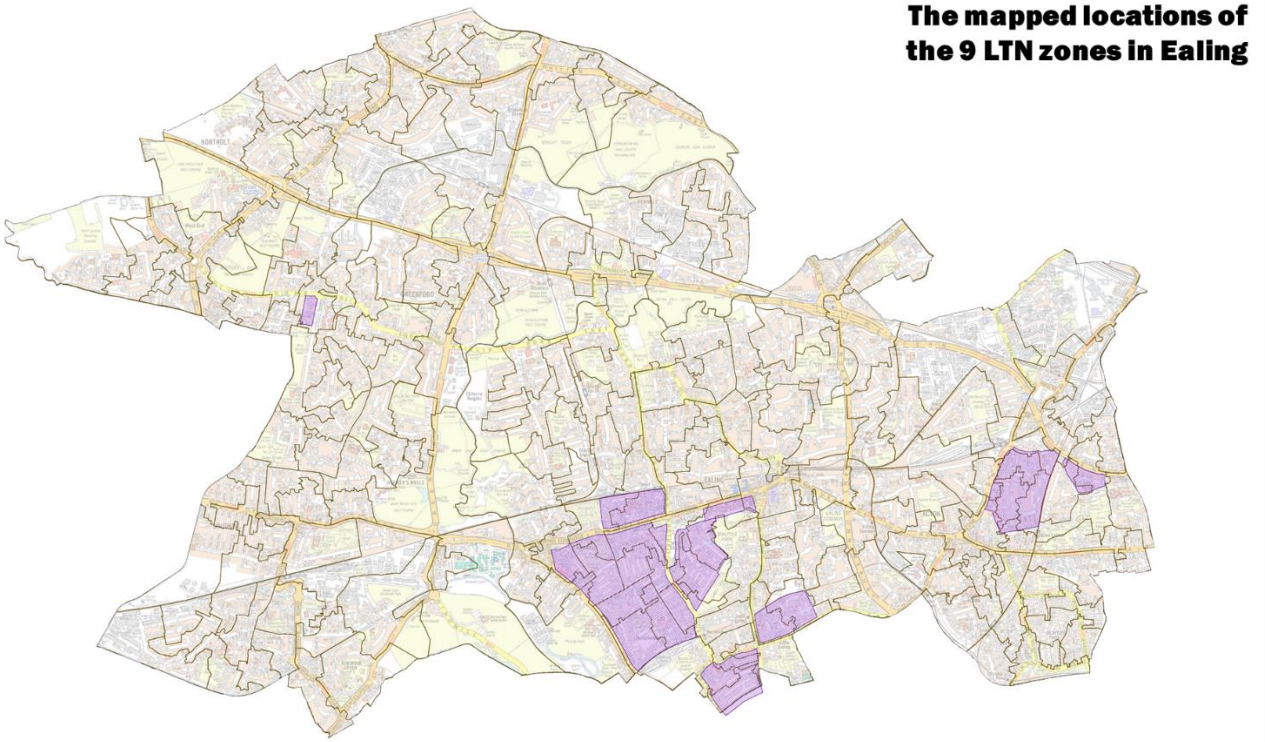
Low Traffic Neighbourhoods in Ealing

Initial Analysis of Impact on Local Crime Levels, Spring 2021

1. Introduction and Methodology

1.1 During the summer of 2020, Ealing introduced 9 low traffic neighbourhoods (LTNs) in residential areas. This analysis attempts to ascertain whether the introduction of these has had a discernible impact on the level of crime occurring in and around these areas, either positively or negatively.

1.2 Each of the LTNs in the borough is a relatively small area, with generally low individual monthly crime totals. The locations of these are shown on the map below:



1.3 The data available from the Metropolitan Police (MPS) is published in an aggregated form, providing counts for generalised categories of crime per month with the lowest geographical unit being lower super output area (LSOA), of which there are approximately 200 in Ealing.

1.4 If we look at and compare individual monthly totals, these will tend to show relatively large percentage changes from month to month which reflect the nature of crime statistics more than a significant underlying trend. It is more useful to look at longer time periods which are indicative of different stages that we can compare and examine; where appropriate or necessary, an average monthly figure can be calculated to facilitate analysis.

1.5 This analysis uses the following temporal divisions for comparison:

- March 2017 to February 2020 (3 years, used to establish a baseline for what we might generally expect)
- March 2020 to June 2020 (4 months, prior to the LTNs being established)
- July 2020 to October 2020 (4 months, during which the 9 LTNs were implemented)
- November 2020 to February 2021 (4 months, after the LTNs had been introduced).

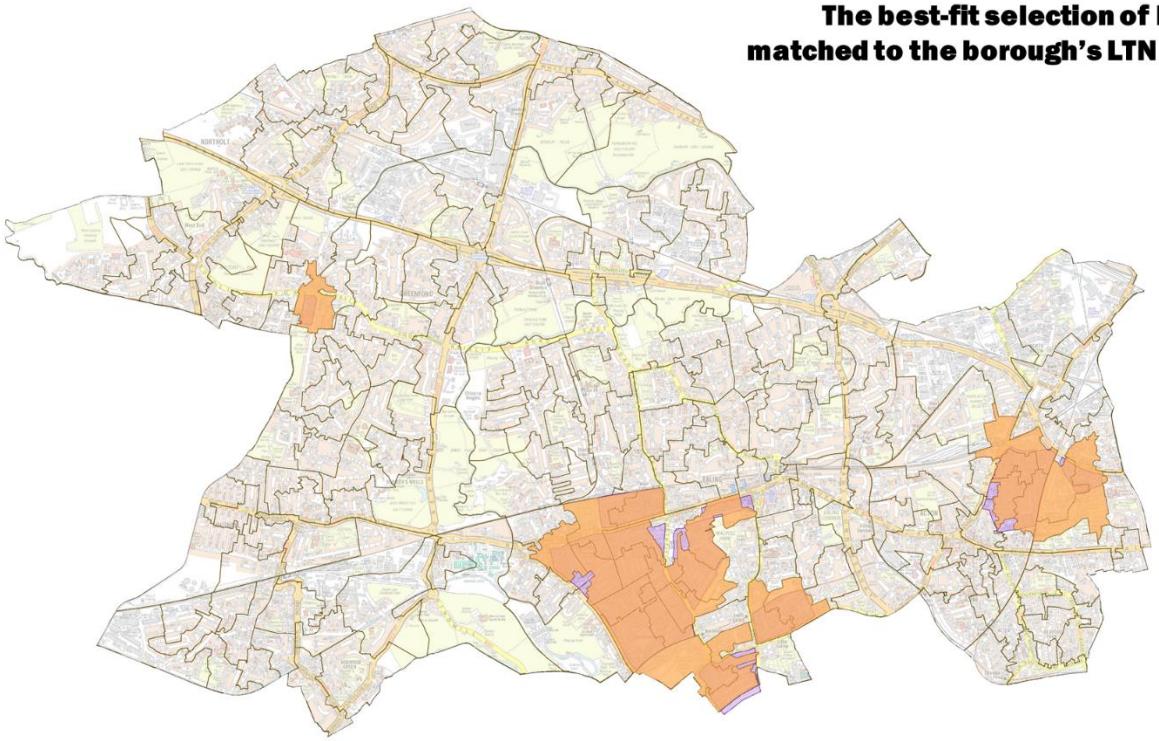
1.6 It is important to note that the year which covers the latter three periods was also dominated by the Covid-19 pandemic and the various restrictions which were imposed, eased and lifted at different times during this year. As such, directly comparing each period and drawing any conclusions from that comparison in isolation is of limited value. Aside from the coronavirus situation, this approach would also not take into account the normal seasonal variations that exist due to factors such as the weather, hours of daylight, and holiday/festival periods.

1.7 Given the low crime figures which occur in any single LTN (or LSOA), it makes sense for us to look at analysing as large a geographical area as possible in the first instance to determine if there has been a significant impact. If we look at individual areas, the small absolute figures will be prone to showing apparently dramatic percentage increases or decreases as a result of normal fluctuations in the numbers of incidents.

1.8 To enable a meaningful analysis, the borough can be separated into two distinct types of location – specifically those areas in and around LTN zones, and the rest of the borough (i.e. those areas not in or around LTN zones).

1.9 The neighbourhoods themselves do not fit neatly with the LSOA boundaries or any other official boundary. The map below shows the 'best fit' of LSOA areas with the LTN zones. It is necessary to do this in order to be able to look at and analyse the crime data as published by the MPS.

The best-fit selection of LSOAs matched to the borough's LTN zones

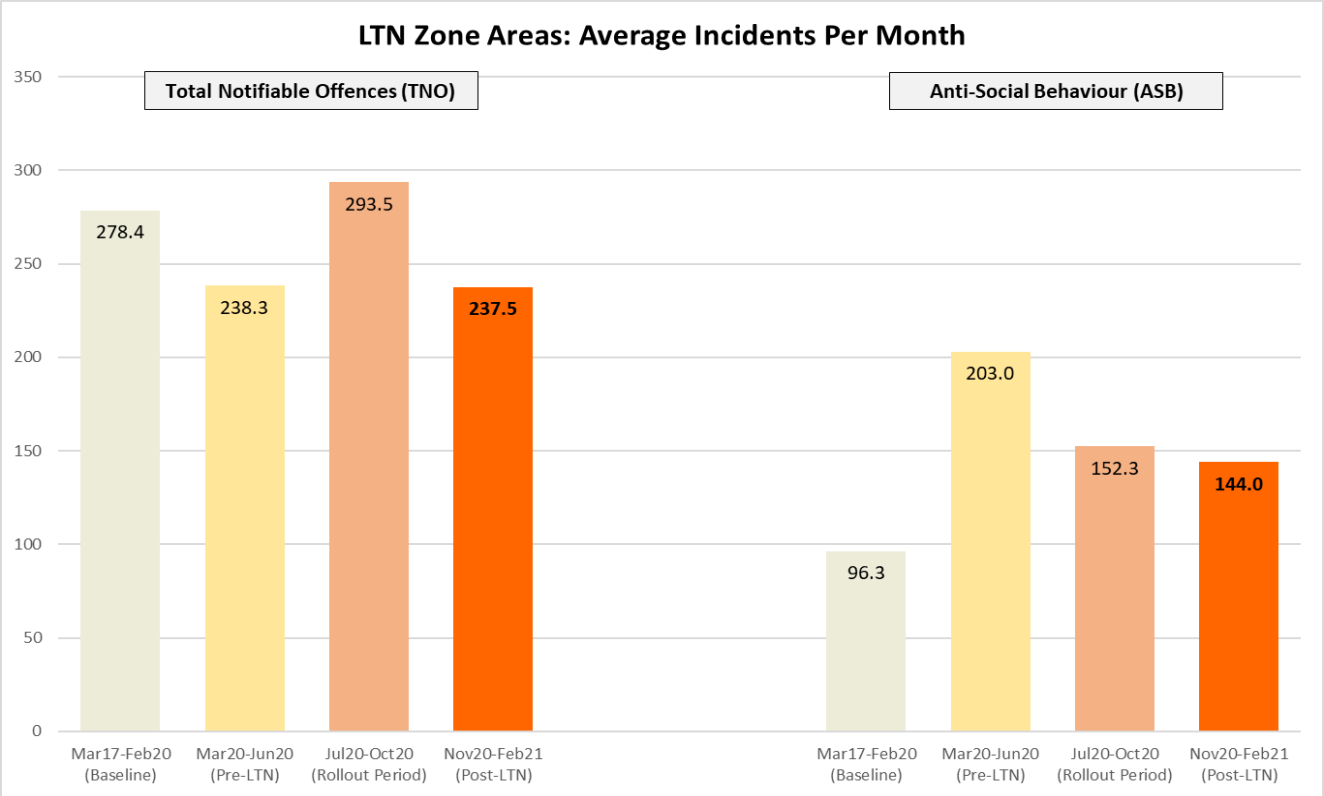


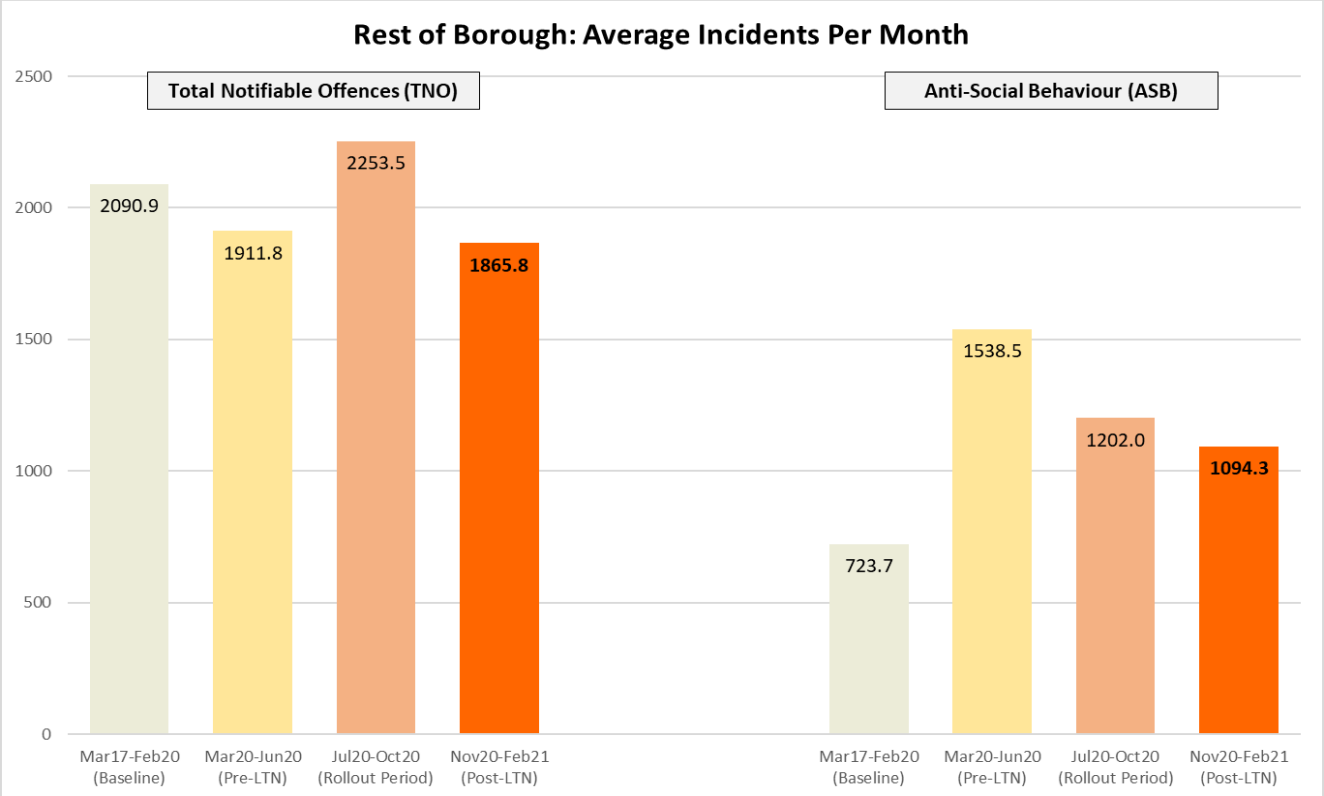
1.10 The LSOAs shaded orange are those that are either mostly covered by LTN zones, or include all or most of an LTN zone. Together, these form the 'areas in and around the LTN zones' category as previously described. The remainder of the LSOAs form the 'rest of the borough' category.

1.11 By comparing the volume of crime occurring within these two aggregated geographies for different time periods, we can begin the process of establishing whether there might be an impact on local crime levels as a result of the introduction of low traffic neighbourhoods, and what form that impact might take.

2. Analytical Findings

2.1 Looking at the average incidents per month over the different time periods for the LTN and non-LTN areas, we see a very similar pattern in each. The graphs below show this data, broken down into all crimes (total notifiable offences, or TNOs) and anti-social behaviour (ASB) calls.





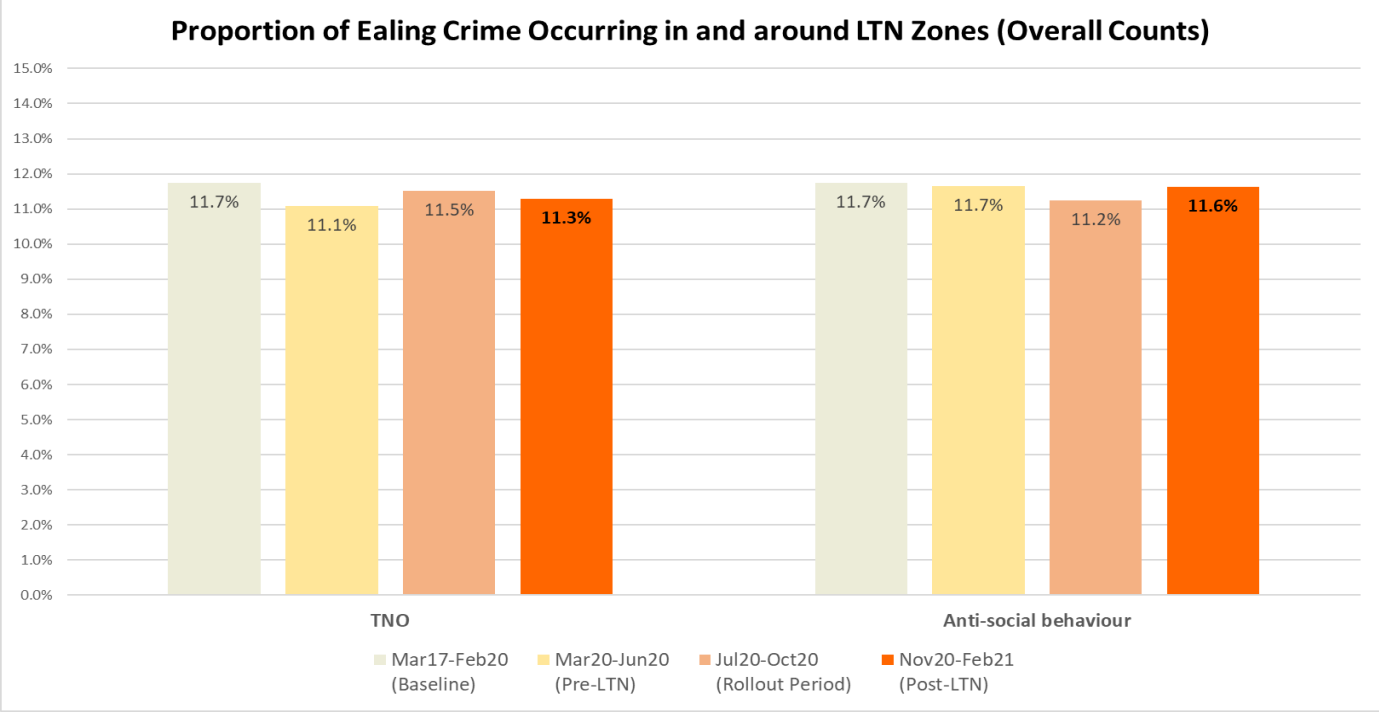
2.2 The key observation here is the similarity in what has occurred in both LTN and non-LTN areas. The graphs above and below follow the same pattern. As mentioned before, this does not take seasonal variations or the impact of the Covid-19 situation into account, and in fact serves to highlight some of these factors.

2.3 Of particular note is the large increase in ASB calls (on the right), most of which can be attributed to Covid related reports including lockdown breaches; this is particular prominent in the March-June period of 2020 where the levels for both areas saw an increase of over 100%.

2.4 The trend in total crime (on the left) shows that levels fell during the first lockdown period, but then increased substantially during the late summer when lockdown was first eased and then removed. From November onwards, as restricted measures returned and when crime is often slightly lower (due in part to the colder weather and shorter days), the figures fell again.

2.5 As a means of analysing and comparing the data more directly, excluding the effect of seasonal variations or pandemic measures as far as possible, it is useful to look at the proportion of incidents which occurred within the two types of area.

2.6 If there is a clear change in the proportion of total borough crime occurring within the LTN areas, this would suggest that their implementation may be having an impact on crime in their locality. The graph below explores this possibility, again showing TNOs on the left and ASB on the right. A more detailed table is included as an appendix.



2.7 Here, comparing the proportion of total crime within LTN zone areas over our four time periods, we can see that there is essentially very little change and certainly no clear trend.

2.8 During the three-year 'baseline' period, 11.7% of Ealing's crime and anti-social behaviour took place in the areas that subsequently became LTN zone locations. During the latest four-month period looked at, these proportions were 11.3% (TNOs) and 11.6% (ASB).

3. Conclusion

3.1 There has not yet been enough time since the introduction of the low traffic neighbourhoods to draw any confident conclusions about their possible longer-term impact on crime, and the picture is made less clear by the unique and unusual nature of the past year.

3.2 This analysis has tried to provide as robust an initial examination of the available data as possible, and the tentative suggestion at this stage would be that there does not appear to have been an obvious immediate impact on overall crime levels in locations where LTNs have been introduced.

3.3 There is not yet enough data to reasonably examine the impacts in individual locations or on specific crime types, but this will become possible as more time passes and as the coronavirus situation becomes less dominant.

Appendix – Detailed Table showing Proportion of Ealing Incidents within LTN Zone areas

	Average Monthly Offences in Ealing	Crime Category	% of Borough Total within LTN LSOA Best Fit Area			
			Mar17-Feb20	Mar20-Jun20	Jul20-Oct20	Nov20-Feb21
	2344	**TNO** (Total Notifiable Offences)	11.7%	11.1%	11.5%	11.3%
	976	**Anti-social behaviour**	11.7%	11.7%	11.2%	11.6%
Higher Volume	*719*	**Violence and sexual offences**	10.6%	9.8%	9.9%	9.4%
	366	**Vehicle crime**	12.5%	12.6%	12.8%	11.0%
	262	**Other theft**	11.8%	10.4%	9.7%	11.6%
	208	**Burglary**	11.7%	9.9%	13.7%	11.2%
	176	**Criminal damage and arson**	11.0%	11.9%	11.7%	12.8%
	163	**Public order**	13.0%	9.8%	9.7%	12.2%
Lower Volume	*123*	**Drugs**	11.4%	11.0%	11.1%	9.9%
	105	**Shoplifting**	15.6%	18.6%	27.1%	25.4%
	79	**Robbery**	10.8%	11.3%	7.9%	12.3%
	51	**Theft from the person**	11.9%	7.8%	7.2%	15.6%
	48	**Bicycle theft**	13.8%	15.9%	13.0%	16.0%
	29	**Other crime**	13.5%	16.5%	9.7%	7.5%
	17	**Possession of weapons**	14.2%	14.0%	10.5%	7.9%

Author's comment: The table above is presented in descending order of average monthly volume. The lower the volume of a particular crime type, the more reactive and potentially unrepresentative any change shown is likely to be. No conclusion can be drawn with confidence at this stage about the change in any individual crime category, but it may be appropriate to include this type of data in possible future analyses.