

Tulse Hill Low Traffic Neighbourhood

Monitoring Study

SYSTRA





About SYSTRA

Introducing SYSTRA

- SYSTRA is a **global leader** in **mass transportation and mobility**, employing over 7,000 global employees across 80 countries.
- SYSTRA has the unique advantage of being not only a Transport Consultancy, but also Social and Market Research Consultancy. Our team members have an in-depth understanding of both the transport sector and of social and market research techniques, providing expert support in monitoring and evaluation both direct to clients and also in a peer review capacity.
- We provide a wealth of experience in conducting both qualitative and quantitative transport research with stakeholders to help understand their priorities and to inform options for future investment and policy development.

The SYSTRA logo is displayed in a bold, red, sans-serif font. The letters are thick and blocky, with a slight shadow effect. The 'S' and 'Y' are particularly prominent.



Monitoring Study

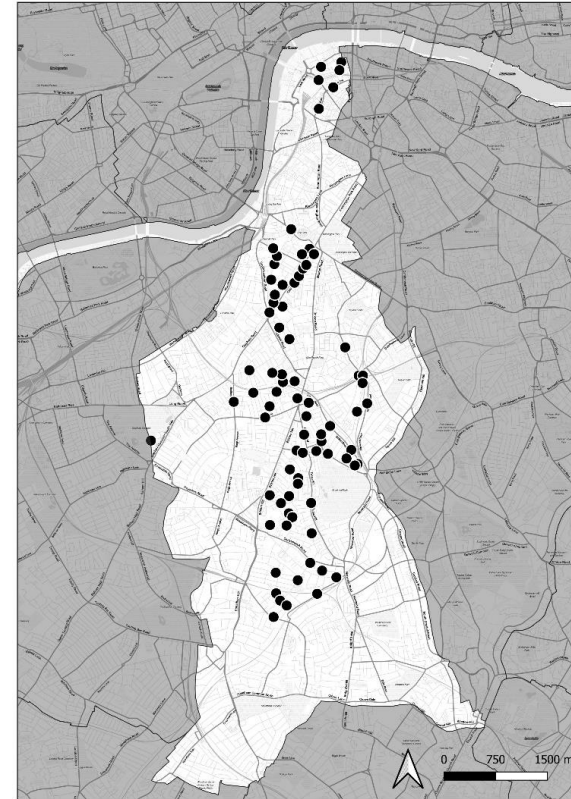
Scheme Background

- LB Lambeth is in the process of delivering its emergency COVID-19 transport response, which is primarily formed of filters to form Low Traffic Neighbourhoods (LTNs), which have been chosen in accordance with Appendix 6 of TfL's Streetspace guidance.
- In the short term, these measures are intended to:
 - Assist residents in **social distancing**
 - Enable **essential journeys** to be made safely
 - Support the local economy with **increased footfall**
- Over the longer term, the introduction of Lambeth LTNs aims to promote a wider modeshift away from vehicle use towards active travel (walking and cycling) and public transport, improving air quality and safety, and reducing greenhouse gas emissions.
- Because these measures were implemented under Experimental Traffic Orders (ETOs), it is crucial that data collection and analysis is completed to inform future decisions about these measures.



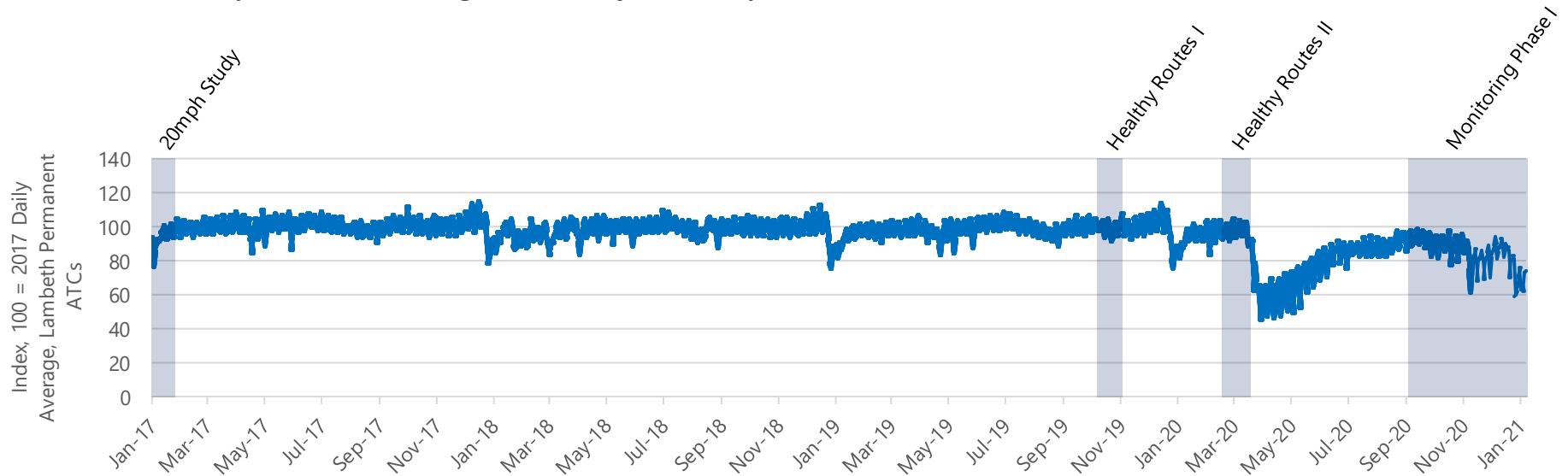
Monitoring Programme

- SYSTRA will be leading the monitoring programme for LB Lambeth's new Low Traffic Neighbourhoods, with data collection completed by survey company MHTC.
- Across the Borough, data will be collected at 82 individual points using Automatic Traffic Counters (ATCs) for a full seven-day week, providing flows and speeds by vehicle type. This will then be **compared to historic data** from those sites or a suitable proxy to **understand the impact of the LTNs** on different modes during different time periods.
- Monitoring for the LTNs will be completed over three stages:
 - **Stage 1:** Directly before enforcement
 - **Stage 2:** Five months after enforcement, prior to LB Lambeth's six month review point
 - **Stage 3:** Eleven months after enforcement, prior to LB Lambeth's one year review point
- For qualitative feedback from residents, LB Lambeth is also running a Commonplace consultation.



Historic Datasets

- The historic datasets used for comparison for this monitoring programme are from the following studies, with their timings set out on the chart at the bottom of the page - this also shows background flows from TfL's continual traffic counts (in blue):
 - Healthy Routes:** two rounds of data collection to support development of Healthy Cycling Routes
 - 20mph Study:** data collected to underpin analysis on the 20mph Borough-wide speed limit
 - The Floop:** GPS telemetry data, providing detail on vehicle routing through neighbourhood cells; this data will be used indirectly to create a scaling factor to adjust Healthy Routes data for roads where no historic data was collected

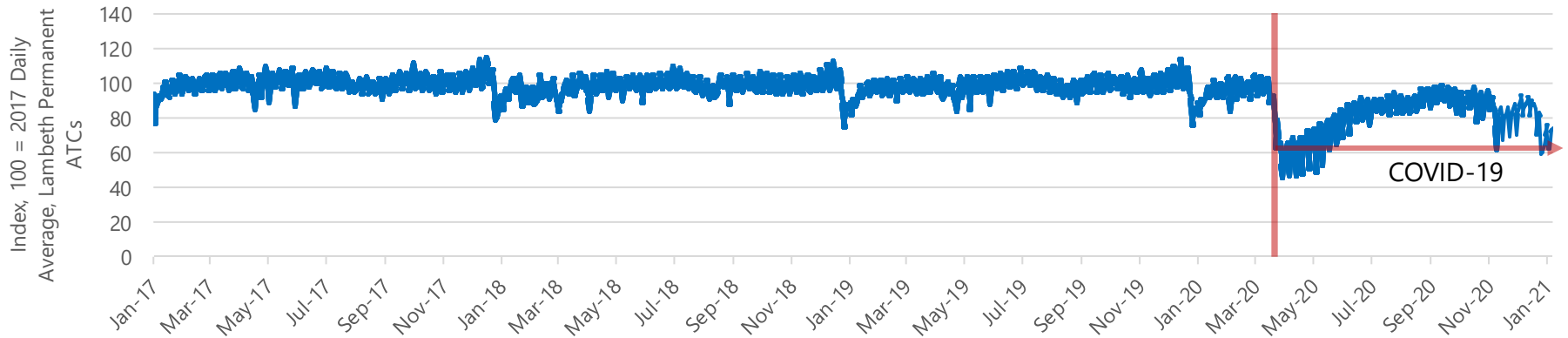


New Data Collection

- Through the monitoring programme, a large amount of new data is being collected across the Borough – this has generally been installed in the same locations as those used in the Healthy Routes or 20mph studies to ensure a fair comparison, although some additional sites have been added, and these will need to make use of The Floop data instead.
- All new data has been collected via **Automatic Traffic Counters (ATCs)**, which are installations that consist of two pneumatic tubes spanning the width of roads to be surveyed – these capture 15 vehicle classes based on number of vehicle axles and the distance between axles, and are regularly used across the transport planning profession to capture traffic information.
- Based on the table in **Appendix A**, class 1 & 2 vehicles have been classified as “**car**”, class 3 to 12 vehicles have been classified as “**goods vehicles**” (sometimes split, with class 3 generally representing LGVs & rigid, 2-axle HGVs; and classes 4-12 representing larger HGVs), class 14 vehicles have been classed as “**motorcycle**” and class 15 vehicles have been classed as “**cycle**.”

Baseline

- As there have been changes in traffic flows on Lambeth's roads between when historic data was collected and this monitoring programme (most significantly due to COVID-19, but also resulting from seasonal shifts in travel patterns – as can be seen in the chart below), a direct comparison between historical and current data to understand the impact of the LTN would be inaccurate.
- To factor in these differences, a **baseline** flow has been calculated for each ATC based on the difference between current background data and historic background data, both of which come from TfL-owned ATCs which have collected continuous data since at least January 2017. A worked example is provided in **Appendix B**.

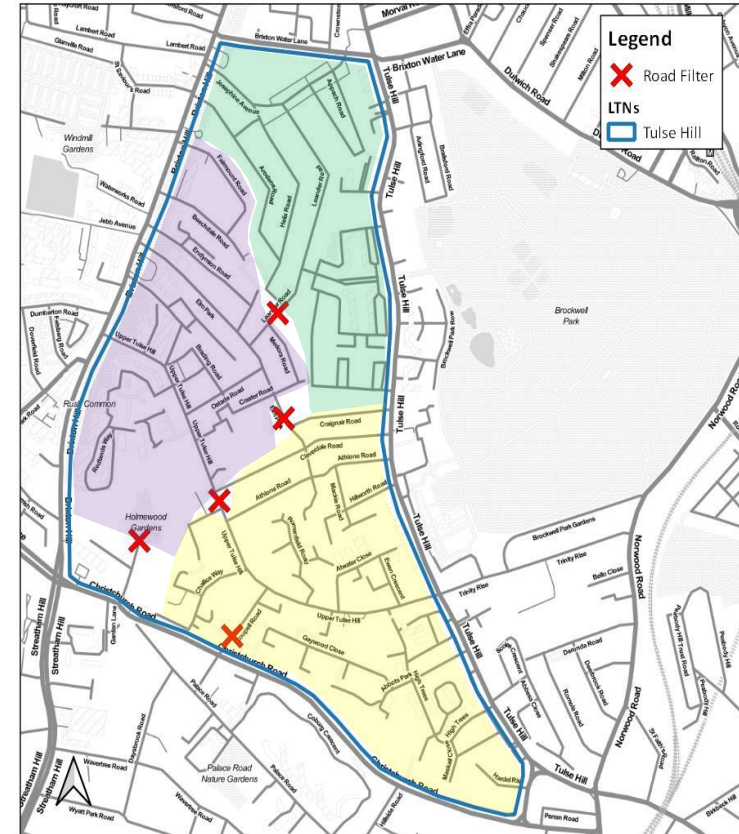




Tulse Hill Low Traffic Neighbourhood

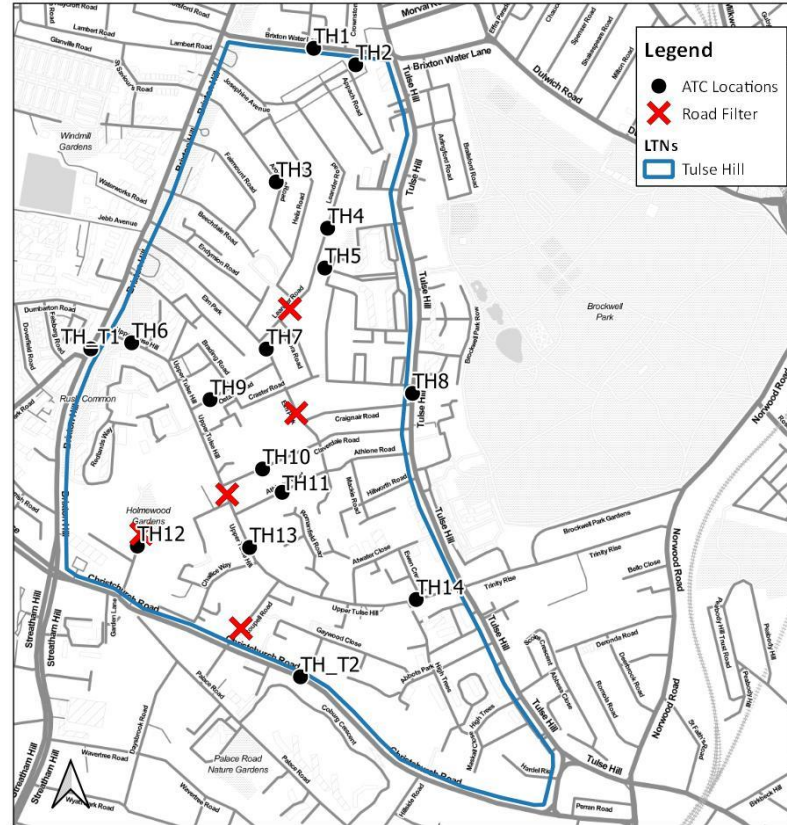
Tulse Hill LTN Background

- The Tulse Hill Low Traffic Neighbourhood occupies an area between Brixton Water Lane and Tulse Hill, and is bounded by Brixton Water Lane to the north and Christchurch Road (A205/South Circular) to the south.
- This LTN has been divided into three main sub-cells identified in green, yellow and purple, as can be seen in the map to the right. Travel between these areas is blocked by modal filters for motor vehicles.
- The major route that is blocked with the introduction of this LTN is east-west traffic along Upper Tulse Hill between Tulse Hill and Brixton Hill. Smaller through-flows on Elm Park and Leander Road are similarly filtered.



Tulse Hill LTN ATC Sites

- For the Tulse Hill LTN, a total of 14 ATCs were installed from **29th October – 4th November**, with all data collected before the start of the second nationwide lockdown. These sites can be seen in the map to the right.
- Of these, 11 were inside the boundary of the LTN, with the remaining 4 on key peripheral roads to pick up any spillover effects from the LTN – 2 peripheral roads used data collected by TfL permanent ATCs.
- For the Tulse Hill LTN, **2** sites use Healthy Routes as a baseline, **7** sites use the 20mph study and **4** sites utilise both The Flow data and Healthy Routes. **2** sites relied on TfL permanent ATC data and therefore only present flows for cars. Historical data for comparison could not be sourced for site TH5 and data collection was therefore not completed.
- Details for individual sites are located in **Appendix C**.

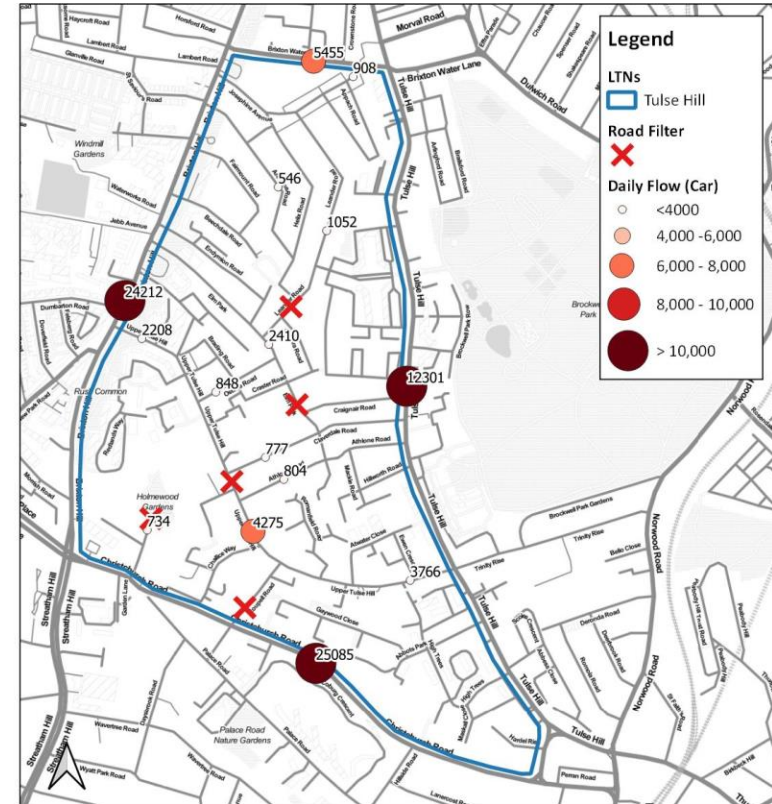




LTN-Wide Analysis

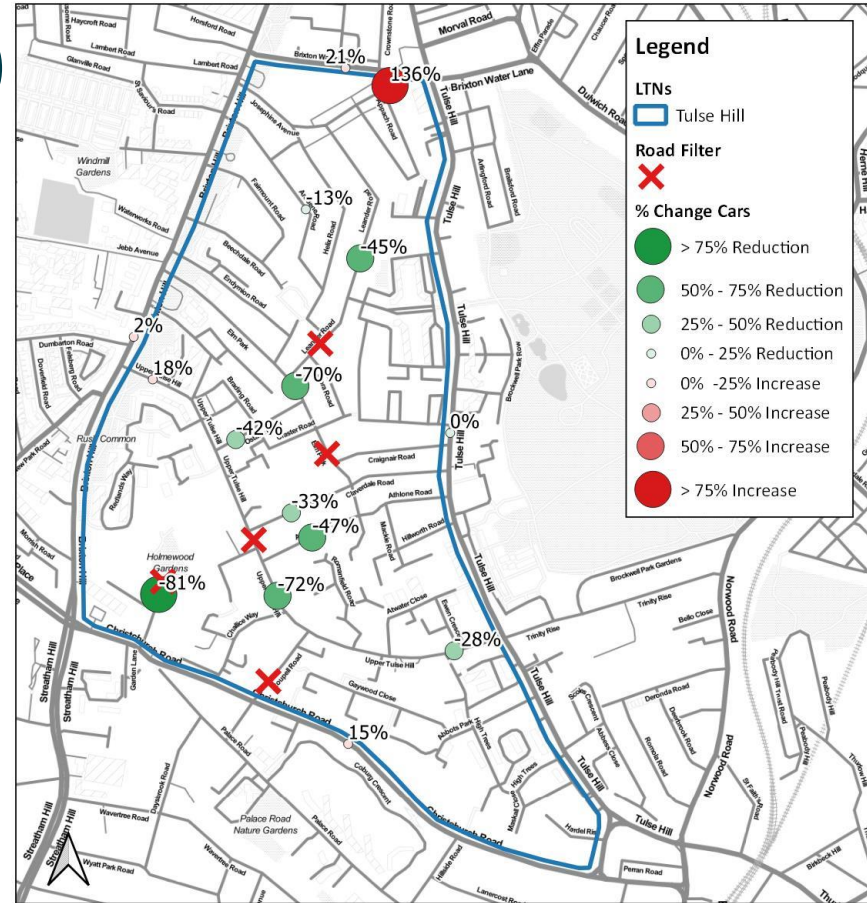
Before: Baseline Flows (Cars)

- As previously outlined, calculated **baseline flows** are those that would be projected based on background TfL data should the LTN not have gone ahead.
- Daily baseline flows are presented in the map to the right, showing the general trend of traffic within and surrounding the Tulse Hill LTN.
- Flows within the LTN itself are generally low (with an exception on Upper Tulse Hill), whilst traffic on peripheral roads is very high, particularly on Brixton Hill to the west and Christchurch Road to the south (*note that for these two TfL sites, traffic data is not disaggregated by vehicle class*)



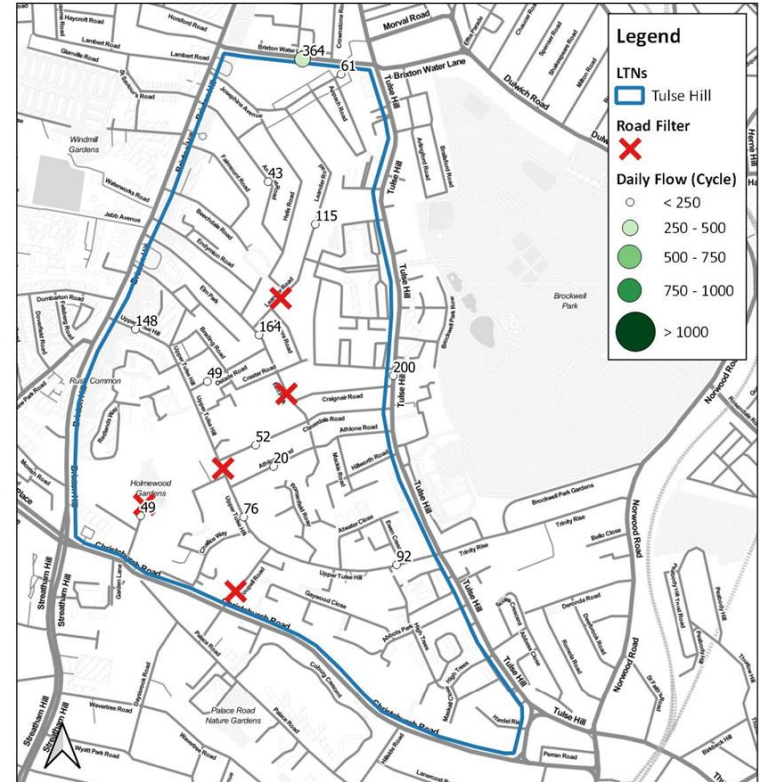
After: LTN Impact (Cars)

- The LTN impact is calculated as the percentage change between data collected in October 2020 and the **baseline** flows.
- The map to the right outlines decreases in car use in green, and increases in red.
- There were large decreases in car travel within the LTN, especially on Cotherstone Road (-81%). There has been a slight % increase in traffic on some peripheral roads, notably Christchurch Road, which is also impacted by the Streatham Hill LTN.
- Inside the LTN, Josephine Avenue experienced a 136% increase in traffic flows, likely due to other accesses to the northern sub-cell now being closed off. There is also an 18% increase in cars on Upper Tulse Hill (West)



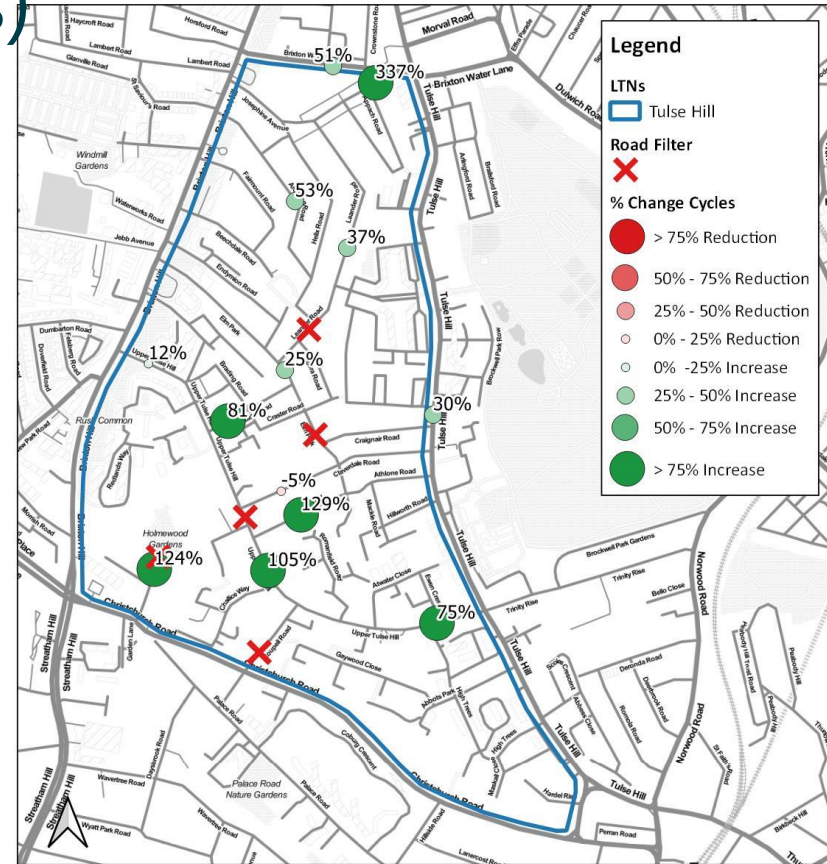
Before: Historic Flows (Cycles)

- As cycle travel does not follow the same patterns as historic car usage and varies significantly based on local conditions, **historic flows** have been used for cycles rather than calculated baseline flows. The map to the right shows daily flows.
- Cycle flows are generally very low in the area, with slightly higher flows recorded on peripheral roads.



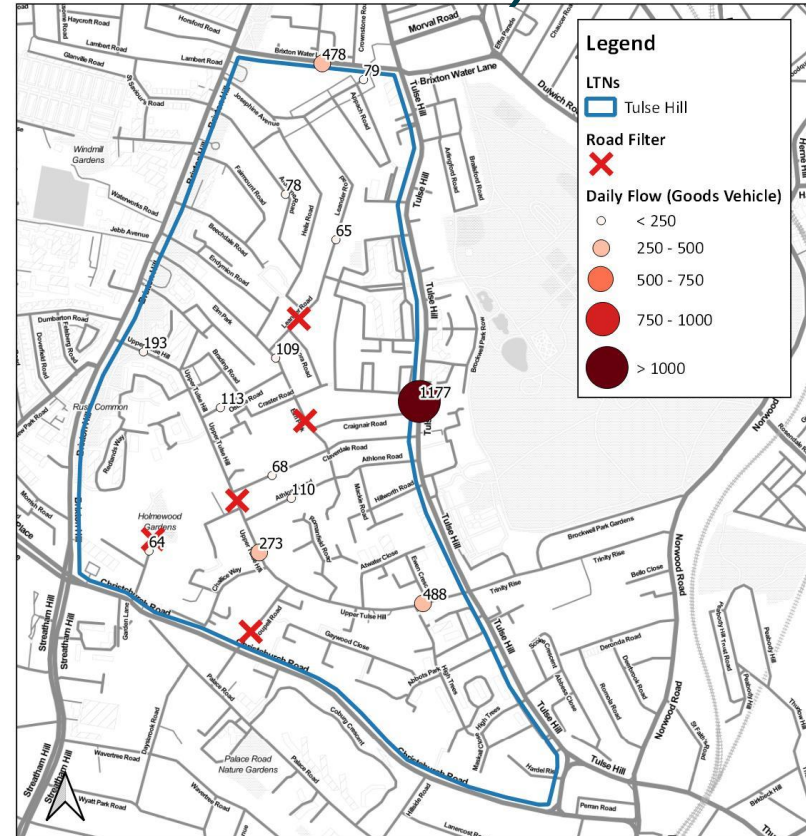
After: LTN Impact (Cycles)

- On most surveyed sites, there was a slight decrease in cycling.
- After the implementation of the LTN, there has been a large increase in cycling across the area, especially on the main north and south entrance points (+337% on Josephine Avenue and +124% on Cotherstone Road). Cavendale Road has recorded a 5% decrease in cycle flows.
- The percentage increase shown in the area are generally high, but they result from a **very low predicted baseline**.



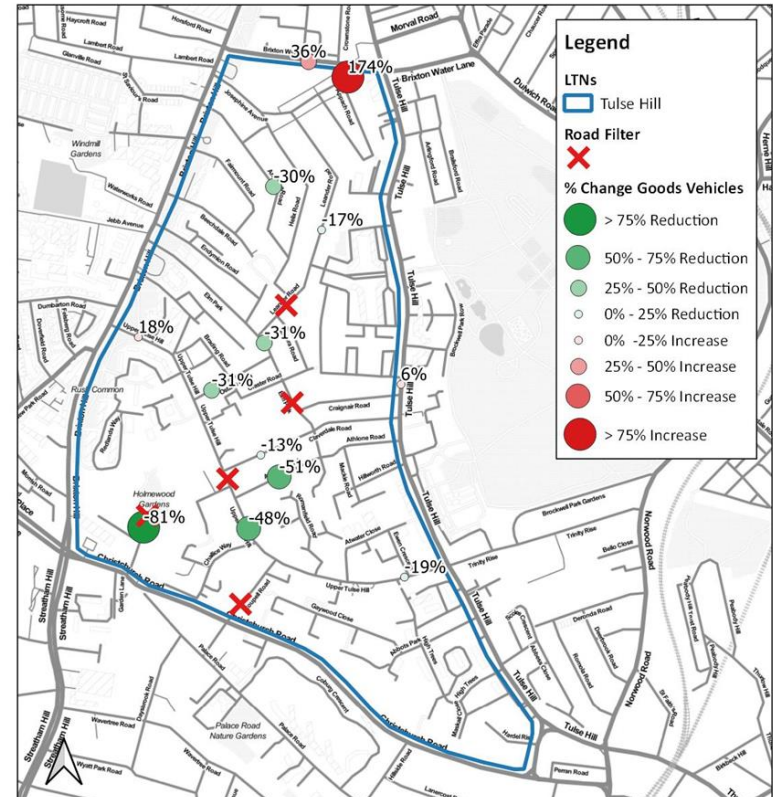
Before: Baseline Flows (Goods Vehicles)

- The map to the right plots **baseline** goods vehicle flows.
- In general, goods vehicle flows are reasonably low within the LTN, and very similar to car flows in their overall patterns.
- Much higher goods vehicle flows were recorded on Tulse Hill, to the east of the LTN.



After: LTN Impact (Goods Vehicles)

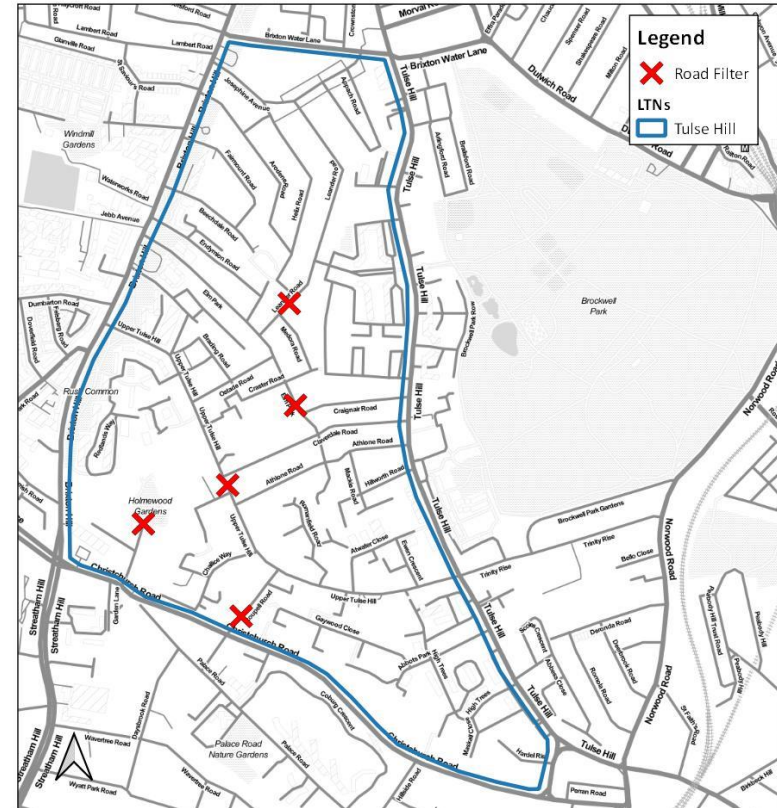
- Goods vehicle movements had generally decreased or slightly increased within the LTN and on peripheral roads.
- The only site inside the LTN where there has been a very large increase in goods vehicles is Josephine Avenue (+174%), likely due to other accesses to the northern sub-cell now being closed off. There is also an 18% increase in goods vehicles on Upper Tulse Hill (West)
- Slight to moderate increases have been recorded on the peripheral roads where data was disaggregated by vehicle type.



General Trends

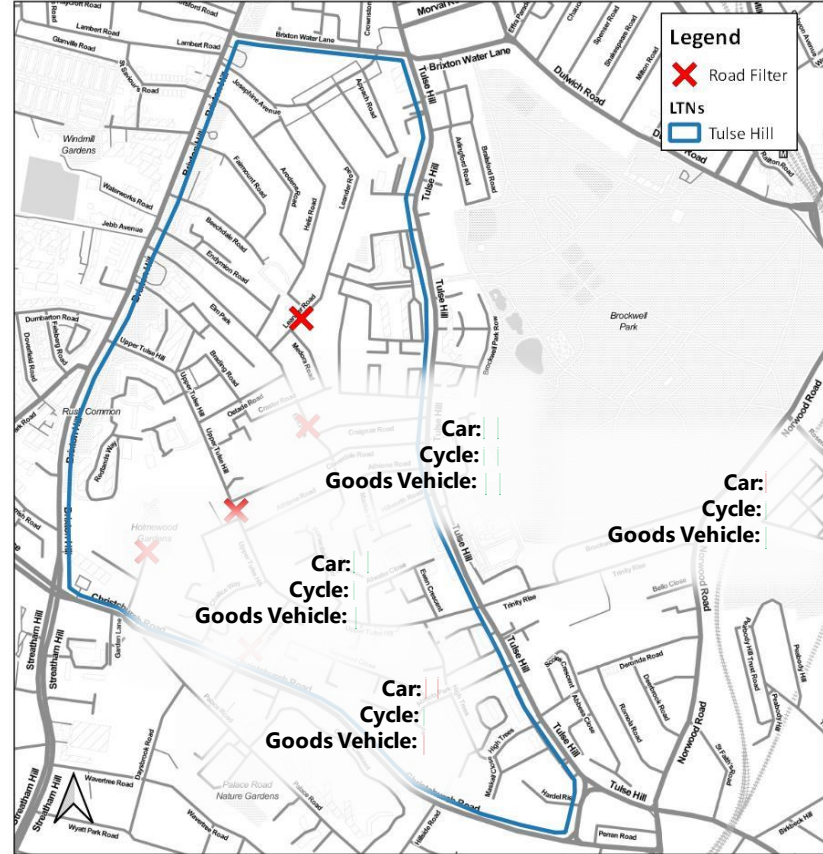
- Within the LTN, the following overall percentage changes in counts were observed against the baseline:
 - **Car: -35%**
 - **Cycle: +69%**
 - **Goods vehicles: -17%**
- On the locally impacted periphery*, the following overall percentage changes in counts were observed against the baseline:
 - **Car: +7%**
 - **Cycle: +43%**
 - **Goods vehicles: +15%**
- Across both internal and locally impacted peripheral roads*, the following overall percentage changes in counts were as follows:
 - **Car: -14%**
 - **Cycle: +59%**
 - **Goods Vehicle: -1%**

*TfL sites on Christchurch Road and Brixton Hill are not included in the above calculations due to a larger margin of error and therefore oversized impact on calculation results. Please see Appendix B for further detail.



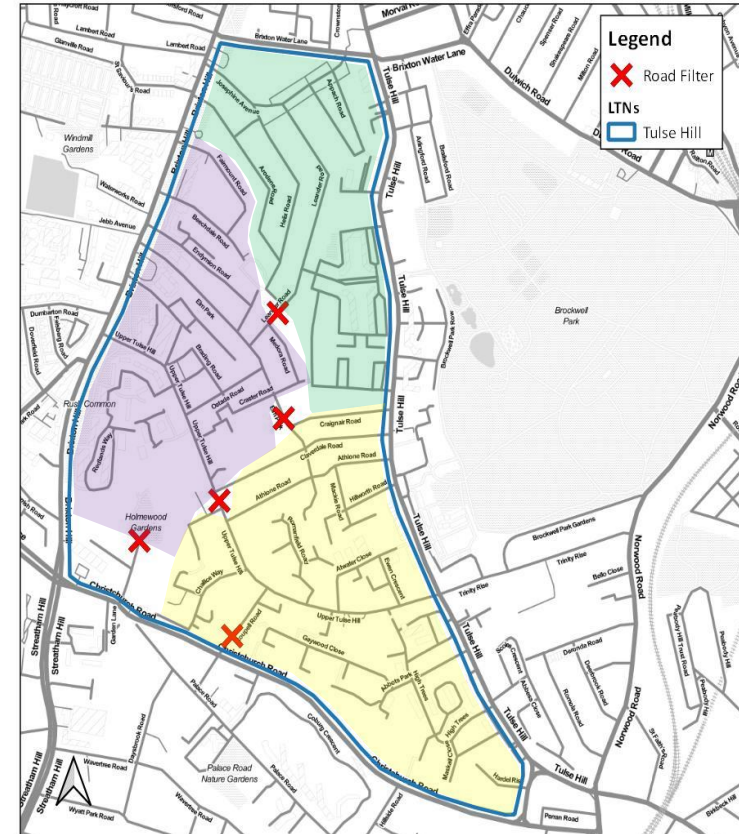
Specific Trends

- Inside the LTN, there was a **decrease in all types of motor vehicles**, including cars and goods vehicles, when compared with the baseline, especially at the intersection between the east-west and north-south routes. However, Josephine Avenue has seen an increase in flows, being the main access point to the northern sub-cell on the LTN.
- The increase of motor vehicles on peripheral roads has been limited.
- Inside the LTN, there was a significant increase on the number of cycles counted, however starting from a very low predicted baseline. A moderate increase was recorded on peripheral roads.



Recommendations

- As further post-implementation data will be available by stage 2, flow numbers from a longer period will be used in calculations from TfL counters to further smooth variability, providing a higher degree of certainty in results pertaining to these sites.





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For Lambeth Council media enquiries – communications@Lambeth.gov.uk

*To provide feedback on the Railton Low Traffic Neighborhood,
please contact the Lambeth Transport Team via the following channels:*

Commonplace engagement site – <https://rtstreets.commonplace.is/>

Email – LowTrafficNeighbourhoods@Lambeth.gov.uk

