LB Lambeth 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.

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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.


Source: TfL

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.
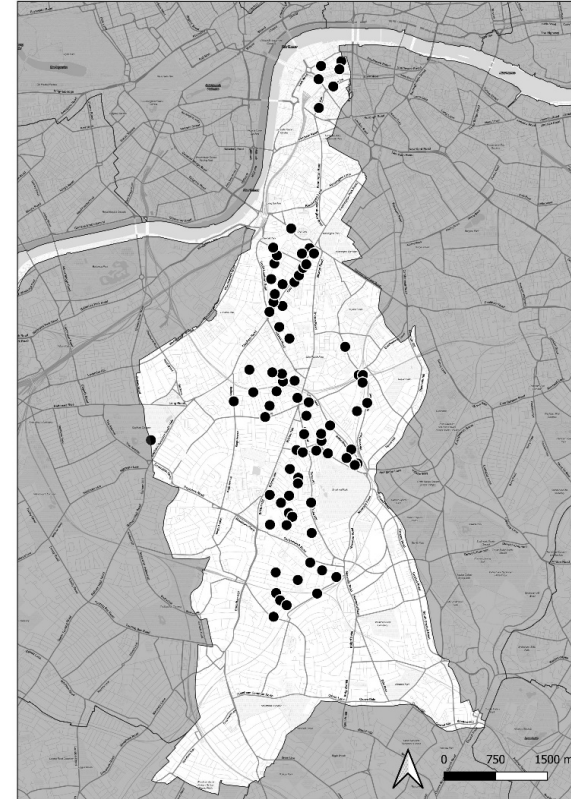
Historic Datasets

- 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 Floow**: 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
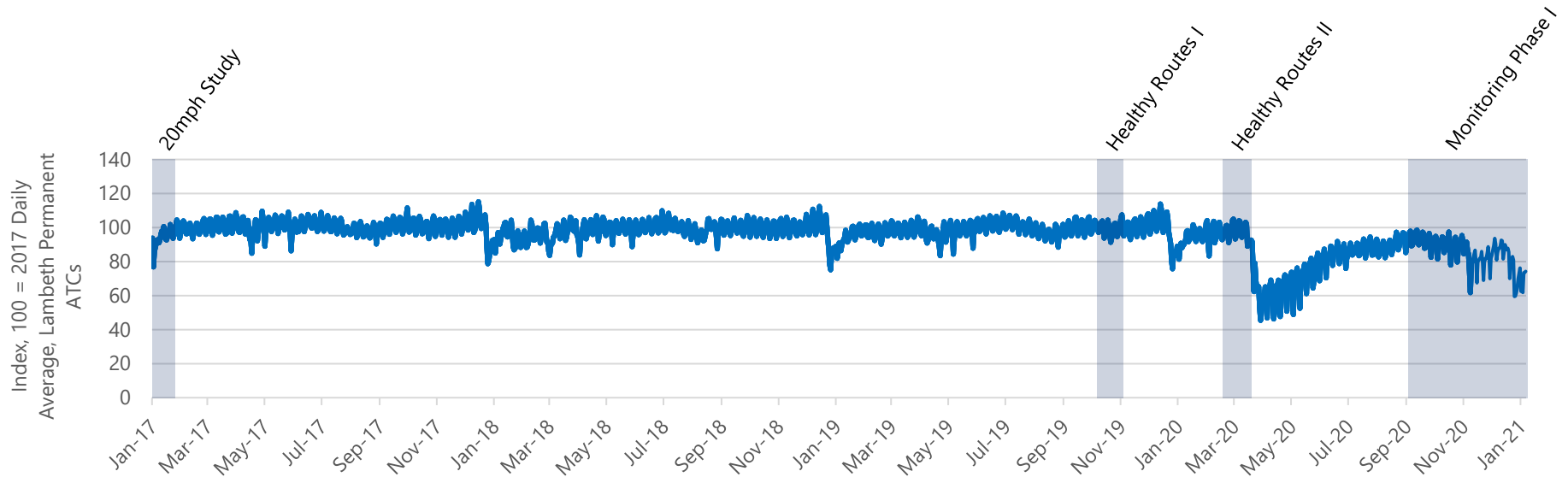
New Data Collection

- 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 Floow 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**.

Oval Low Traffic Neighbourhood

Source: The Floow
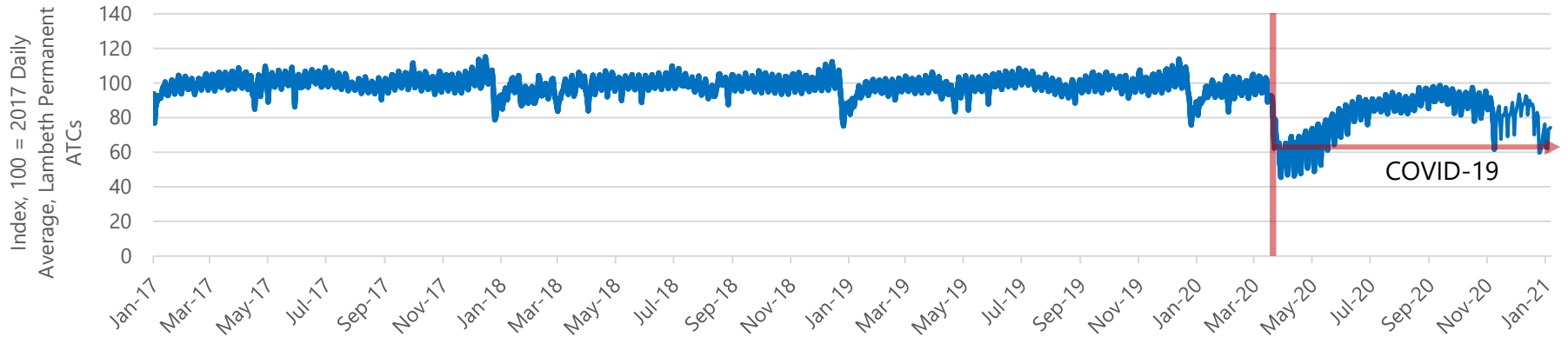
Oval LTN Background

- The Oval to Stockwell Triangle Low Traffic Neighbourhood occupies the triangle-shaped area between Vauxhall, Oval and Stockwell Underground stations, and is bounded by the A3/Clapham Road to the southeast, South Lambeth Road to the west and A202/Harleyford Street to the northeast.

- The LTN is centred around **Quietway 5**, traverses the area along Meadow Road, Bolney Street and St. Stephen's Terrace. The main objective of the LTN is to limit possible east-west through traffic between Clapham Road an South Lambeth Road.

- Seven modal filters were introduced to form the Oval Low Traffic Neighbourhood, most of which restrict vehicular traffic turning onto/off of the A3.
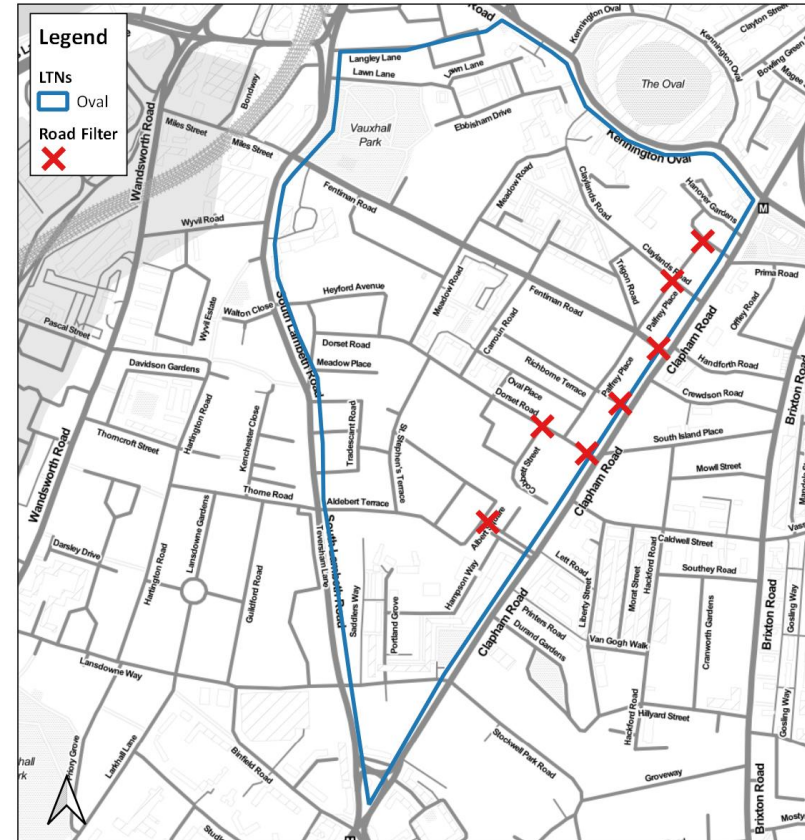
Basemap: Stamen

Oval LTN ATC Sites

- For the Oval LTN, a total of 21 ATCs were installed in December 2020. These can be seen in the map to the right.

- Of these, 9 were inside the boundary of the LTN, with the remaining 12 on other roads in the area to pick up any spillover effects from the LTN.

- Of the ATC sites, **1** site uses Healthy Routes as a baseline, **7** sites use the TSS study, **4** sites use the 20mph study and **7** utilise both The Floow data and Healthy Routes.

- Details for individual sites are located in **Appendix C.**
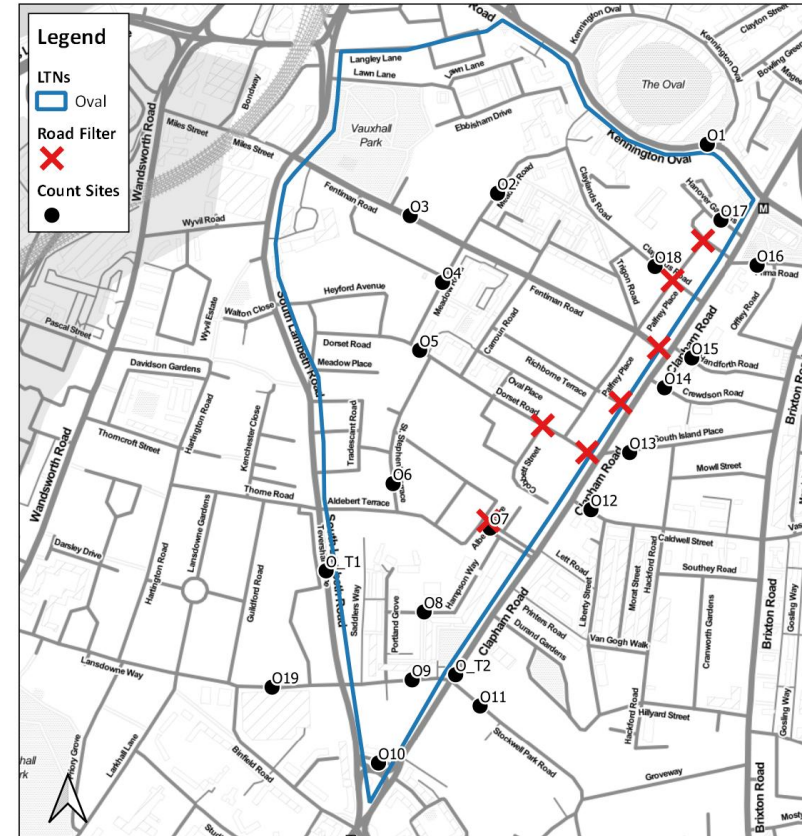

Basemap: Stamen

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 Oval LTN.

- Baseline flows within the LTN are in general below the Healthy Routes threshold of 200 vehicles per hour in the peak hour (vphph), although in some areas higher flows have been recorded, such as 240 vphph on Fentiman Road.
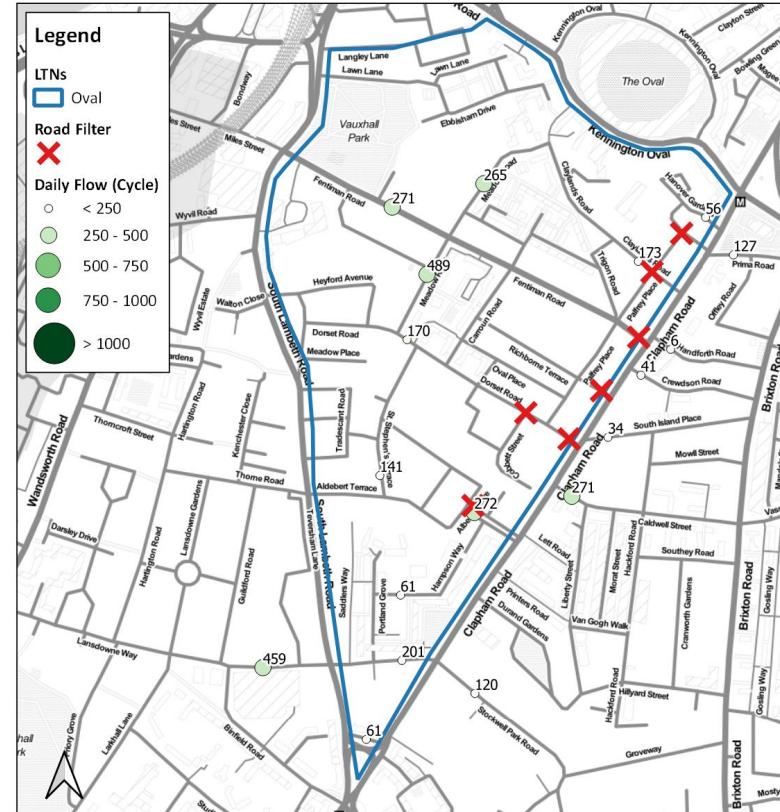

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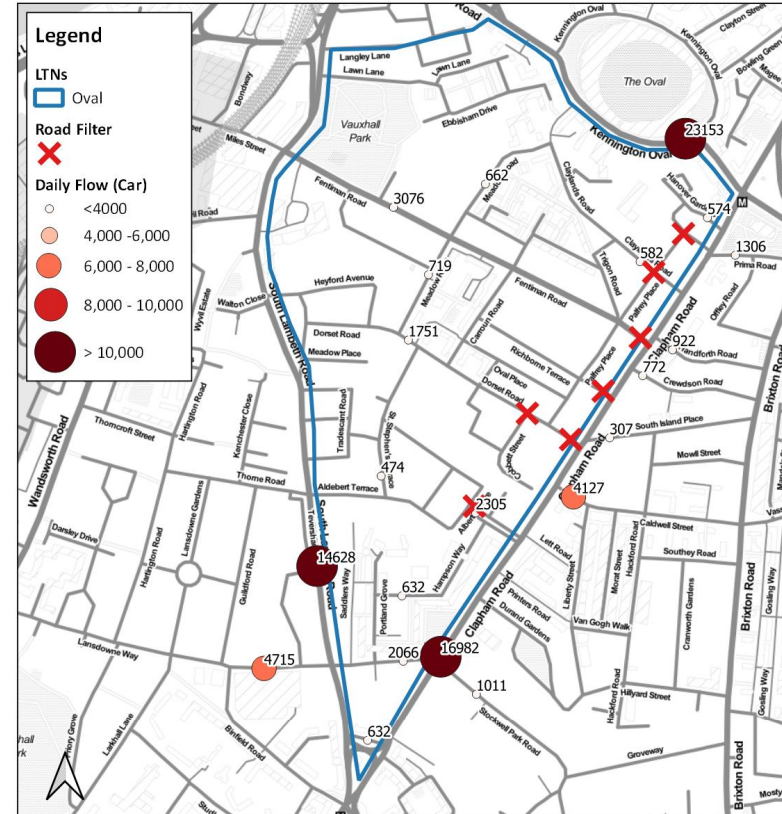
After: LTN Impact (Cars)

- The LTN impact is calculated as the percentage change between data collected in December 2020 and the **baseline** flows.

- The map to the right outlines decreases in car use in green, and increases in red.

- The introduction of point closures naturally decreases vehicle flows on roads connecting to Clapham Road (by up to 91%), but increase in other locations including Lansdowne Way (+21%), which provides a route through the LTN from South Lambeth Road to Clapham Road.

- Flows increase on St. Stephen's Terrace by 173%, indicating that local traffic is rerouting from the east (it should be noted that this is still well within limits for Healthy Routes).

Basemap: Stamen
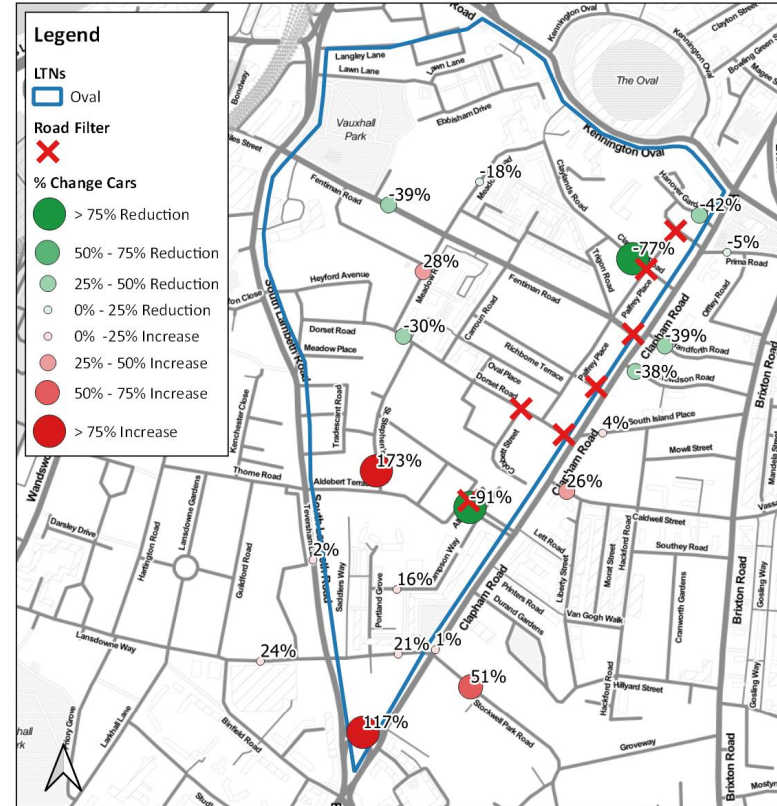
Before: Historic Flows (Cycles)

- 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 somewhat similar to vehicle flows in their distribution, with direct routes and access points to Clapham Road recording the highest flows.

Basemap: Stamen

After: **LTN Impact** (Cycles)

- Most sites inside the LTN recorded an increase in cycle flows, especially sites along the Quietway 5, notably Dorset Road (+173%).

- Locations adjacent to Clapham Road generally saw a increase in cycle flows, although all changes are from low baselines and therefore represent minor changes in raw numbers.

Basemap: Stamen

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Before: Baseline Flows (Goods Vehicles)

- The map to the right plots **baseline** goods vehicle flows.

- In general, goods vehicle flows are higher on roads on the periphery, although there are still high flows through the LTN, especially on Fentiman Road, where over 15% of vehicles in the peak hour are goods vehicles.
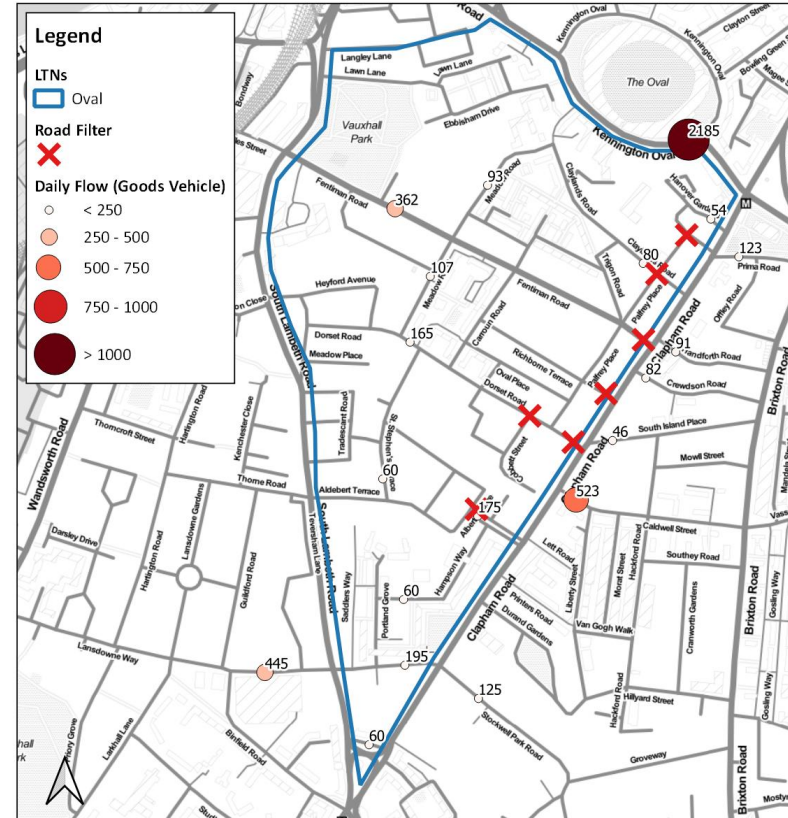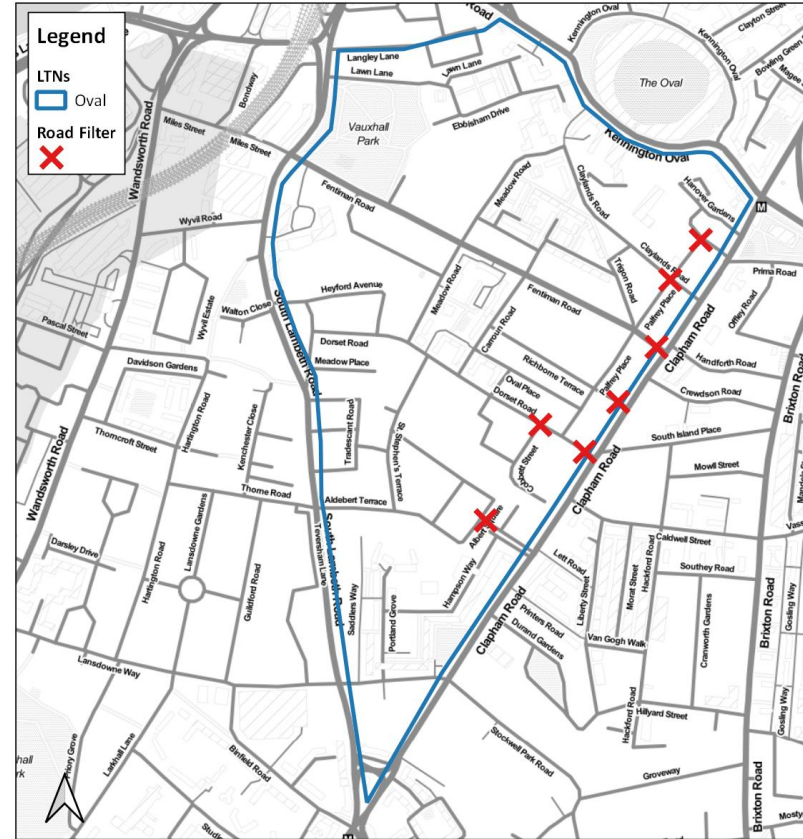

Basemap: Stamen

After: LTN Impact (Goods Vehicles)

- The impact of the LTN on goods vehicle movements is similar to the one observed for cars.

- As could be expected, roads with point closures on them saw notable reductions in goods vehicle movements.

- Some locations within the LTN saw in increase in flows as has happened for cars, such as on Lansdowne Way (+59%).

Basemap: Stamen
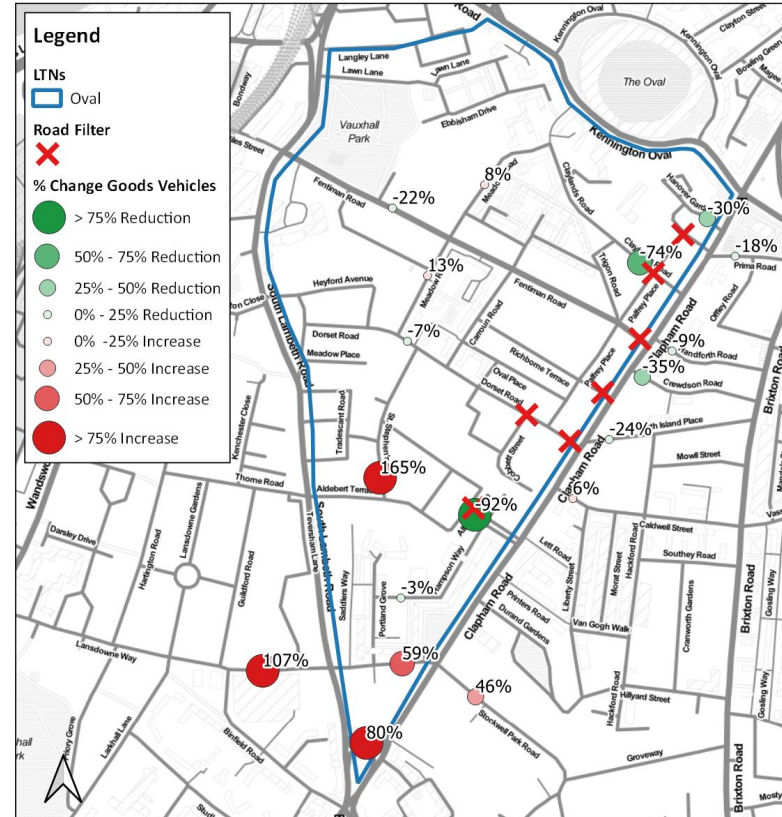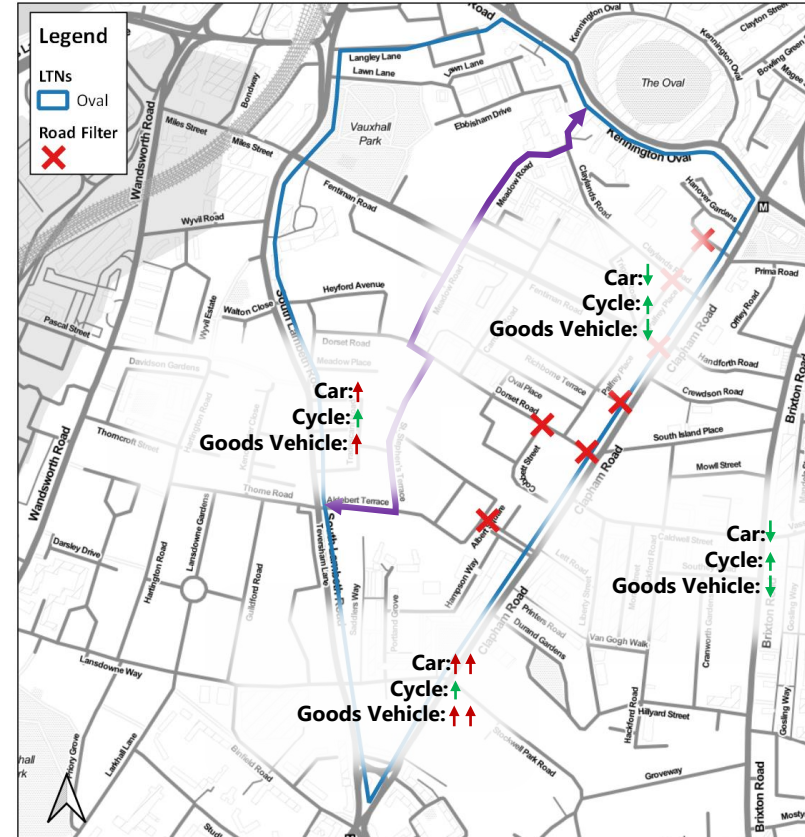
General Trends

- Within the LTN, the following overall percentage changes in counts were observed against the baseline:

  - **Car: -17%**

  - **Cycle: +10%**

  - **Goods Vehicle: -3%**

- On Borough Roads* surrounding the LTN, the following overall percentage changes in counts were observed against the baseline:

  - **Car: +10%**

  - **Cycle: +19%**

  - **Goods Vehicle: +13%**

- Across both internal and surrounding Borough Roads*, the following overall percentage changes in counts were as follows:

  - **Car: -3%**

  - **Cycle: +34%**

  - **Goods Vehicle: +16%**

- *TfL sites on South Lambeth Road and Clapham Road are not included in the above calculations due to a larger margin of error and therefore outsized impact on calculation results. Please see Appendix B for further detail.

Basemap: Stamen

Specific Trends

- The modal filters in the Oval LTN have almost completely removed traffic movements accessing the area from Clapham Road; however, a portion of these vehicles now access the LTN via Aldebert Terrace & St. Stephen's Terrace.

- Within the LTN, cycle flows have mostly increased, particularly along Quietway 5 (in purple).

Basemap: Stamen

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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Contact details:
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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

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