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.
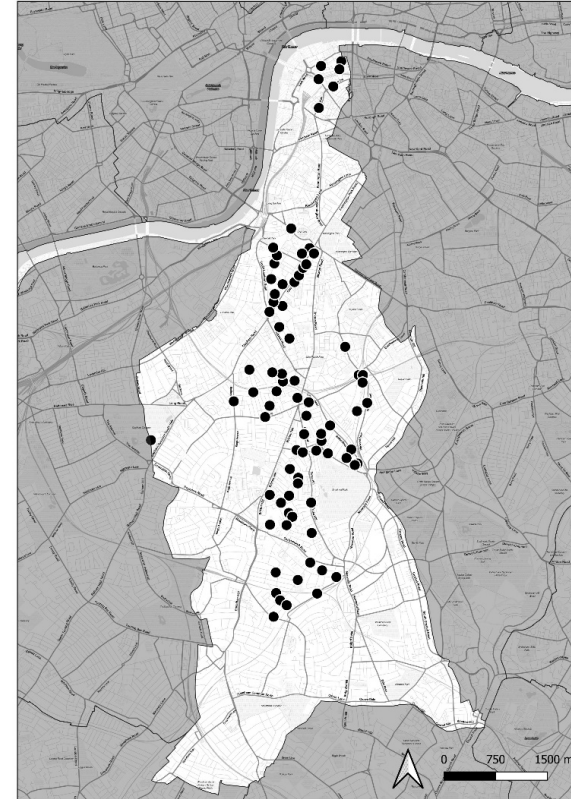
Monitoring Study

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.

STREETSPACE FOR LONDON

Source: TfL

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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.

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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

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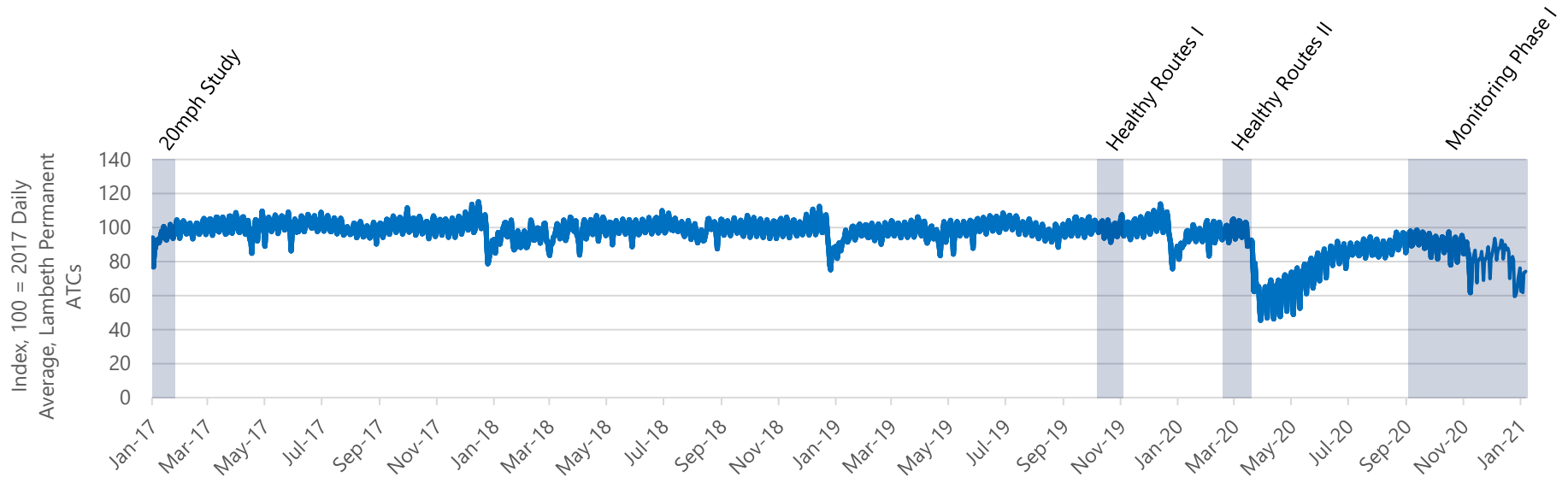
New Data Collection

- 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**.
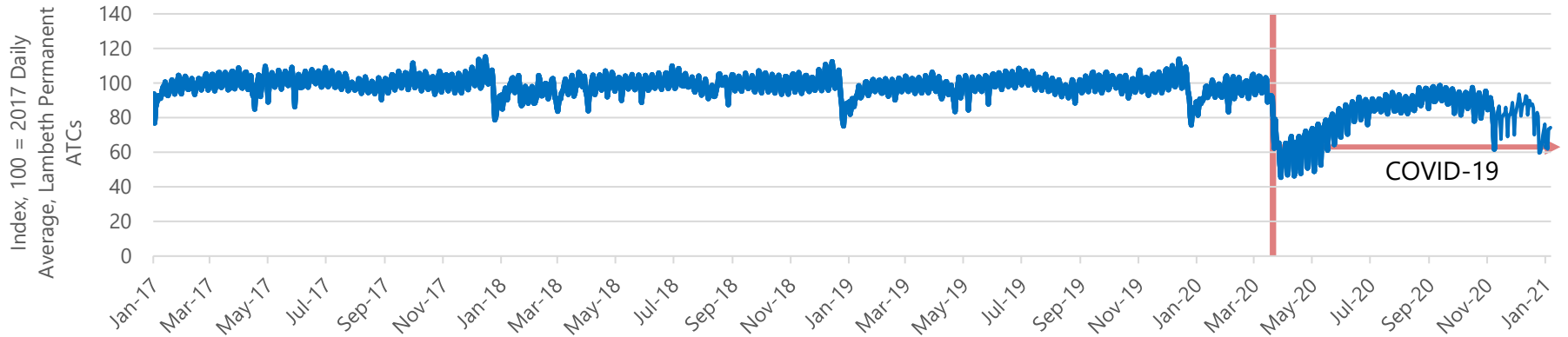
Streatham Hill Low Traffic Neighbourhood

Streatham Hill LTN Background

- The Streatham Hill Low Traffic Neighbourhood occupies a trapezoidal area between the **Streatham Hill and Tulse Hill rail stations**. It is bounded by the South Circular/A205 to the north, Leigham Vale to the southeast, Leigham Court Road to the south and Streatham Hill to the west.

- Residential roads such as Hillside Road/Downton Avenue are often used to avoid congestion the South Circular/A205 and Streatham High Road, drawing higher flows onto residential streets in the LTN.

- This LTN's modal filters are positioned to create several smaller neighbourhood cells, as depicted on the map to the right – there are four of these in total, with no through routes between them.

Streatham Hill LTN ATC Sites

- For the Streatham Hill LTN, a total of 11 ATCs were installed from **19th October – 25th October.** These can be seen in the map to the right.

- Of these, 8 were inside the boundary of the LTN and 2 on key peripheral roads – these, combined with 2 TfL permanent ATCs on Streatham Hill & Christchurch Road can provide insight into spillover effects from the LTN.

- For the Streatham Hill LTN, **1** site uses Healthy Routes as a baseline, **5** sites use the 20mph study and **3** utilise both The Floow data and Healthy Routes. The remaining **2** sites use data from studies specific to the area.

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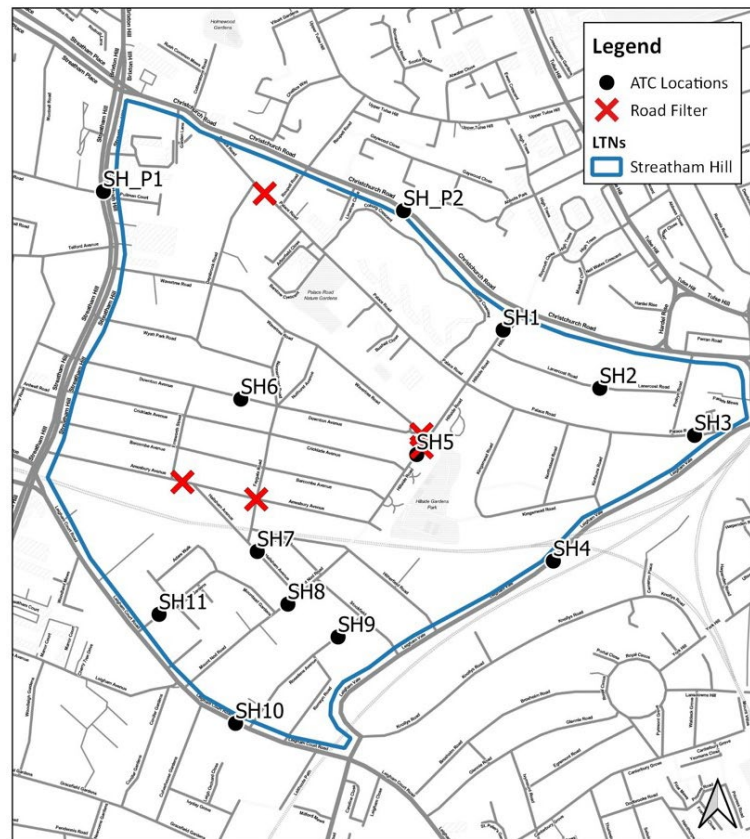
LTN-Wide Analysis

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 Streatham Hill LTN.

- Flows within the LTN itself are generally reasonably low, except for on the central section of Hillside Road, which is commonly used as a through-route.

- Leigham Court Road and the TfL sites on the strategic network (Streatham Hill & Christchurch Road) indicate significantly higher flows (*note that the latter two sites are for all vehicles as data is not disaggregated by mode*).

Basemap: Stamen
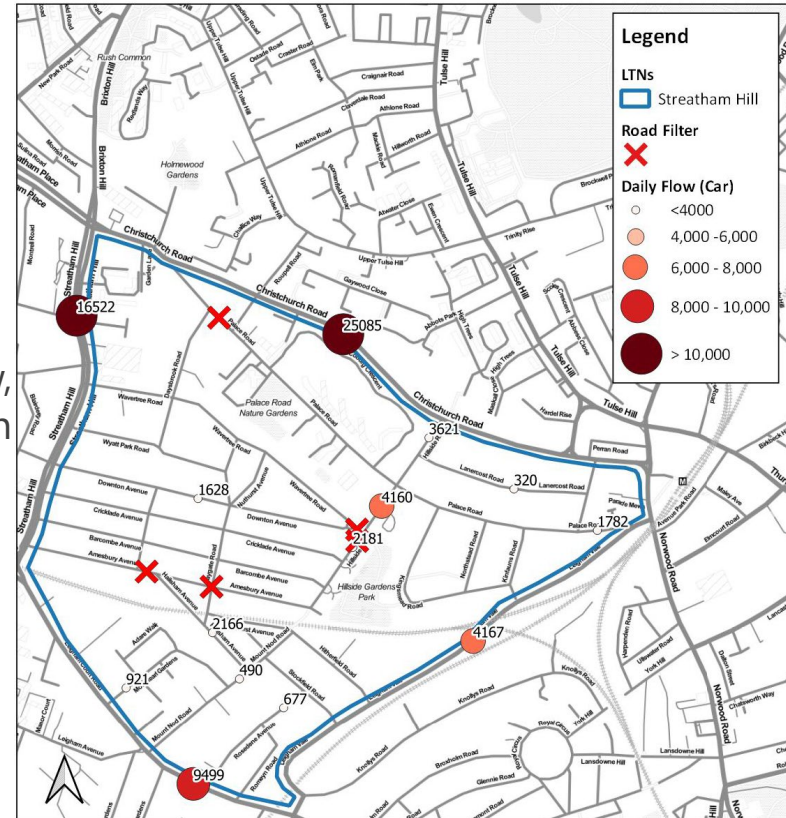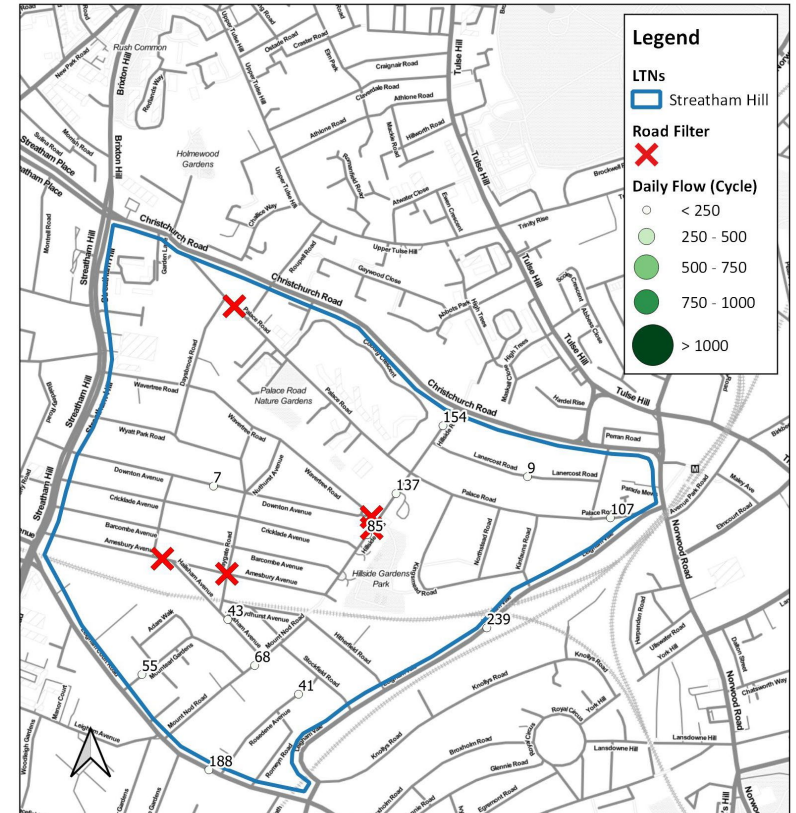
After: LTN Impact (Cars)

- 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 traffic cells created by the modal filters (such as -89% on Hillside Road), except on the southern cell, where there was an overall increase in traffic flow, with vehicles likely now accessing this area via Mount Nod Road/Rosendene Avenue from the south rather than Hailsham Avenue from the west.

- Flows also increased on Palace Road (+77%), which is a common routing to this area now access from Hillside Road is limited.

- Traffic on Christchurch Road has increased slightly, likely from the dual impacts of the Tulse Hill and Streatham Hill LTNs.

Basemap: Stamen

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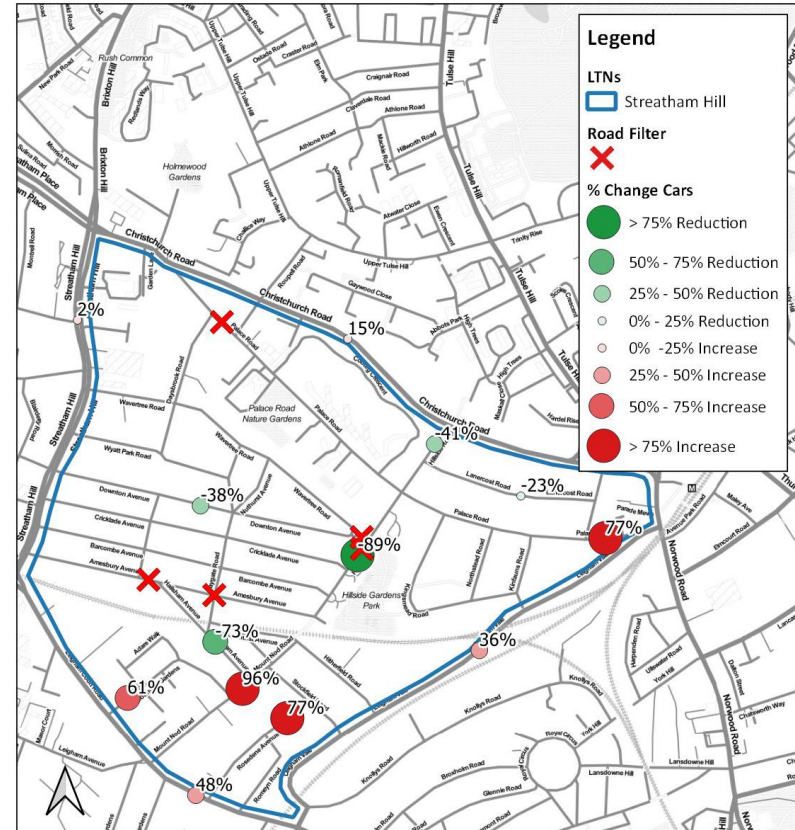
Before: Historic Flows (Cycles)

- As cycle travel does not follow the same patterns as background 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, which may be due to the lack of cycleways within the area and on the surrounding main roads, in addition to the somewhat hilly local topography.

- Slightly higher cycling flows are reported on Hillside Road, Palace Road, Leigham Court Road and Leigham Vale.


Basemap: Stamen

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After: **LTN Impact** (Cycles)

- Considerable percentage increases in cycling flows were recorded at all sites, although largely from **low baseline figures**.

- The largest increases were recorded on Mount Nod Road (+245%). Cycle flows also roughly doubled on Leigham Court Road (+102%) and on Hillside Road (+94%).
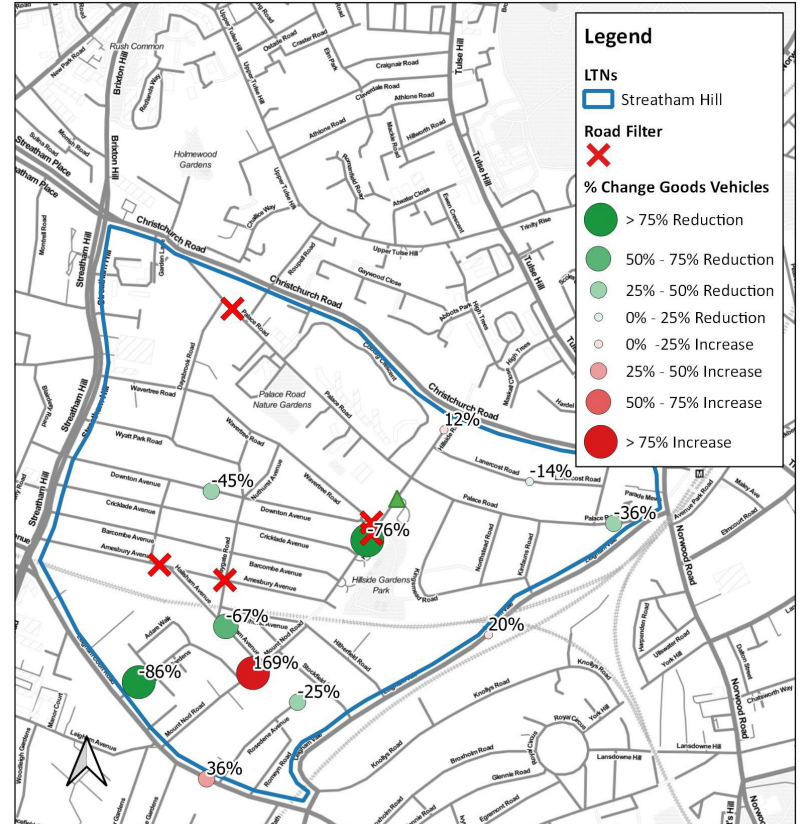

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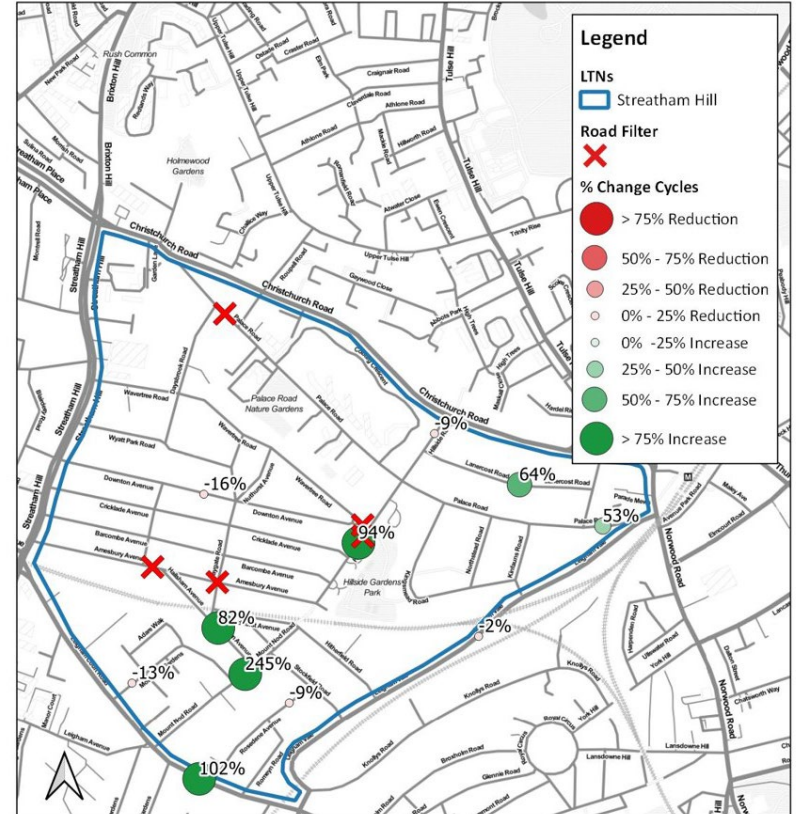
Before: Baseline Flows (Goods Vehicles)

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

- Goods vehicles flows are reasonably low in the south of the LTN area, while they are above 300 per day on the northern ATC sites (343 on Hillsdale Road north, 360 on Palace Rd and 300 on Downtown Ave).

- Leigham Court Road was the only site for which goods vehicles volumes mean that Healthy Routes criteria for mixing cycles and general traffic are not met.


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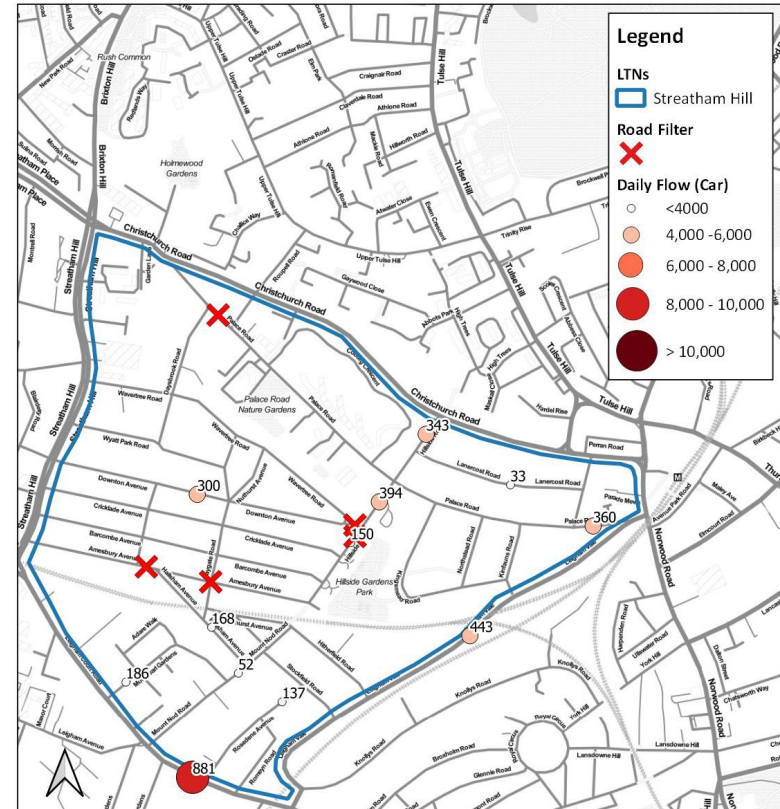
After: **LTN Impact** (Goods Vehicles)

- Goods vehicle movements had generally decreased within the LTN, with the exception of Mount Nod Road.

- The largest decreases in flow were recorded on Mountearl Gardens (-86%), Hillside Road south (-76%) and Hailsham Avenue (-67%), but from **very low predicted baseline flows**.

Legend

LTNs
— Streatham Hill

Road Filter
✖

% Change Goods Vehicles
● > 75% Reduction
● 50% - 75% Reduction
● 25% - 50% Reduction
● 0% - 25% Reduction
● 0% -25% Increase
● 25% - 50% Increase
● 50% - 75% Increase
● > 75% Increase

Basemap: Stamen

General Trends

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

  - **Car: -25%**

  - **Cycle: +117%**

  - **Goods vehicles: -10%**

- On the locally impacted periphery* of the LTN, the following overall percentage changes in counts were observed against the baseline:

  - **Car: +44%**

  - **Cycle: +167%**

  - **Goods vehicles: +19%**

- Across both internal and locally impacted peripheral roads*, the following overall percentage changes in counts were as follows:

  - **Car: +8%**

  - **Cycle: +135%**

  - **Goods Vehicle: +5%**

- *TfL sites on Christchurch Road and Streatham Hill 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.


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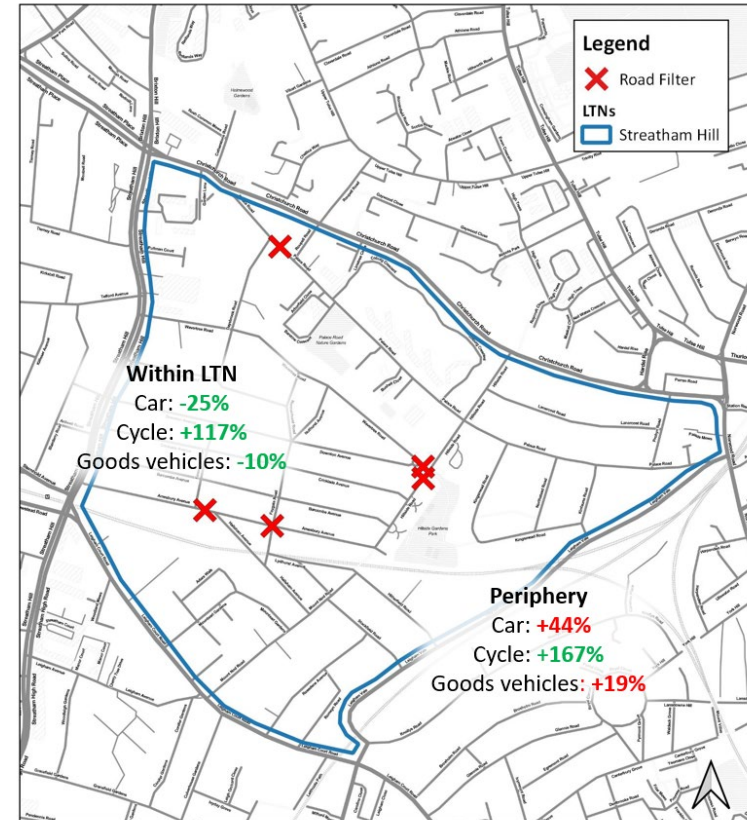
Specific Trends

- Inside most of the LTN, there was a general **decrease in both cars and goods vehicles** when compared with the baseline. However, motor vehicle flows have increased where modal filters require new accesses to each sub-cell of the LTN, for example around Mt. Nod Road and the eastern end of Palace Road.

- Motor vehicle flows have increased on both of the peripheral roads monitored.

- Cycle flows recorded a large increase, both inside the LTN and on peripheral roads; however, this increase is from a very small predicted baseline.

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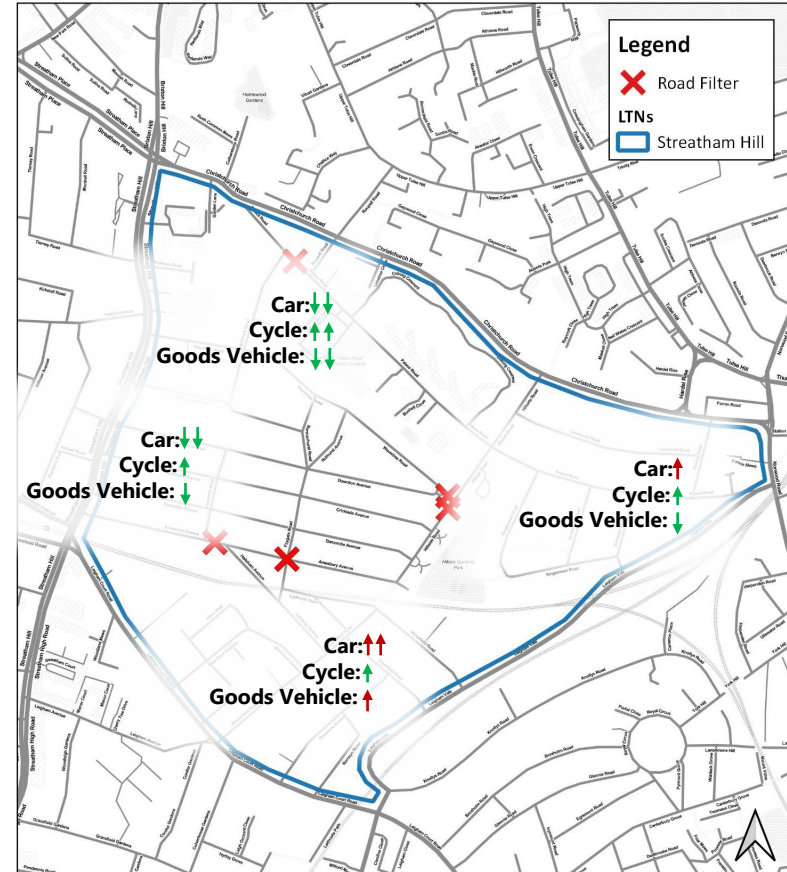
Recommendations

- To more fully understand the impact of the Streatham Hill Low Traffic Neighbourhood, SYSTRA recommends that further counts are completed on **Hillside Road (between Palace Road and Downton Avenue).**

- Additionally, 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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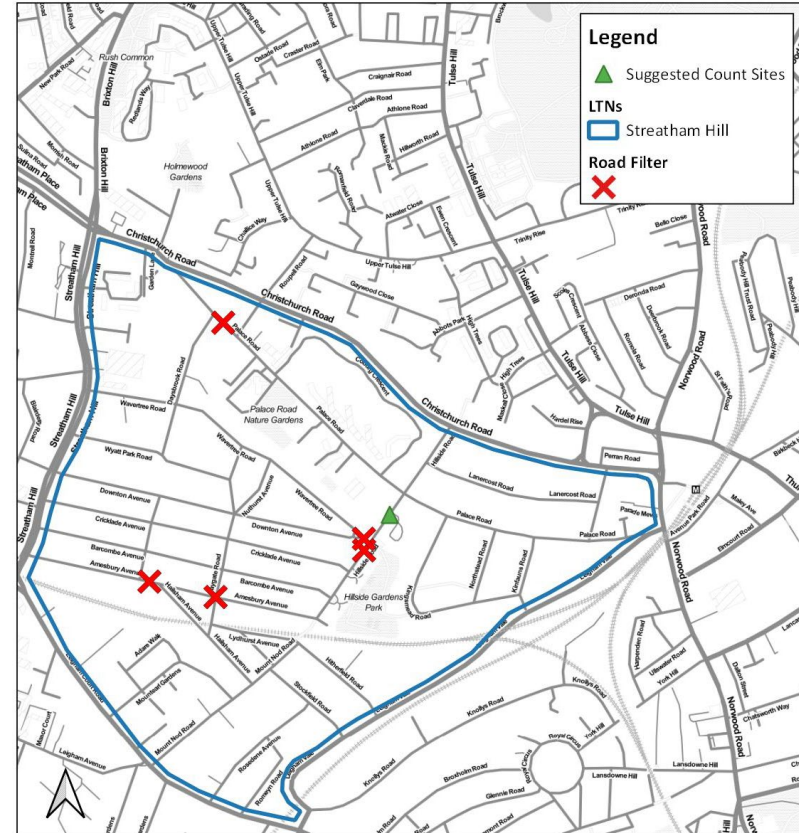
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For Lambeth Council media enquiries – communications@Lambeth.gov.uk

To provide feedback on the Streatham Low Traffic Neighbourhood,
please contact the Lambeth Transport Team via the following channels:
      Commonplace engagement site – https://streathamhilllowtrafficneighbourhoodproposals.commonplace.is/
      Email – LowTrafficNeighbourhoods@Lambeth.gov.uk

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