-of-introducing-low-traffic-neighbourhoods-on-road-traffic-injuries>.

Annex A: Map of Cowley LTNs

Source: Oxfordshire County Council, Evaluation of EATF T1 LTN Schemes Feb 2022



Annex B: Example extract from crashmap.co.uk

2015-2019 Collisions, Orange: Slight, Red: Serious

