

# COVID Emergency Low Traffic Neighbourhoods – Interim Assessment

30<sup>th</sup> November 2020

## Technical Appendix

### 1. What do we currently know about the effects of the LTNs on traffic flow?

#### 1.1 Overview

- The recent introduction of nine trial LTNs in Ealing, part of a package of Emergency Active Travel measures called for and funded by the Government, was not accompanied by the traffic survey and analysis work that would usually have been undertaken. This was because (a) the Department for Transport expressly called for “these measures to be delivered quickly using temporary materials” (letter dated 28<sup>th</sup> May) and (b) the effects of COVID-19 and the associated lockdowns on travel patterns would have rendered most survey data collected at the time meaningless.
- The Council’s usual approach to such schemes is evidenced by the substantial data collection and consultation work undertaken in connection with two proposed LTNs (in West Ealing and Olive Road) that had been in development prior to the pandemic.
- Any data on traffic flow in Ealing since mid-March will have been subject to a number of variables that make it unsuitable for determining established patterns that might be associated with the introduction of the trial LTNs.
- In normal times, traffic surveys are undertaken in ‘neutral’ periods during which flows might reasonably be considered representative of general patterns. (So, for example, surveys are not generally undertaken during school holidays or in the winter.) There has been no time since the beginning of the pandemic when traffic conditions could be in any way described as ‘neutral’ or settled. The number of variables include the different phases of COVID-19 lockdown, the differing responses by different people to the restrictions on public transport use, varying abilities to work from home (at least part-time), and the effects of school holidays (which will have been entirely different from previous years), and the trial LTNs themselves.
- The possible effect of relatively long-term roadworks needs also to be considered, especially bearing in mind the relatively short period since the trial LTNs began to be introduced.
- The table below lists a number of events, all of which can be expected to have had some effect on traffic patterns on streets in or near the trial LTNs.

Date	Event
29 <sup>th</sup> February	End of pre-COVID period
16 <sup>th</sup> March	PM: all non-essential travel to be curtailed
23 <sup>rd</sup> March	PM: Lockdown 1
4 <sup>th</sup> -19 <sup>th</sup> April	Ealing schools Easter holiday
13 <sup>th</sup> May	PM: slight easing of Lockdown 1
28 <sup>th</sup> May	South Ealing area roadworks (gas) recommenced
1 <sup>st</sup> June	PM: further easing; Reception, Years 1&6 back to school
15 <sup>th</sup> June	PM: Non-essential shops reopen; limited return to school
6 <sup>th</sup> July	PM: pubs and restaurants allowed to reopen

22 <sup>nd</sup> July	LTN48 (Adrienne Avenue) operational
23 <sup>rd</sup> July	LTN34 (Bowes Road) operational
25 <sup>th</sup> July-1 <sup>st</sup> Sept	Ealing schools summer holiday
5 <sup>th</sup> August	LTN08 (Olive Road) operational
14 <sup>th</sup> August	LTN32 (Junction Road) operational
26 <sup>th</sup> August	LTN35 (Mattock Lane) operational LTN21 (West Ealing South) operational
2 <sup>nd</sup> September	Ealing Fields School opens
3 <sup>rd</sup> September	LTN25 (Acton Central) operational
29 <sup>th</sup> September	LTN21 (West Ealing North) operational
17 <sup>th</sup> October	London enters Lockdown Tier 2
24 <sup>th</sup> Oct-1 <sup>st</sup> Nov	Ealing schools half-term holiday
2 <sup>nd</sup> November	School Streets for Oaklands (and others) introduced
4 <sup>th</sup> November	LTN30 (Loveday Road) operational
5 <sup>th</sup> November	PM: Lockdown 2
14 <sup>th</sup> November	Major roadworks at B455/B4419 junction begin. Ongoing.

- The fact that there is known to have been a good deal of non-compliance with some LTN restrictions also makes it hard to be certain about how much traffic might have been displaced to other streets arising from the introduction of LTN measures.
- In summary, although relevant traffic data has been and will be gathered from a wide variety of sources, it is too early to be able to establish any reliable causal relationship between traffic flows and trial LTN measures, whether specific or general. As is mentioned in section 4, many people objecting to the trial LTNs do so at least partially on the basis of assertions that traffic flows on boundary roads have increased because of the LTN measures. While some displacement of traffic from streets within LTNs has almost certainly taken place, the scale of this and, especially its effect on two key considerations – congestion and air quality – cannot be identified with any certainty at this stage, not least in view of the effects of COVID-19 on car use (which are also uncertain).
- Moreover, evidence from elsewhere (e.g. Waltham Forest) indicates that overall traffic levels fall over time as a result of LTN measures, because people choose to swap some car trips to other modes (e.g. walking or cycling), or combine shorter car trips with longer ones, or simply choose not to make them. These effects may be noticeable towards the end of the six-month trial period for each LTN.

## 1.2 **Conventional traffic count data**

Relevant traffic data from the period prior to the pandemic is available from the following sources:

- Surveys undertaken for the West Ealing Liveable Neighbourhood programme.
- Surveys undertaken in bringing forward proposals for the Olive Road LTN.
- Traffic surveys undertaken on Windmill Road and Swyncombe Avenue.
- Surveys undertaken by the Department for Transport at several sites in the borough.

In terms of before/after analysis, the only traffic counts undertaken since the introduction of the first trial LTN have been on Swyncombe Avenue/Windmill Road, with surveys by both Ealing and Hounslow Councils. A summary of the available before and after data is provided in the table below.

<b>Swyncombe Avenue (weekday, all motor vehicles, both directions combined)</b>		
<b>Date</b>	<b>7-10am</b>	<b>7am-7pm</b>
February 2015	2,198	8,171
February 2019	2,172	7,863
September 2020	1,861	8,329
November 2020	1,703	6,840

These data suggest that traffic flows along Swyncombe Avenue, a boundary road for LTN21, have remained remarkably consistent over time. Subject to the caveats mentioned in section 1.1, there is no evidence that the introduction of LTN21 has yet had a significant effect either way. Anecdotal reports of congestion here seem to be the short-lived daily consequence of travel to and from the new Ealing Fields School, rather than increased traffic levels. Video surveys in November 2020 show queuing associated with the heavy use of the zebra crossing on Windmill Road at the Northfield Avenue/Little Ealing Lane junction.

A summary of conventional traffic count data from all sources is provided in Table 1. A Map showing the location of these counts is provided as Figure 1.

### **1.3 Additional data from Transport for London**

TfL is able to provide data from two sources that are helpful in understanding the effects of the trial LTNs. This data exists for the pre-COVID-19 period, for the period between the start of the pandemic, and since the trial LTNs became operational. The sources are:

- Data from traffic signal junctions that are controlled by the SCOOT system. This data includes and estimation of traffic flows and an approximation of congestion.
- Bus journey time (iBus) data. This will help understand any congestion issues on LTN boundary roads. No information from this source has been made available in time for the Initial Assessment report, but this will be available for all relevant streets carrying bus routes for the six-month reports.

SCOOT data has been provided for the two locations of particular interest: the junction of both Lower Boston Road and Northfield Avenue with the Uxbridge Road (respectively the 'Viaduct' and 'Lido' junctions). (The signals at the junction of South Ealing Road with Pope's Lane and Little Ealing Lane is not operated under SCOOT control and so no data is available for that location). The data provided to date covers the period from 1<sup>st</sup> September 2019 to 25<sup>th</sup> November 2020. This information indicates that:

- At the Viaduct junction (Lower Boston Road), total traffic flows have broadly returned to pre-pandemic levels. However, both flows and congestion on Lower Boston Road increased to greater than pre-pandemic levels at the end of August (broadly coincident with the introduction of LTN21) but both have also since declined somewhat.
- At the Lido junction (Northfield Avenue), both traffic flows and congestion are currently slightly below pre-pandemic levels.

A more detailed analysis of the SCOOT data is appended as Attachment 1.

## **1.4 Additional data from third party suppliers**

Estimated traffic flows on defined streets and an understanding of through traffic routing for each LTN can be obtained from two third party suppliers. Floop uses data insurance company black box recorders installed in a range of vehicles, while INRIX uses similar data from major vehicle fleet operators. Data from Floop has been obtained directly by the Council, while data from INRIX will be provided through TfL and will be available for the six-month assessment.

Data from both sources is available for the pre-Covid, Covid-to-LTNs, and post LTNs time periods. Because both datasets represent only a proportion of all vehicles, the data is more reliable the longer the period in question (i.e. the pre-Covid period/baseline data will be most reliable) and needs to be calibrated using available counts.

The information is used to estimate traffic flows on any street within or around a specified area (e.g. a LTN) and is also used to identify the proportion of traffic from any given entry point that leaves the area from each of the available exit points. This helps identify through traffic patterns.

Initial outputs have been obtained from Floop and provide estimates of traffic flows on all streets in and around all trial LTNs, and of through-routing in each LTN. The data currently received covers the pre-pandemic period only and requires to be calibrated against known actual traffic flows on relevant links (see sections 1.2 and 1.3). Comprehensive, calibrated data for all LTNs will also be available for the post-LTNs period for the six-month reviews. For the present, Attachment 2 provides a sample of the summary traffic flow data for each LTN for an average weekday (7am-7pm). Prior to calibration, all flows are best understood as relative, not actual.

The Council has also been monitoring publicly available data from SatNav providers since early October to develop an understanding of average journey times on selected routes adjacent to the LTN08, LTN20, LTN21, LTN30, LTN32 and LTN35. This helps with understanding patterns of congestion. However, the publicly available data can only be obtained for each successive present day, and historic patterns cannot be examined. This data is also for private use only, and so cannot be published at this stage. The Council will seek to obtain permission to publish details and, if possible, historic data as part of the six-month assessment. The key findings are:

- Over the period since early October, average weekday flows on all links observed show usual patterns of peaking.
- While there are a small number of outliers at specific times on specific days on specific links, there is no evidence of general patterns of excessive queuing on any links. The causes of outliers are unknown, but may include broken down vehicles, traffic collisions (however minor), or roadworks.
- The data reveals that, between the classic morning and late afternoon/evening peaks, journey times on all observed routes reduce appreciably compared with the peaks themselves. This is indicative of the fact that traffic is reasonably free-flowing past boundary road schools (e.g. St Marks', Little Ealing, Mount Carmel, Ealing Fields) during school hours. This, in turn, is indicative of there being unlikely to be particular air quality concerns related to queuing traffic.
- This data is not conclusive on congestion issues and cannot be used to suggest that anecdotal reports of long queues on some routes at some times are untrue (see section 4.3). However, it does point to the lack of any causes of general or particular concern in relation to congestion on boundary roads since the implementation of the adjacent LTNs.

### **Traffic Flow Summary**

It is too soon to say with any certainty what the effect of the trial LTNs has been on traffic flows, specifically or generally. The available data does not point to any concerns of excessive congestion on boundary roads. Increased flows on Lower Boston Road have been recorded, though these also appear now to be declining. Increased congestion on Pope's Lanes has also been reported. Some displacement of traffic from streets within LTNs to boundary roads would be expected, but isolating the effects of LTNs from other influences on traffic levels (e.g. COVID-19, the full return to school coinciding with the introduction of LTN21) is not currently possible. More comprehensive and reliable data will be available at the end of the six-month trial periods.

## **2. What do we currently know about the effects of the LTNs on access by emergency vehicles?**

- A report of responses by all three emergency services to a proforma questionnaire is appended as Attachment 3. The summary is provided on the last page (page 6).

### **Emergency Services Summary**

Notwithstanding the failure to obtain comments from the London Ambulance Service prior to installing the trial LTNs, and notwithstanding also anecdotal evidence of some delays to emergency crews having arisen from negotiating certain filters, no records of failures to meet response time target attributable to any of the measures were contained in the questionnaire response. All emergency services would prefer filters to be controlled by ANPR cameras rather than fixed bollards, and this is particularly so in the case of the larger LTNs, like LTN21.

## **3. What do we currently know about the effects of the LTNs on air quality?**

- Ealing has ten permanent AQ monitoring sites (NO<sub>x</sub>, PMs, etc), but these are largely irrelevant in terms of location relative to the LTNs.
- Ealing has a far higher number of Diffusion Tube (NO<sub>x</sub> only) sites, and tubes have recently been installed at 13 additional sites relevant to the LTNs. (Map to be provided.)
- No meaningful AQ data can be reported in the Initial Assessment. The way in which the information available is used, including allowing for the effect of weather and background events, needs careful consideration so that data presented cannot be used misleadingly.
- For the present, evidence of congestion can be used as a proxy for air quality (see section 1).

### **Air Quality Summary**

It is too soon to be able to report on what effect of the trial LTNs may have had on air quality, specifically or generally. A properly considered and evidenced report will be possible at the end of the six-month trial periods.

## **4. What have local people said about the effects of the LTNs to date?**

### **4.1 Overview**

- All emails to the CovidTransport address up to CoP 20<sup>th</sup> November have been analysed – see table below.
- All emails to the Traffic Notices address up to CoP 20<sup>th</sup> November have been analysed – see Attachment 4.
- All comments on the Commonplace website up to CoP on 20<sup>th</sup> November have been analysed – see Attachment 5.
- Given the number of comments received, the analysis undertaken in the time available has meant that there will inevitably be some double-counting in the current reporting on the total number of comments received by different individuals (for both to supporting and objecting emails).

### **4.2 Summary of generic comments**

#### *Positive*

- An appreciable (smellable, taste-able) improvement in air quality on streets within LTNs.
- A noticeable reduction in the total number of motor vehicles on streets within LTNs, leading to reduced concerns about road safety.
- A noticeable reduction in the speed of motor vehicles on streets with LTNs, also leading to reduced concerns about road safety.
- A noticeable reduction in traffic noise on streets within LTNs, making it more pleasant to live and be out and about on local streets.
- A reduction in the number of incidents of horn-blowing/shouting involving drivers 'facing off' at pinch-points.
- Feeling much happier to cycle and walk, especially on LTN streets, and noticing lots more people out and about on foot and cycle.
- Particular emphasis on the positive effect on children, in relation to the potential harm to them (e.g. lung damage, road safety) from motor traffic.
- General support for attempts to reduce motor traffic levels overall.

#### *Negative*

- Objections to the increase in distance for some car trips due to the need now to go 'the long way round'.
- Specific concern about the effect on access for people with disabilities (i.e. people for whom a car is a mobility aid) and for those who care for disabled or sick people locally.
- Similar specific concern about the effect of longer routing on people who need to drive for non-commuting business reasons (e.g. making deliveries, or carrying people/pets).
- Objections about the lack of prior consultation (e.g. as previously for CPZs).
- Concern about the effect on access by emergency services vehicles (supported in some instances by reports of observed incidents leading to some delays).
- Concern about the likely negative effects of LTNs on boundary roads; specifically, displaced traffic making both congestion and air quality worse.
- Concern that streets are now too quiet, prompting personal security fears.

### 4.3 Summary of principal issues raised for each LTN, with officer response

ISSUE	RESPONSE
LTN08 Olive Road	
<p>Banning the right turn from Pope's Lane into Oliver Road has made queues worse on the westbound Pope's Lane approach to the traffic signals at South Ealing Road.</p>	<p>This LTN had previously been requested by local people, and a permanent scheme had been in preparation, with traffic surveys and consultation undertaken prior to the pandemic.</p> <p>The purpose of the measures is to prevent drivers avoiding the right turn at the Pope's Lane/ South Ealing Road by turning right into Olive Road instead. Counts undertaken in February 2019 found an average of one vehicle/minute turning right from Pope's Lane into Olive Road in the evening peak period.</p> <p>The Pope's Lane arm of the main junction is the only one with a single lane at the stop-line and there is no room for widening. TfL has been approached to change the signals to give more time to the right turn from Pope's Lane, as there does seem to be some inefficiencies in the current method of signal control.</p> <p>The Pope's Lane traffic and queue length surveys undertaken in February 2019 should be repeated for the South Ealing Road and Olive Road junctions in early 2021 to help inform action.</p>
LTN48 Adrienne Avenue	
<p>With the filter in its current location, that rat-run is successfully blocked. However, this means there is no direct access between the trading estate and Ruislip Road. Most complaints about vans and lorries from the trading estate now using residential streets have come from Kenilworth Gdns residents.</p>	<p>Moving the filter one street south, to just north of Kenilworth Gdns, would re-open access between the trading estate and Ruislip Road, but would focus general rat-running on Woodstock Ave. A second filter could therefore be installed at the west end of Woodstock Ave</p> <p>Painting Double Yellow Lines at the junctions of all three side streets with Adrienne Avenue has been proposed as a short-term measure, to enable larger vehicles to turn safely.</p>
LTN34 Bowes Road	
<p>It was suggested that the filter could be shifted from the Glendun Road (east) side of the area to the Friar's Place Lane (west) side of the area.</p>	<p>It would be possible to swap the filter to Friars Place Lane, but this would just recreate the same issue for a larger number of residents (including those of Vyner Road and Perryn Road). The effect of a swap would in any case be likely to mean that people from the east side of the area could have longer</p>

	<p>journeys, if returning home along East Acton Lane from the west, especially at the busiest times.</p>
<p>In terms of reducing the cause of rat-running, which is eastbound traffic blocking back from Savoy Circus along East Acton Lane (EAL), suggestions were: a yellow box could be more effective than the current 'Keep Clear' markings where EAL meets Old Oak Common Lane (OOCL); the exit from EAL to OOCL could be widened; and the EAL/Bromyard junction could be changed from a roundabout to a simple priority junction so traffic coming up from The Vale and turning right at the roundabout towards Savoy Circus doesn't effectively block traffic approaching eastbound along EAL in the peaks.</p>	<p>As with other queue-avoiding rat-runs, all reasonable options that might help reduce the length of the main queue, such as these, should be explored; although this is out with the LTN programme itself.</p>
<p>LTN32 Junction Road</p>	
<p>The main specific concern reported is that traffic seeking to avoid the South Ealing Road/Pope's Lane/Little Ealing Road lights is now focused on Lawrence Road and Radbourne Avenue.</p>	<p>Previously, rat-running traffic avoiding the left turn at the signals into Little Ealing Lane could use a range of east-west side streets, from Whitestile Road northwards. The specific effect of the LTN measures on Lawrence Road is therefore plausible, even if less total rat-running would be expected, because the length of queue to avoid is shorter by the time Lawrence Road has been reached. The total amount of rat-running traffic in the northernmost section of Radbourne Ave should, at best, be no greater than previously.</p> <p>A corresponding dog-leg rat-run may exist via Ealing Park Gardens &amp; Birkbeck Road, especially in the light of reported congestion at Windmill/Northfield/Little Ealing near the new school. However, it hasn't (yet) featured in email feedback.</p>
<p>LTN35-LTN30 Mattock Lane-Loveday Road</p>	
<p>No specific comments or suggestions other than generic issues listed in 4.2.</p>	
<p>Concern about the adequacy of signage at boundaries.</p>	<p>Signs on entry could have been more prominent and clearer to drivers unfamiliar with the area. A review will be undertaken, with proposals for change, as appropriate, for the six-month reviews.</p>



Concern about vandalism and non-compliance with regulations.	Maintenance crews have sought to keep pace with repairing damaged planters and bollards. Fines for non-compliance will be issued at ANPR sites from 7 <sup>th</sup> December 2020.
LTN21 West Ealing South	
Complaints were raised by people in the northern part of the area (e.g. Coldershaw Road etc) that the size of the LTN and the arrangement of measures means they are subject to especially long diversions on some journeys, and that this problem is compounded by their having to access their streets only via Uxbridge Road, which is generally subject to more congestion than other boundary roads.	This issue is noted, and is a consequence of the arrangement and spacing of the main roads in West Ealing. The reason why Elthorne Park Road and Leighton Road were relatively busy compared to other residential streets in LTN21 is that they had become used as a proxy east-west 'main road'. The proportionate effect on LTN21 on residents north of that route will be explored and any possible changes reported on at the six-month review.
Specific concern about the effect on Blue Badge holders (from all parts of the LTN) was raised, also citing the issues associated with the sheer size of the LTN and its effect on extending journey distances.	This issue is noted. Exemptions for Blue Badge holders living within the LTN, allowing them passage through ANPR-controlled filters will be explored.
Many respondents claimed that the arrangement of filters, along Midhurst Road in particular has 'divided the community'.	This view has been countered by supporters of the scheme who cite the ability to walk and cycle more safely and conveniently across the area makes it easier and more pleasant to visit neighbours locally.
Specific concerns were raised about the effect of the LTN on trade at Jay's Superstore on Midhurst Road.	Officers will explore this issue with the business owner.
Some respondents noticed more parking near their homes, possibly because some neighbours find it more convenient to park slightly further from their own homes, in order to be on the 'right' side of a filter for their regular journeys.	Some effects like this would be expected in general terms but impossible to predict. To be kept under review.
Concern about vandalism and non-compliance with regulations.	Maintenance crews have sought to keep pace with repairing damaged planters and bollards. Fines for non-compliance will be issued at ANPR sites from 7 <sup>th</sup> December 2020.
LTN25 Acton Central	
In addition to the generic issues listed in 4.2, the main local issue concerns the length of diversion of some car journeys due to the size of the LTN and the local geography (A40 and railway corridor boundaries).	Pre-pandemic, this LTN was part of a wider planned scheme, including changes along Churchfield Road and to side streets. As this wider scheme is reconsidered, possible changes to the current LTN will be explored.

LTN20 West Ealing North	
<p>Responses generally queried whether the balance of pros/cons is excluding through traffic from routing via Eccleston, Felix and Alexandria meant residents having to route east via the already busy Uxbridge Road and Lido junctions.</p>	<p>This LTN was under prior consideration arising from the WELN project.</p> <p>While the new measures block eastbound through traffic, westbound through traffic is obliged to route via the area because the right turn from Drayton Green Road into Uxbridge Road has been banned for many years.</p> <p>That right turn should, in principle, be reinstated, but it has not been because of the modelled negative effect on the overall capacity of the Lido junction.</p> <p>In line with the Council's wider policies and actions aimed at traffic reduction, reinstating this right turn could now be reconsidered.</p> <p>If ANPR camera controls were installed, residents of LTN20 could be granted exemptions for travelling east along Alexandria Road.</p>

#### **4.4 Future Focus Groups**

- These will be undertaken for the six month assessment.
- It's relatively easy to determine what groups of people should be invited: residents, local businesses, disabled people and carers, for example.
- However, it will be more challenging to agree which individuals should take part, especially considering the need to ensure that it can fairly be said that groups represent a wide range of opinion. It will be useful to have a discussion on this with a range of officers as soon as practicable.
- A standard set of questions/prompts will also be needed.

#### **5. What have Councillors said about the effects of the LTNs to date?**

- Feedback from ward members has been regularly sought throughout the trial. Most ward councillors have sent e-mails citing both their personal, or their constituents' concerns or support as well as reporting issues with vandalism. Ward members will be consulted on the outcomes of the interim assessments and will be involved in the final decisions on the future of the LTNs. Regular briefing meetings have been held for members on the full range of active travel schemes, including LTNs.
- In addition, the Council held a Councillor engagement for the Interim Assessment in the week beginning 23<sup>rd</sup> November. See also paragraph 3.3 of the main Cabinet Report.