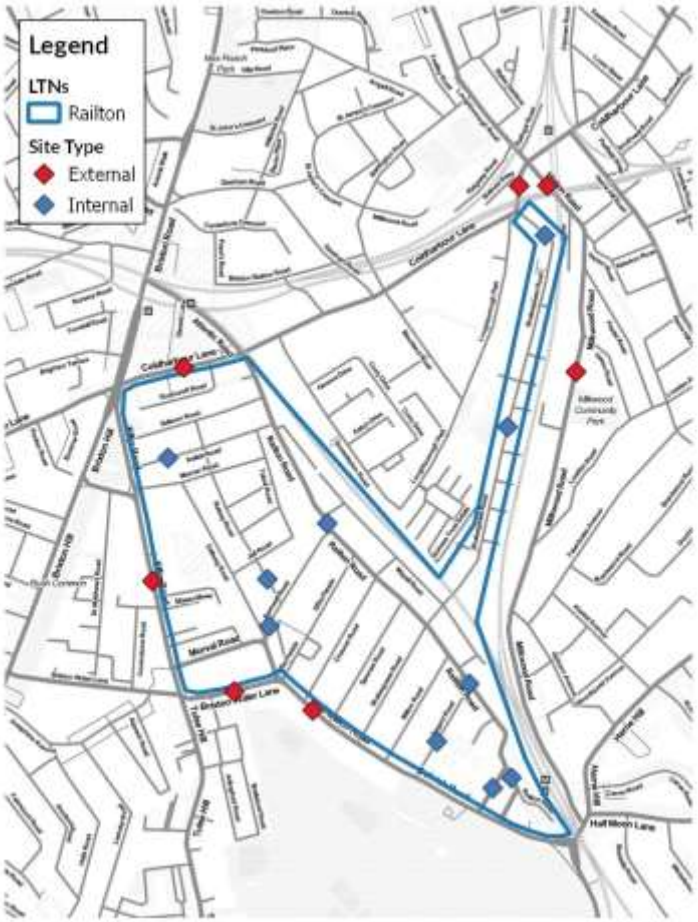
London Borough of Lambeth: Railton LTN Monitoring Stage 2 Report

SYSTRA

Executive Summary

Executive Summary (1)

- This stage 2 monitoring report presents data reviewing the impact of the Railton Low Traffic Neighbourhood (LTN) on local traffic flows, with count sites spread across the inside of the LTN and on its boundary roads. This report follows from the stage 1 interim report published in early 2021.
- For analysis, count sites have been classed as "internal" or "external", as represented on the map to the right. Of the 17 total sites, **10 sites were internal (blue)** and **7 were external (red)**.
- Throughout the report, data collected before the LTN was introduced has been referred to as "pre-implementation" and data collected after the LTN was introduced has been referred to as "post-implementation."



Executive Summary (2)

- As pre-implementation data was sourced from studies taking place across several years, and post-implementation data was collected during 2020-2021 (a time of significant fluctuation in general traffic flows), a normalisation adjustment has been made to ensure a fairer comparison of pre- and post-implementation data.
- For the Railton LTN, the average adjustment to vehicle flows is -**4%** (i.e. 96% of pre-COVID flows), which is **more conservative** than a direct comparison of pre- and post-implementation flows.
- The following impacts have been observed between normalised pre-COVID data and data from April 2021:
  - **The overall volume of motor traffic recorded across all streets has decreased by -18%, equating to almost 19,000 fewer vehicles counted.**
  - The **volume of cars** counted on **internal streets** has **decreased** by **-66%**, and has changed by **roughly -2% on external streets**.
  - **Cycle volumes** on **internal streets** have **increased** by **+62%** and by **+18%** on **external streets.**
  - Across all streets, the **volume of HGVs** has **decreased** by **-6%** whilst the **volume of LGVs** has **decreased** by **-4%**
  - The **volume of motorcycles** on **internal streets** has decreased by **-33%** and increased by **+11%** on **external streets,** with a **0% change overall**.

Executive Summary (3)

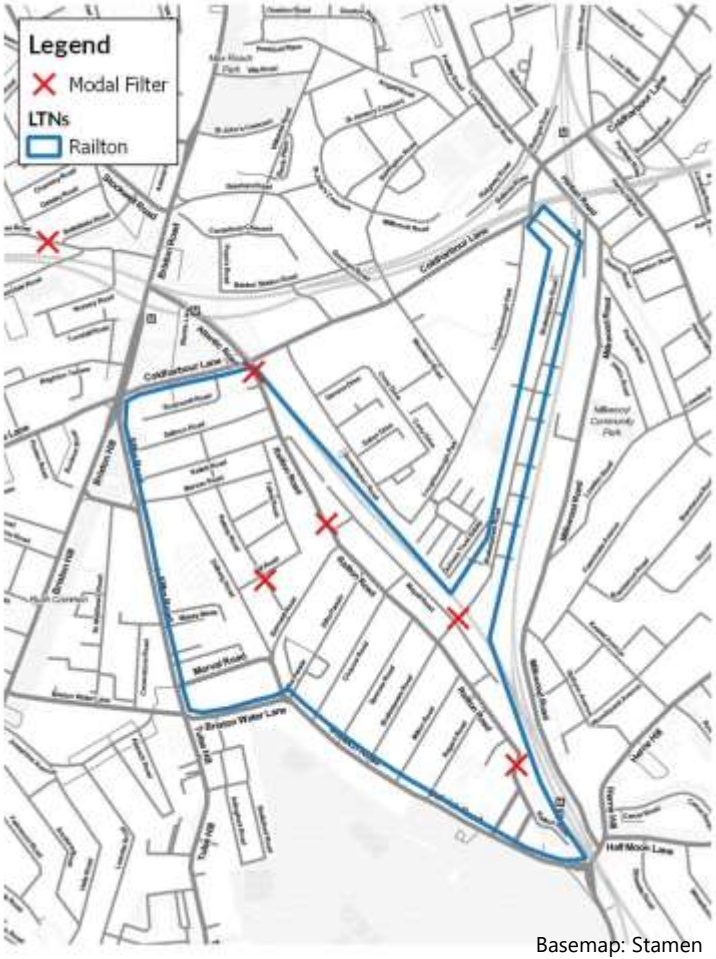
- The total number of cars, cycles and all motor traffic recorded on internal and external roads (for pre- and post-implementation) are provided below. Details of further data (collected in September 2020) are provided within the main report.

	Cars				Cycles				All Motor Vehicles			
	Pre	Post – May 2021	Change	% Change May 2021	Pre	Post – May 2021	Change	% Change May 2021	Pre	Post – May 2021	Change	% Change May 2021
Internal	26,230	8,950	-17,280	-66%	3,275	5,313	2,038	62%	30,406	11,165	-19,242	-63%
External	69,243	67,257	-1,985	-3%	4,490	5,287	798	18%	79,264	78,765	-500	-1%
All Counts	**95,473**	**76,207**	**-19,265**	**-20%**	**7,764**	**10,600**	**2,836**	**37%**	**109,671**	**89,929**	**-19,741**	**-18%**

Scheme Introduction

Railton LTN Background

- The Railton Low Traffic Neighbourhood stretches between **Herne Hill** and **Brixton**, and is bounded by Coldharbour Lane to the north, the A204/Dulwich Road to the east & southeast, and the rail line to the west.
- This LTN is centred around Railton Road, a narrow, yet busy route often used by drivers for direct access to Brixton or Herne Hill – there are also a number of other feeder streets which are often busy as a result.
- On **July 13th 2020**, four modal filters were introduced to form the Railton Low Traffic Neighbourhood. Further filters were added at the junction of Jelf Road and Rattray Road/Dalberg Road in Spring 2021.



Basemap: Stamen

Monitoring Study

Scheme Background

- LB Lambeth implemented a number of measures as part of its emergency COVID-19 transport response. These included Low Traffic Neighbourhoods (LTNs), in accordance with national and regional guidance. In the short term, these measures were intended to:
  - Assist residents in **social distancing**
  - Enable **essential journeys** to be made safely
- Now, over the longer term, the introduction of the Lambeth LTNs aims to promote a wider change **away from motor vehicle use towards active travel (walking and cycling) and public transport**, improving air quality and safety, and reducing greenhouse gas emissions in line with the Lambeth Transport Strategy 2019
- These measures have been implemented as trials under Experimental Traffic Orders (ETOs), with data collection and analysis completed to inform future decisions about their permanence.
- This data collection and analysis will form the basis of the **monitoring study**.

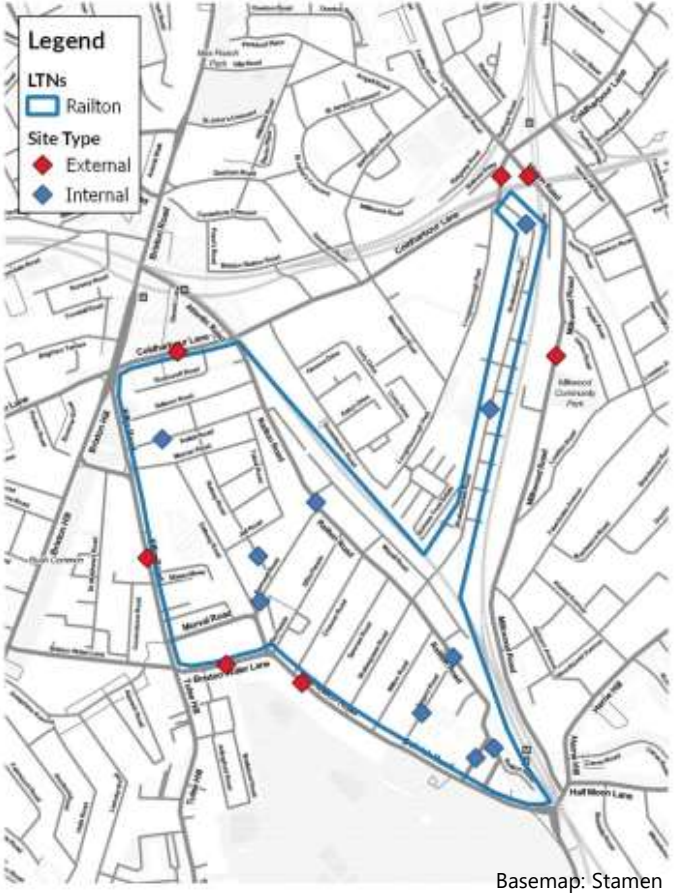
Source: TfL

Monitoring Programme

- SYSTRA is leading the traffic monitoring programme for LB Lambeth's new Low Traffic Neighbourhoods to understand the effectiveness of the schemes at reducing vehicular traffic flows, with data collection completed by survey company MHTC.
- Across the Borough, data has been collected at a large number of individual points using mostly Automatic Traffic Counters (ATCs) (and occasionally radar surveys) for a full seven-day week, providing flows and speeds by vehicle type. This has then been **compared to historic data** from those sites or a suitable proxy site 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:** Initial adjustment (September 2020)
  - **Stage 2:** Settling down (May 2021) - ***current stage***
  - **Stage 3:** Regular use (if scheme unsuccessful at stage 2)
- For qualitative feedback from residents, LB Lambeth is also running a separate Commonplace consultation and representations and objections can also be made in response to the traffic order.
- Further independent air quality modelling is also being conducted.

Data Collection

- For this Stage 2 report, data was collected at 17 sites, which have been classed as “internal” or “external”, as represented on the map to the right.
- Of the 17 total sites, **10 sites were internal (blue)** and **7 were external (red)**.
- Details for individual sites and their locations can be found in **Appendix C.**



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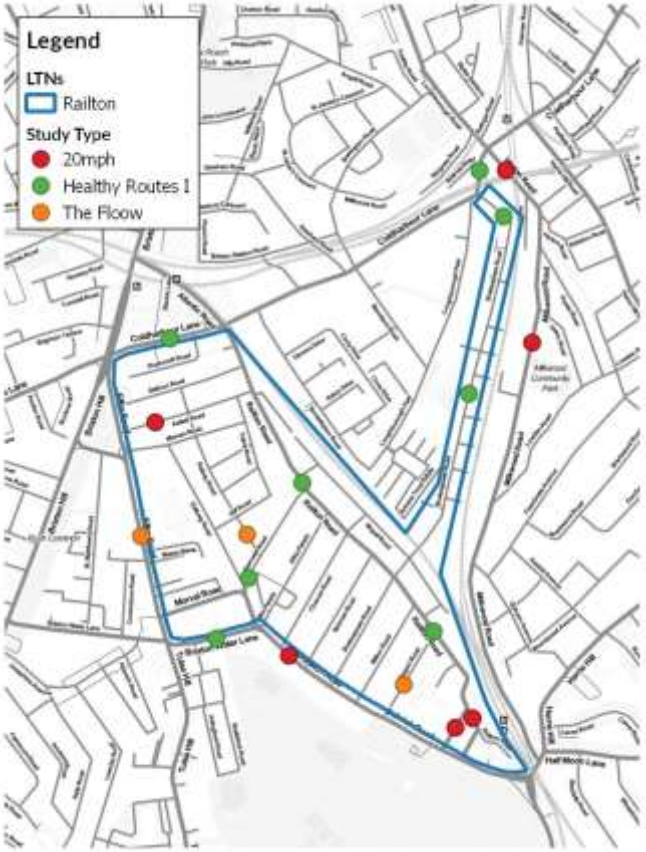
Data Collection

- As the LTN was introduced as a response to COVID-19, no comprehensive dataset existed to represent pre-implementation data. Instead, data was drawn from the following studies commissioned by LB Lambeth since 2017:
  - **Healthy Routes:** two rounds of data collection to support development of Healthy Cycling Routes (Nov 2019-Mar 2020)
  - **20mph Study**: data collected to underpin analysis on the 20mph Borough-wide speed limit (Jan 2017)
  - **The Floow**: GPS telemetry data, providing detail on vehicle routing through neighbourhood cells; this data will be used alongside Healthy Routes data for roads where no historic data was collected to approximate vehicle flows
- Of the ATC sites, **8** sites use Healthy Routes as a baseline, **6** sites use the 20mph study and **3** utilise both The Floow data and Healthy Routes.



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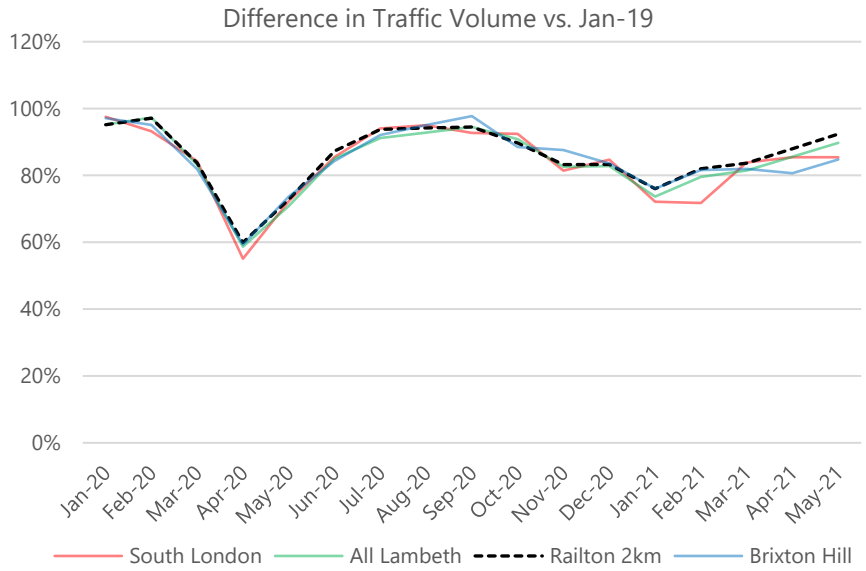
COVID-19 Impacts on traffic flows

Impact of COVID-19 on vehicular traffic

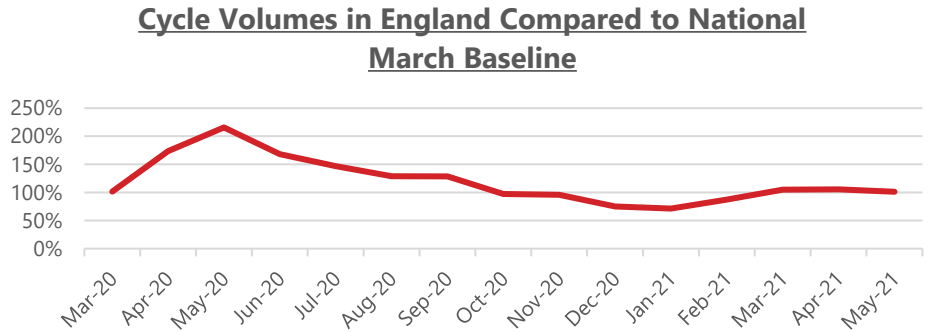
- Since the onset of the pandemic, people's travel behaviour has changed significantly, with the majority making far fewer trips, particularly during national lockdowns. This has led to reductions in vehicle traffic throughout the country. Therefore in analysing the data collected, it will be important to consider these impacts. The chart below compares traffic across South London, Lambeth, within 2km of the Railton LTN and the closest count site (Brixton Hill), to volumes in January 2017, according to continuous Automated Traffic Counter (ATC) counts collected by TfL.



- Traffic has been consistently lower than pre-pandemic, with particularly pronounced drops during lockdowns. To account for this a process of normalisation has been applied to all data collected.
- The normalisation process adjusts the data collected to the month when the most recent data was recorded (i.e. April 2021), and can therefore represent "what would be expected without the LTN" so all data can be compared on a like-for-like basis.
- Further detail on the normalisation process is provided in **Appendix C**. All car, LGV and HGV volumes have been normalised in the same manner.

Impact of COVID-19 on cycle flows

- As with motor traffic volumes, the number of people cycling has also been affected by the pandemic. The Department for Transport's Road Traffic Statistics estimate a 38% increase in cycling in London in 2020, relative to the average for 2017-2019. Other estimates include:
  - a 35% increase in London from 2019 to 2020 among Strava users;
  - a 7% increase in Inner London and a 22% increase in Outer London from 2019 to 2020 as measured by the company Eco-Counter.
- The chart below shows the volume of cycle trips compared to a pre-COVID, March baseline across England[1]. A large increase is shown in 2020, although levels appear to have reverted to below or similar to pre-COVID levels in the latter part of the year and 2021. During the study period, national cycling levels were only 3% higher than in March 2021, likely due to poor weather throughout May 2021.



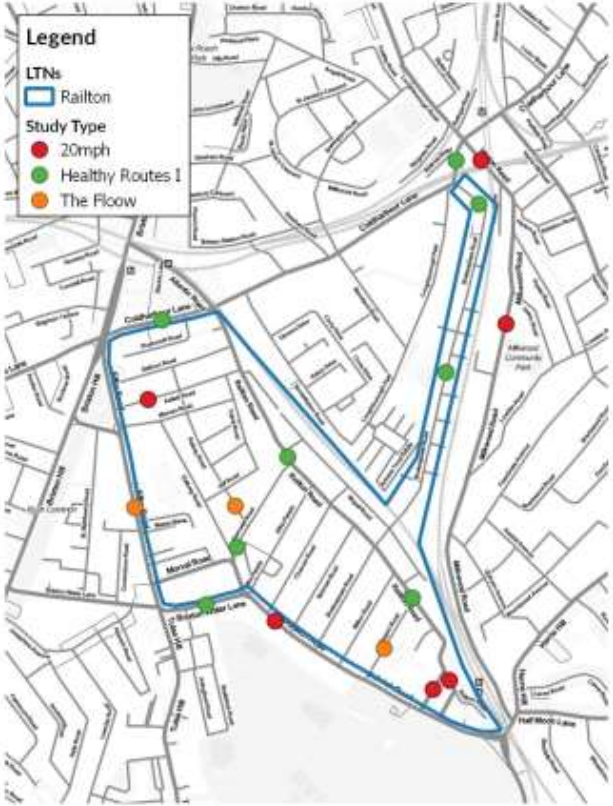
- Unlike for motor vehicles, a continuous data set does not exist that is sufficiently comparable to cycling in Lambeth to allow for normalisation of cycle trips. Therefore such a process has not been completed, so changes in cycle flows observed should be considered in the context of the changes described.

[1]https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

Pre-Implementation Flows

Pre-Implementation Flows

- Pre-implementation flow data was drawn from a range of studies which took place between 2017 and early 2020. These are presented to the right. All data has been normalised using background flow data from ATCs within 2km of the LTN.
- Cycle flow data has not been normalised, reflecting the absence of an appropriate data set with which to perform this process. Similarly, motorcycle flow data shown in the appendices has also not been normalised, as the impact of COVID-19 on motorcycles is likely to have been significantly different to that of general traffic, due to the changes in factors such as take-away food deliveries. However, a historic dataset for these alone is not available.
- HGV and LGV data has been normalised, although notes are provided to help understand these numbers in context of wider traffic patterns.



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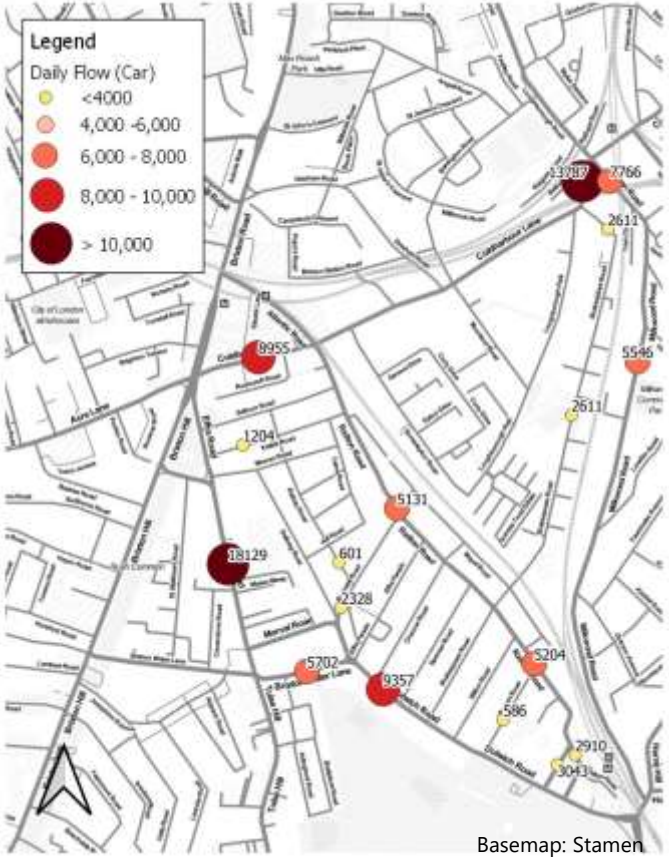
Pre-Implementation Flows – Cars

- As previously outlined, calculated **pre-implementation flows** are those that would be projected based on background TfL data.
- On the inside of the LTN, Railton Road previously carried a high number of daily car trips (>5,000), whilst Shakespeare Road, Barnwell Road and Hurst Street all had flows over 2,000 per day.
- Outside the LTN, daily flows were highest on Effra Road (>18,000), Coldharbour Lane East (near 14,000), Dulwich Road (>9,000) and Coldharbour Lane West (near 9,000).



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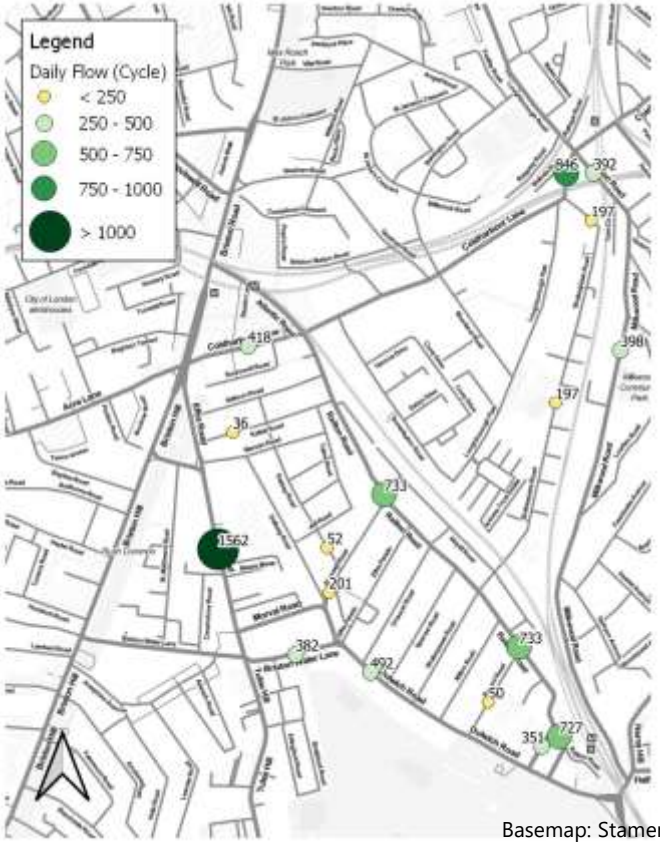
Pre-Implementation Flows – Cycles

- As cycle travel does not follow the same patterns as car usage and varies significantly based on local conditions, cycle flows have not been normalised. The map to the right shows daily flows.
- Before the LTN was installed, cycle flows were significantly higher on Effra Road than anywhere else (>1,300), although Railton Road and Coldharbour Lane also carried relatively high volumes of cyclists.



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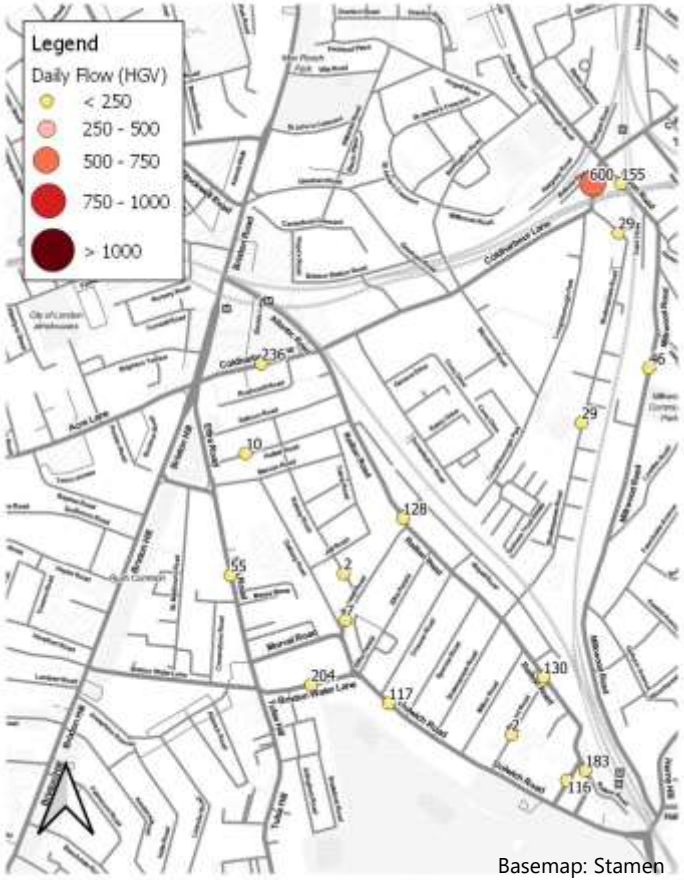
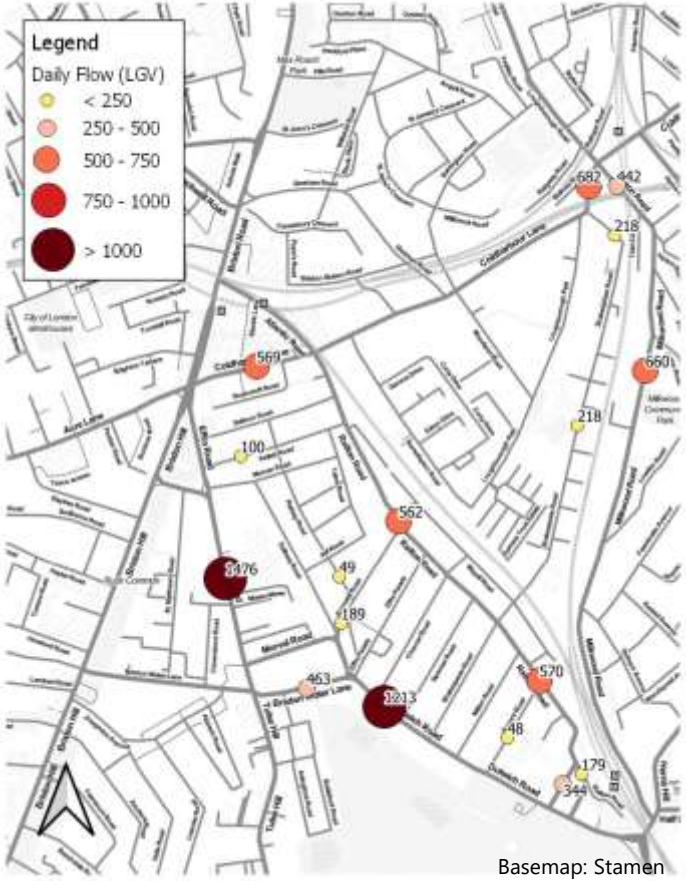
Pre-Implementation Flows – HGVs

- The map to the right plots **pre-implementation** HGV flows.
- HGV flows were fairly minimal across the LTN, except on Coldharbour Lane East (>600). There were, however, over 100 such movements a day on Railton Road.
- Notably, HGV flows were very low on Effra Road (<50).



Pre-Implementation Flows – LGVs

- The map to the right plots **pre-implementation** LGV flows.
- Within the LTN, LGV flows were highest along Railton Road (>500 daily), whilst on the outside, flows were highest on Effra Road and Dulwich Road (both >1,000 daily).
- On other peripheral roads such as Coldharbour Lane and Milkwood Road, LGV flows were between 500-700 per day.



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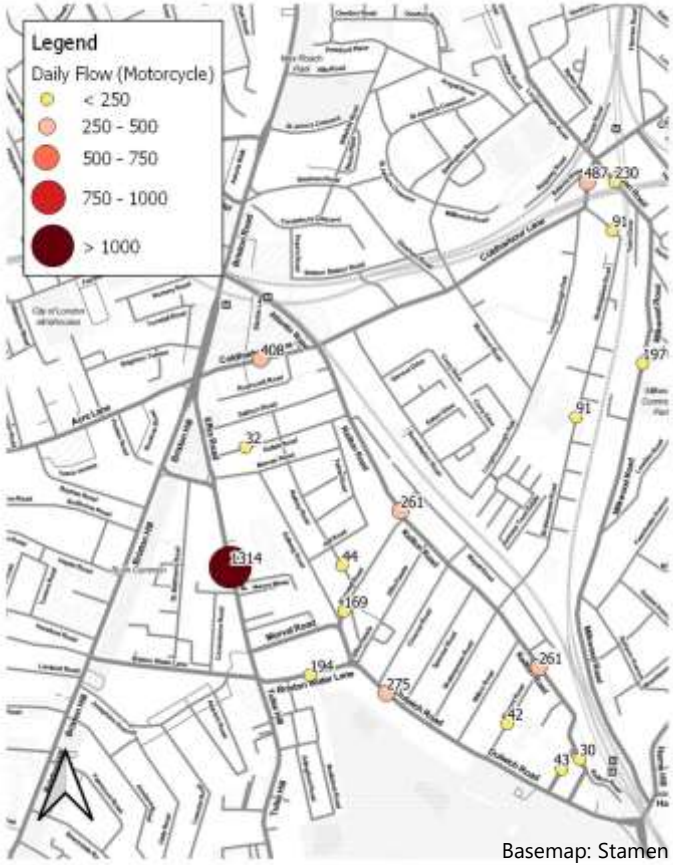
Pre-Implementation Flows – Motorcycle

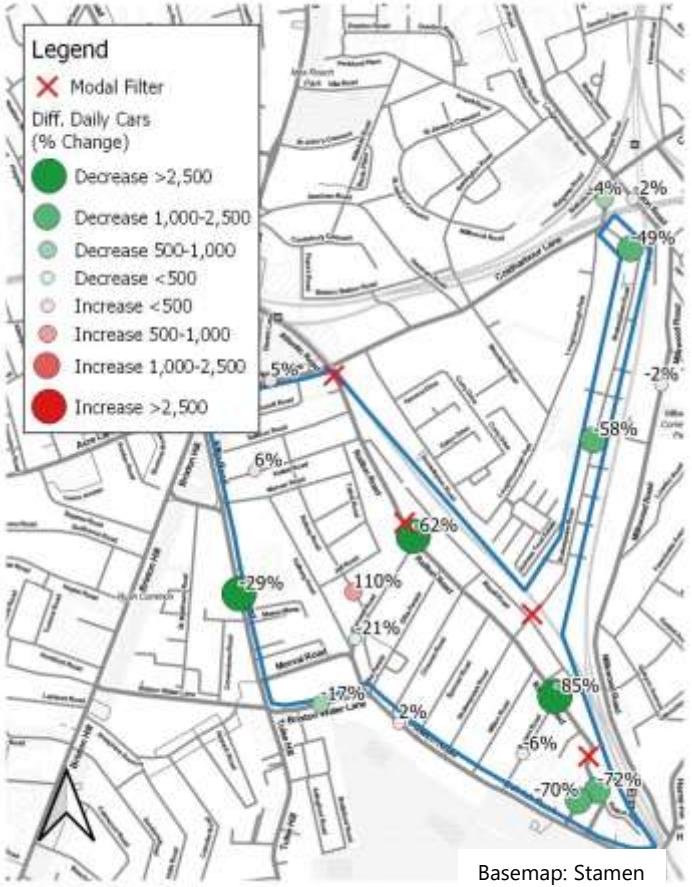
- As motorcycle travel does not follow the same patterns as car usage and delivery trends have significantly changes throughout 2020-21, flows have not been normalised. The map to the right shows daily flows.
- Inside the LTN, only Railton Road carried a notable number of motorcycles before scheme implementation (261). On boundary roads, Effra Road carried a much higher number (1,314).



Post-Implementation Monitoring Stage 1/September 2020

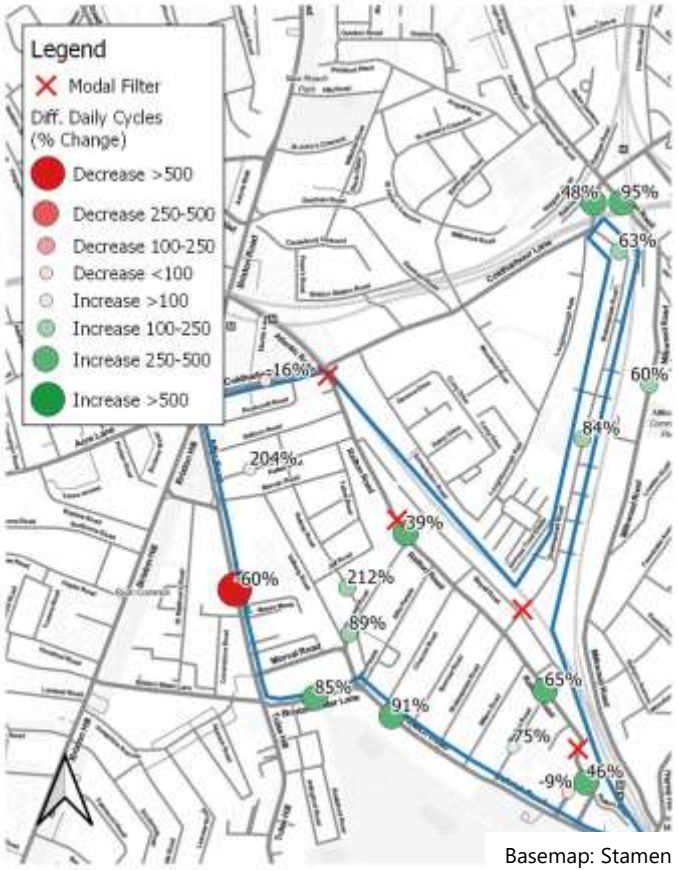
September 2020 Flow Change – Cars

- The map to the right outlines changes in counts of cars compared to those pre-implementation, at sites where data was collected in September 2020.
- Inside the LTN, car volumes are down significantly. On Railton Road, such trips have decreased between 62% and 85% (-4,446 vehicles), whilst on Shakespeare Road volumes have roughly halved (-1,743 vehicles).
- Car volumes on external roads are more mixed. On Effra Road, Brixton Water Lane and Milkwood Road, volumes have also decreased (-3,600, -433 and -121 vehicles, respectively), whilst on Coldharbour Lane West and Dulwich Road volumes are slightly up (+490 and +160 vehicles, respectively).
- Notably, car volumes are up 110% on Rattray Road, representing an increase of 660 vehicles per day – however, this is still well within TfL-defined parameters for safely mixing cycles and cars.



September 2020 Flow Change – Cycles

- The map to the right outlines changes in counts of cycles compared to pre-implementation, at sites where data was collected in September 2020.
- In almost all locations, cycle flows are significantly up compared to pre-implementation.
- On Railton Road, cycle flows have increased by around 400 per day (+39% to 65%), and volumes on external roads have also almost doubled on Dulwich Road, Brixton Water Lane and Hinton Road.
- Cycle flows are lower, most notably on Effra Road, although it is noted that previous cycle flows here were the highest in the area and it is likely that some demand has switched to travelling through the LTN via Railton Road.



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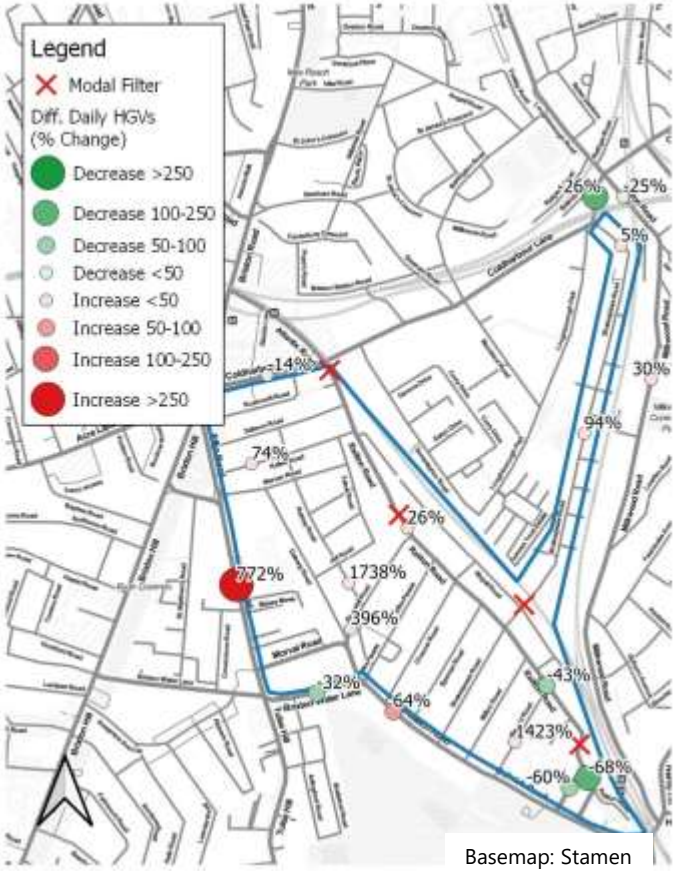
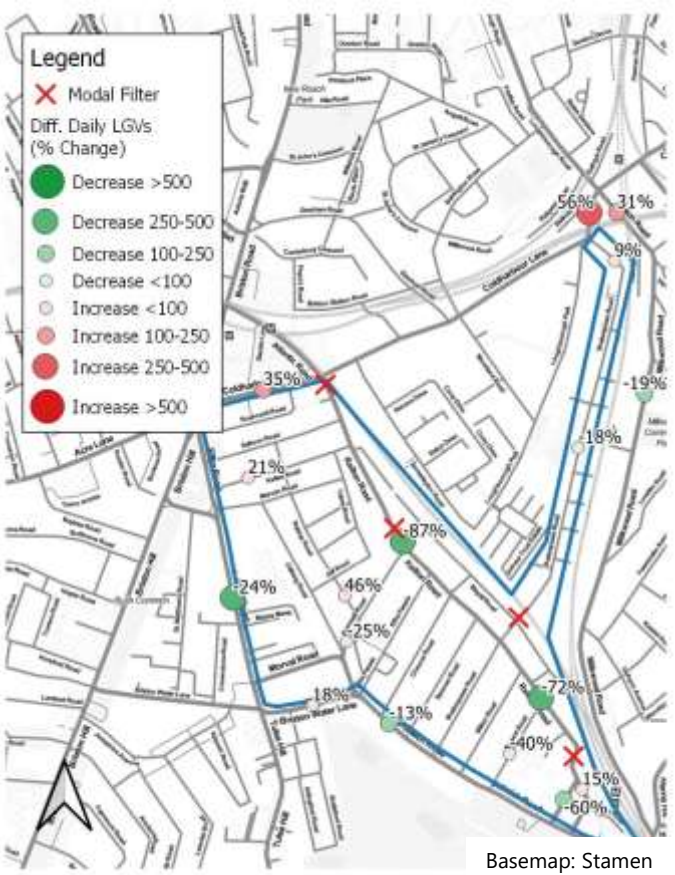
September 2020 Flow Change– HGVs

- The map to the right outlines changes in counts of HGVs compared to pre-implementation, at sites where data was collected in September 2020.
- Changes in HGV flows were very mixed across the LTN, although it should be noted that in almost all cases the baseline volumes were very low.
- The interior of the LTN saw limited change in terms of total HGV movements, even if some percentage changes were high. For example, the ~1,700% increase on Rattray Road corresponds to an additional 32 daily vehicles and ~1,400% increase on Regent Road to 25 additional vehicles.
- This compares to larger changes on external roads, such as the 772% increase (+423 vehicles) on Effra Road and 64% increase (+75 vehicles) on Dulwich Road. There was also a moderate decrease in HGV flows on Coldharbour Lane East (-26% or -155 vehicles).



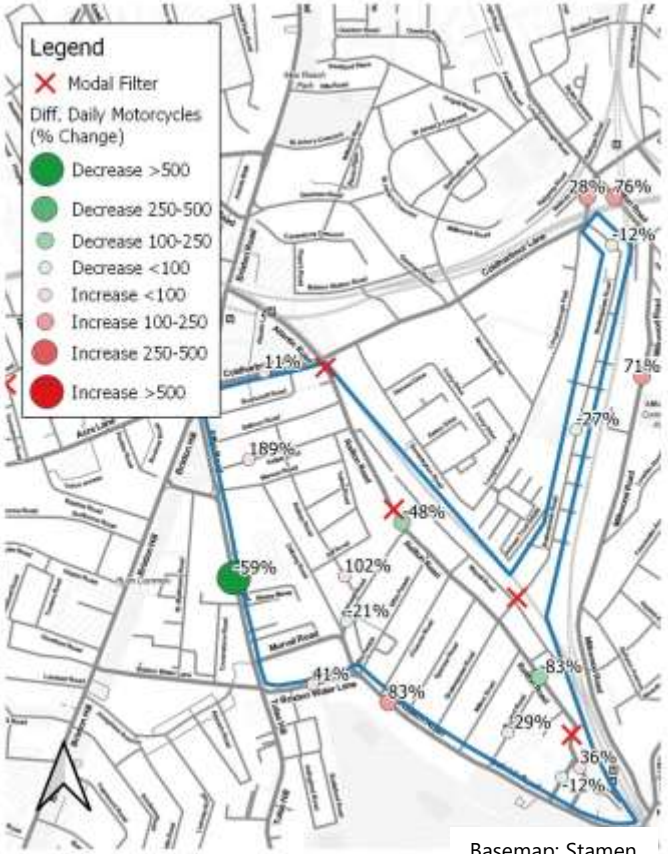
September 2020 Flow Change– LGVs

- The map to the right outlines changes in counts of LGVs compared to pre-implementation, at sites where data was collected in September 2020.
- Similarly to HGVs, changes in LGV flows were somewhat mixed across the LTN due to lower baseline volumes.
- Flows along Railton Road significantly decreased (~ -80% on average, or around -400 vehicles), with generally more moderate decreases elsewhere within the LTN.
- On some boundary roads, LGV flows are down somewhat (-13% or -162 vehicles on Dulwich Road and -24% or -351 on Effra Road), but on others they are moderately to significantly higher than pre-implementation (+56% or +384 vehicles on Coldharbour Lane East, for example).



September 2020 Flow Change– Motorcycles

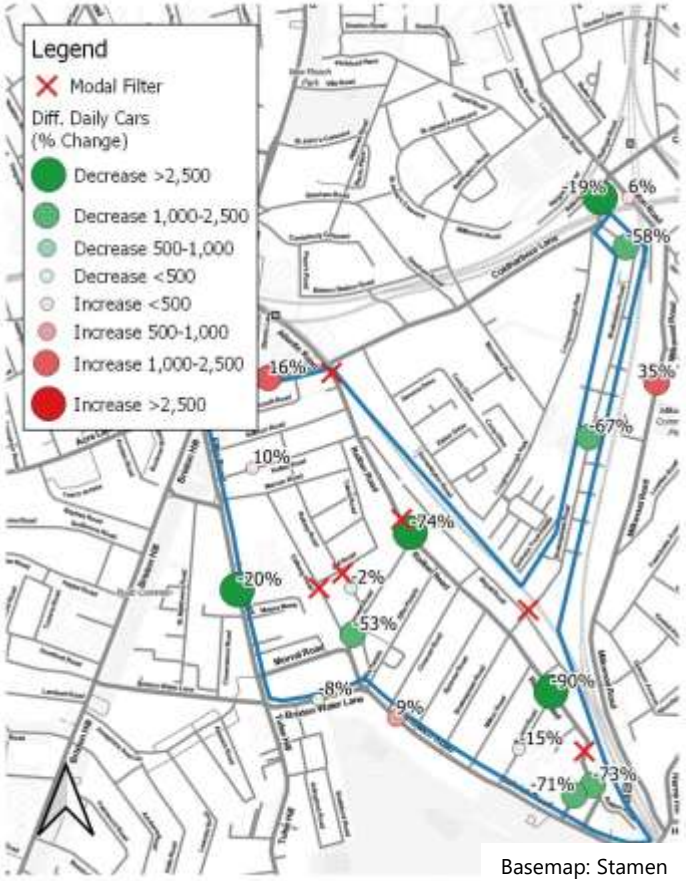
- The map to the right outlines changes in counts of motorcycles compared to pre-implementation, at sites where data was collected in September 2020.
- Changes in motorcycle volumes are generally minimal throughout the LTN, with most changes being of fewer than 250 daily vehicles.
- The largest change is a significant reduction of motorcycle traffic on Effra Road (-59% or -773 vehicles).



Post-Implementation Monitoring Stage 2/May 2021

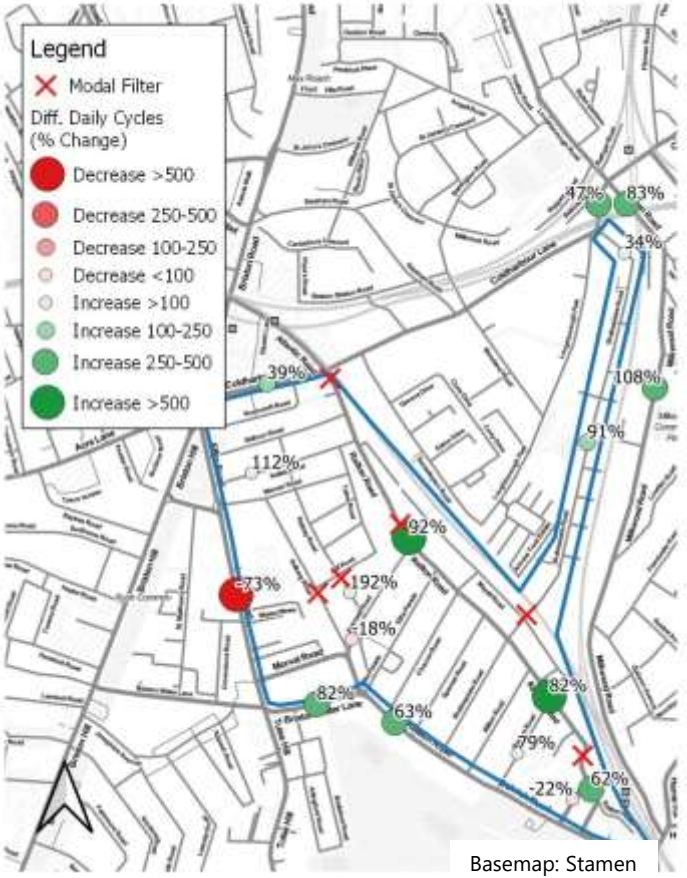
May 2021 Flow Change – Cars

- The map to the right outlines changes in counts of cars compared to pre-implementation, at sites where data was collected in May 2021.
- Car volumes have continued to decrease in most areas throughout the LTN, namely on Railton Road where volumes are ~75% or more lower (>3,000 fewer cars) than they were pre-implementation .
- However, since the September tranche of monitoring, traffic volumes have increased on a number of boundary roads, namely Coldharbour Lane West (+16%, ~1,400 vehicles), Milkwood Road (+35%, ~2,000 vehicles) and Dulwich Road (+9%, ~900 vehicles). Flows are down on Effra Road, however (-20%, ~3,700 vehicles)
- Car volumes on Rattray Road, which saw a jump in traffic after the opening of the LTN, have returned to pre-implementation levels with the addition of a new road filter.



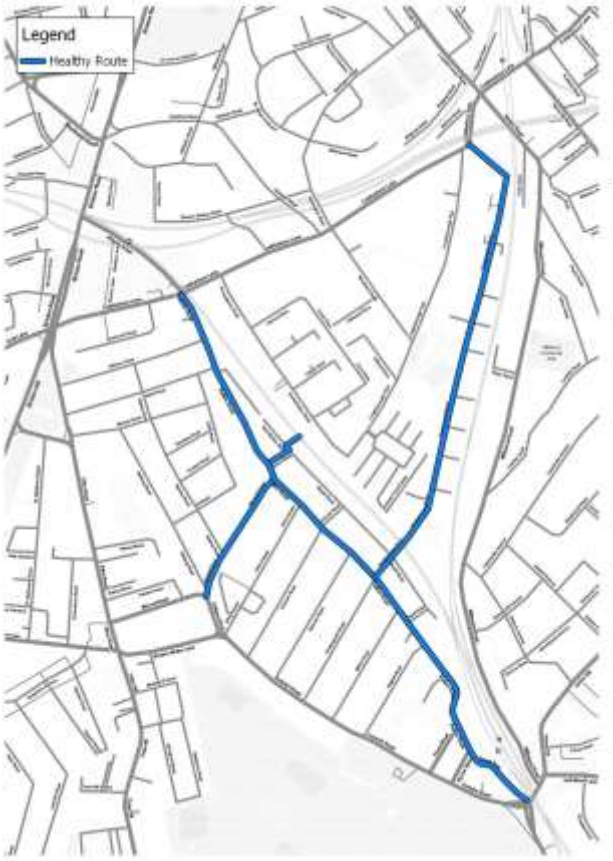
May 2021 Flow Change – Cycles

- The map to the right outlines changes in cycle counts compared to pre-implementation, at sites where data was collected in May 2021.
- Cycle volumes have remained high when compared to those pre-implementation, particularly on Railton Road where they have nearly doubled (>500 additional daily cycles).
- Cycle flows are also moderately up on boundary roads such as Milkwood Road, Dulwich Road and Brixton Water Lane. However, they are significantly down on Effra Road, although baseline cycle flows here were very high (>1,500).



Healthy Cycle Routes

- Healthy Routes are those which have the right conditions to enable more people to walk and cycle. They link people with key destinations, and are convenient, attractive and safe for all.
- For a Healthy Route to be designated as such in Lambeth, it must have certain key characteristics:
  - Fewer than 200 vehicles per hour in the average weekday peak hour.
  - Under 5% of vehicles using the route can be classified as HGVs.
  - Average vehicle speeds must be <20mph.
- The map to the right outlines LB Lambeth's designated Healthy Routes as they pass through the Railton LTN.

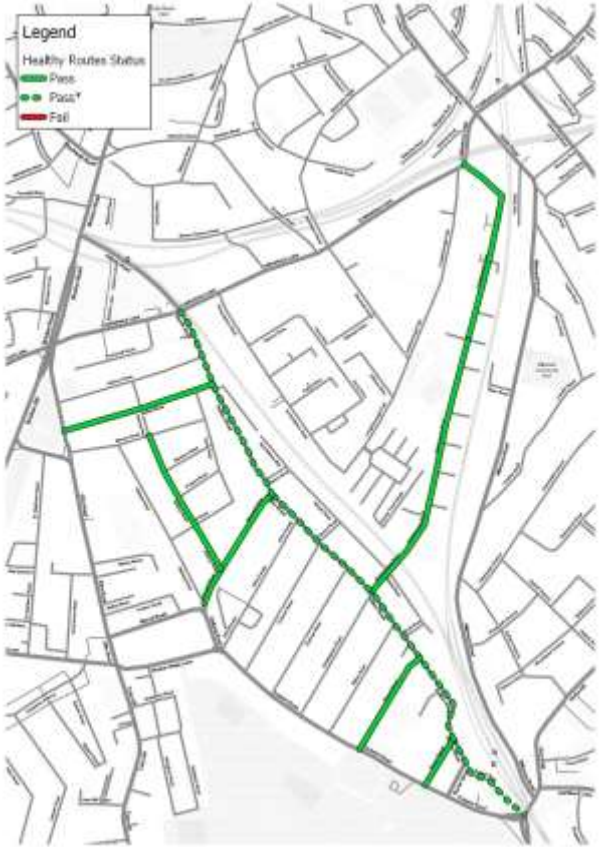


Baseline - Healthy Cycle Routes

- Pre-implementation, none of the Healthy Routes sections within the LTN would pass LB Lambeth's criteria.
- Railton Road itself has average peak hour flows of over 500 vehicles per hour, over double the threshold, whilst flows on Shakespeare Road are near 350 vehicles per hour in the average peak. Barnwell Road also sees average weekly peaks of around 300 vehicles per hour.

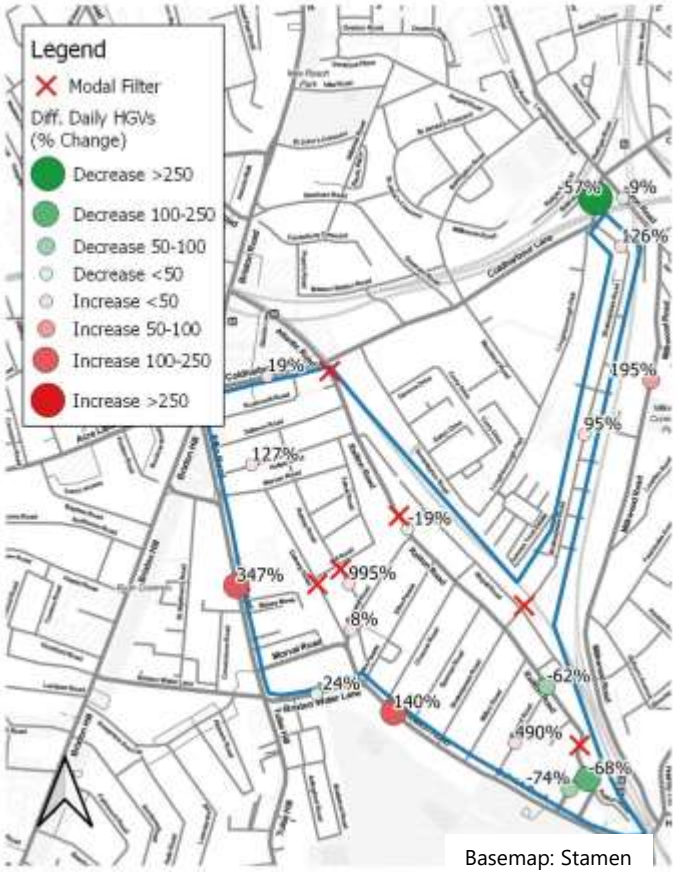
May 2021– Healthy Cycle Routes

- Inside the Railton LTN, evidence from May 2021 suggest that both the Shakespeare Road and Barnwell Road portions of the Healthy Routes now pass based on the aforementioned criteria.
- On Railton Road itself, the very low volumes of vehicle flows remaining on Railton Road create a higher % share of HGVs than would typically be appropriate for a Healthy Route; however, as these are mostly TfL buses (and drivers have likely completed Safe Urban Driving cycle training as part of their ongoing professional development) and are few in number, it is considered that Railton Road is still very much safe for cycling and its uses are aligned with the Mayor's Transport Strategy.



May 2021 Flow Change– HGVs

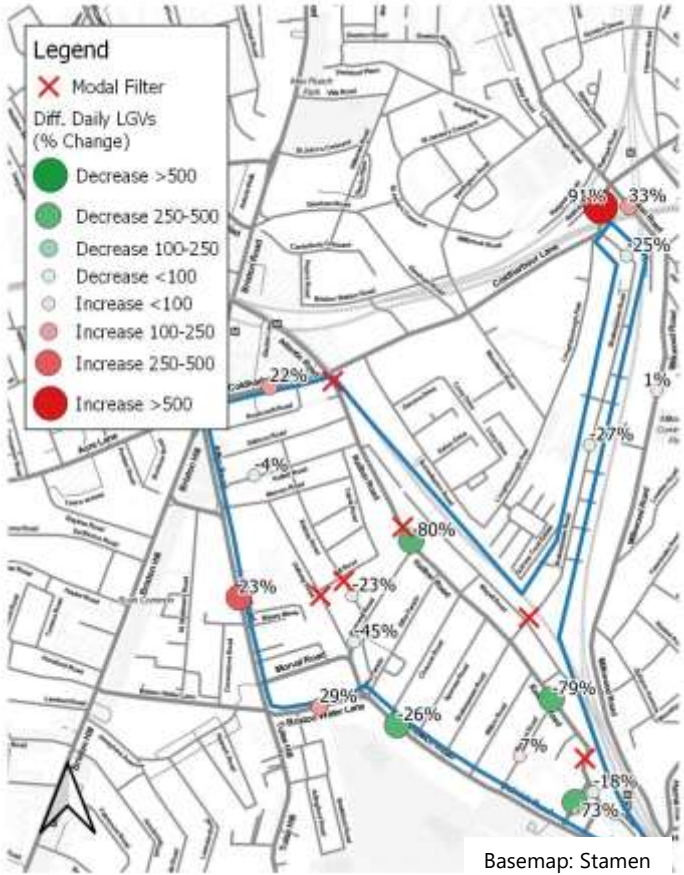
- The map to the right outlines changes in HGV counts compared to pre-implementation, at sites where data was collected in May 2021.
- Changes in HGV flows were very mixed across the LTN, although it should be noted that in almost all cases the baseline volumes were very low.
- The interior of the LTN saw limited change in terms of total HGV movements, even if some percentage changes were high. For example, the ~1,000% increase on Rattray Road corresponds to an additional 18 daily vehicles, whilst the 126% increase on Shakespeare Road North equals to 36 additional vehicles.
- This compares to larger changes on external roads, such as the 57% decrease (-342 vehicles) on Coldharbour Lane East and 347% increase (+190 vehicles) on Effra Road.
- It should be noted that in May 2021, national levels of HGV movements were at 105% - normalisation of flows may therefore mean that reported increases in HGV flows are overstated[1].



[1]https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

May 2021 Flow Change– LGVs

- The map to the right outlines changes in LGV counts compared to pre-implementation, at sites where data was collected in May 2021.
- Similarly to HGVs, changes in LGV flows were somewhat mixed across the LTN due to lower baseline volumes.
- Flows along Railton Road significantly decreased (-80% on average, or -450 vehicles), with generally more moderate decreases elsewhere within the LTN.
- On some boundary roads, LGV flows are down somewhat (-26% or -314 vehicles on Dulwich Road), but on others they are moderately to significantly higher than pre-implementation (+91% or +618 vehicles on Coldharbour Lane East and +23% or +340 vehicles on Effra Road).
- It should be noted that in May 2021, national levels of LGV movements were at 107% - normalisation of flows may therefore mean that reported increases in LGV flows are overstated[1].



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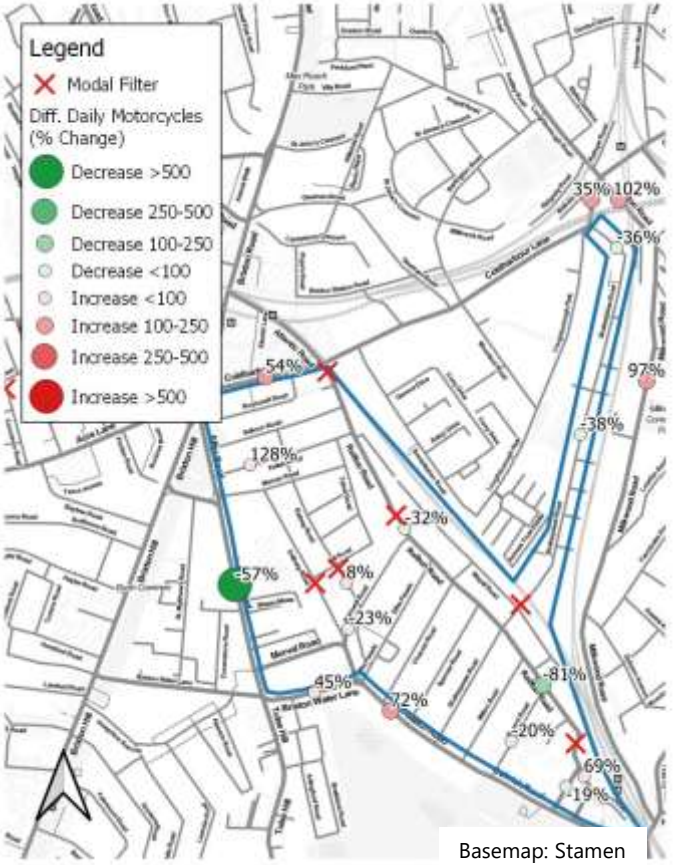
May 2021 Flow Change– Motorcycles

- The map to the right outlines changes in motorcycle counts compared to pre-implementation, at sites where data was collected in May 2021.
- Changes in motorcycle volumes are generally minimal throughout the LTN, with most changes being of fewer than 250 daily vehicles.
- The largest change is a significant reduction of motorcycle traffic on Effra Road (-57% or -748 vehicles).



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.

Contact Us

SYSTRA

SYSTRA.CO.UK

Contact details:

For enquiries about this report* – info_uk@systra.com
For Lambeth Council media enquiries – communications@Lambeth.gov.uk

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

Commonplace engagement site – https://rtstreets.commonplace.is/
Email – LowTrafficNeighbourhoods@Lambeth.gov.uk

****Please note that due to the volume of questions we are unable to respond to individual queries; however, we are working with LB Lambeth to create an FAQ document in relation to this reporting.***

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