

London Borough of Southwark: Walworth Streetspace Monitoring

September 2021

SYSTRA





Executive Summary

Executive Summary (1): Comparison to Pre-Scheme

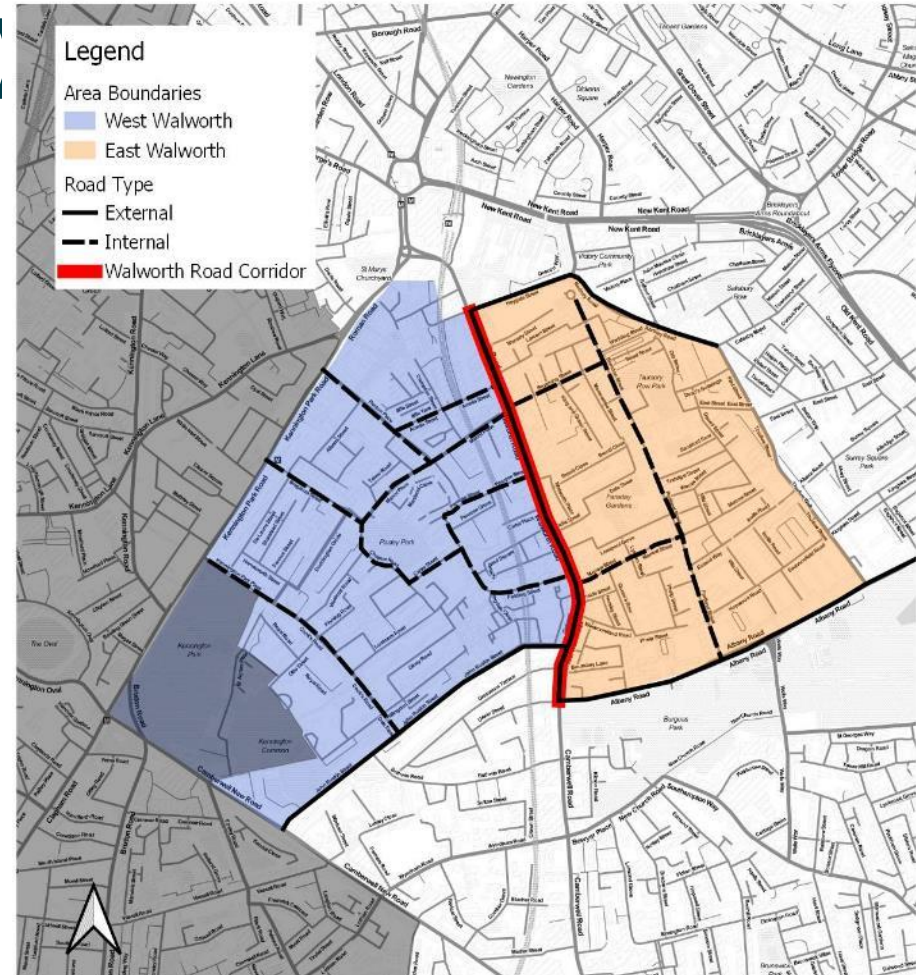
- This September monitoring report presents the results of data collected to understand the impact of the Streetspace trials installed in Walworth during 2020.
- Results should be considered in the context of overall traffic levels being down **-7%** across Southwark between September 2021 and September 2019, the month to which pre-implementation data has been adjusted.
- For streets where data was collected both pre-implementation and in September 2021, the following impacts have been observed:
 - The **volume of motor traffic** counted on **internal streets** has **decreased** by **-44%** in the West Walworth area and **-54%** in the East Walworth area.
 - On **external streets**, **volumes** have **increased** by **+4%** in the West Walworth area and **decreased** by **-8%** in the East Walworth area.
 - The **volume of motor traffic counted** on the Walworth Road Corridor has **decreased** by **-2%**.
 - The **volume of cycles** on **internal streets** has **increased** by **+41%** in the West Walworth area and **+48%** in the East Walworth area. On **external streets**, **volumes** have **increased** by **+98%** in the West Walworth area and decreased by **-17%** in the East Walworth area. **Across all roads, cycle volumes have increased by +26%**
 - The **overall volume of motor traffic recorded across all streets** has **decreased** by **-18%**

Executive Summary (2): Comparison from June 2021 to September 2021

- The results from September 2021 can be compared to those of the previous report, which used data collected in June 2021.
- These results should be considered in the context of **overall traffic levels being up by +1% across Southwark** in September 2021 compared to June 2021.
- Total motor traffic counted had decreased by **-18% in September 2021, compared to -16% in June 2021**.
- Across all count sites the volume of **motor traffic decreased by -4%**
- At all count sites on external roads, and the Walworth Road Corridor, **motor traffic decreased by -4%**
- Across all count sites the **volume of cycles decreased by -6%**
- When comparing the volume of motor traffic in October to September, on external roads only, average traffic has dropped by **-4%**.

Executive Summary (3)

- 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.



Executive Summary (4)

- 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 September 2021 is shown below. Details of further data collected in other months are provided within the remainder of this report. Results should be read in the context of traffic in Southwark being down by 7% in September 2021 compared to pre-COVID.

	Cars/LGVs Pre	Cars/LGVs - Post – Sep 2021	Cars/LGVs - Change	Cars/LGVs - % Change Sep 2021	All Motor Traffic* - Pre	All Motor Traffic* - Post – Sep 2021	All Motor Traffic* - Change	All Motor Traffic* - % Change Sep 2021	Cycles - Pre	Cycles - Post – Sep 2021	Cycles - Change	Cycles - % Change Sept 2021
Internal – West Walworth	17,928	9,265	-8,663	-48%	20,454	11,420	-9,034	-44%	1,897	2680	783	41%
External – West Walworth	12,355	12,552	197	2%	13,613	14,216	603	4%	388	770	382	98%
Internal – East Walworth	12,711	5186	-7,525	-59%	14,404	6,634	-7,770	-54%	2,203	3,260	1,057	48%
External East Walworth	24,151	22,291	-1,860	-8%	26,330	24,328	-2,002	-8%	875	726	-149	-17%
Walworth Road Corridor	22,043	21,785	-258	-1%	27,901	27,222	-679	-2%	2,364	2,276	-88	-4%
All counts	89,188	71,079	-18,109	-20%	102,702	83,820	-18,882	-18%	7,727	9,712	1,985	26%

Executive Summary (5)

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

	Cars/L GVs - Change March 2021	Cars/L GVs - Change April 2021	Cars/L GVs - Change June 2021	Cars/L GVs - Change Sept 2021	HGVs - Change March 2021	HGVs - Change April 2021	HGVs - Change June 2021	HGVs - Change Sept 2021	Motor Traffic* - Change March 2021	Motor Traffic* - Change April 2021	Motor Traffic* - Change June 2021	Motor Traffic* - Change Sept 2021	Motor Traffic* - Change March 2021	Motor Traffic* - Change April 2021	Motor Traffic* - Change June 2021	Motor Traffic* - Change Sept 2021
Internal – West Walworth	-44%	-42%	-44%	-48%	-25%	-37%	-44%	-45%	-40%	-38%	-40%	-44%	48%	53%	53%	41%
External – West Walworth	-2%	14%	4%	2%	-5%	-12%	6%	1%	0%	14%	7%	4%	123%	127%	129%	98%
Internal – East Walworth	-60%	-56%	-58%	-59%	-50%	-48%	-49%	-49%	-56%	-51%	-53%	-54%	23%	45%	43%	48%
External East Walworth	-16%	-8%	-7%	-8%	-32%	-39%	-14%	-11%	-17%	-9%	-7%	-8%	-25%	-5%	-5%	-17%
Walworth Road Corridor	-4%	8%	2%	-1%	-16%	-35%	-6%	-16%	-4%	1%	1%	-2%	9%	5%	10%	-4%
All counts	-23%	-15%	-18%	-20%	-22%	-35%	-15%	-21%	-21%	-15%	-16%	-18%	25%	33%	34%	26%



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.

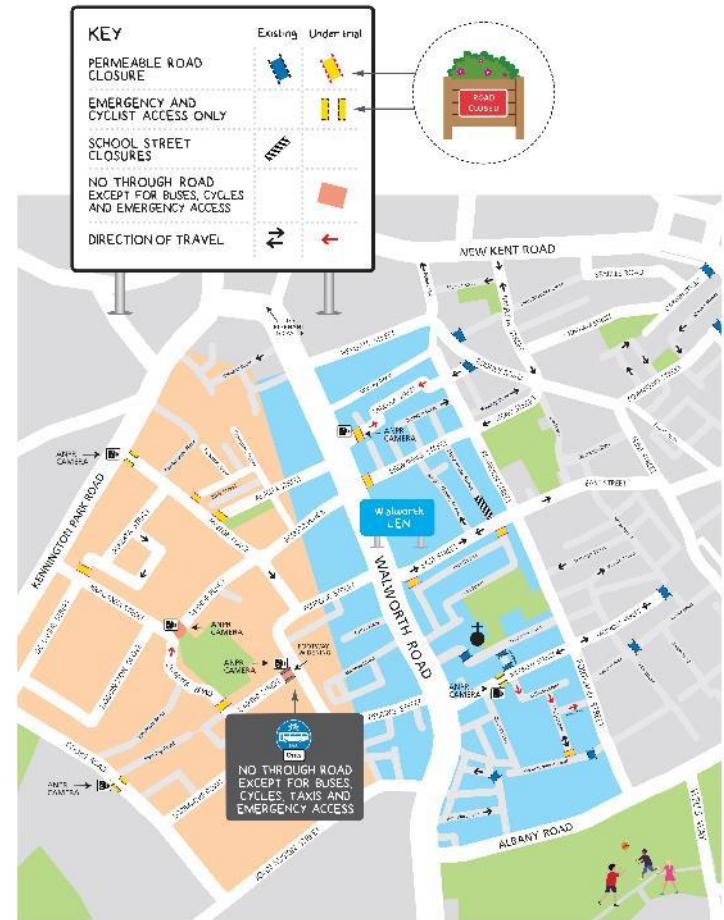
The SYSTRA logo is displayed in a bold, red, sans-serif font. The letters are thick and blocky, with a slight shadow effect. The 'S' and 'Y' are particularly prominent.



Context

Introduction

- This report sets out the first interim monitoring results on the impact of the trial measures implemented by the London Borough of Southwark in Walworth, as part of their Streetspace programme in response to the COVID-19 pandemic.
- It covers the measures introduced across Walworth, informed by an earlier 2019 consultation for the Walworth Low Emission Neighbourhood 'Our Healthy Walworth'.
- The measures were initially implemented between July and October 2020, and comprise a series of permeable road closures and cycles, buses and taxis only restrictions, as shown on the map on the right.





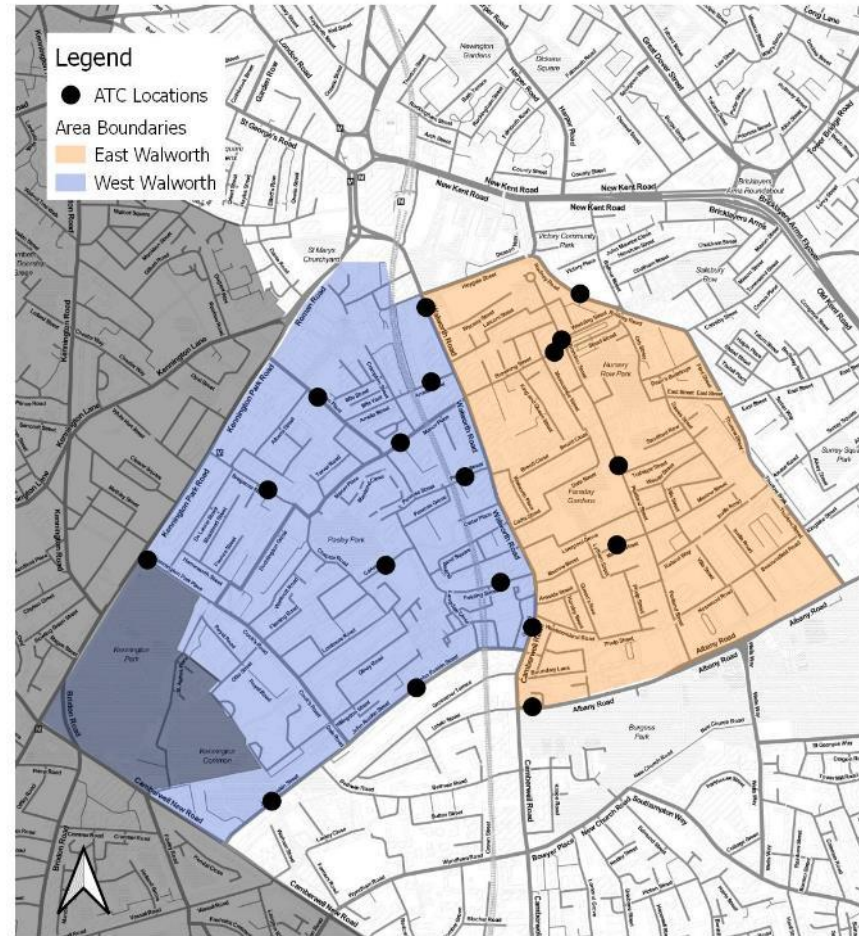
Monitoring Study

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.
- Three reports have been produced for the monitoring:
 - **Report 1:** interim report, using data collected to the end of April 2021.
 - **Report 2:** full monitoring report using data to the end of June 2021.
 - **Report 3:** follow-on report, adding data from September 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 in reporting months throughout 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

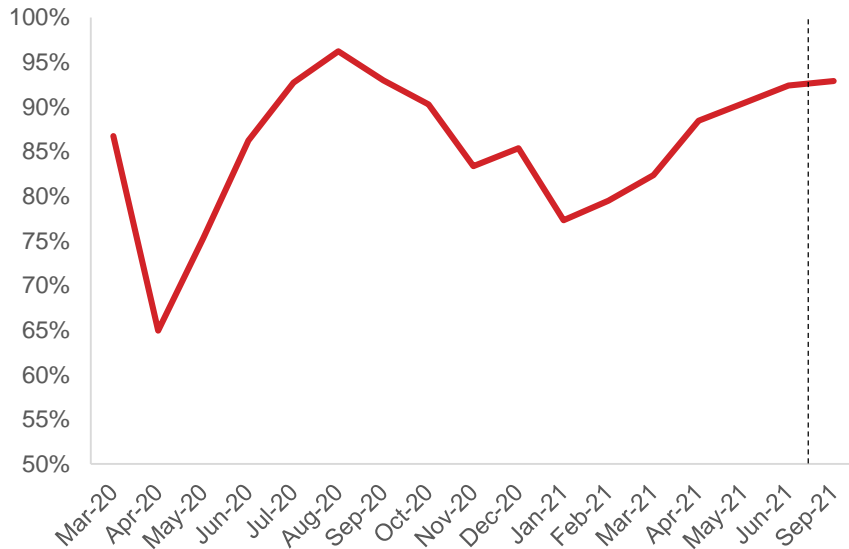


COVID-19 Impacts on traffic flows

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 Southwark against the equivalent month in 2019 or early 2020, before the impact of COVID-19, according to continuous traffic counts collected by TfL.

Difference in Traffic Volume in Southwark Compared to Equivalent Month pre-COVID*



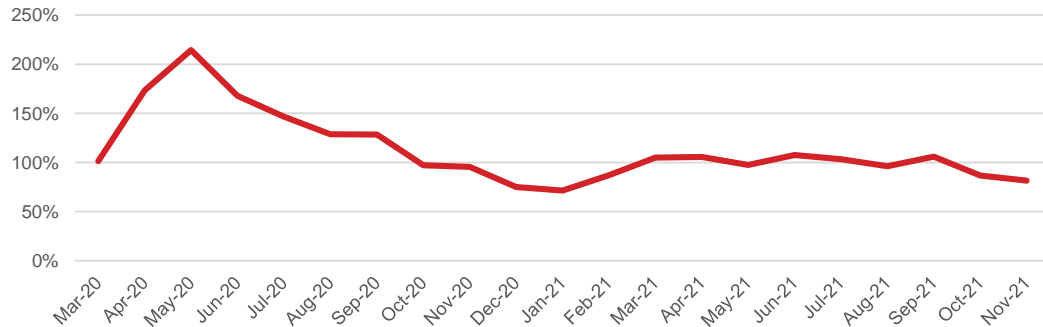
- Traffic has been consistently lower than pre-pandemic, with pronounced drops during lockdowns. However, traffic has been increasing steadily in 2021, being 9% greater in September 2021 compared to March 2021.
- The difference between TfL recorded motor traffic volumes in September 2021 vs. September 2019 is presented in the table below. Results for motor vehicle flows in this report should therefore be considered in this context.

Area	Difference September 2021 to September 2019
Southwark	-7.1%

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 2020 baseline across England¹. 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 into 2021.

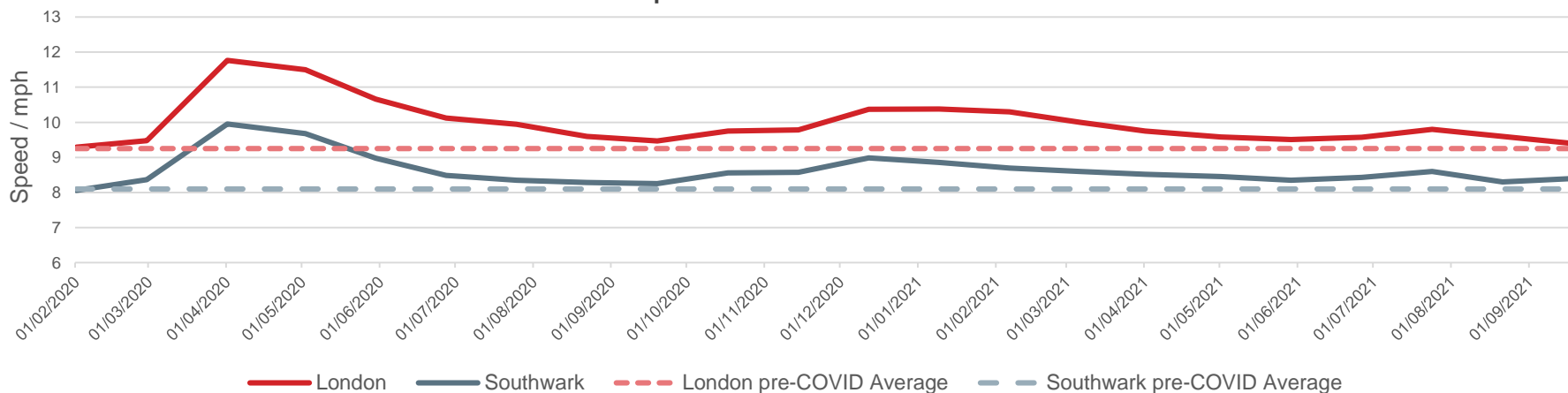
Cycle Volumes in England Compared to National March 2020 Baseline



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

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 and 2021 against the average speed for the year pre-lockdown¹.
- As can be seen, speeds significantly increased in the first lockdown, and less so in the second, before slowly returning towards, but remaining slightly above, pre-COVID levels.





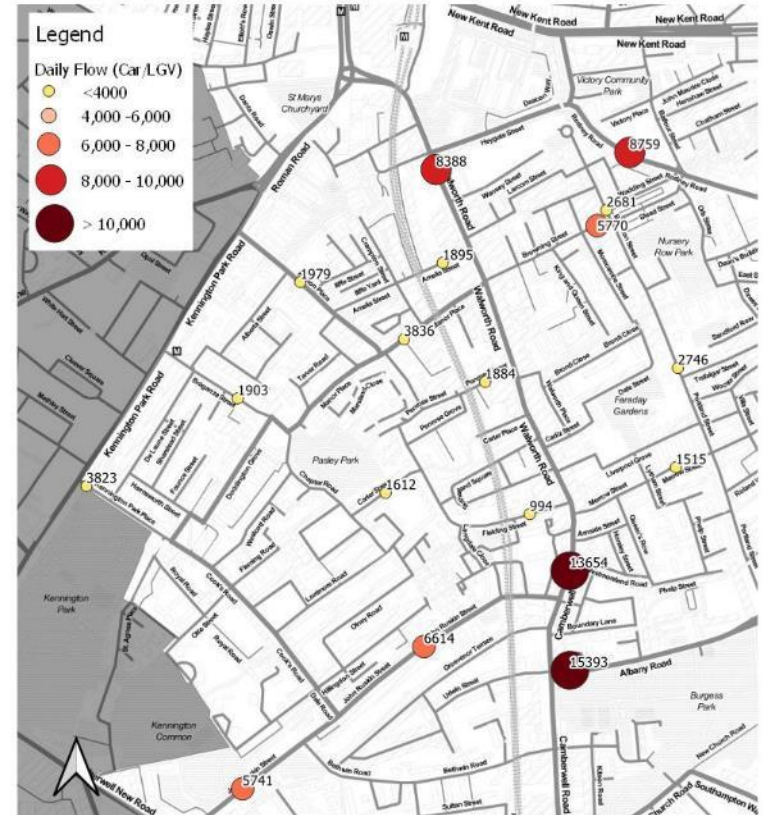
Pre- Implementation Flows

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 September 2019 levels for a fairer basis of comparison against post-implementation data from September 2021.
- This adjustment has been conducted based on differences in traffic flows captured by TfL counters between the month of data capture and September 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 – Cars/LGVs

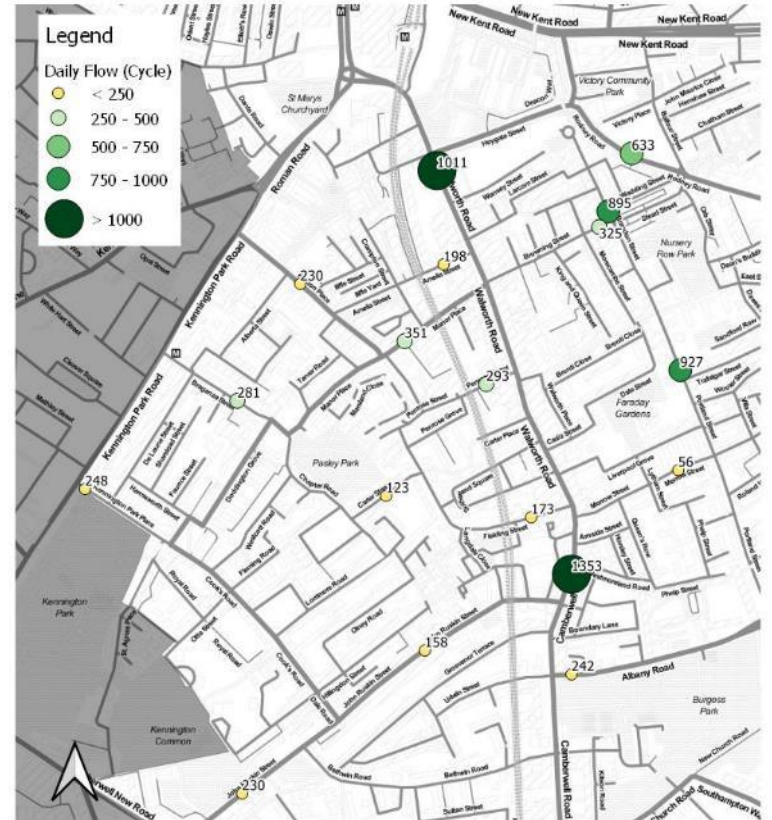
- The average total daily pre-implementation flows of cars and LGVs (combined) are presented in the map to the right, showing the general trend of traffic flows.
- Flows are generally low on internal roads. The internal road that showed the highest flows was Browning Street, around 5,800 vehicles per day.
- There are high flows of vehicles recorded on Walworth Road (8,400 vehicles per day), with high flows also on John Ruskin Street (between 5,700 and 6,700 daily vehicles).
- The highest flows recorded are on Camberwell Road (13,654) and Albany Road (15,393).



Basemap: Stamen

Pre-Implementation Flows – Cycles

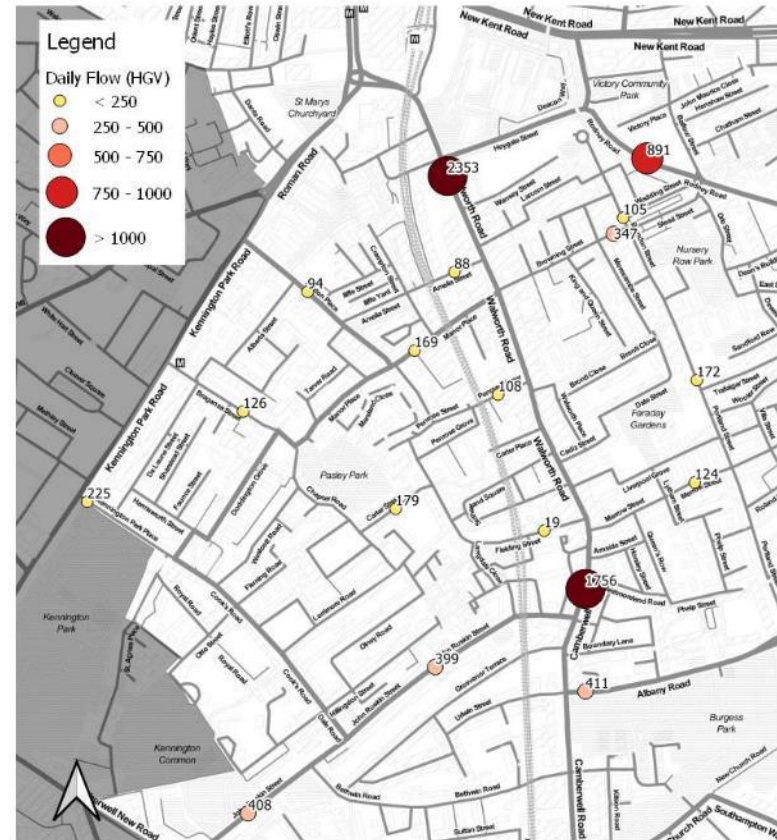
- The maps to the right shows the average total daily pre-implementation flows of cycles.
- Cycle flows on internal roads are generally low, between 100 and 400 cyclists per day, with the exception of Portland Street, where flows of around 900 cycles per day are recorded, likely because this road forms 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 (2,353 per day), which may relate to construction in Elephant Park. Flows are also relatively high (891 per day) at Rodney Road, potentially for the same reason.



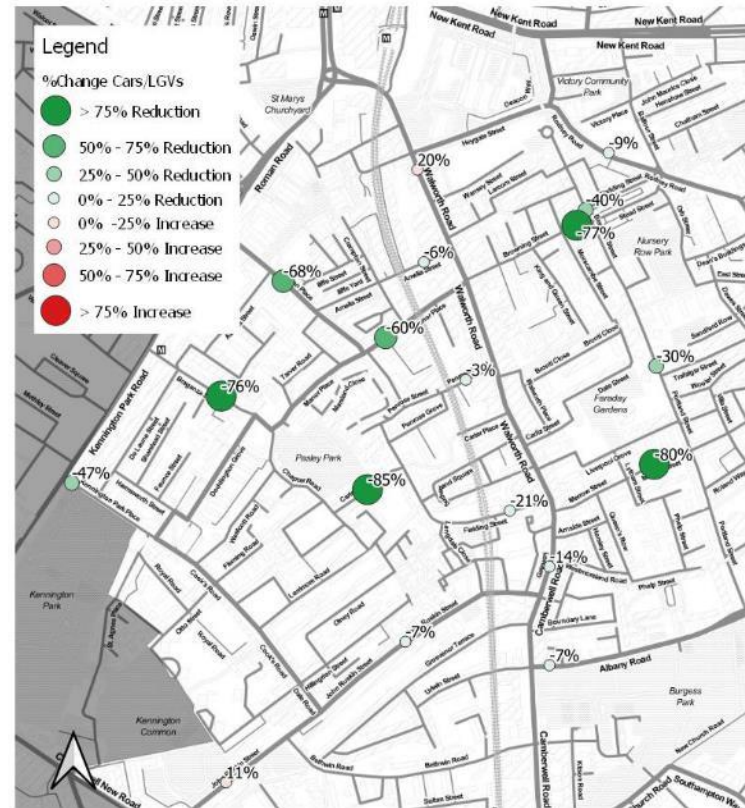
Basemap: Stamen

Post-
Implementation
Monitoring
Round
5/September 2021



September 2021 Flow Change – Cars/LGVs

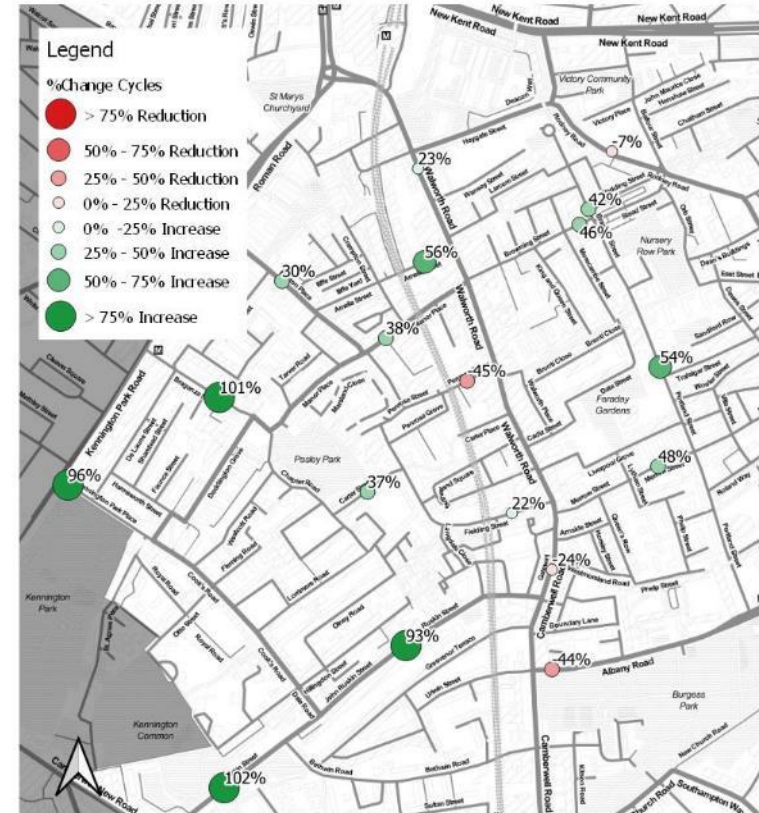
- The map to the right outlines changes in counts of cars and LGVs (combined) compared to pre-implementation, at sites where data was collected in September 2021.
- Changes in car/LGV flows recorded in September 2021 are similar to those recorded in June, with flows decreasing on most internal roads and increasing on Walworth Road (+20%). Flows have increased on the west end of John Ruskin Street, but decreased on the eastern end.
- Notably, where traffic had increased on Penrose Street and Fielding Street in June 2021, car/LGV volumes here are now down 3% and 21%, respectively.
- There are large decreases in flows recorded on Carter Street (-85%) and on Merrow Street (-80%).
- **Note that overall traffic levels in Southwark were down 7% in September 2021 vs. September 2019.**



Basemap: Stamen

September 2021 Flow Change – Cycles

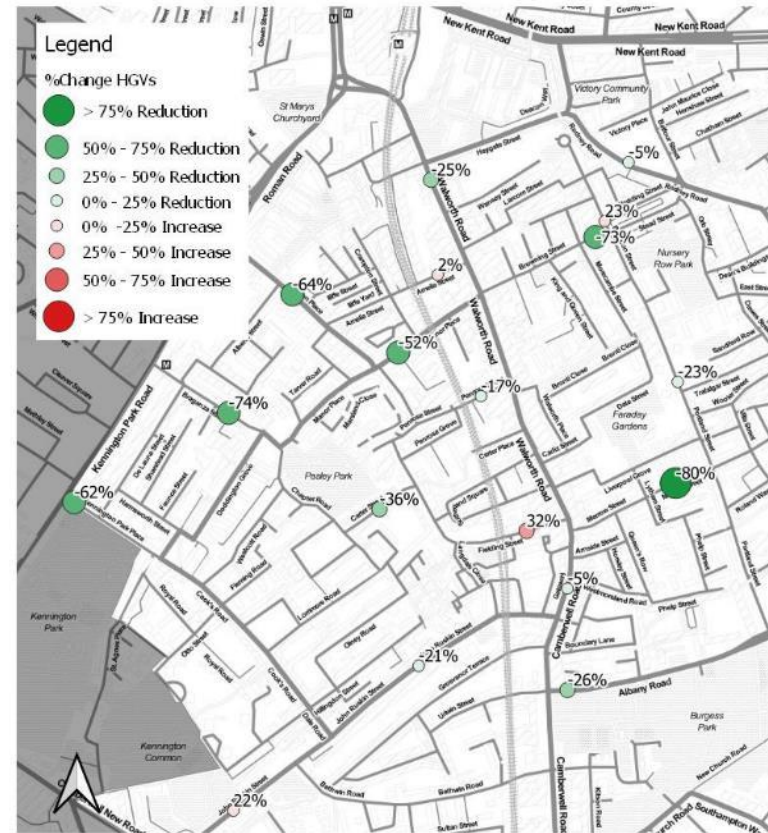
- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data was collected in September 2021.
- Similarly to June 2021, cycle flows have increased on almost every road in the area, with the highest increases now recorded on John Ruskin Street west (+102%) and Braganza Street (+101%).
- The majority of other streets have also experienced increases in cycling.
- There have been moderate decreases in cycling on Camberwell Road (-24%), Albany Road (-44%), and Penrose Street (-45%).



Basemap: Stamen

September 2021 Flow Change— HGV

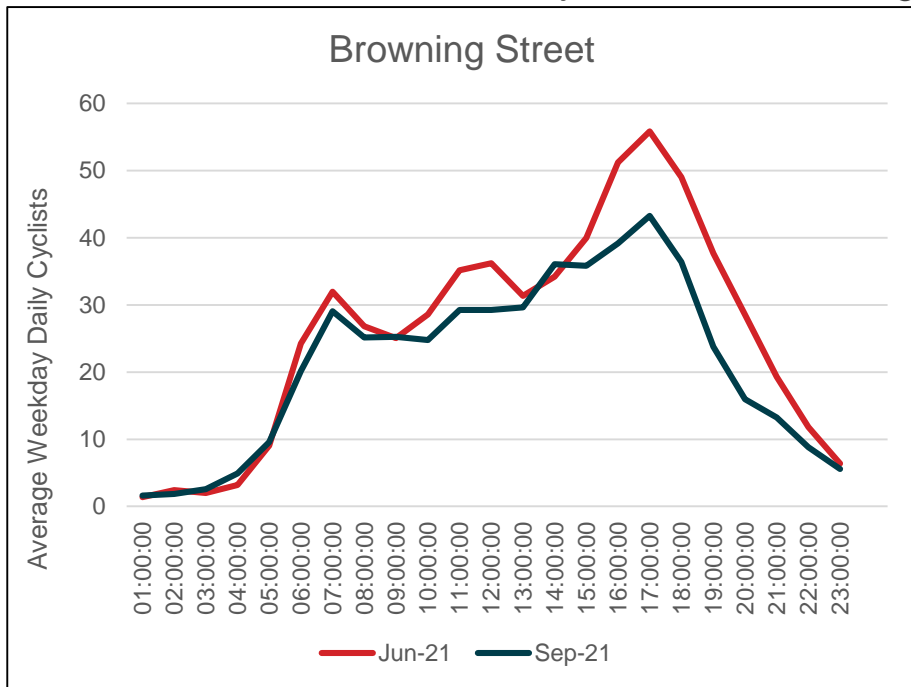
- The map to the right outlines changes in HGVs counted compared to pre-implementation, at sites where data was collected in September 2021.
- HGVs have decreased on most roads, with a number of locations seeing over 50% reductions, including Merrow Street, Browning Street and Brazanga Street. HGVs have also dropped on some higher-volume roads, including Walworth Road (-25%), Albany Road (-26%) and the eastern side of John Ruskin Street (-21%).
- HGV flows have increased on Brandon Street (+23%), Fielding Street (+32%) and on the western side of John Ruskin Street (+22%).
- It should be noted, that on a national basis, whilst car traffic was at 97% of pre-COVID levels in September 2021, HGV traffic was at 112% of pre-



Basemap: Stamen

Vivacity Data Analysis – Cycle Flow Profiles

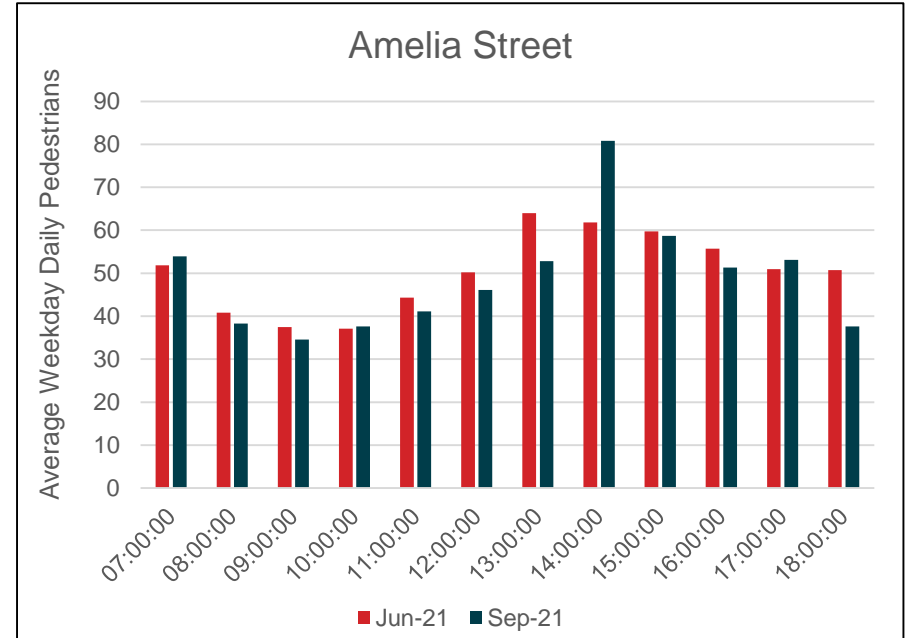
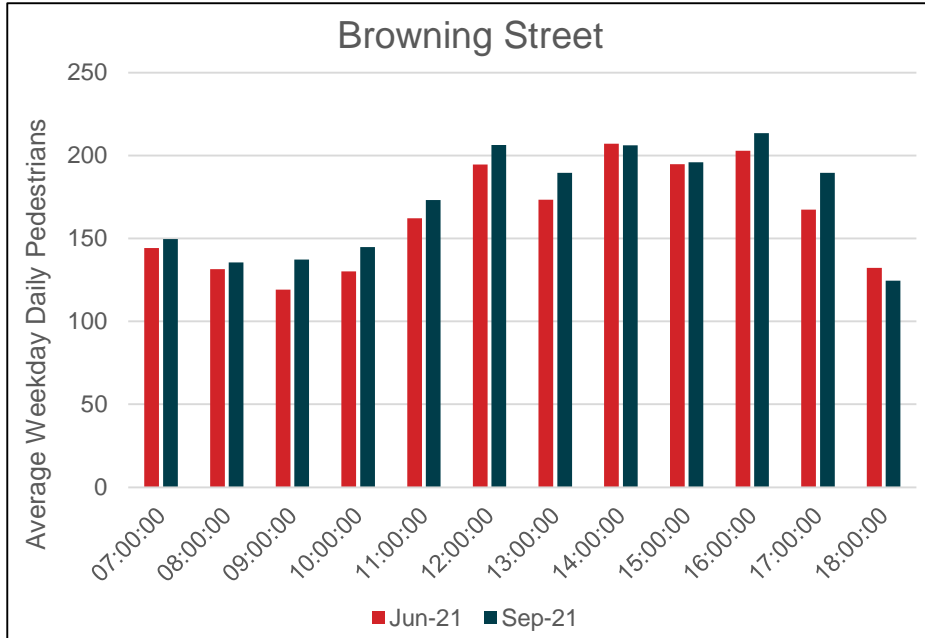
- Vivacity Data is recorded through sensors that are able to recognise and differentiate between road users. data has been collected at the junctions of Browning Street/Walworth Road and Amelia Street/Penton Place.



- Cycle numbers have a slight AM peak, then grow throughout the day, with the largest volumes in both locations between 5-6pm. Volumes reduced slightly between June and September at both sites.

Vivacity Data Analysis – Pedestrian Volumes

- Vivacity Data can also be used to count the number of people walking. The charts below show an estimate of the volume of people walking through the junctions of Browning Street/Walworth Road and Amelia Street/Penton Place from 7AM to 7PM.

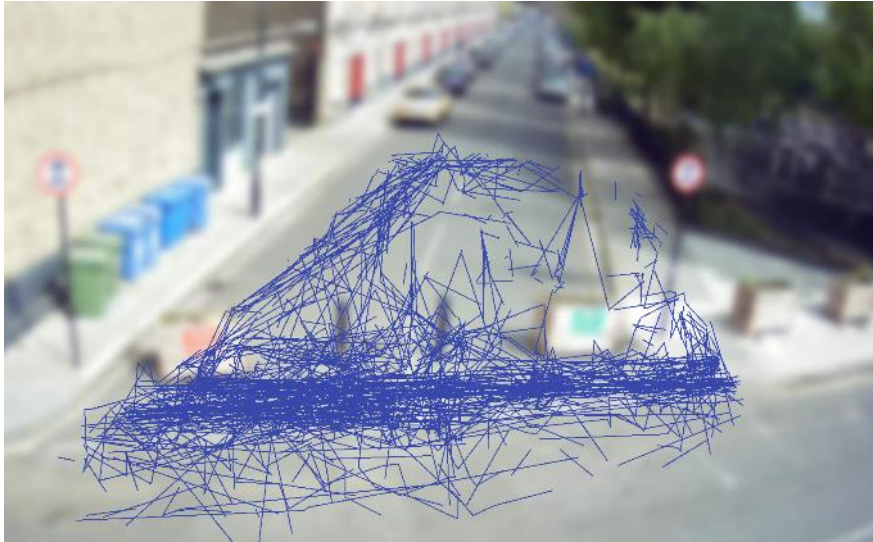


- Both junctions are relatively busy throughout the day, with a peak in the afternoon around school pick-up. Amelia Street pedestrians have decreased by -3% (19 people) compared to June, Browning Street increased by 5% (106 people).

Vivacity Data Analysis – Pedestrian Movements

- Vivacity Data also track the paths taken by pedestrians. The images below the routes taken for a sample peak hour, with each line representing the movement of one person.

Amelia Street



Browning Street



- Both streets show how the filters have allowed pedestrians to move freely in the carriageway, following a range of paths through the junction.



Bus Journey Time Monitoring

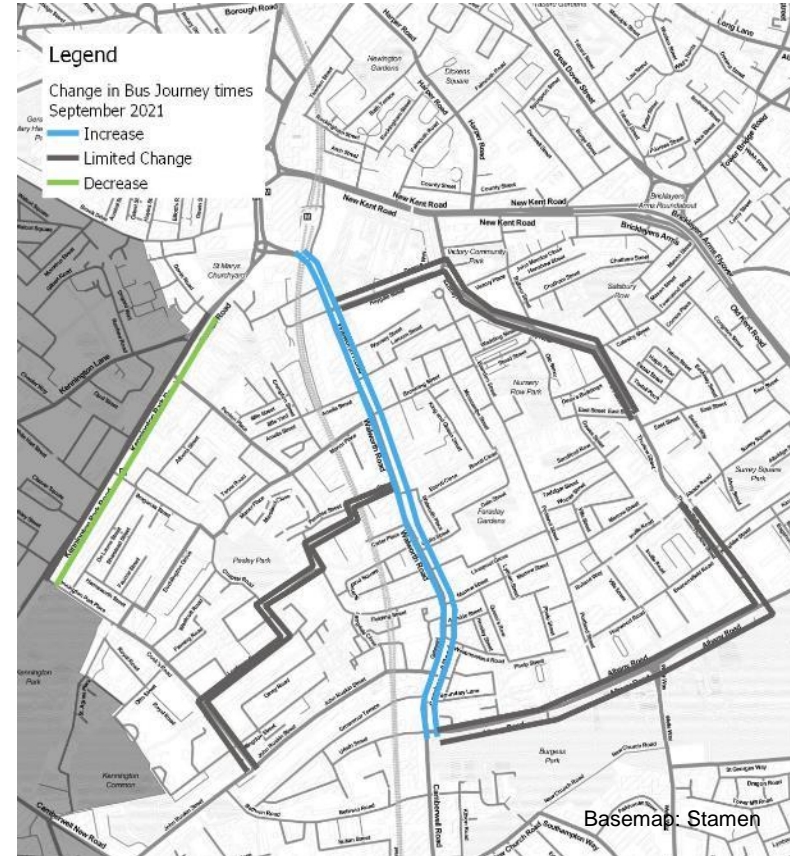
Bus Journey Times, Context

- 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 – September 2021

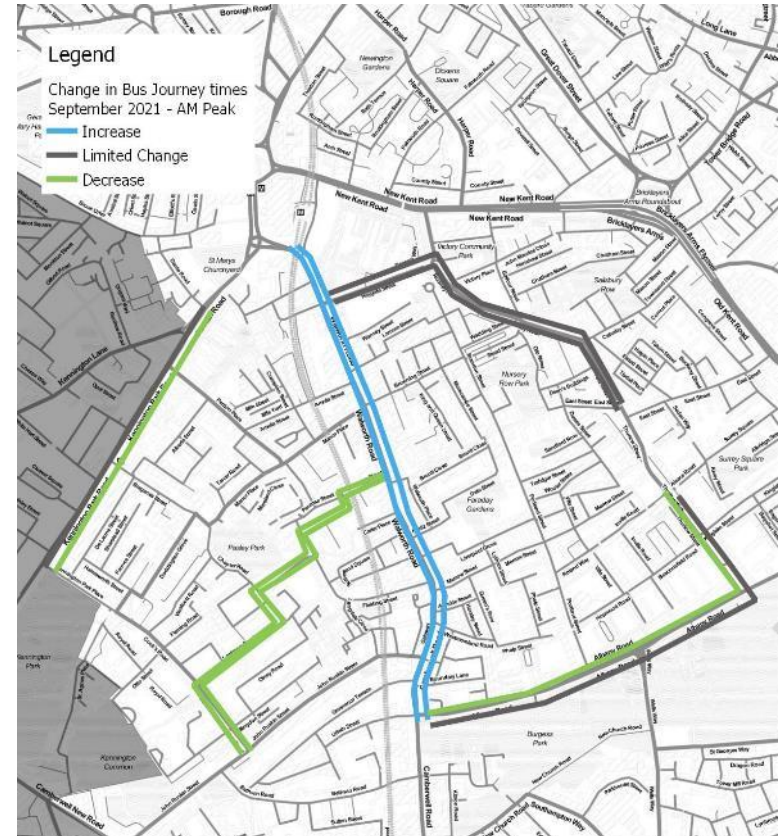
2021

- Bus journey time analysis shows an increase in journey times in both directions on Walworth Road.
- On Kennington Park Road southbound, journey times have decreased.
- On all other streets, no major changes in bus journey times were recorded.



Bus Journey Time Analysis – September 2021, AM Peak

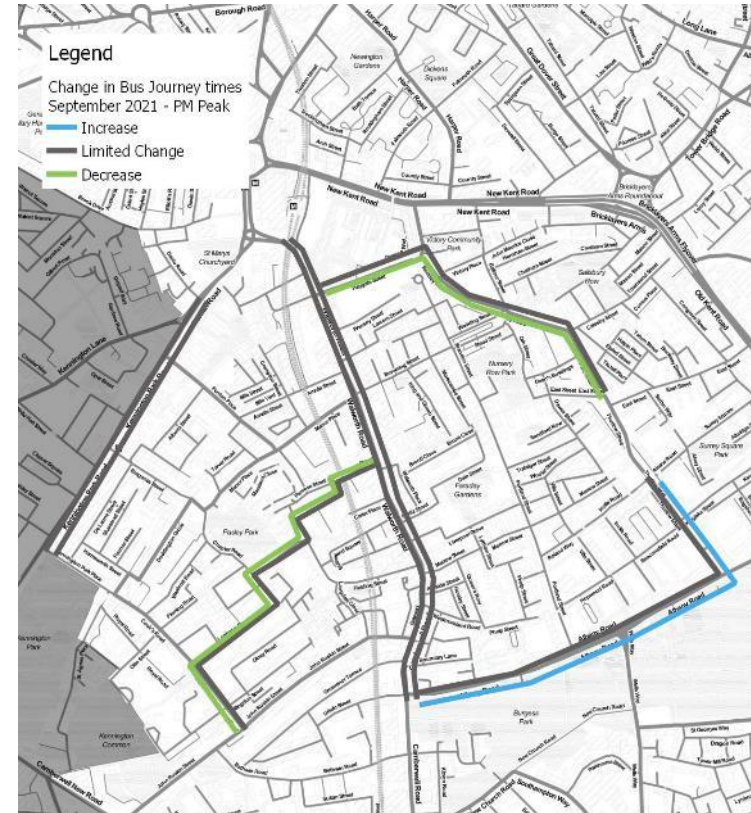
- Bus journey time analysis for the AM Peak (7AM – 10AM) shows an increase in journey times in both directions on Walworth Road.
- Journey times have improved on Albany Road eastbound, Kennington Park Road southbound and both directions on Carter Street.
- No noticeable change has been recorded in journey times on other streets.



Basemap: Stamen

Bus Journey Time Analysis – September 2021, PM Peak

- Bus journey time analysis for the PM Peak (4PM – 7PM) shows no change in journey times on Walworth Road.
- Journey times have improved on Heygate Street northbound, and Carter Street eastbound.
- Journeys time have increased on Albany Road westbound only.
- No noticeable change has been recorded in journey times on other streets.





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 West:** Vehicles travelling over the posted speed limit dropped from 68% to 32%, with average speeds dropping from 22mph to 19mph.
 - **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 18mph pre-implementation to 16mph in September 2021.
 - **Penrose Street:** Average vehicle speeds have dropped from around 16mph to around 12mph.

Quality Assurance

All results are presented in good faith and have had extensive quality assurance checks undertaken. However, this does not rule out the possibility of error, or anomalies in the original data. Should we become aware of an item requiring correction, we will endeavour to correct this.

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