

London Borough of Southwark: Walworth Streetspace Monitoring

June 2021

SYSTRA





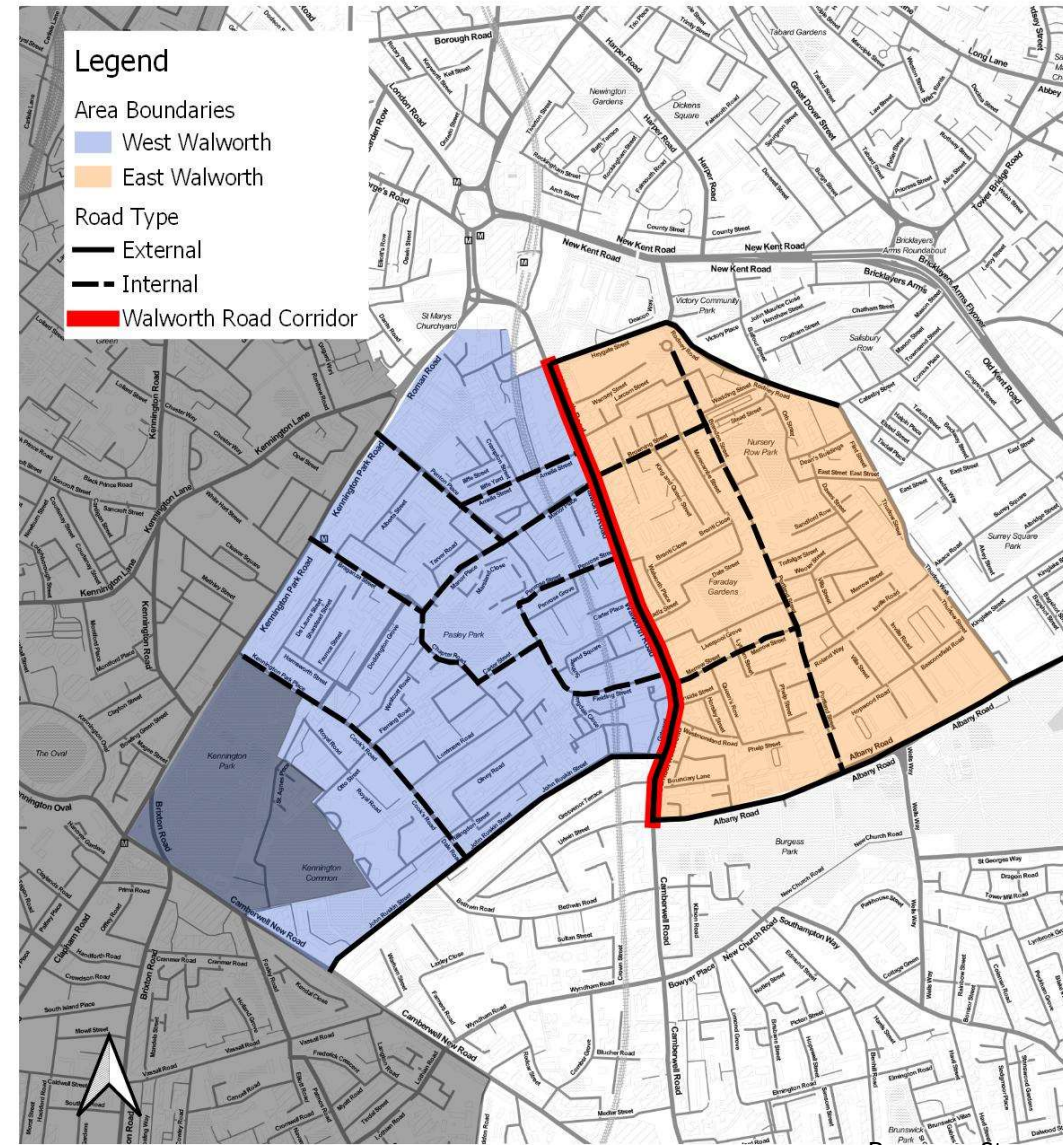
Executive Summary

Executive Summary (1)

- This June monitoring report presents the results of data collected to understand the impact of the Streetspace trials installed in Walworth during 2020.
- Results should be considered in the context of overall traffic levels being down **-8%** across all of Southwark between June 2021 and June 2019, the month to which all pre-implementation data has been adjusted.
- For streets where data was collected both pre-implementation and in June 2021, the following impacts have been observed:
 - The **volume of motor traffic** counted on **internal streets** has **decreased** by **-40%** in the West Walworth area and **-53%** in the East Walworth area.
 - On **external streets**, **volumes** have **increased** by **+7%** in the West Walworth area and **decreased** by **-7%** in the East Walworth area.
 - The **volume of motor traffic** counted on the Walworth Road Corridor has **increased** by **1%**.
 - The **volume of cycles** on **internal streets** has **increased** by **+53%** in the West Walworth area and **+43%** in the East Walworth area. On **external streets**, **volumes** have **increased** by **+129%** in the West Walworth area and **decreased** by **-5%** in the East Walworth area. **Across all roads, cycle volumes have increased by +34%**
 - The **overall volume of motor traffic** recorded across all streets has **decreased** by **-16%**

Executive Summary (2)

- The streets on which analysis has been completed are shown to the right (as black solid or dashed lines), along with the areas defined as East or West Walworth and the Walworth Road Corridor. It should be noted that the proximity of these means each will impact the others, so any traffic impacts on external streets without restrictions should not be associated directly with any single individual measure.
- The measures implemented are either permeable road closures that do not permit through motor traffic, or restrictions that permit cycles, buses and taxis only.
- Streets where the measures implemented restrict or prevent through traffic have been defined as internal, whilst those without direct impacts on through traffic have been defined as external.



Basemap: Stamen

Executive Summary (3)

- The total number of cars/LGVs, cycles and all motor traffic recorded on streets where a traffic count was completed in the same location both prior to the impact of COVID-19 and in June 2021 is shown below. Details of further data collected in other months are provided within the remainder of this report.

		Cars/LGVs				All Motor Traffic*				Cycles			
		Pre	Post - June 2021	Change	% Change June 2021	Pre	Post - June 2021	Change	% Change June 2021	Pre	Post - June 2021	Change	% Change June 2021
West Walworth	Internal	18,239	10,261	-7,977	-44%	20,782	12,510	-8,273	-40%	1,897	2,902	1,004	53%
	External	12,570	13,080	511	4%	13,842	14,744	902	7%	388	890	502	129%
East Walworth	Internal	12,932	5,495	-7,437	-58%	14,637	6,855	-7,783	-53%	2,203	3,151	948	43%
	External	24,570	22,885	-1,685	-7%	26,772	24,961	-1,811	-7%	875	834	-41	-5%
Walworth Road Corridor		22,425	22,870	445	2%	28,354	28,689	334	1%	2,364	2,594	-4,958	10%
All Counts		90,735	74,592	-16,143	-18%	104,387	87,757	-16,630	-16%	7,727	10,371	2,644	34%

Executive Summary (4)

- A comparison of data outcomes from previous months of reporting is presented below.

		Cars/LGVs			HGVs			Motor Traffic*			Cycles		
		Change March 2021	Change April 2021	Change June 2021	Change March 2021	Change April 2021	Change June 2021	Change March 2021	Change April 2021	Change June 2021	Change March 2021	Change April 2021	Change June 2021
West Walworth	Internal	-44%	-42%	-44%	-25%	-37%	-44%	-40%	-38%	-40%	48%	53%	53%
	External	-2%	14%	4%	-5%	-12%	6%	0%	14%	7%	123%	127%	129%
East Walworth	Internal	-60%	-56%	-58%	-50%	-48%	-49%	-56%	-51%	-53%	23%	45%	43%
	External	-16%	-8%	-7%	-32%	-39%	-14%	-17%	-9%	-7%	-25%	-5%	-5%
Walworth Road		-4%	8%	2%	-16%	-35%	-6%	-4%	1%	1%	9%	5%	10%
All Counts		-23%	-15%	-18%	-22%	-35%	-15%	-21%	-15%	-16%	25%	33%	34%



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.



Introduction



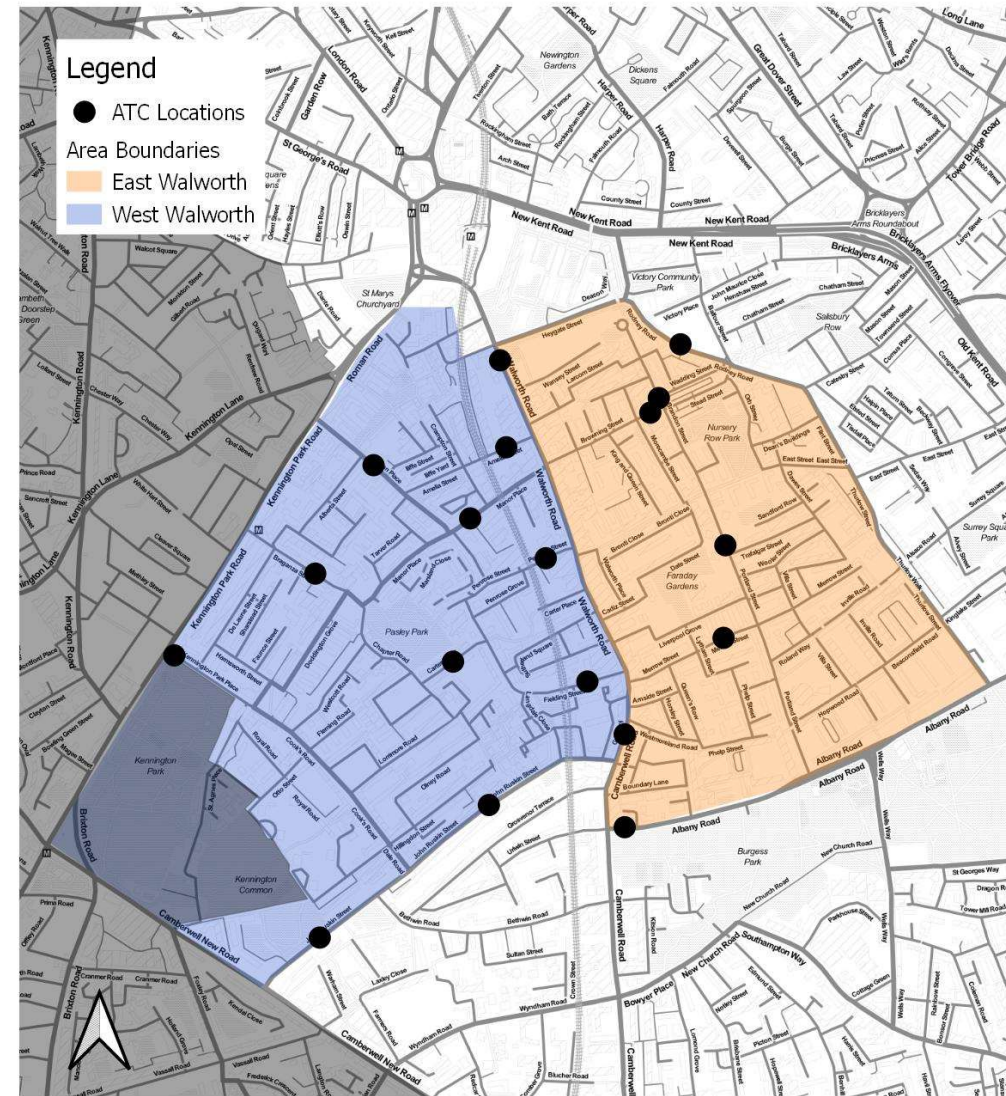
Monitoring Study

Monitoring Programme

- SYSTRA has been commissioned by LB Southwark to produce an independent monitoring report on the impact of the Streetspace schemes, analysing a range of data collected by the Council largely between 2019 and 2021.
- Traffic data has been collected on various roads, both within and on the edge of the scheme via Automatic Traffic Counters (ATCs), with a mixture of weeklong samples and continuous collection, providing cycle and motor vehicles flows, and average speeds. Bus journey time data from TfL has also been analysed, along with data from Active Travel Monitors, which record and classify all road users.
- Two reports have been produced for the monitoring:
 - **Report 1:** first interim report, using data collected to the end of April 2021.
 - **Report 2:** monitoring report using data to the end of June 2021.

Data Collection

- 18 Automatic Traffic Count (ATC) locations have been utilised to analyse the impact of the schemes on traffic flows, shown to the right.
- The majority of ATC sites were in place in June 2020, September 2020 and March, April and June 2021; however, data has not been collected at all locations in all these time periods. Further data from pre-2020 has also been used.
- The shaded areas indicate the broad area affected by each of the Streetspace schemes, but it is noted that they are strongly interlinked and therefore impact upon each other.
- A more complete summary of the all data collected is shown in the appendices.
- In addition to the traffic data, data has also been analysed with respect to bus journey times.



Basemap: Stamen

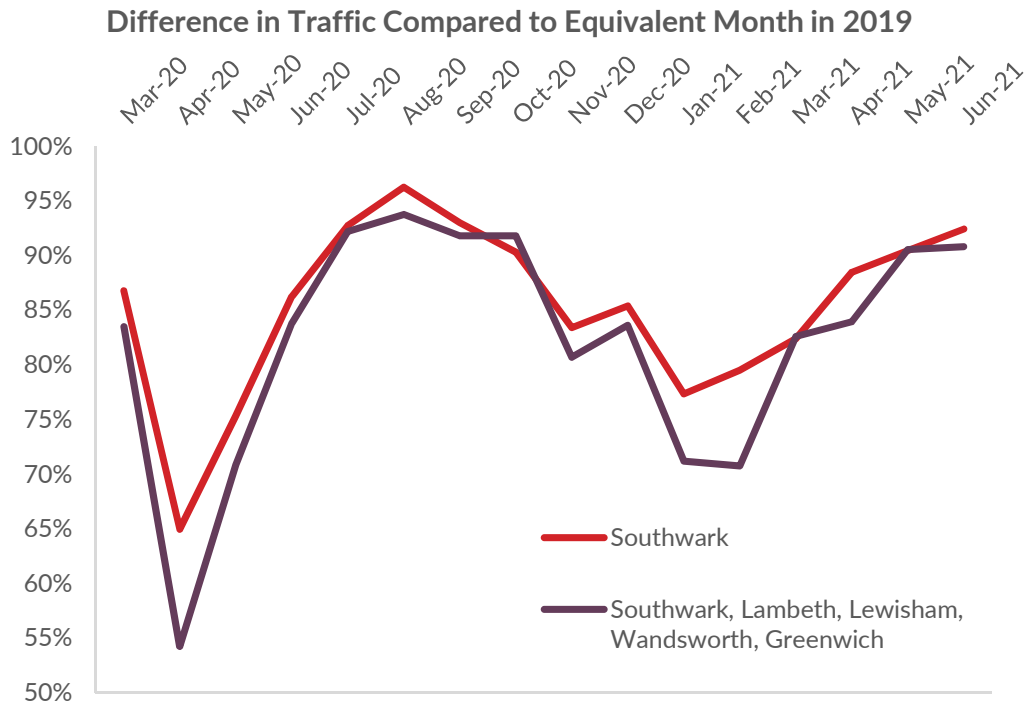


COVID-19

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 London, as can be seen in the chart below, which compares traffic volumes in all of Southwark and that of five south London Boroughs against traffic volumes for the same areas in June 2019, according to continuous traffic counts collected by TfL.

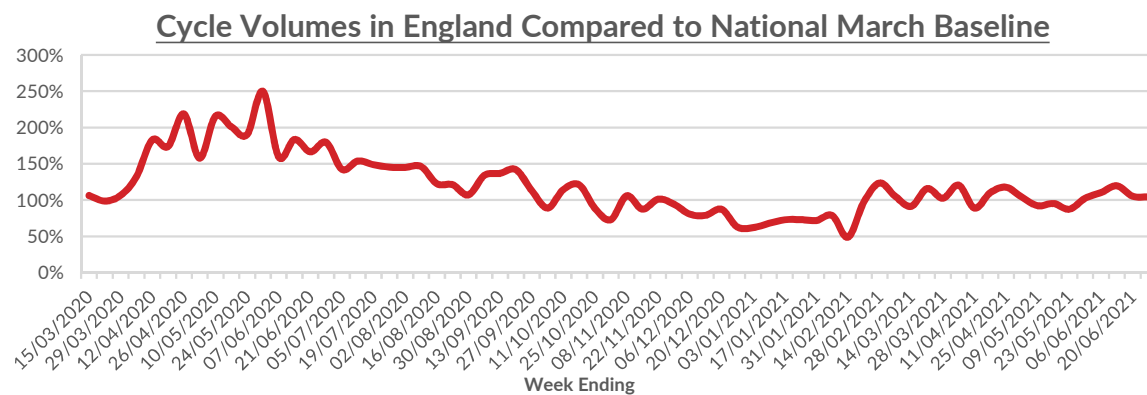


- Traffic has been consistently lower than pre-pandemic, with particularly pronounced drops during lockdowns. Results for most motor vehicle flows presented in this report should therefore be considered in this context.
- The difference between total vehicle volumes in June 2021 vs. June 2019 is presented in the table below for each area.

Area	Difference June 2021 to June 2019
Southwark	-7.6%
Southwark, Lambeth, Lewisham, Wandsworth, Greenwich	-9.2%

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 that whilst total trip rates fell by 22% in 2020 vs. 2019, annual cycling stages per person increased by 23% and annual miles cycled per person increased by 62%¹. Other findings have seen, for cycling:
 - 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 2020 baseline across England². 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 in 2021.



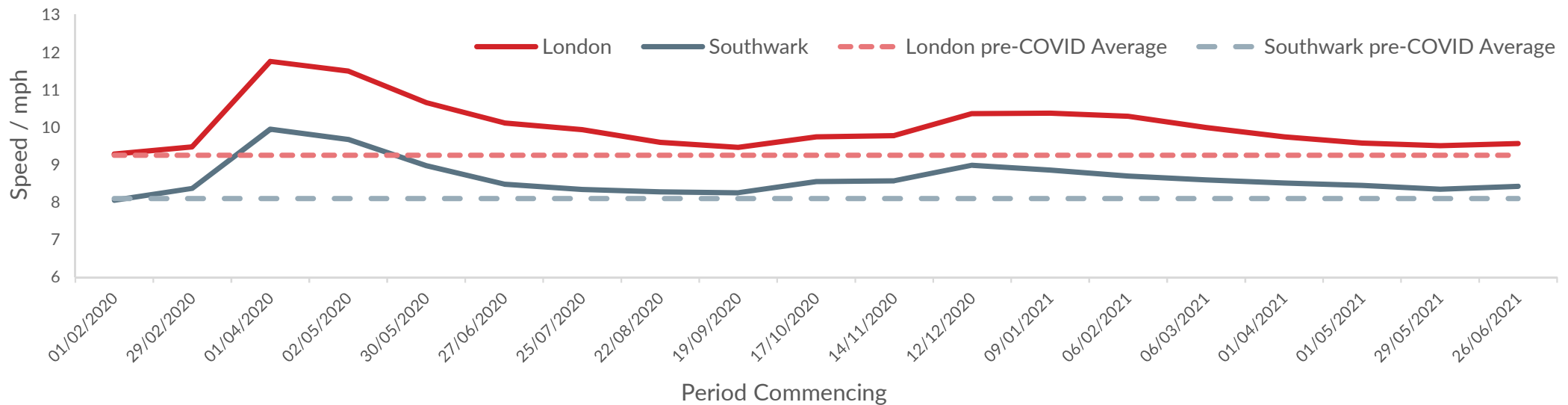
- All differences in cycle flows throughout reporting should be considered in the context of the above observations.

¹<https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-2020/the-impact-of-the-coronavirus-pandemic-on-walking-and-cycling-statistics-england-2020>

²<https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic>

Impact of COVID-19 on Bus Journey Times

- Bus journey times will also have been affected by the pandemic, with lower traffic volumes leading to decreased journey times. The chart below illustrates average bus speeds in Southwark across the course of 2020-21 against the average speed for the year pre-lockdown¹.
- As can be seen, speeds significantly increased in the first lockdown, and again in the second, before slowly returning towards pre-COVID levels. It could therefore be expected that in the absence of any other changes, bus speeds in Dulwich would have followed similar patterns.





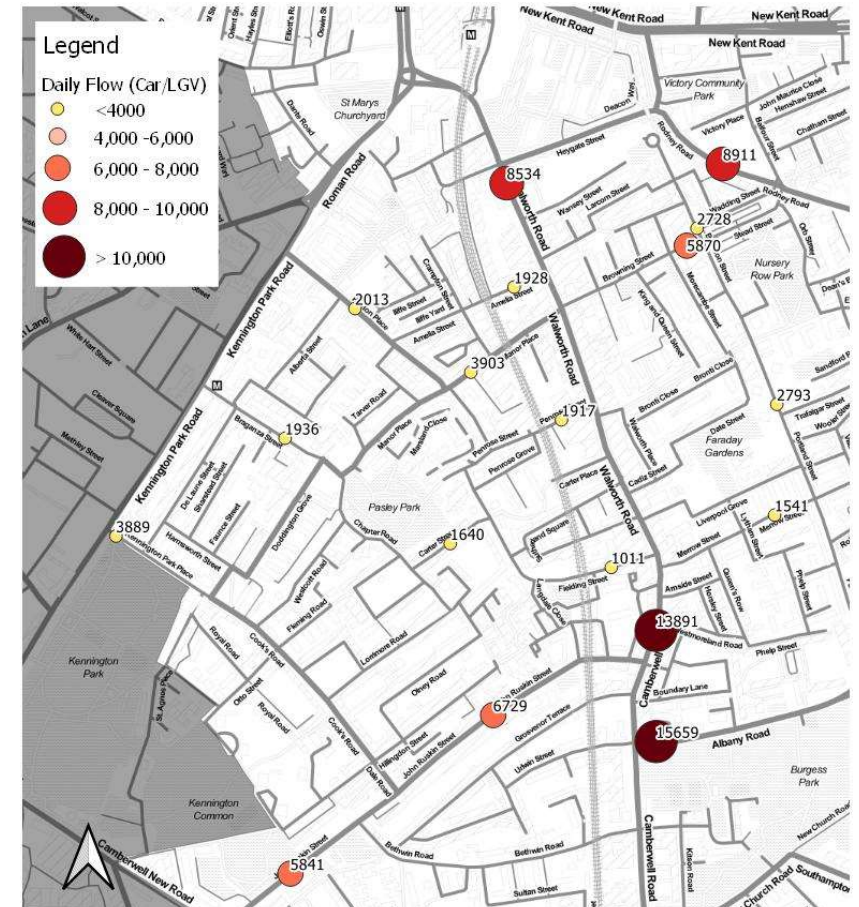
Pre- Implementation Flows

Pre-Implementation Flows

- Pre-implementation flow data was collected across a range of months since late 2017. To provide consistency, all motor vehicle data has been adjusted to June 2019 levels for a fairer basis of comparison against post-implementation data from June 2021.
- This adjustment has been conducted based on differences in traffic flows captured by TfL counters between the month of data capture and June 2019. These TfL counters have been operating continuously for many years, and for Walworth, the adjustment has been made using the traffic flows recorded across all counters in Southwark, Lambeth, Lewisham and Greenwich.
- Pre-implementation flows for previous round of surveys (September 2020, March 2021 and April 2021) have been similarly adjusted.
- It should be noted that these adjustments are small, the difference in traffic levels between September and June 2019 was 0.2% and September and April 2019 was 3.5%.

Pre-Implementation Flows – Cars/LGVs

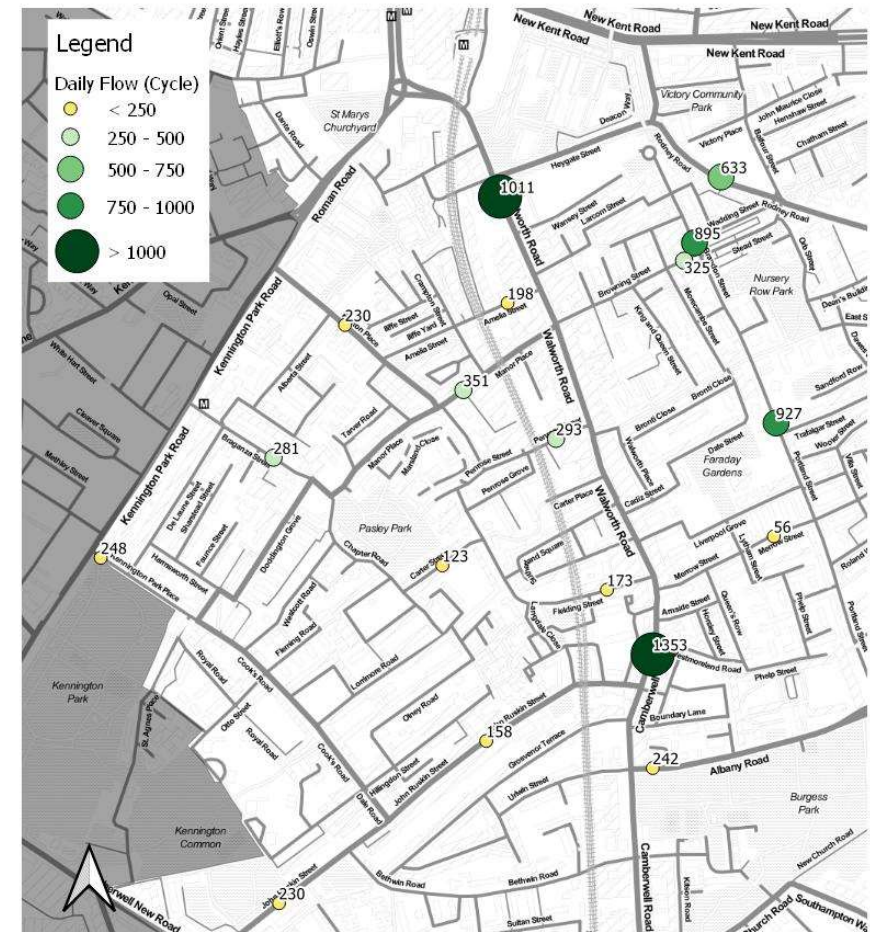
- The average total daily pre-implementation flows of cars and LGVs (combined) are presented in the map to the right, showing the general trend of traffic flows.
- Flows are generally low on internal roads. The internal road that showed the highest flows was Browning Street, above 5,800 vehicles per day.
- There are high flows of vehicles recorded on Walworth Road (8,500 vehicles per day), with high flows also on John Ruskin Street (between 5,800 and 6,800 daily vehicles).
- The highest flows recorded are on Camberwell Road (13,891) and Albany Road (15,659).



Basemap: Stamen

Pre-Implementation Flows – Cycles

- The maps to the right shows the average total daily pre-implementation flows of cycles.
- Cycle flows on internal roads are generally low, between 100 and 400 cyclists per day, with the exception of Portland Street, where flows of around 900 cycles per day are recorded, likely because this road forms part of **Cycleway 17**.
- The highest flows recorded are on Camberwell Road (1,353 cycles per day).



Basemap: Stamen

Pre-Implementation Flows – HGV

- The average total daily pre-implementation flows of HGVs are shown in the map to the right.
- HGV flows follow a similar pattern to car and LGV flows, being low on internal roads and higher on external roads.
- Walworth Road has recorded the highest volume of HGVs (1,950 per day), which may relate to construction in Elephant Park. Flows are also relatively high (810 per day) at Rodney Road, potentially for the same reason.



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Post- Implementation Monitoring Round 4/June 2021



June 2021 Flow Change – Cars/LGVs

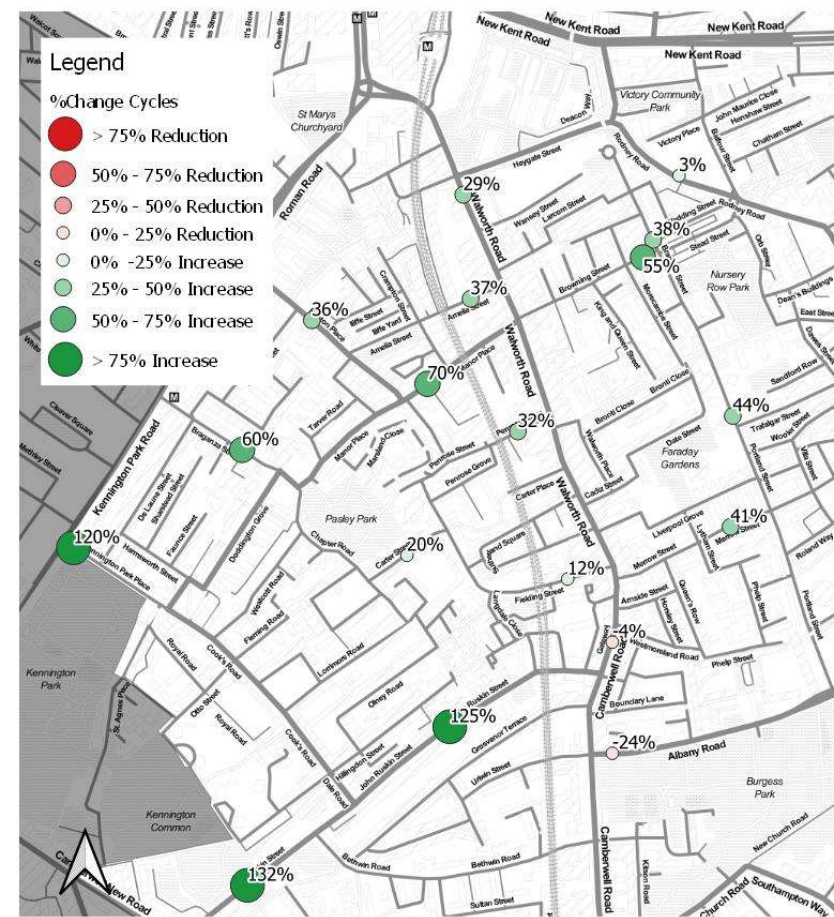
- The map to the right outlines changes in counts of cars and LGVs (combined) compared to pre-implementation, at sites where data was collected in June 2021.
- Changes in car/LGV flows recorded in June 2021 are similar to those recorded the previous month, with flows decreasing on most internal roads and increasing on Walworth Road North (+21%), as well as on access roads to the West Walworth Area such as Penrose Street and Fielding Street, with the increase on Fielding Street being higher than previously recorded (+45%, +50 peak hour vehicles).
- There are large decreases in flows recorded on Carter Street (-77%) and on Merrow Street (-80%).
- Flows have decreased on John Ruskin Street East (-4%).
- **Note that overall traffic levels in Southwark were down 8% in June 2021 vs. June 2019.**



Basemap: Stamen

June 2021 Flow Change – Cycles

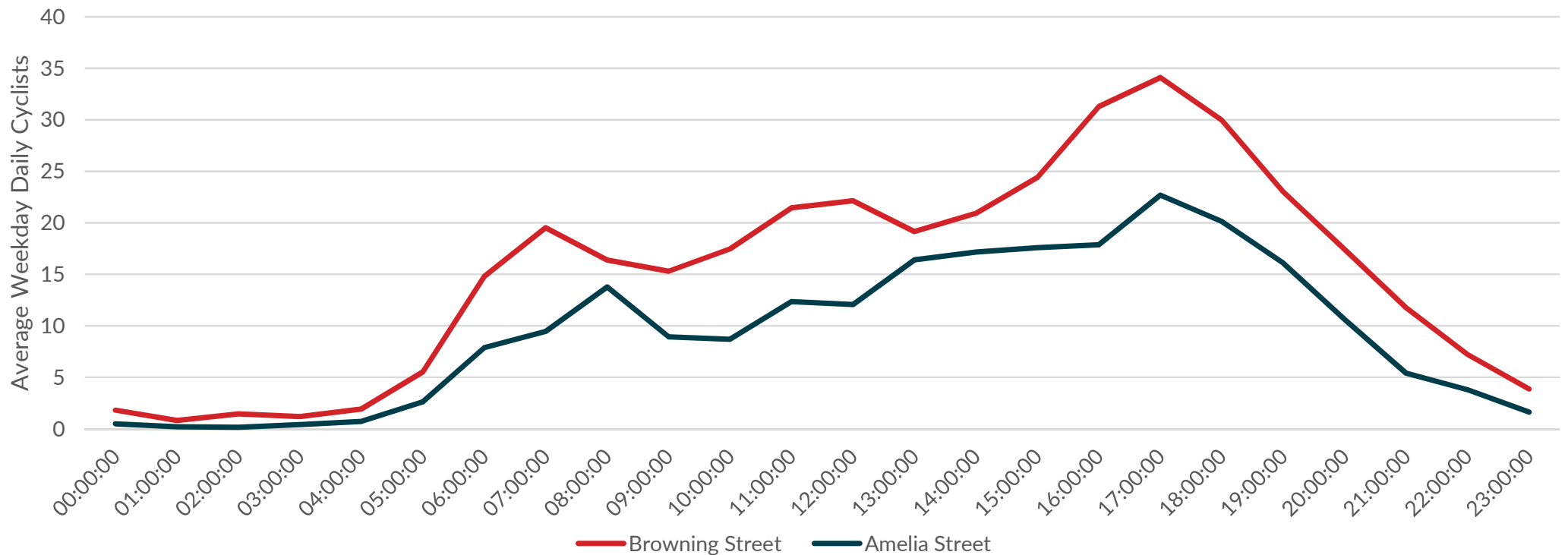
- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data was collected in June 2021.
- Similarly to April 2021, cycle flows have increased on almost every road in the area, with the highest increase recorded on John Ruskin Street East and West (+125% and +132% respectively).
- As in April, a decrease in cycle flows has been seen Albany Road (-24%) and on Camberwell Road (-4%).



Basemap: Stamen

Vivacity Data Analysis – Cycle Flow Profiles

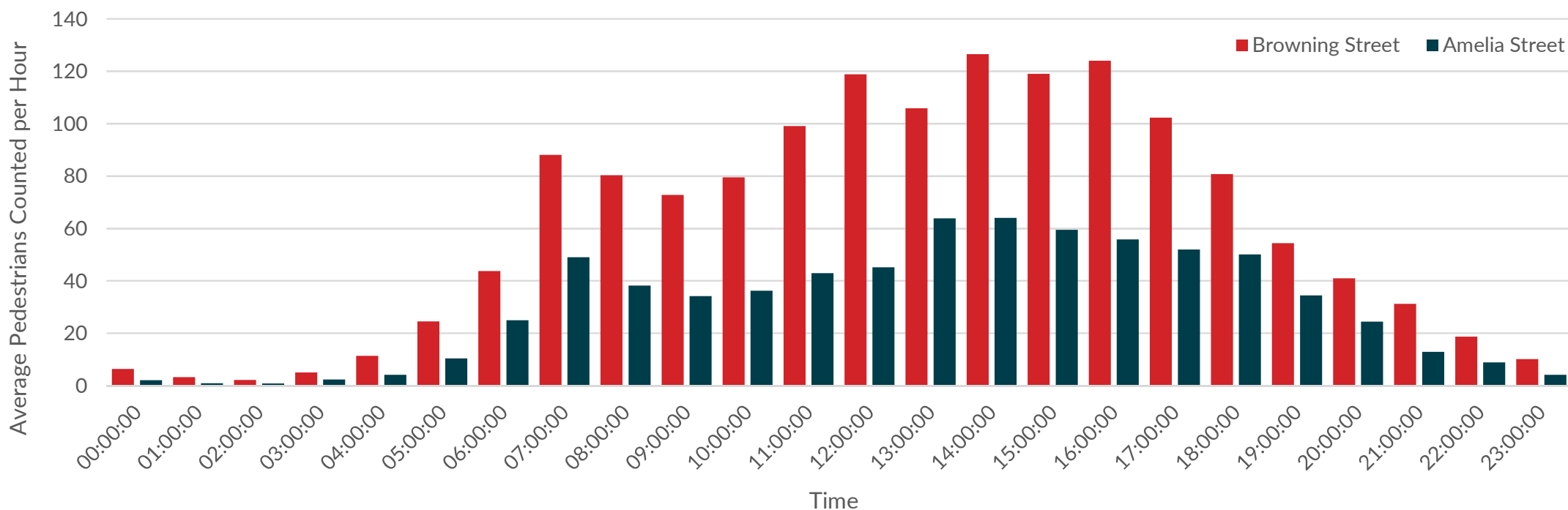
- Vivacity Data is recorded through sensors that are able to recognise and differentiate between road users. data has been collected at the junctions of Browning Street/Walworth Road and Amelia Street/Penton Place.



- Cycle numbers have a slight AM peak, then grow throughout the day, with the largest volumes in both locations between 5-6pm.

Vivacity Data Analysis – Pedestrian Volumes

- Vivacity Data can also be used to count the number of people walking. The chart below shows an estimate of the volume of people walking through the junctions of Browning Street/Walworth Road and Amelia Street/Penton Place.



- Both junctions are relatively busy throughout the day, although both have slightly higher flows during school drop-off and pick-up times in the morning and early afternoon.

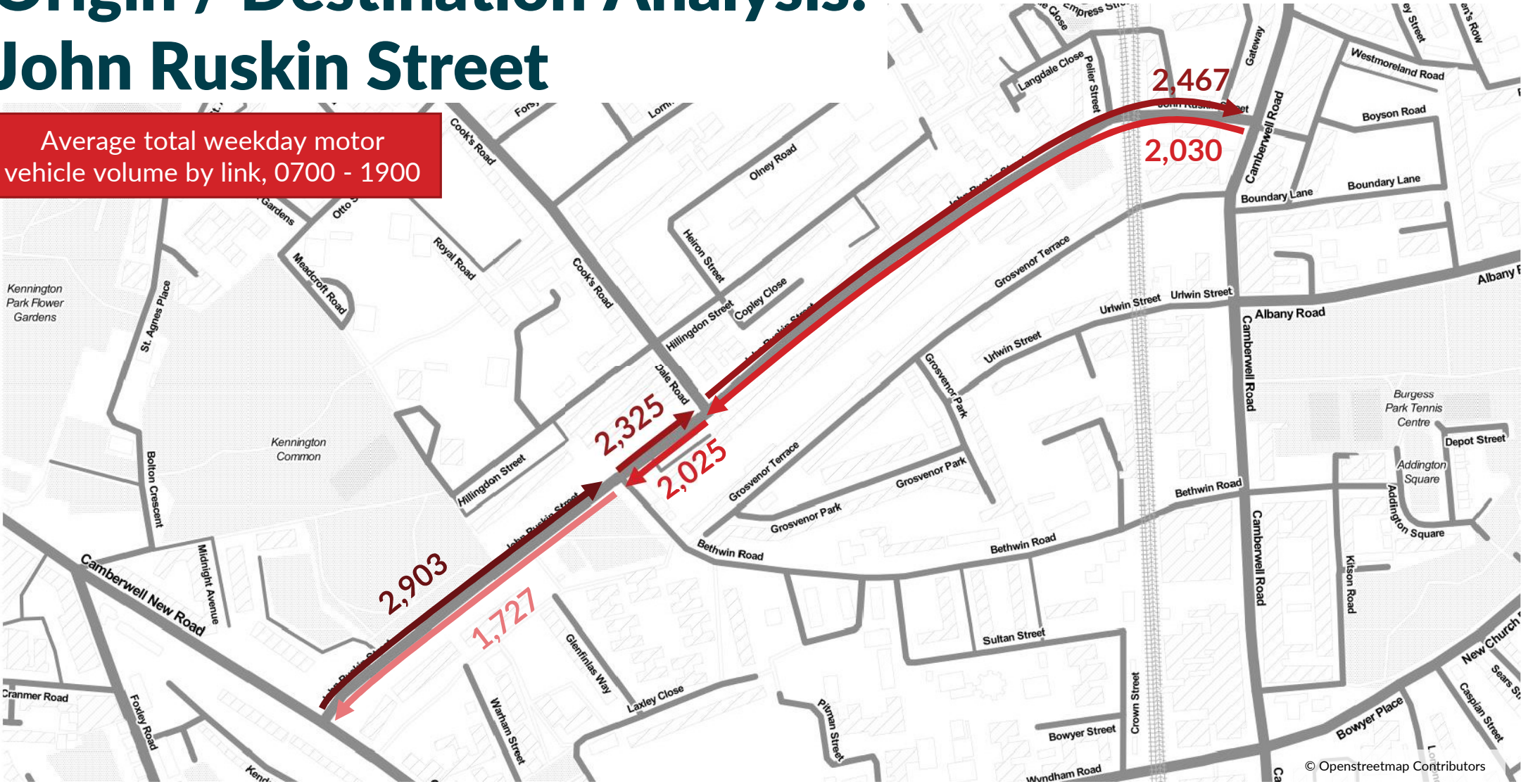
Origin - Destination Analysis

Origin-Destination Analysis

- Origin-Destination data has also been collected for John Ruskin Street. This uses Automatic Number Plate Recognition technology to record each vehicles along the road, noting if and when they pass each camera.
- Origin-Destination data was collected for two days in June 2021 7AM – 7PM, the average of the two days is shown in the following results.

Origin / Destination Analysis: John Ruskin Street

Average total weekday motor vehicle volume by link, 0700 - 1900



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Origin / Destination Analysis: John Ruskin Street

Proportion of motor vehicle traffic remaining by location that started at Camberwell New Road. Average weekday, 0700 – 1900.



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Origin / Destination Analysis: John Ruskin Street

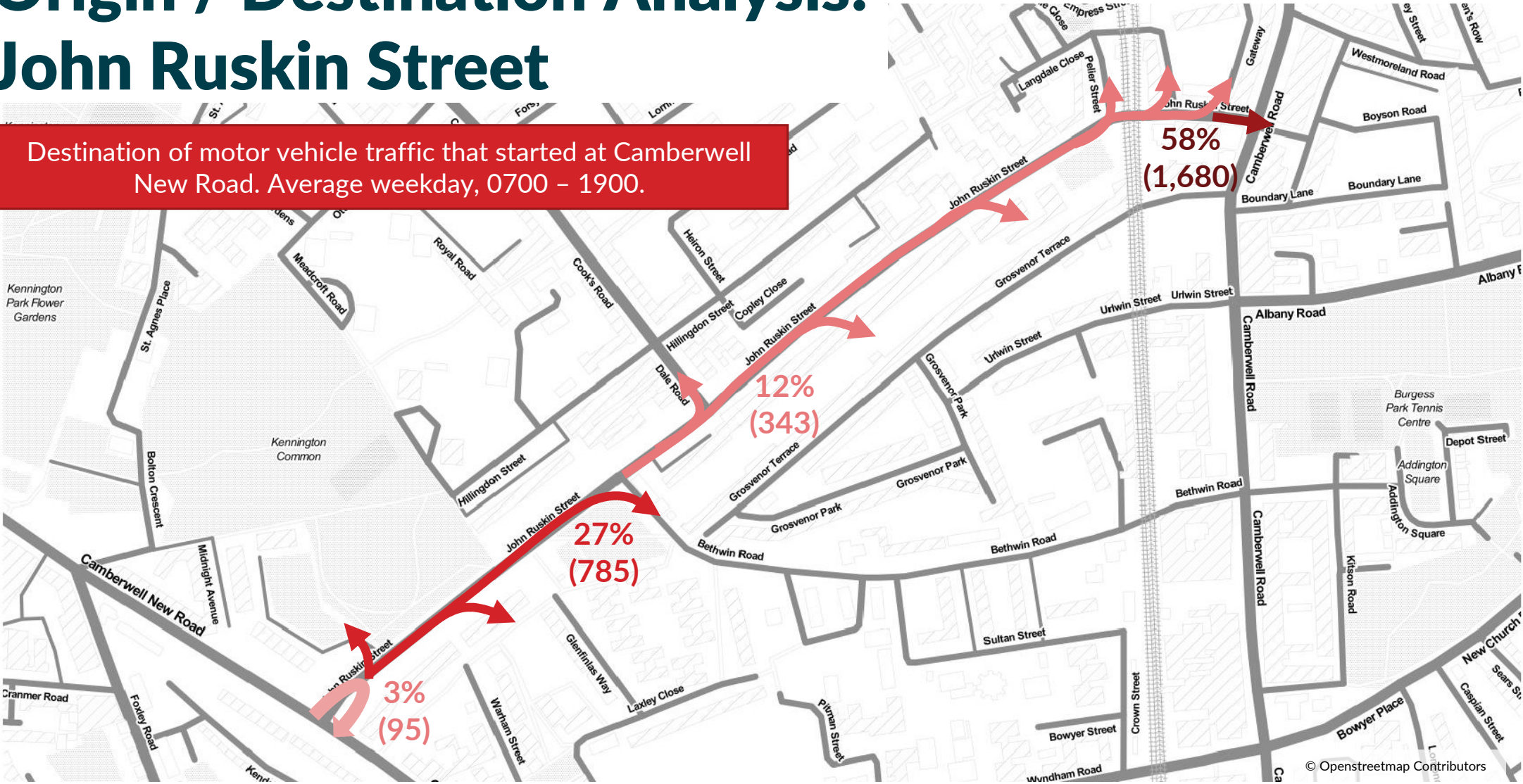
Proportion of motor vehicle traffic remaining by location that started at Camberwell Road. Average weekday, 0700 – 1900.



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Origin / Destination Analysis: John Ruskin Street

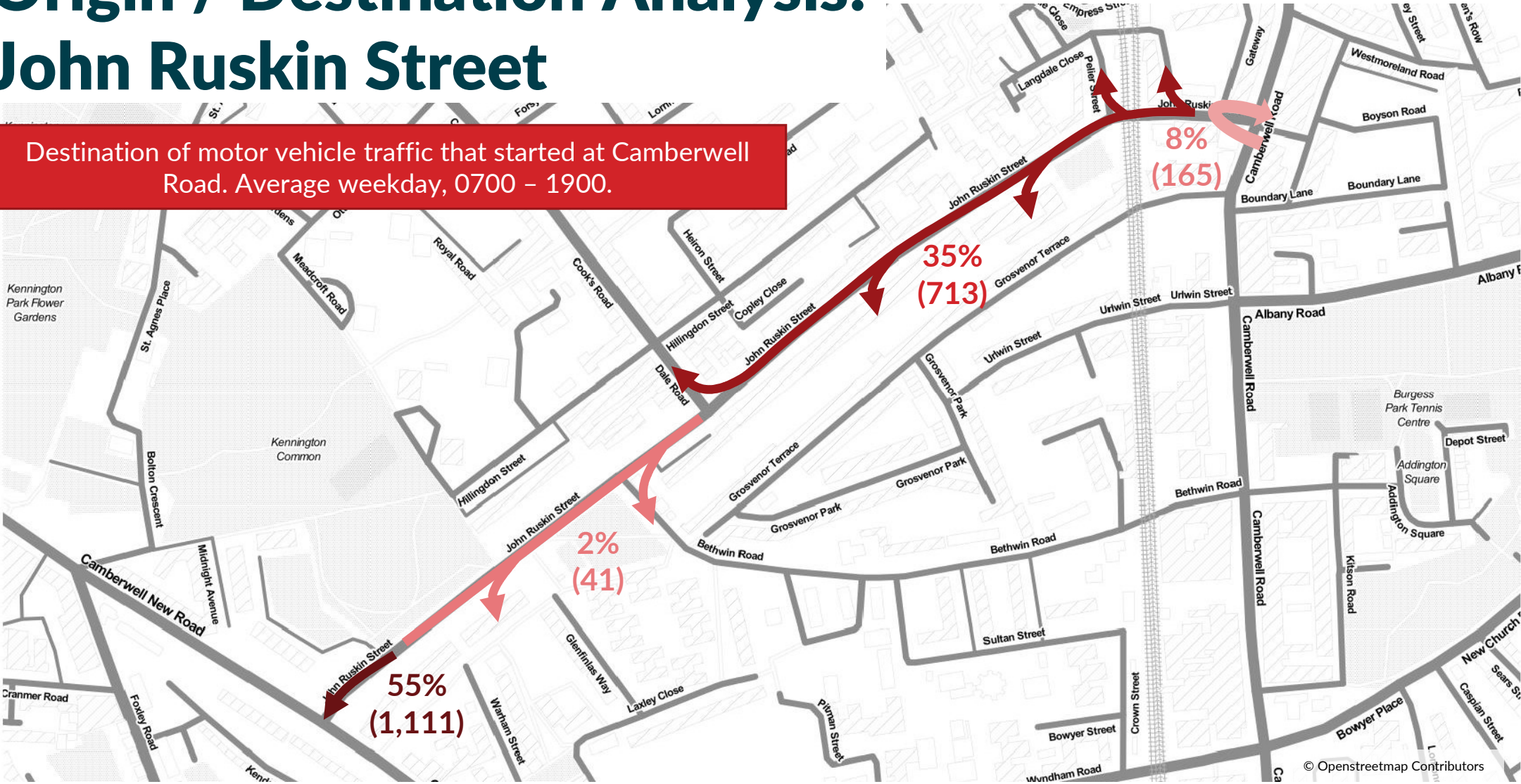
Destination of motor vehicle traffic that started at Camberwell New Road. Average weekday, 0700 – 1900.



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Origin / Destination Analysis: John Ruskin Street

Destination of motor vehicle traffic that started at Camberwell Road. Average weekday, 0700 – 1900.





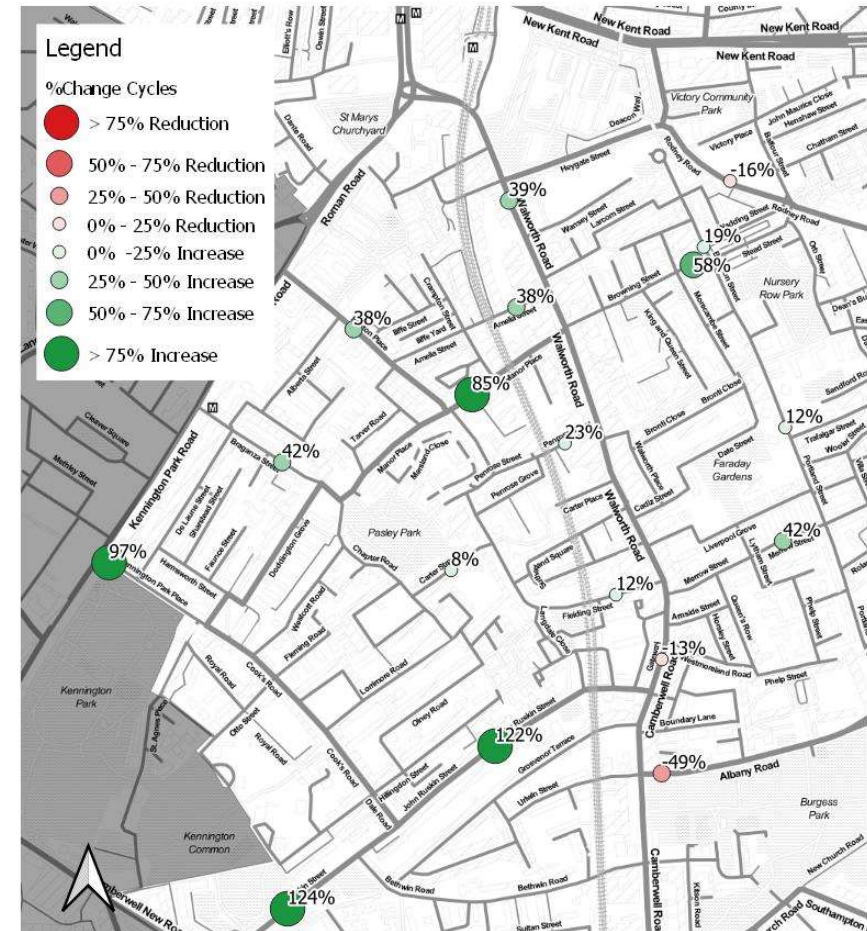
Post- Implementation Monitoring Round 3/April 2021



Post- Implementation Monitoring Round 2/March 2021

March 2021 Flow Change – Cycles

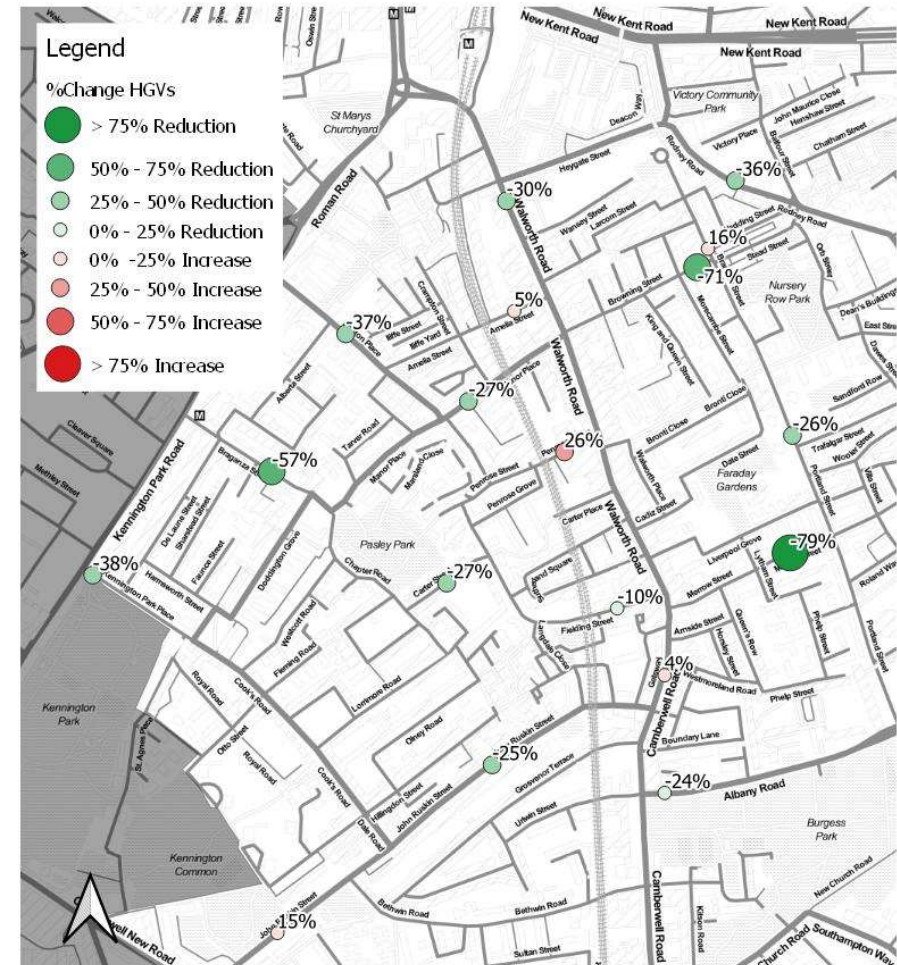
- The map to the right outlines changes in counts of cycles compared to pre-implementation, at sites where data was collected in March 2021.
- Cycle flows have increased both on internal and external roads, with the exception of Camberwell Road, where there has been a 13% decrease in flows, on Albany Road, where there is a 49% decrease and on Rodney Road with a decrease of 16%.
- The highest increase in cycle flows was on John Ruskin Street (+124% and +122%).
- Other high increases include: Manor Place (+85%) and Kennington Park Road (+97%).



Basemap: Stamen

March 2021 Flow Change– HGV

- The map to the right outlines changes in counts of HGVs compared to pre-implementation, at sites where data was collected in March 2021.
- Looking at internal roads, HGV flows have increased on Manor Street (+26%), Brandon Street (+16%), Amelia Street (+5%) and John Ruskin Street West (+15%).
- The highest decrease was recorded on Merrow Street (-79%).
- HGV traffic also decreased on Walworth Road North (-30%) and Albany Road (-24%).
- It should be noted, that on a national basis, whilst car traffic was at 70% of pre-COVID levels in March 2021, HGV traffic was exceeding pre-COVID volumes¹.



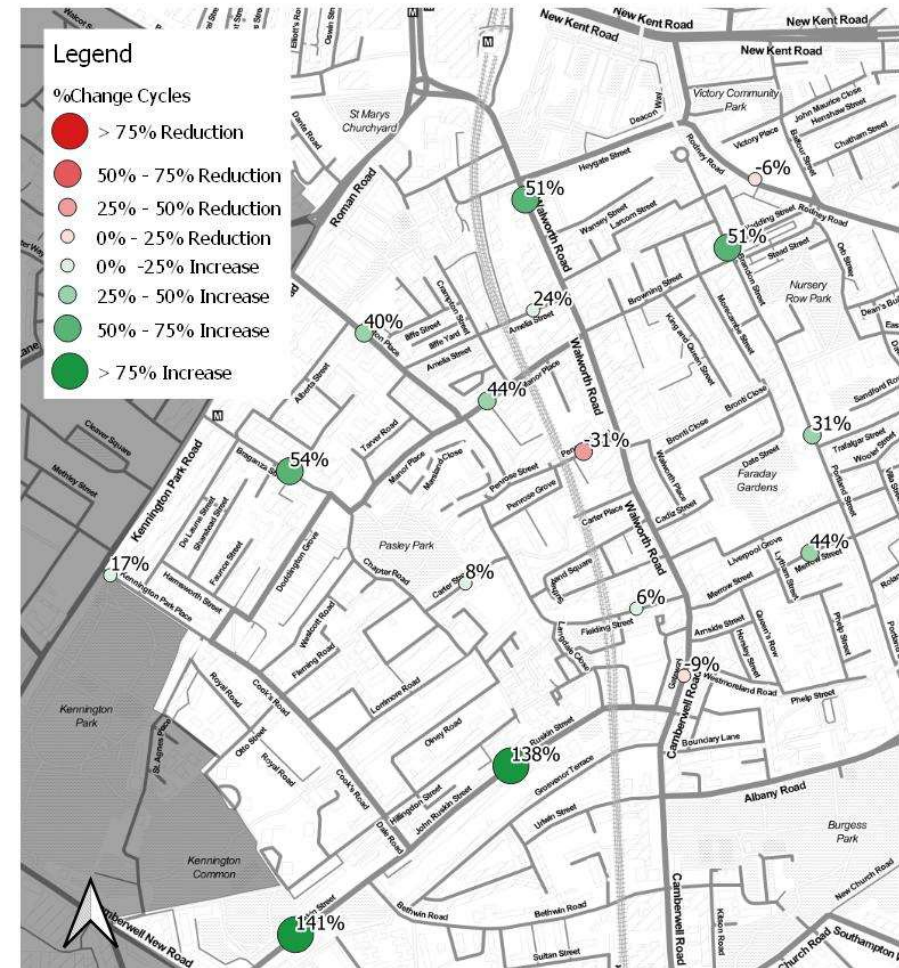
Basemap: Stamen



Post- Implementation Monitoring Round 1/Sep 2020

Sep 2020 Flow Change – Cycles

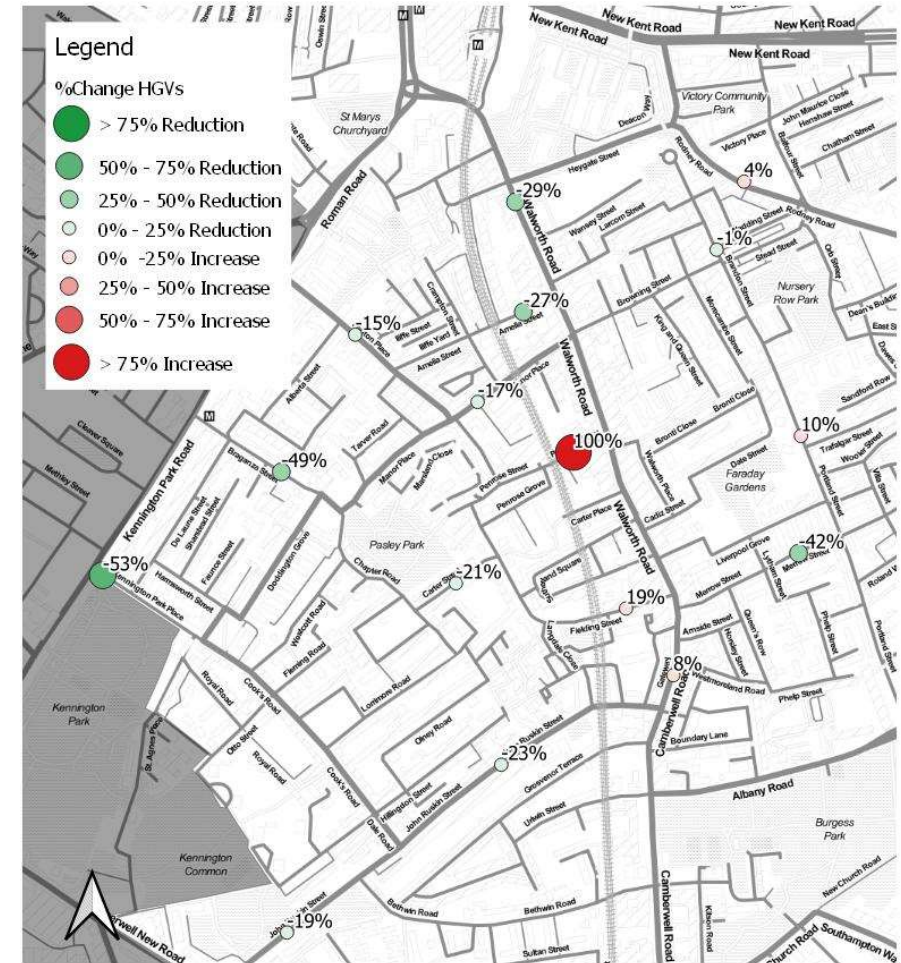
- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data was collected in September 2020.
- A general increase in cycle flows in the area has been recorded, with the highest increase along John Ruskin Street (+141% and +138%), and on Walworth Road (+51%) and Braganza Street (+54%).
- In terms of internal roads, increases have also been seen on Brandon Street, Manor Place and Penton Place.
- Flows have decreased on Penrose Street (-31%) and on Kennington Park Place (-17%).



Basemap: Stamen

Sep 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.
- As for HGVs, flows have increased on Penrose Street (+100%, 107 additional vehicles) and on Fielding Road (+19%, 4 additional vehicles).
- Volumes on Walworth Road North have decreased (-29%), on Kennington Park Place (-53%), Braganza Street (-49%) and on Merrow Street (-42%).
- In most other locations, HGV flows are down.
- It should be noted, that on a national basis, whilst car traffic was at 92% of pre-COVID levels in September 2020, HGV traffic was exceeding pre-COVID volumes¹.



Basemap: Stamen



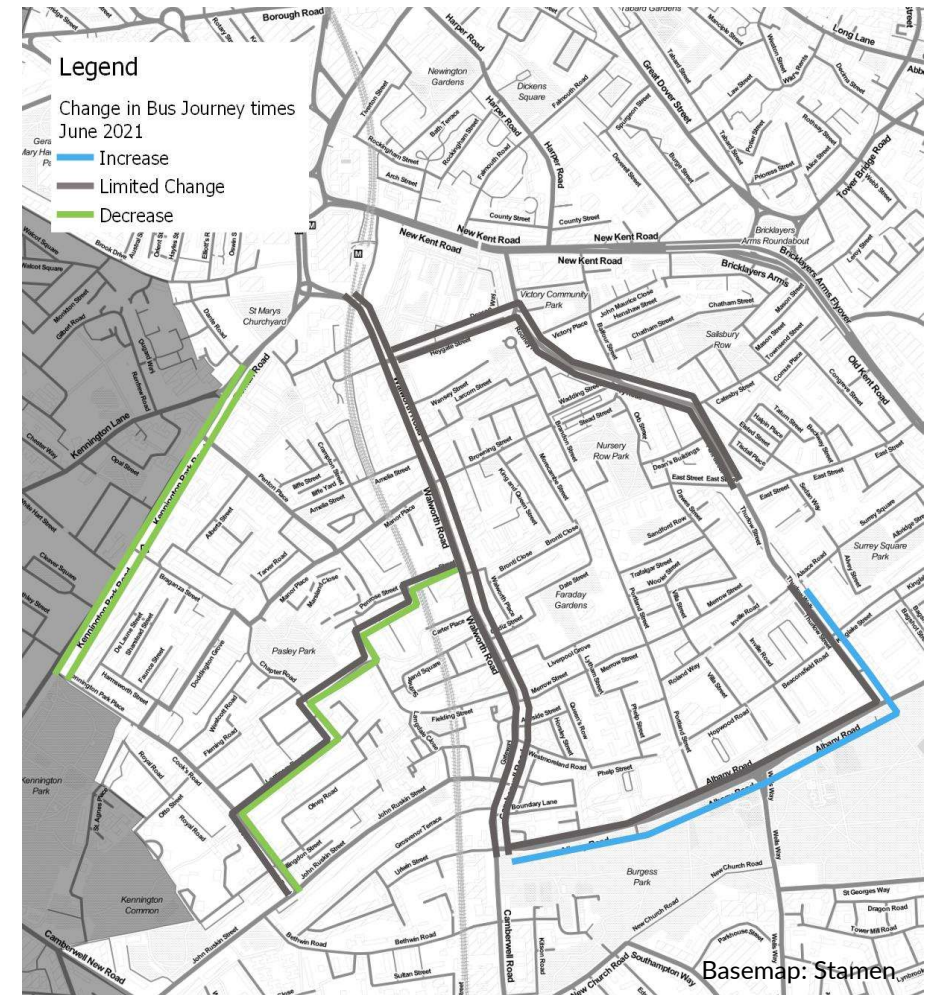
Bus Journey Time Monitoring

Bus Journey Times, Context

- TfL continuously monitors bus journey times. Analysis of these has been completed, considering the average journey speed, excluding time taken to pick up and drop off passengers.
- Journey times have been compared to the average journey time in the 12 months prior to the impact of COVID-19, for each bus corridor around or through Walworth. The average speed for all routes (40, 68, 176 etc.) combined on each corridor has been assessed.
- The maps on the following slides illustrate, for each corridor and each direction, whether bus journey times have stayed the same (or changed by a limited amount), increased or decreased. Results are the average for the 12 hours from 7AM - 7PM.
- These maps show the averages for each of September 2020, March, April, May and June 2021, in line with the main periods of data collection for the traffic data. Continuous data showing weekly journey times from March 2020 to date can be found in Appendix C.

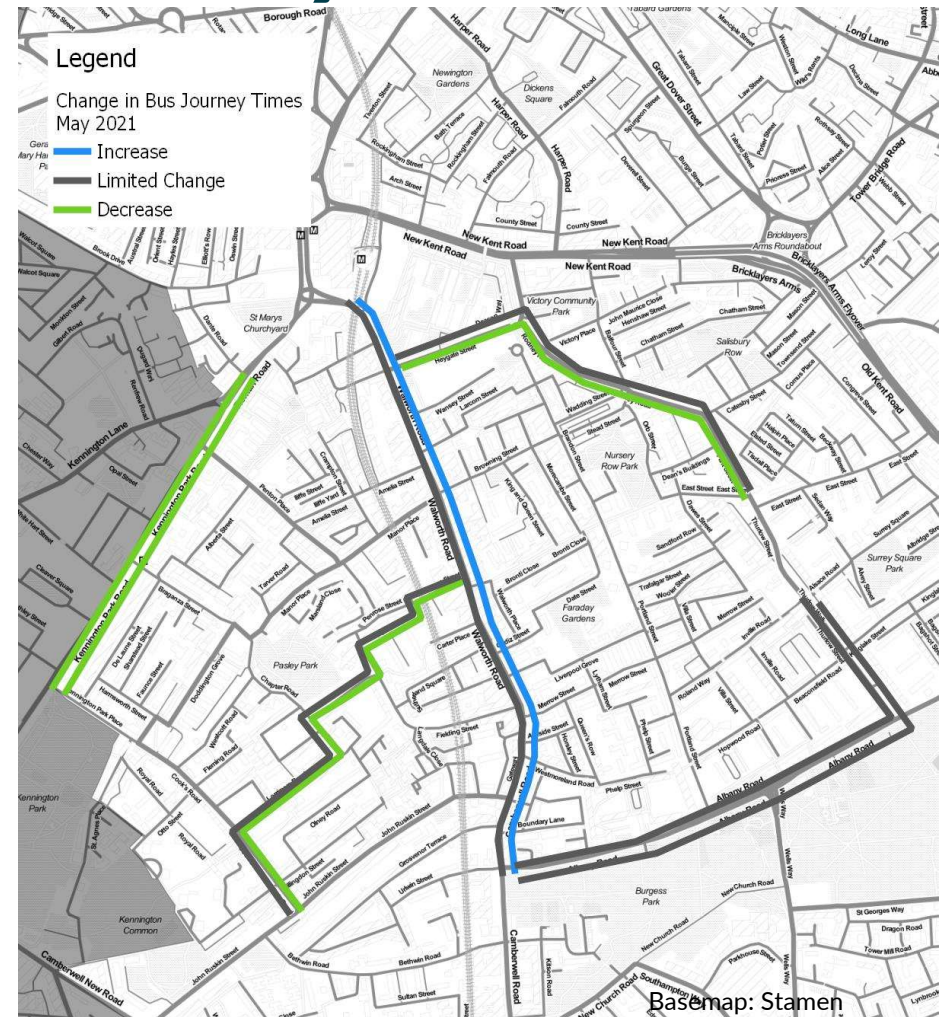
Bus Journey Time Analysis – June 2021

- Bus journey time analysis shows an increase in journey times westbound on Albany Road, although no notable change eastbound.
- Kennington Park Road experienced decreases in journey times in both directions, while Carter Street experienced a decrease in journey time in only one direction.
- Journey times along Walworth Road southbound have improved since April, now only showing limited change from pre-implementation.
- Journey times on Heygate Street westbound have worsened.



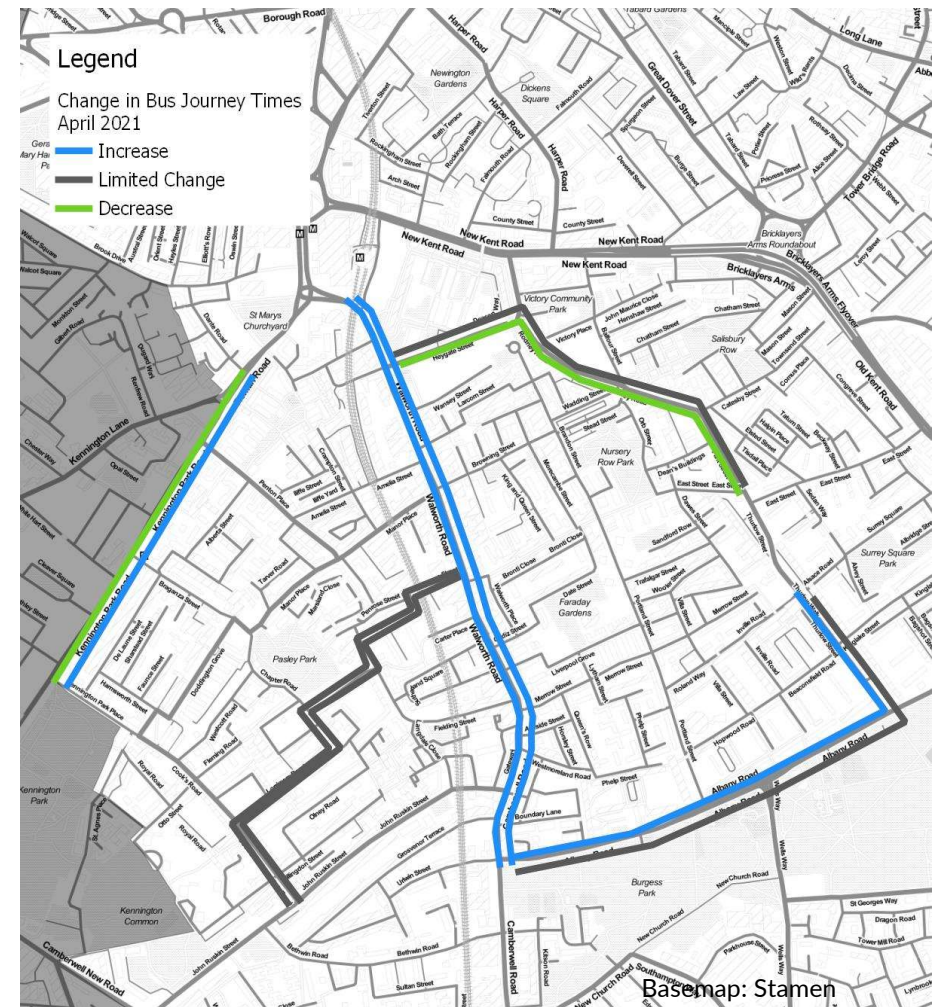
Bus Journey Time Analysis – May 2021

- Bus journey time analysis shows a large increase in journey times southbound on Walworth Road.
- Kennington Park Road, Heygate Street and Carter Street all experienced decreases in journey times, which were significant in at least one direction.



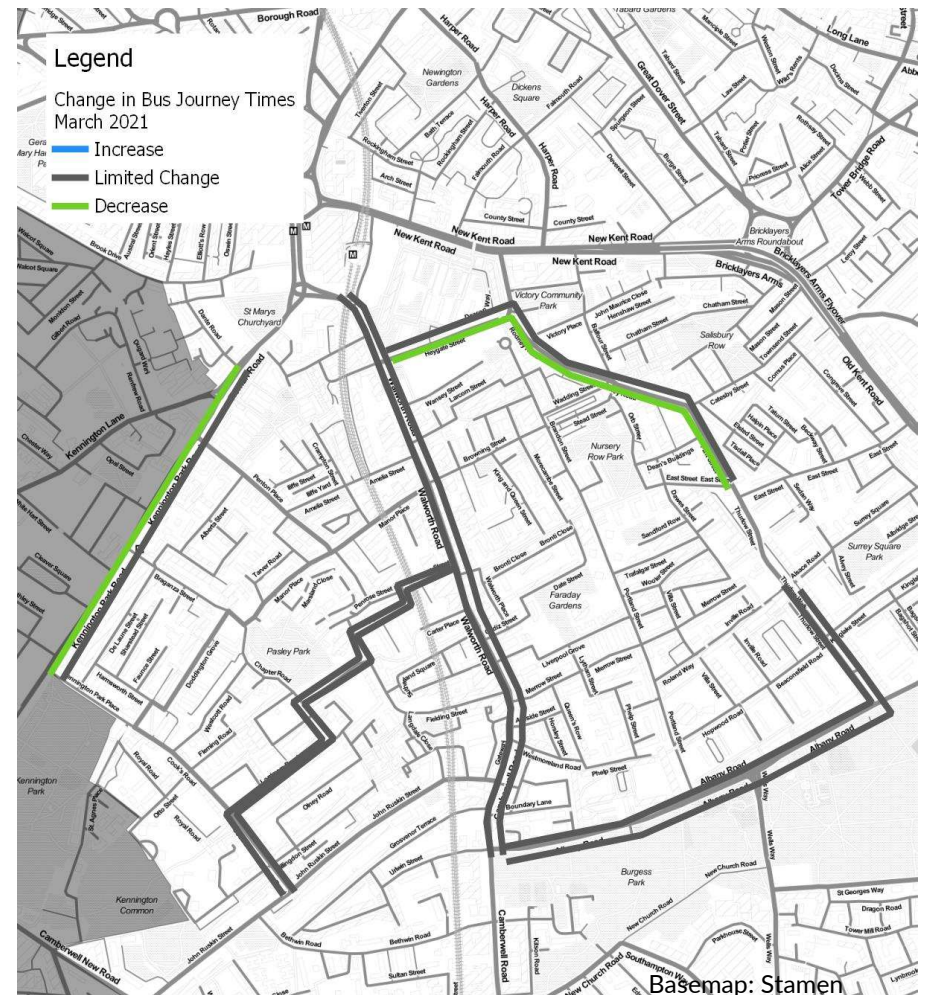
Bus Journey Time Analysis – April 2021

- Bus journey time analysis shows an increase in journey times along most peripheral roads, especially along Walworth Road (both directions), Kennington Park Road (southbound) and Albany Road (eastbound).
- Kennington Park Road (northbound) and Heygate Street (eastbound) again recorded decreases.
- Review of the week by week data shows two weeks where bus journey times were considerably worse on these routes, affecting the monthly average. However, these are potentially linked to factors external to the scheme.



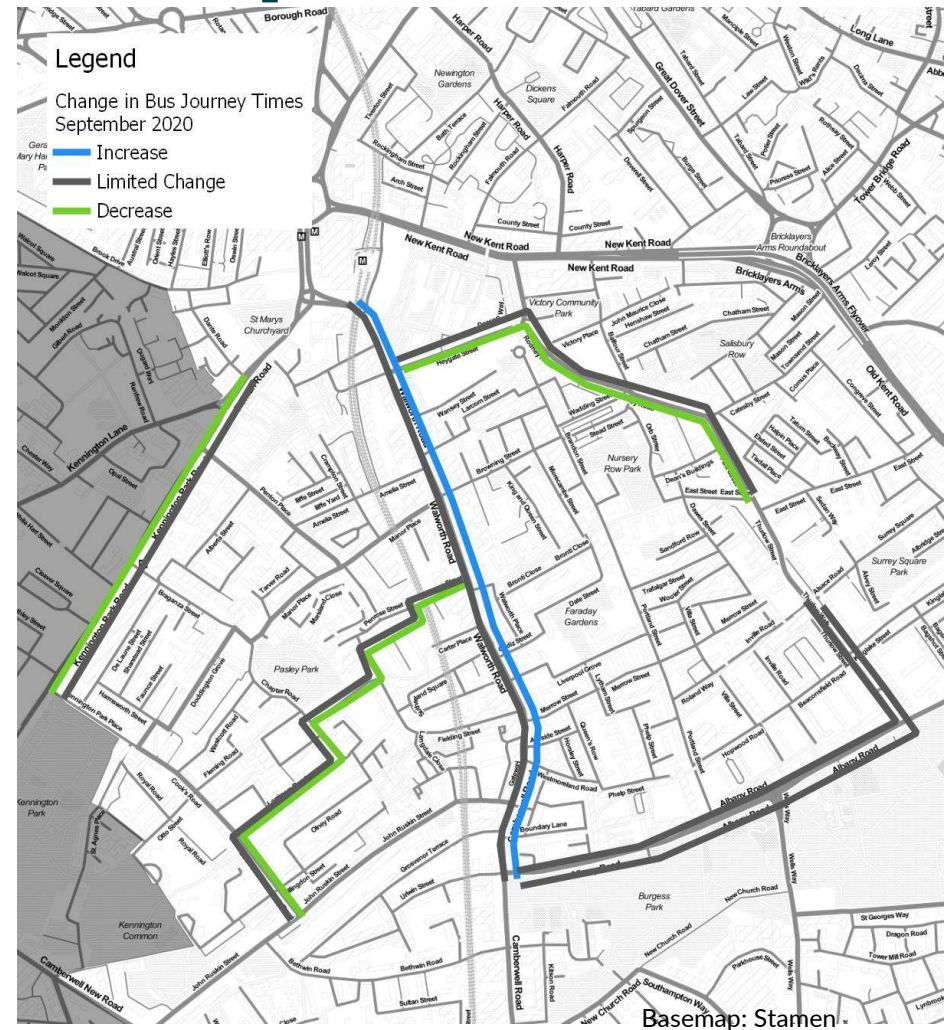
Bus Journey Time Analysis – March 2021

- Bus journey time analysis shows a general decrease in journey times, particularly on Kennington Park Road and Heygate Street.
- Most other roads showed limited change in journey times.



Bus Journey Time Analysis – September 2020

- Bus journey time analysis shows mostly limited change or decreases in journey times (Carter Street westbound, Heygate Street eastbound and Kennington Park Road northbound).
- Journey times on Walworth Road (southbound) were higher than in the baseline.





Vehicle Speed Monitoring

Vehicle Speeds

- Whilst the objective of the Streetspace schemes is not to reduce vehicle speeds, it is possible that changes in traffic volumes will lead to changes in speeds on roads inside or outside the scheme areas.
- A review of the data has been completed, comparing the average and 85th percentile speeds, as well as the percentage of vehicles travelling above the speed limit.
- Whilst some variation has been observed, in general this has been very low, or related to low vehicle flows. Some notable sites with regard to speed are:
 - **John Ruskin Street:** Vehicles travelling over the posted speed limit dropped from 68% to around 30%, with average speeds dropping from 22mph to 18.5mph.
 - **Brandon Street:** The average speed of vehicles increased from around 10mph to 15mph.
 - **Walworth Road:** The average speed of vehicles decreased very slightly (20mph to 19mph), with minimal change in the % of vehicles travelling over the posted speed limit.
 - **Manor Place:** Average vehicle speeds have steadily dropped, from 17.7mph pre-implementation to 15.8mph in June 2021.