London Borough of Southwark: Dulwich Streetspace Monitoring

Champion Hill, East Dulwich and Dulwich Village: September 2021

SYSTRA

Executive Summary

Executive Summary (1): Comparison to Pre-Scheme

- This September monitoring report presents the results of data collected on the impact of the Streetspace trials installed in Dulwich Village and East Dulwich in 2020, and Champion Hill in 2019.
- Results should be considered in the context of overall traffic levels being down **-7%** across Southwark in September 2021 compared to September 2019, but having been consistently rising since the end of lockdown.
- 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** had **decreased** by **-34%** around Dulwich Village, and **-88%** in East Dulwich.
  - The **volume of motor traffic** counted on **external streets** had **decreased** by **-5%** around Champion Hill, by **-3%** around Dulwich Village and showed a 1% increase around East Dulwich .
  - The **volume of cycles** on **internal streets** had **increased** by **+78%** around Dulwich Village, and **+35%** in East Dulwich and **+12%** on Champion Hill.
  - The **volume of cycles on external streets** had also increased by between **+38%** to **+69%.**
- **The overall volume of motor traffic recorded across all streets has decreased by -12%**
- **The overall volume of cycling recorded across all streets has increased by +61%**

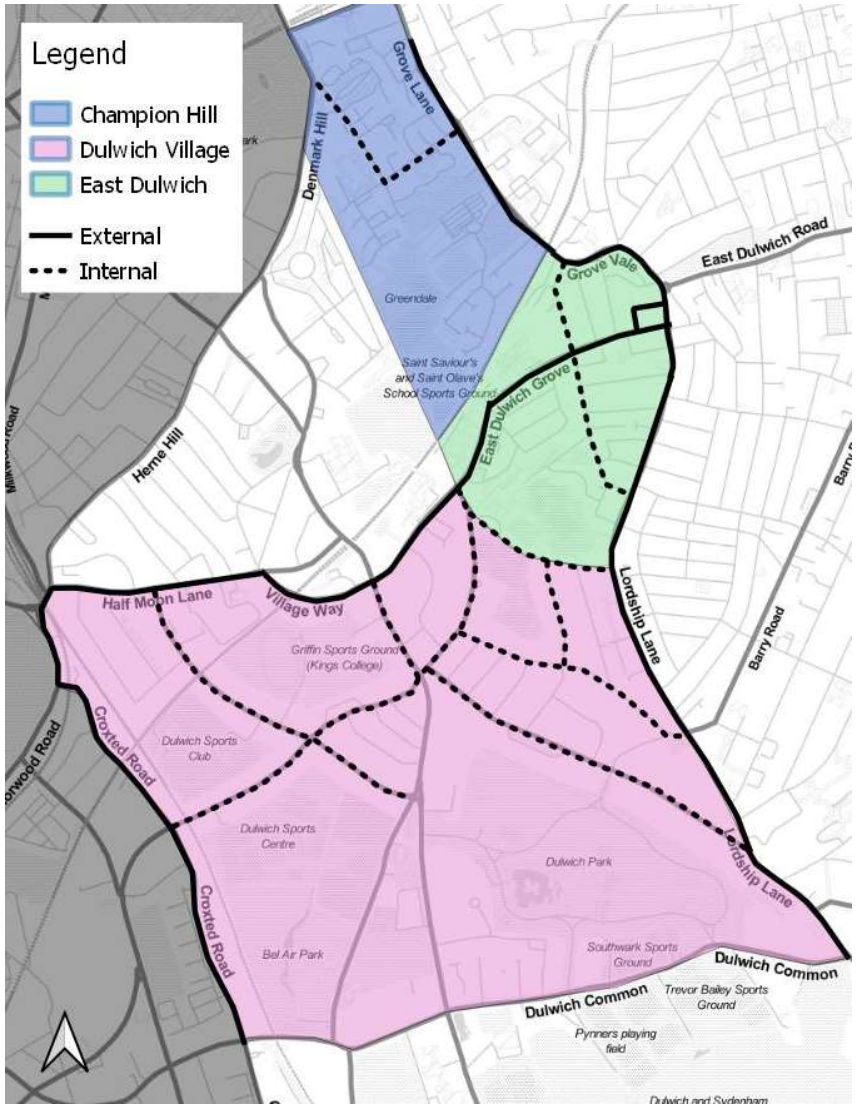
Executive Summary (2): Comparison from June 2021 to September 2021

- 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 compared to June.
- Total motor traffic counted had decreased by **-12% in September 2021, compared to -10% in June 2021**.
- Across all count sites the volume of **motor traffic decreased by -6%**
- At all count sites on external roads, **motor traffic decreased by -5%**
- Across all count sites the **volume of cycles decreased by -8%**
- **Pedestrian activity was up +7%** (470 people per day) at Calton Avenue / Dulwich Village and **+13%** (560 people per day) on Melbourne Grove North.
- When comparing the volume motor traffic in October 2021 to September 2021, on external roads only, average traffic has dropped by **-4%**.

Executive Summary (3)

The streets on which the core analysis has been completed are shown to the right, along with areas defined as Dulwich Village, East Dulwich or Champion Hill. It should be noted that the proximity of the three areas means each will be impacting the others, so the traffic impacts on external streets without restrictions should not be associated to a single measure. The streets marked are those on which data has been collected and reported on.

The measures implemented are either permanent, permeable road closures that do not permit through motor traffic, or timed restrictions that permit cycles, buses and taxis only in one direction during peak hours. Streets where measures implemented restrict or prevent through traffic are defined as internal, whilst those where no change has been made to throughflow are defined as external.



Executive Summary (4)

The total number of cars/LGVs, cycles and all motor traffic recorded on streets where a traffic count in the scheme areas 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 main report. Results should be considered in the context of overall traffic levels being down -7% across Southwark between September 2021 and September 2019.

		Cars/LGVS				All Motor Traffic*				Cycles			
		Pre-Scheme	Post-Scheme Sept 2021	Change Sept 2021	% Change Sept 2021	Pre-Scheme	Post-Scheme Sept 2021	Change Sept 2021	% Change Sept 2021	Pre-Scheme	Post-Scheme Sept 2021	Change Sept 2021	% Change Sept 2021
Dulwich Village	Internal	41,511	26,316	-15,195	**-37%**	43,880	28,871	-15,009	**-34%**	2,842	5,072	2,230	**78%**
	External	64,193	61,627	-2,567	**-4%**	70,148	68,016	-2,132	**-3%**	1,318	2,114	796	**60%**
East Dulwich	Internal	3,791	355	-3,436	**-91%**	4,134	495	-3,639	**-88%**	203	275	72	**35%**
	External	36,880	36,261	-619	**-2%**	39,843	40,203	360	**1%**	1,116	1,540	424	**38%**
Champion Hill	Internal	1,948	1,807	-140	**-7%**	2,192	2,084	-108	**-5%**	357	399	42	**12%**
	External	10,399	9,888	-511	**-5%**	11,931	11,355	-576	**-5%**	215	364	150	**69%**
All Counts		**158,722**	**136,254**	**-22,468**	**-14%**	**172,128**	**151,024**	**-21,104**	**-12%**	**6,050**	**9,764**	**3,714**	**61%**

*Includes car, LGV, HGV and motorcycle, but not pedal cycle

Executive Summary (5)

A comparison of data outcomes from previous months of reporting is presented below. Note that additional data sites were included in June 2021 and again in September 2021 so comparison does not reflect the exact same streets.

		Cars/LGVs				HGVs				Motor Traffic*				Cycles			
		Change March 2021	Change April 2021	Change June 2021	Change Sept 2021	Change March 2021	Change April 2021	Change June 2021	Change Sept 2021	Change March 2021	Change April 2021	Change June 2021	Change Sept 2021	Change March 2021	Change April 2021	Change June 2021	Change Sept 2021
Dulwich Village	Internal	-44%	-33%	-33%	**-37%**	-7%	-2%	-1%	-12%	-41%	-31%	-30%	**-34%**	75%	103%	92%	**78%**
	External	-20%	-11%	-1%	**-4%**	-8%	-18%	-4%	-6%	-19%	-11%	0%	**-3%**	30%	70%	75%	**60%**
East Dulwich	Internal	-86%	-81%	-83%	**-91%**	-79%	-77%	-78%	-76%	-83%	-79%	-81%	**-88%**	12%	29%	24%	**35%**
	External	-12%	2%	1%	**-2%**	36%	-20%	10%	17%	-8%	2%	3%	**1%**	-14%	45%	3%	**38%**
Champion Hill	Internal	-12%	9%	11%	**-7%**	-17%	-8%	-8%	-20%	-10%	10%	12%	**-5%**	10%	19%	17%	**12%**
	External	-5%	0%	5%	**-5%**	-6%	-28%	2%	-12%	-5%	-3%	6%	**-5%**	24%	43%	49%	**70%**
All Counts		**-27%**	**-17%**	**-11%**	**-14%**	**0%**	**-18%**	**-2%**	**-3%**	**-24%**	**-16%**	**-10%**	**-12%**	**42%**	**74%**	**66%**	**61%**

*Includes car, LGV, HGV and motorcycle, but not pedal cycle

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.

Introduction

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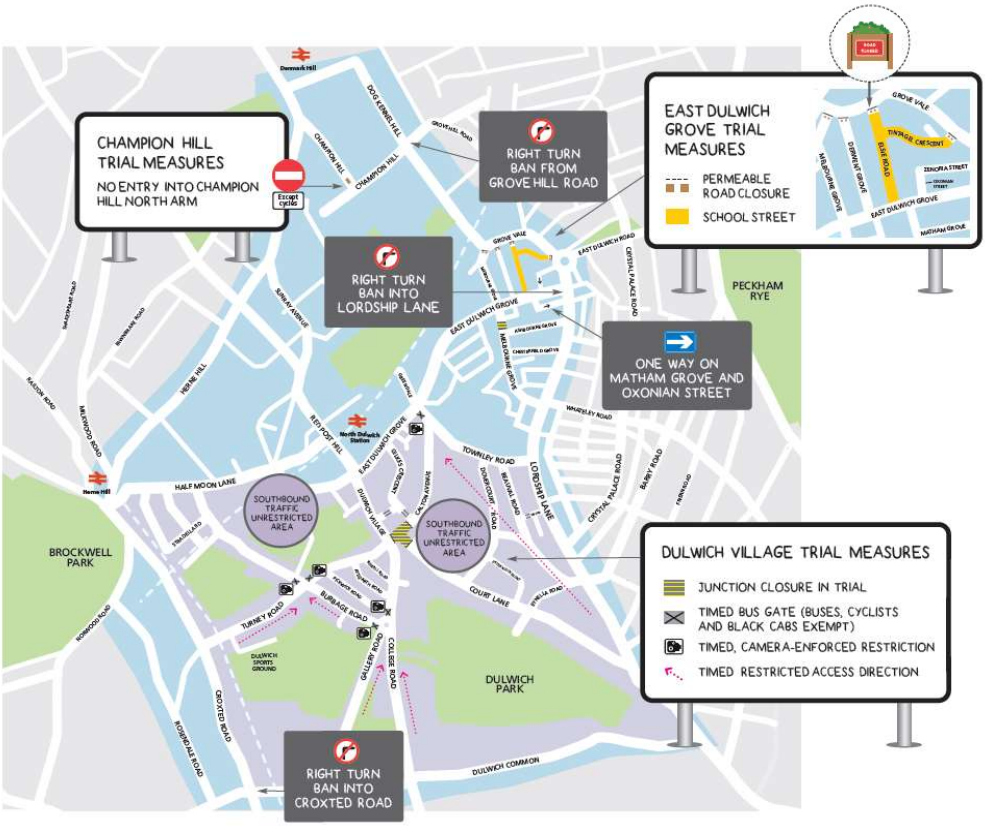
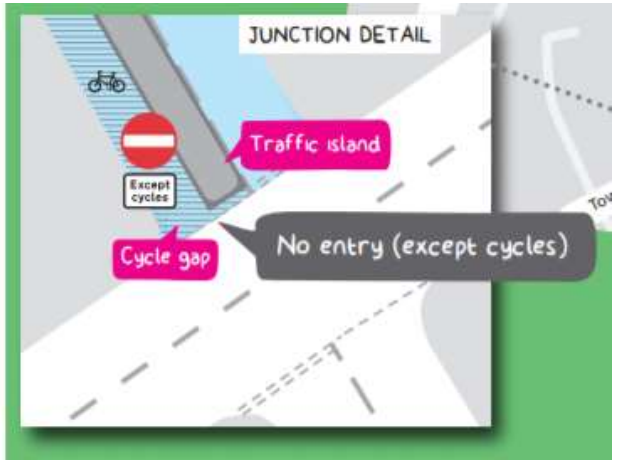
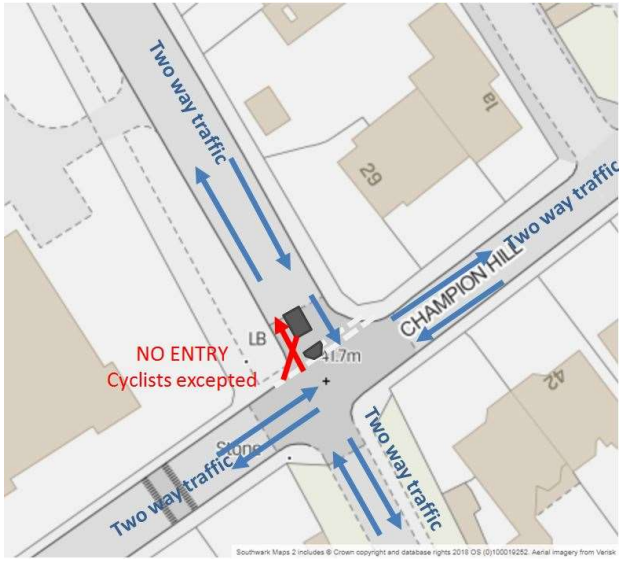
- This report sets out the September monitoring results on the impact of the trial measures implemented by the London Borough of Southwark in Dulwich, as part of their Streetspace programme responding to the COVID-19 pandemic.
- All results are shown as comparisons to pre-implementation data collected primarily in 2019.
- It covers the measures introduced across Dulwich, formed of three Streetspace schemes:
  - Champion Hill
  - East Dulwich
  - Dulwich Village
- The measures implemented are shown on the map on the right.



Champion Hill Scheme

- A permeable road closure on Champion Hill was installed in February 2019, preventing motor vehicles from using Champion Hill to drive from Dog Kennel Hill to Denmark Hill. The aim of the scheme was to reduce traffic volumes to support the delivery of Quietway 7, which runs north-south along the length of the Borough.
- In early 2020, the Council consulted on making the vehicular No-Entry permanent, but as part of the COVID-19 transport response the Experimental Traffic Order for the scheme was extended an additional 18 months.

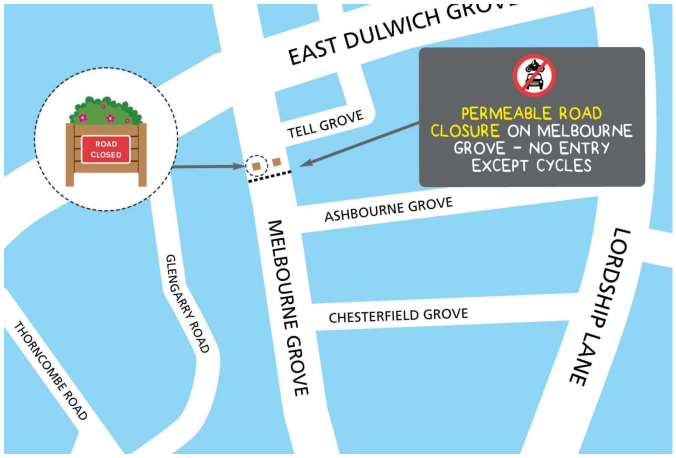




East Dulwich Scheme

The East Dulwich scheme was delivered in two phases:

- Phase 1: **permeable road closure** on Melbourne Grove, south of Tell Grove. Implemented on 30th June 2020.
- Phase 2: **permeable road closures** on Melbourne Grove, Derwent Grove, Elsie Road and Tintagel Crescent at the junction with Grove Vale, and a **school street** closure during school drop-off and pick-up on Tintagel Crescent and Elsie Road. Implemented on 4th September 2020.



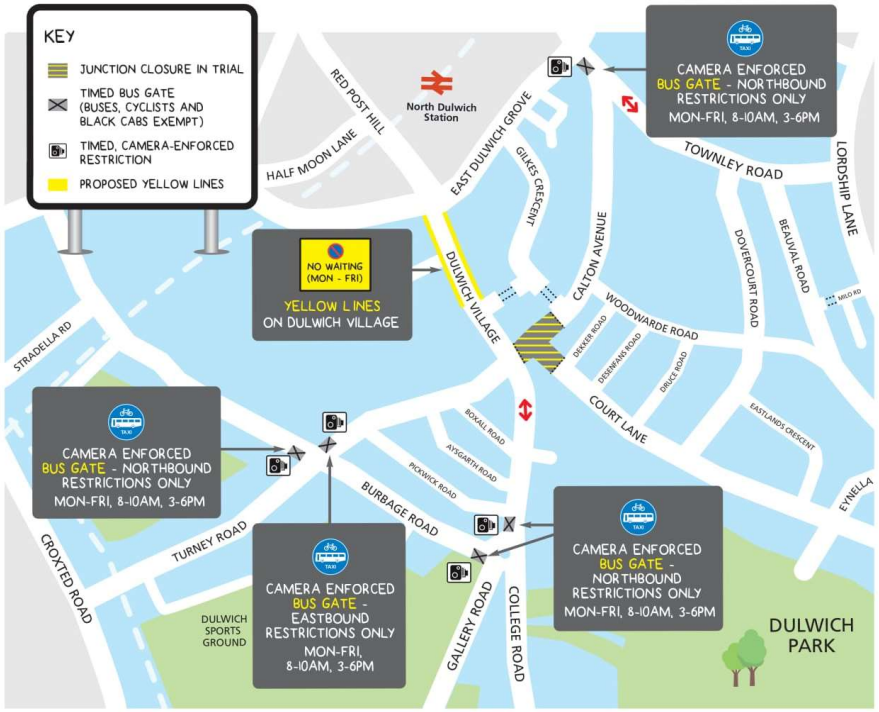
Existing measures that will also affect traffic flow in the area include:

- Right turn ban from Grove Hill Road into Grove Lane.
- Right turn ban from East Dulwich Grove to Lordship Lane.
- One way on Matham Grove and Oxonian Street.

Dulwich Village Scheme

The Dulwich Village scheme was delivered in two phases:

- Phase 1: Court Lane, Calton Avenue and Dulwich Village **modal filter**. Implemented on the 30th June 2020.
- Phase 2: camera enforced **timed restrictions** (from 8-10am and 3-6pm on weekdays) of motor traffic travelling northbound on Burbage Road, Dulwich Village and Townley Road and eastbound on Turney Road. Buses, taxis and cycles are exempt from the timed restrictions.
- Phase 2 was implemented on the 16th November 2020, but not enforced until January 2021.
- A right turn ban from A205/Thurlow Park Road to Croxted Road was already in place.



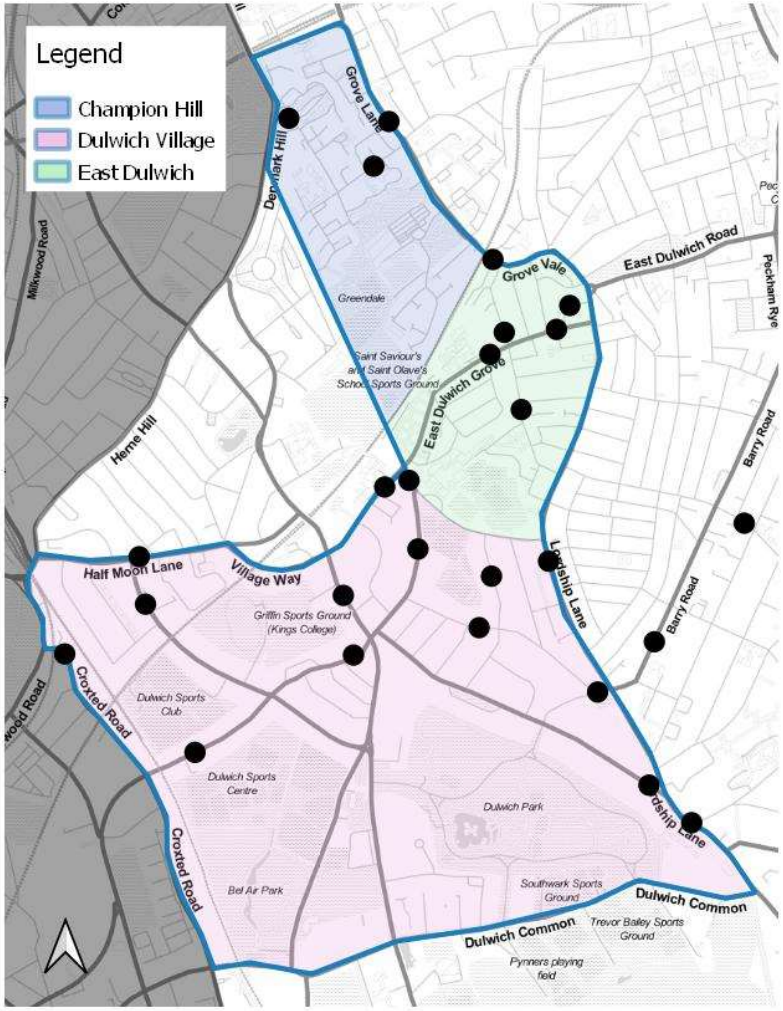
Monitoring Study

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 areas 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

- 26 Automatic Traffic Count (ATC) locations have been utilised to analyse the impact of the three schemes on traffic flows. These locations are shown to the right. LB Southwark has also collected data in additional locations, but only sites where counts were completed both pre- and post- implementation of the Streetspace measures have been included in the analysis.
- 24 of these sites are within or on the edge of the scheme areas, and have been included in executive summary totals above. Two additional sites outside the scheme area on Underhill Road and Barry Road are reported upon, but not included in overall totals.
- The majority of ATC sites were in place in September 2019; September 2020; and March, April, June and September 2021. However, some count data used within this report dates from earlier periods. Data was not collected at all locations in all time periods.
- 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 share scheme impacts.
- A 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 and road user types, the latter as recorded by Active Movement Sensors.

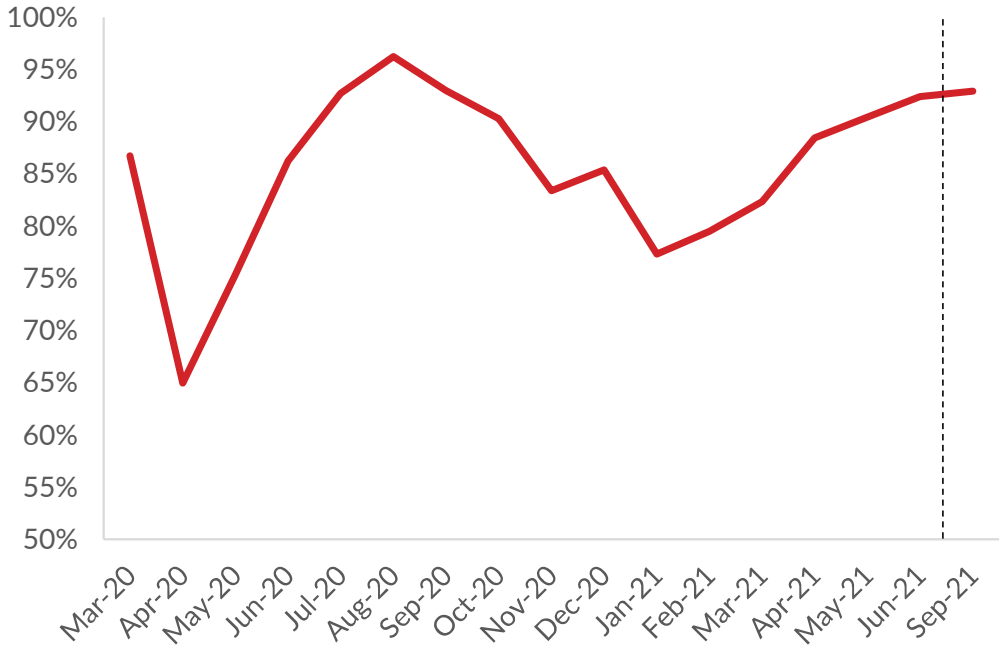


COVID-19 Impacts on Traffic Flows

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*



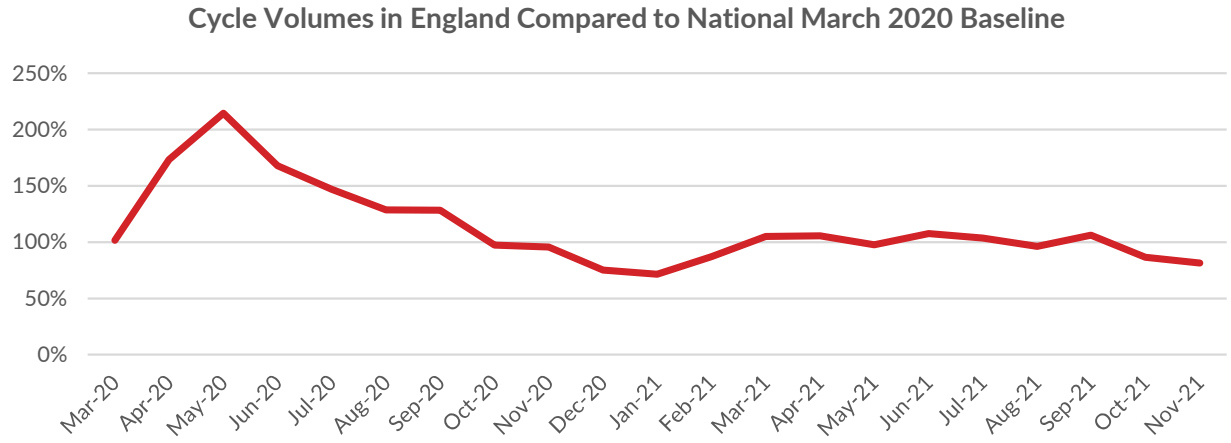
- Traffic has been consistently lower than pre-pandemic, with pronounced drops during lockdowns. However, traffic has been increasing steadily in 2021, being 9% greater in September 2021 compared to March 2021.
- The difference between TfL recorded motor traffic volumes in September 2021 vs. September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

	Difference September 2021 to September 2019
Southwark	**-7.1%**

*Data missing for July and August 2021.

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 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 into 2021.

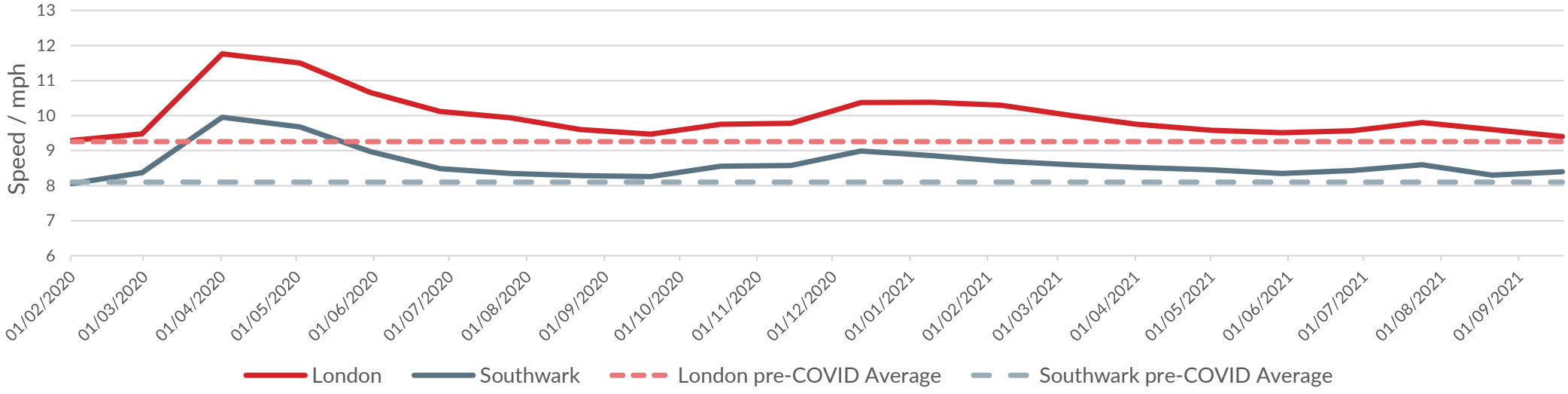


- All differences in cycle flows throughout reporting should be considered in the context of the above observations.

[1]https://www.gov.uk/government/statistics/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 and 2021 against the average speed for the year pre-lockdown[1].
- 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. It could therefore be expected that in the absence of any other changes, bus speeds in Dulwich would have followed similar patterns.



[1]https://tfl.gov.uk/corporate/publications-and-reports/buses-performance-data

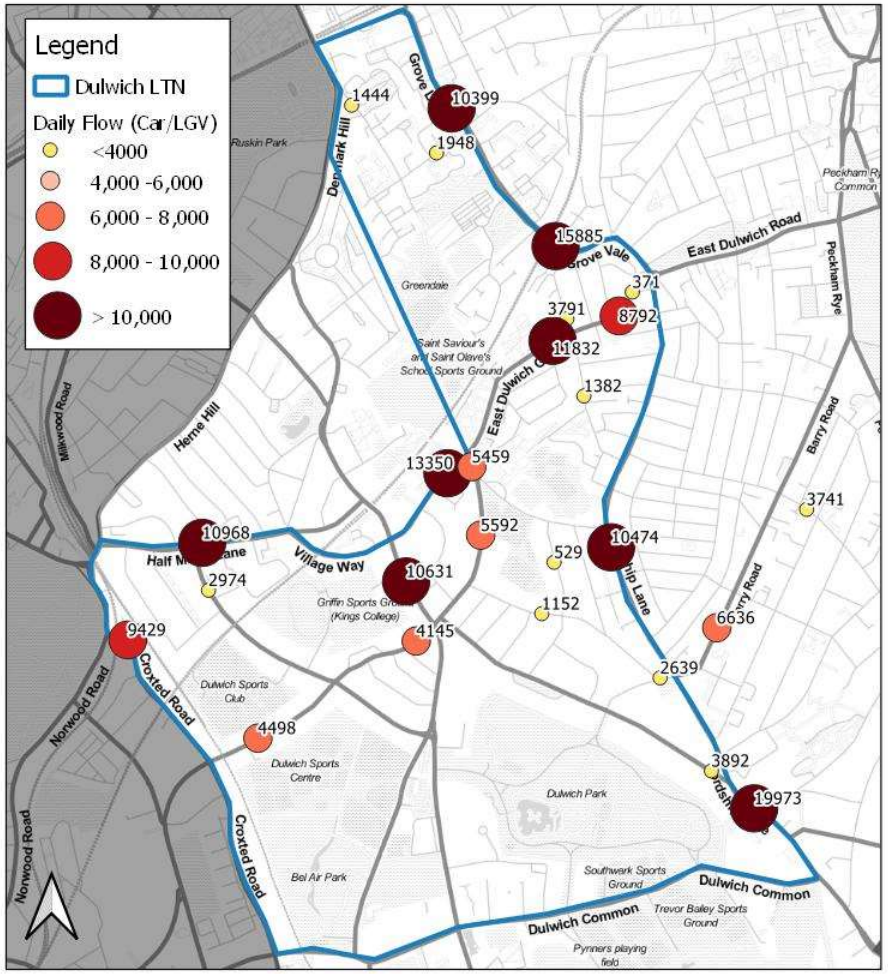
Pre-Implementation Flows

Pre-Implementation Flows

- Pre-implementation flow data was collected across a range of months since late 2017. To provide consistency, all pre-implementation motor vehicle data (including for Burbage Road and Court Lane, where the only data available is from June 2020) has been adjusted to September 2019 levels for a fairer basis of comparison.
- This adjustment has been conducted based on differences in background 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 Dulwich, the adjustment has been made using all counters in Southwark, Lambeth, Lewisham, Wandsworth and Greenwich, excluding Central London.

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 within and surrounding the three schemes.
- The highest flows are recorded on peripheral roads such as Half Moon Lane, Grove Lane, East Dulwich Grove, Lordship Lane and Dulwich Village, all of which carry over 10,000 vehicles per day.
- Vehicle flows are also high (exceeding 4,000 vehicles per day) along Turney Road, Calton Avenue, Croxted Road and Barry Road.
- Smaller residential roads generally record lower vehicular flows (below 3,000 vehicles per day).

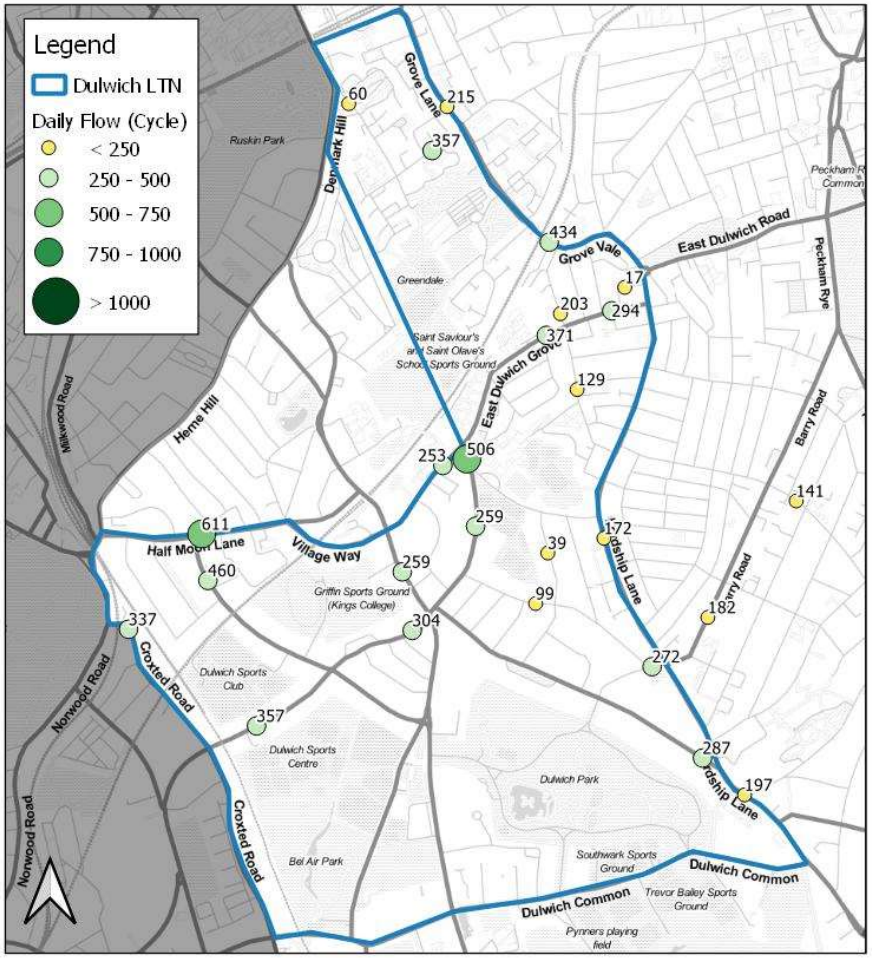


Basemap: Stamen

*Light Goods Vehicle (i.e. delivery vans or similar)

Pre-Implementation Flows – Cycles

- The maps to the right shows the average total daily pre-implementation flows of cycles.
- The highest flows recorded are on Half Moon Lane (611 average cycles per day) and on Townley Road (506 average cycles per day).
- Cycle flows on roads leading to Dulwich Village are between 250 and 350 cycles per day.



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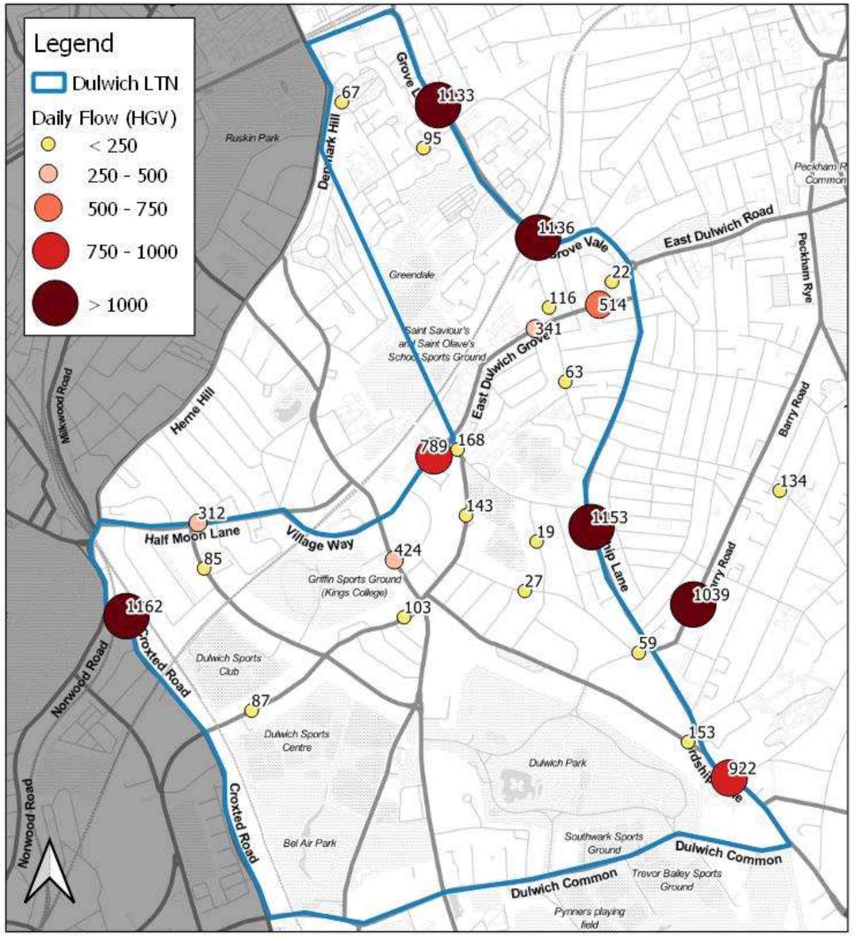
Pre-Implementation Flows – HGV

- The average total daily pre-implementation flows of HGVs are shown in the map to the right.
- HGV flows are high on main roads surrounding the scheme areas, with the highest volumes recorded on Croxted Road (1,162 average vehicles per day), Lordship Lane (1,153 average vehicles per day) and Barry Road (1,039 average vehicles per day).
- Lordship Lane, East Dulwich Grove and Dulwich Village all have flows of at least 400 HGVs per day.
- Flows are lower on internal roads (below 200 vehicles on average) and very low on minor residential roads (below 100 vehicles).



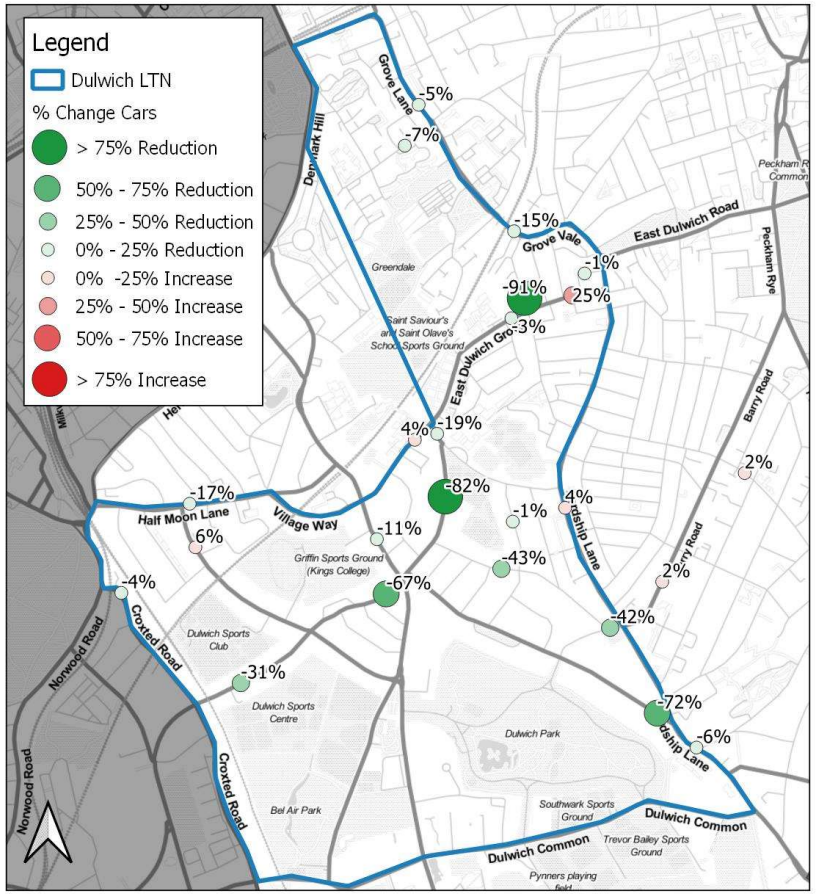
Basemap: Stamen

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 has been collected in September 2021.
- Increases in flows have been observed on East Dulwich Grove and Burbage Road, the largest of these being +25% on East Dulwich Grove near Lordship Lane. These increases are similar to those recorded in June 2021 at the same sites. However the site further west on East Dulwich Grove near the Tessa Jowell Centre, shows a slight decrease.
- The decreases in flows on internal roads remain similar to those recorded in June 2021. Turney Road West and East were previously mis-referenced, an error which has been corrected in this report.
- Lordship Lane near Townley Road has recorded a slight increase (+4%) in flows, whilst further south at Court Lane, it has recorded a slight decrease in flows (-6%), reflecting the same trend recorded in June 2021. Negligible changes are recorded on Barry Road and Underhill Road.
- **Note that overall traffic levels in Southwark were down 7% in September 2021 vs. September 2019.**

Basemap: Stamen



NB. Melbourne Grove South and Champion Hill North ATCs did not collect data in September.

East Dulwich Grove

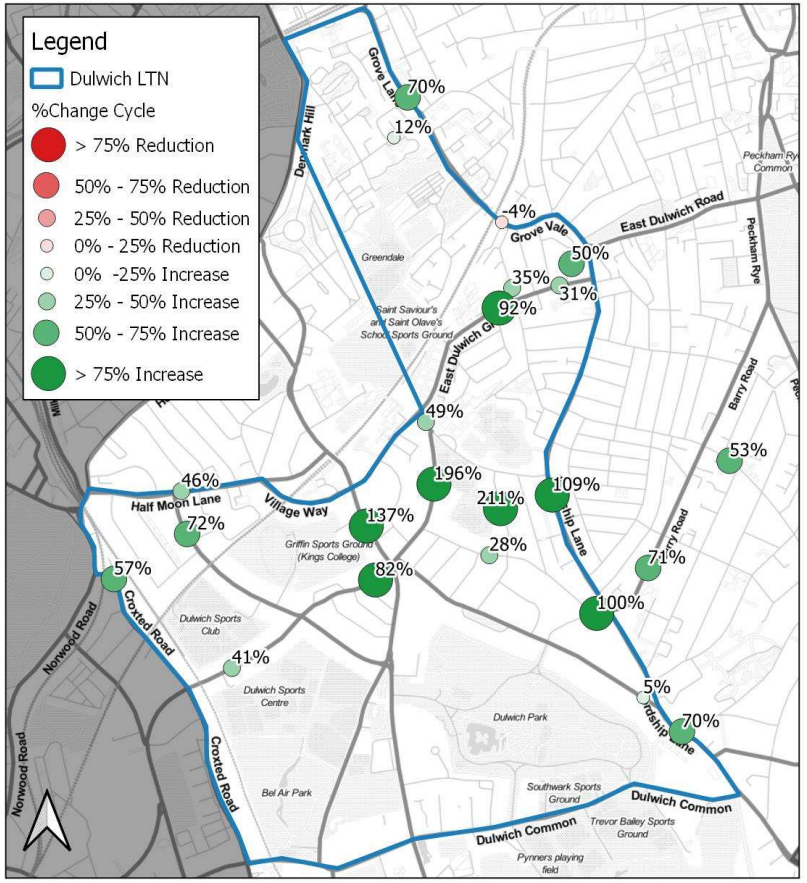
- **East Dulwich Grove is a key external road. Previous reporting covered two ATC sites** on East Dulwich Grove, one at its eastern end near the junction with Lordship Lane, and one towards its western end, between Townley Road and Dulwich Village.
- **A third ATC site has been added since September 2021**, by the Tessa Jowell Health Centre, the results of which have been shown in this report. For this site, **data for a comparable location was collected in both January and September 2019**. In both cases, a single week of data was collected. The average daily motor **vehicles recorded showed a notable difference between the two months**, with around 3,000 more vehicles per day being recorded in September 2019 than January 2019, greater than what would be expected from natural seasonal variation. In contrast, at the eastern ATC near Lordship Lane, where data was also collected in both January and September 2019, the volume of vehicles recorded was much more similar.
- As a result, the choice of pre-scheme data between January and September 2021 will affect the recorded change. To **present the more conservative results with respect to changes in motor traffic volumes, the January 2019 data has been used** in the report. The table below summarises the changes depending on the choice of January or September 2019 for pre-scheme data. **September 2019 offers a direct comparison with the same month, and indicates a notable drop in cars/LGVs (-20%)**, whilst when compared to January 2019 the decrease is smaller (-3%). Comparisons for October 2021 are also shown, with a further decrease in traffic.

Pre-Scheme Data Month	Pre-Scheme Cars/LGVs	Sept 2021 Cars/LGVs	Sept 2021 Change in Cars/LGVs	Sept 2021 % Change in Cars/LGVs	Oct 2021 Cars/LGVs	Oct 2021 Change in Cars/LGVs	Oct 2021 % Change in Cars/LGVs
January 2019	11,832	11,442	-390	**-3%**	10,997	-835	**-7%**
September 2019	14,214	11,442	-2,772	**-20%**	10,997	-3,217	**-23%**

September 2021 Flow Change – Cycles

- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data has been collected in September 2021.
- Most sites have seen an increase in cycling, with the largest being a 211% increase on Dovercourt Road. Other sites around Dulwich Village have also seen large increases in cycle counts, such as on Calton Avenue (+196%) and Dulwich Village (+137%).
- Increases in flows recorded on some external roads are lower than the ones recorded in June 2021, with the exception of Grove Lane (+70%) and Lordship Lane (+109%).

Basemap: Stamen



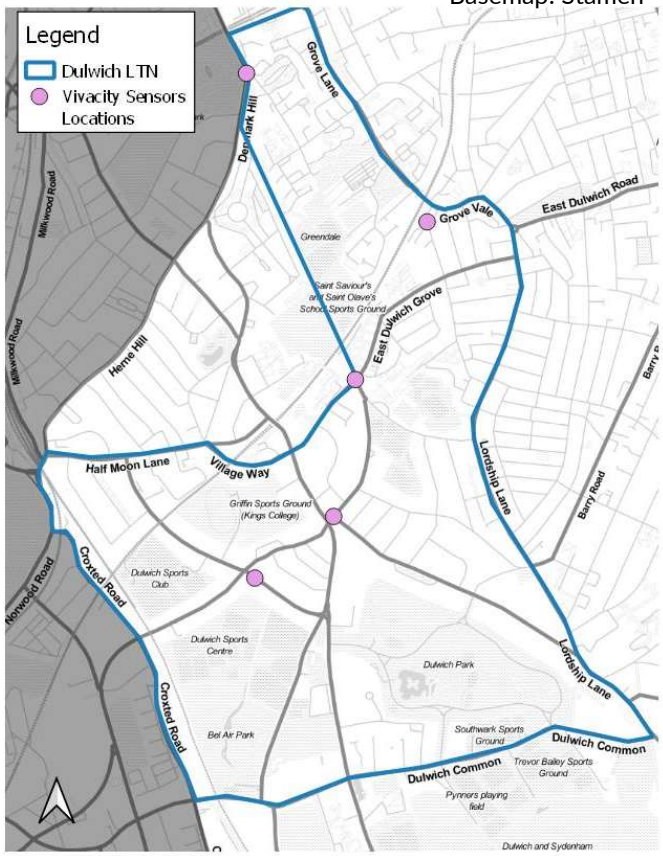
NB. 1. Melbourne Grove South and Champion Hill North ATCs did not collect data in September.
2. East Dulwich Grove South ATC believed not to be accurately counting cyclists.
3. Court Lane East and Burbage Road North, comparison is to June 2020 rather than data collected pre-COVID, and cannot be normalised meaning likely smaller comparative increase.

Vivacity Data Analysis – Cycle Flow Changes

- Vivacity Data is recorded through sensors that are able to recognise and differentiate between road users. LB Southwark has placed Vivacity Sensors in key junctions around the Streetspace schemes since implementation. Where data has been collected at the same location prior to implementation, a comparison has been made.
- Vivacity Data collected in April, June and September 2021 has been compared to counts of the numbers of people cycling made in September or October 2019, either via manual turning counts or an ATC. The results are shown below*.

Site	Sept / Oct 2019	April 2021	Change	June 2021	Change	Sept 2021	Change
Calton Avenue / Dulwich Village	923 (manual count)	2,083	+126%	2,020	+119%	1372	+49%
Townley Road	1,003 (manual count)	1,488	+48%	1,505	+50%	1684	+68%
Champion Hill North	41 (ATC)	161	+292%	142	+247%	148	+261%
Burbage Road	352 (ATC)	857	+143%	813	+131%	712	+102%
Melbourne Grove	155 (ATC)	300	+94%	318	+105%	302	+95%

Basemap: Stamen

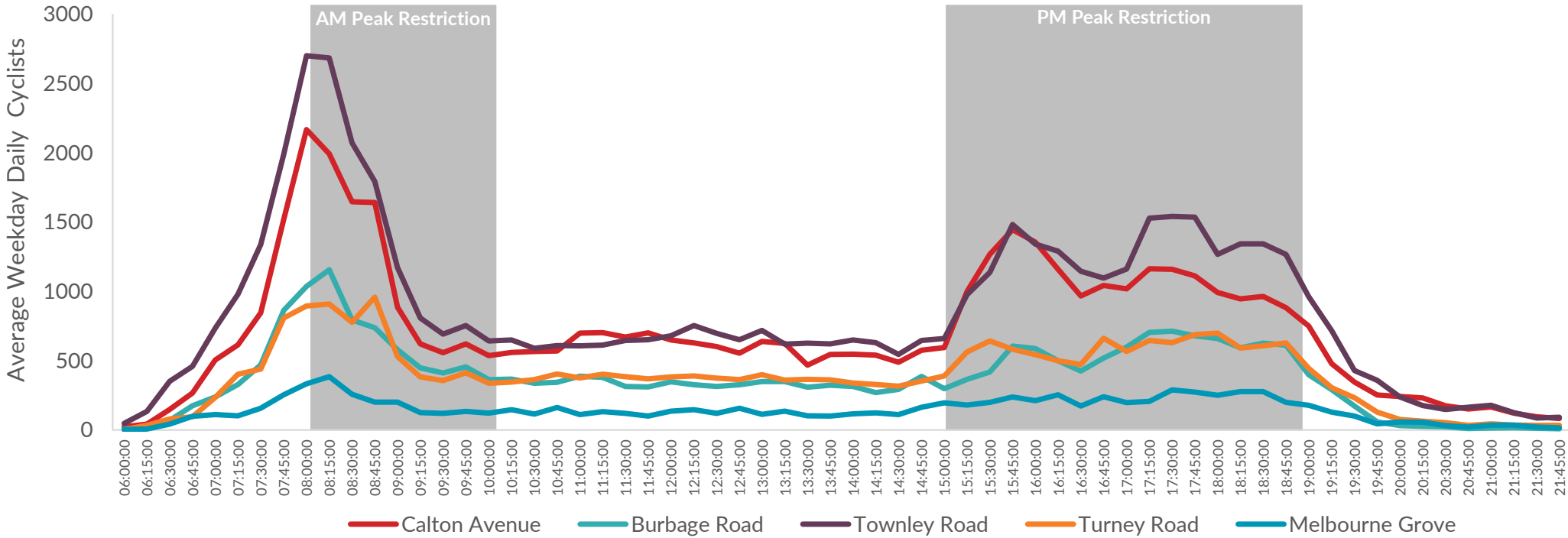


- All sites have shown increases in the number of people counted cycling between pre- and post-implementation of the Streetspace schemes. These increases are beyond what may have been expected as a result of seasonality or COVID-19 alone.

*Average total number of cycles recorded 7AM – 7PM, School Term Time Weeks Compared Only

Vivacity Data Analysis – Cycle Flow Profiles

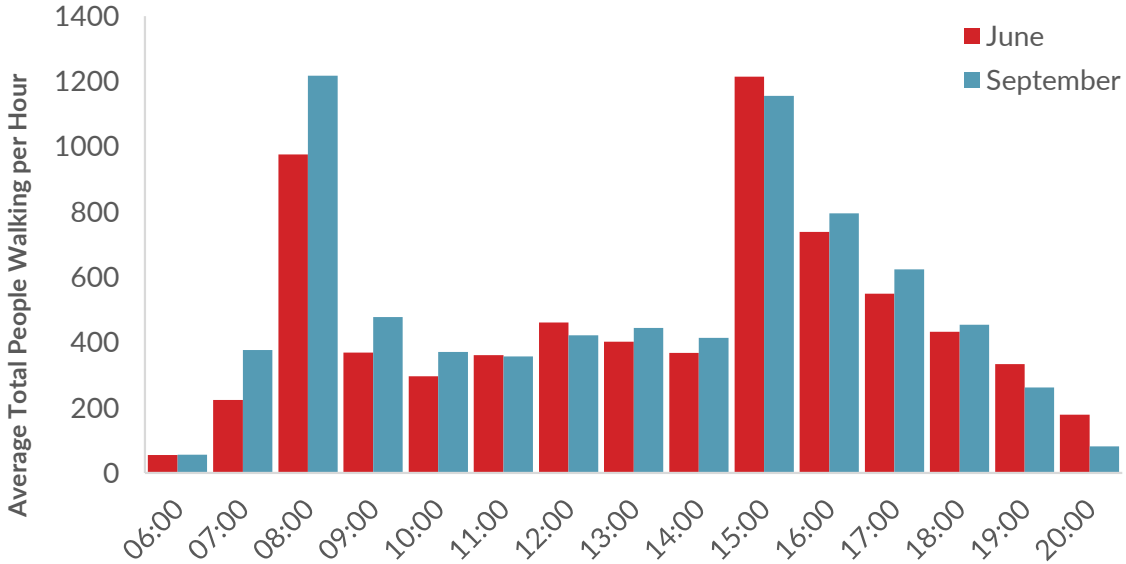
- The time profile for cycling flows at Calton Avenue, Turney Road, Burbage Road, Melbourne Grove and Townley Road are shown in the chart below.

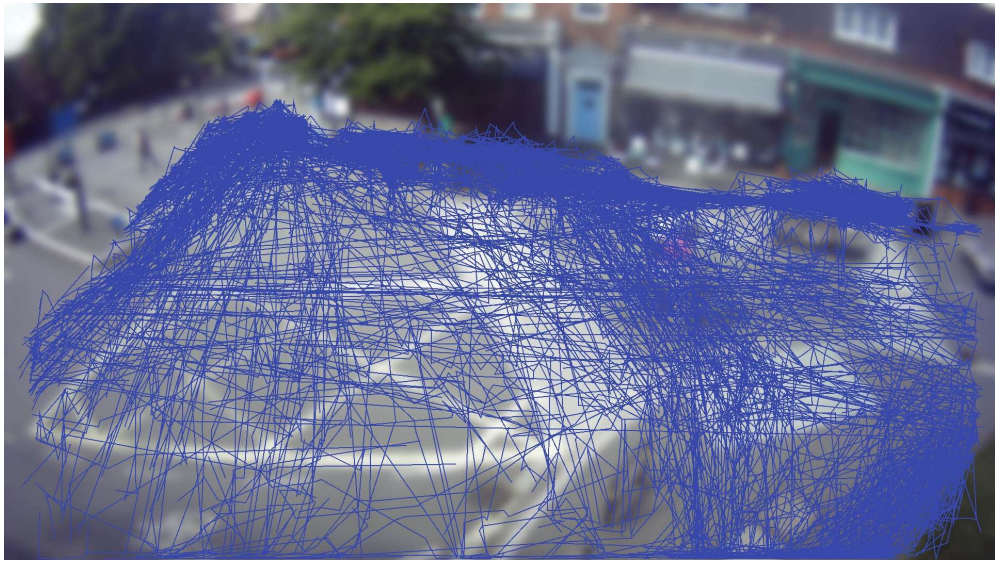


- The morning peak of people cycling is shorter, and starts from before the timed restrictions, but ends soon after 9AM. The afternoon peak is extended, starting from just after 3PM and covering the whole of the period of restrictions.

Pedestrian Volumes – Calton Avenue

- Vivacity Data can also be used to count the number of people walking, and track the paths taken. The chart below shows an estimate of the volume of people walking through the north side of the Calton Avenue / Dulwich Village Junction on an average weekday in 2021. The image to the right shows the routes taken for a sample peak hour, with each line representing the movement of one person.

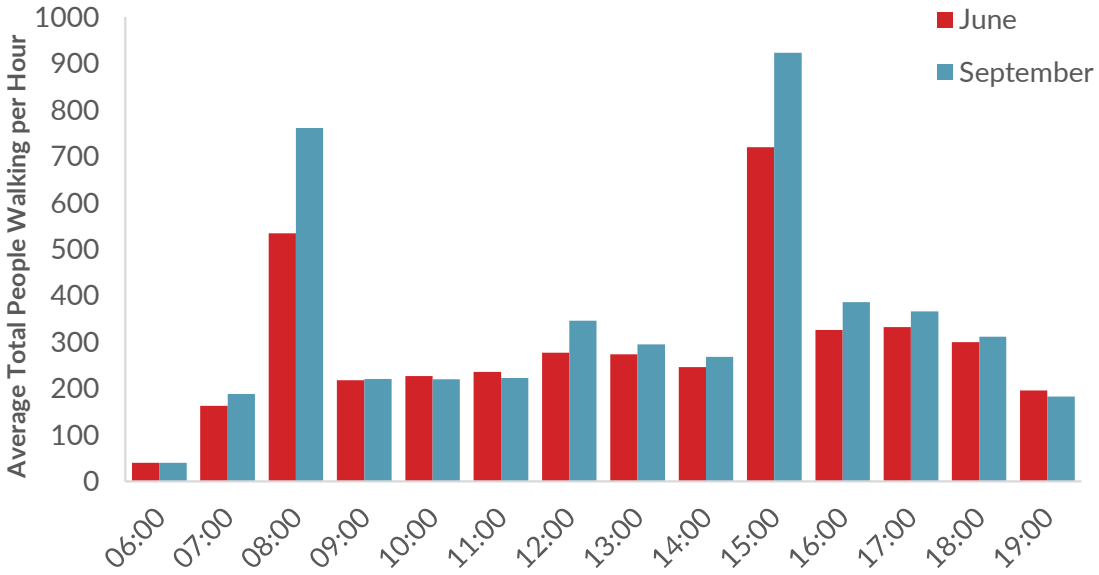


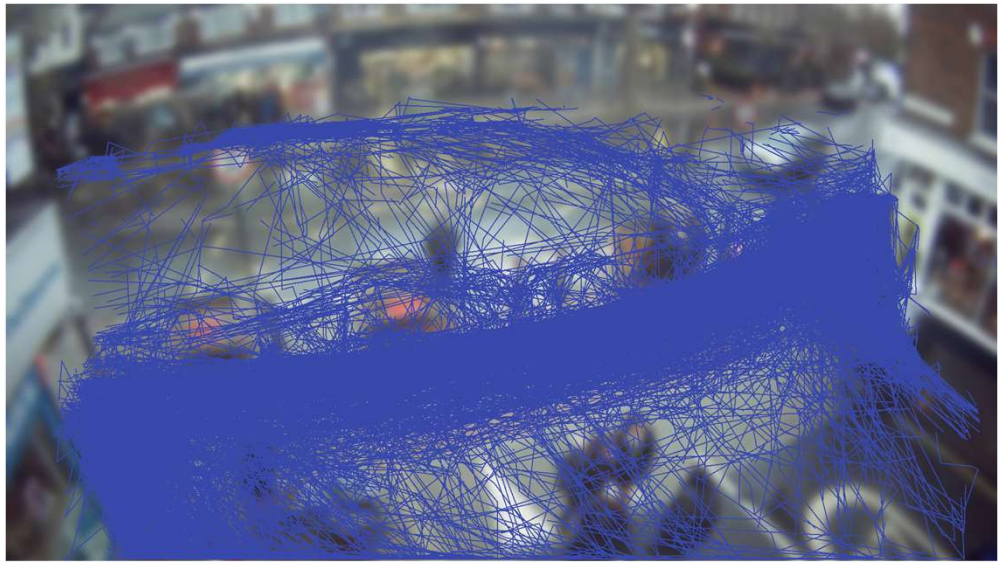


- In the busiest hour over 1,000 people walk through the junction, using the full extent of the space.
- Peak times align with school opening and closing, being 8 - 9AM and 3-4PM.
- Pedestrian volumes have increased slightly in nearly all time periods in September compared to June 2021, with a total increase across the day of 7% or 470 people.

Pedestrian Volumes – Melbourne Grove North

- The chart below shows an estimate of the volume of people walking along Melbourne Grove North on an average weekday in 2021. The image to the right shows the routes taken for a sample peak hour, with each line representing the movement of one person.



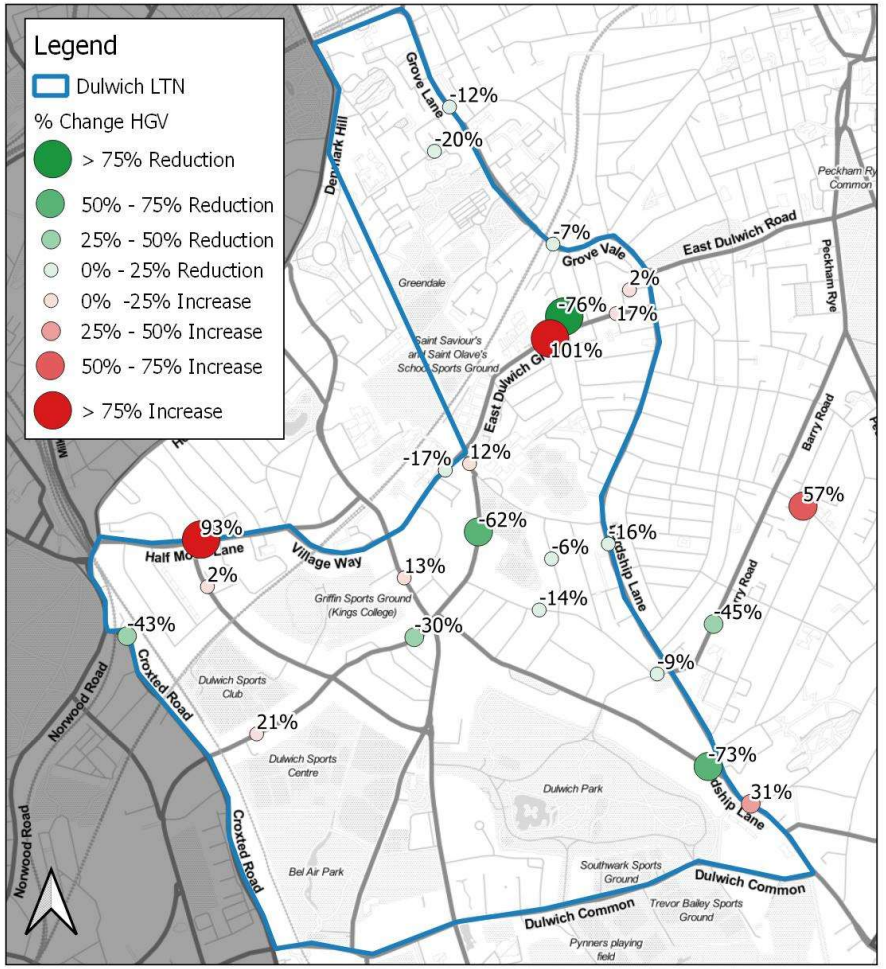


- In the busiest hour over 900 people walk along Melbourne Grove, utilising the relatively traffic-free carriageway
- Peak times align with school opening and closing, being 8-9AM and 3-4PM.
- Pedestrian volumes have increased slightly in nearly all time periods in September compared to June 2021, with a total increase across the day of 13% or 560 people.

September 2021 Flow Change– HGV

- The map to the right outlines changes in counts of HGVs compared to pre-implementation, at sites where data has been collected in September 2021.
- HGV flows have increased at some sites, with the largest increases recorded at East Dulwich Grove near the Tessa Jowell Centre (+101%), possibly related to construction traffic, and on Half Moon Lane (+93%), which is higher than the increase recorded in June (+85%). Other increases over 20% have been recorded on Lordship Lane South (+31%), and Turney Road West (+21%).
- Flows in Grove Vale and Grove Lane have decreased (-7% and -12% respectively), while an increase had been recorded in June. HGVs were down on Barry Road (-45%), but up on Underhill Road (+49%).
- **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-COVID levels[1].**

Basemap: Stamen



NB. Melbourne Grove South and Champion Hill North ATCs did not collect data in September.

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

Further Count Sites

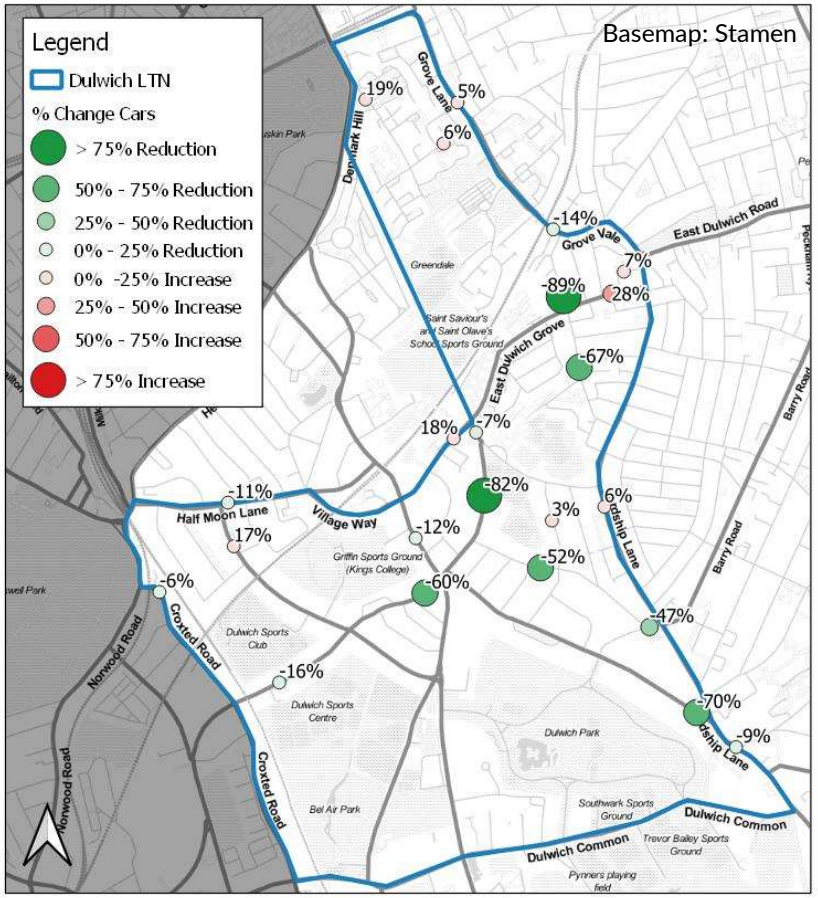
- Whilst not directly within the scheme areas, data has also been collected on streets east of Lordship Lane between Dulwich and Peckham. This data has not been included in the overall totals shown in the Executive Summary.
- The changes in total numbers of **motor vehicles** on Barry Road and Underhill Road from data recorded prior to implementation, and pre-COVID with data collected in June and September 2021 is shown in the table below.
- It can be seen that on average in September 2021 on Barry Road traffic was down compared to before the Streetspace scheme, but on Underhill Road was up slightly.

Location	Pre-Implementation Daily Flow	Daily Flow June 2021	Change in Daily Flow Pre-Implementation to June 2021	% Change in Daily Flow Pre-Implementation to June 2021	Daily Flow Sept 2021	Change in Daily Flow Pre-Implementation to Sept 2021	% Change in Daily Flow Pre-Implementation to Sept 2021
Barry Road	7,813	6,963	-850	-11%	7,582	-231	-3%
Underhill Road	4,039	4,141	+102	+3%	4,288	249	6%

Post-Implementation Monitoring Round 4/June 2021

June 2021 Flow Change – Cars/LGVs

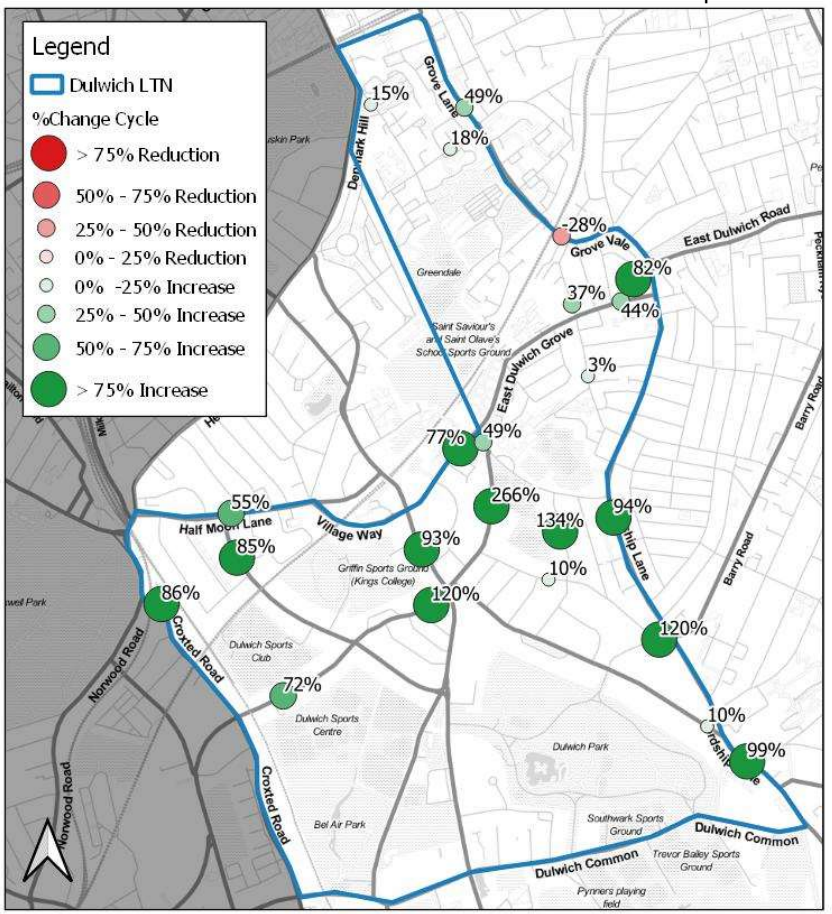
- The map to the right outlines changes in counts of cars and LGVs (combined) compared to pre-implementation, at sites where data has been collected in June 2021.
- Increases in flows have been observed on East Dulwich Grove, Burbage Road, Zenoria Street and Dovercourt Road, the largest of these being +28% on East Dulwich Grove. These increases are similar to those recorded in April 2021 at the same sites.
- The decreases in flows on internal roads remain similar to the those recorded in April 2021.
- Lordship Lane near Townley Road has recorded a slight increase (+6%) in flows, whilst further south at Court Lane, it has recorded a slight decrease in flows (-9%).
- **Note that overall traffic levels in Southwark were down 8% in June 2021 vs. June 2019.**



June 2021 Flow Change – Cycles

- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data has been collected in June 2021.
- Most sites have seen an increase in cycling, with the largest being a 266% increase on Calton Avenue. Other sites around Dulwich Village have also seen large increases in cycle counts, such as on Dovercourt Road (+134%) and Eynella Road (+120%).
- A higher increase in flows compared to April 2021 has also been recorded on some external roads, such as on Lordship Lane South (+99%) and East Dulwich Grove West (+77%).
- A 28% decrease in cycle flows has been recorded on Grove Vale, while flows had increased in April 2021 on this site.

Basemap: Stamen

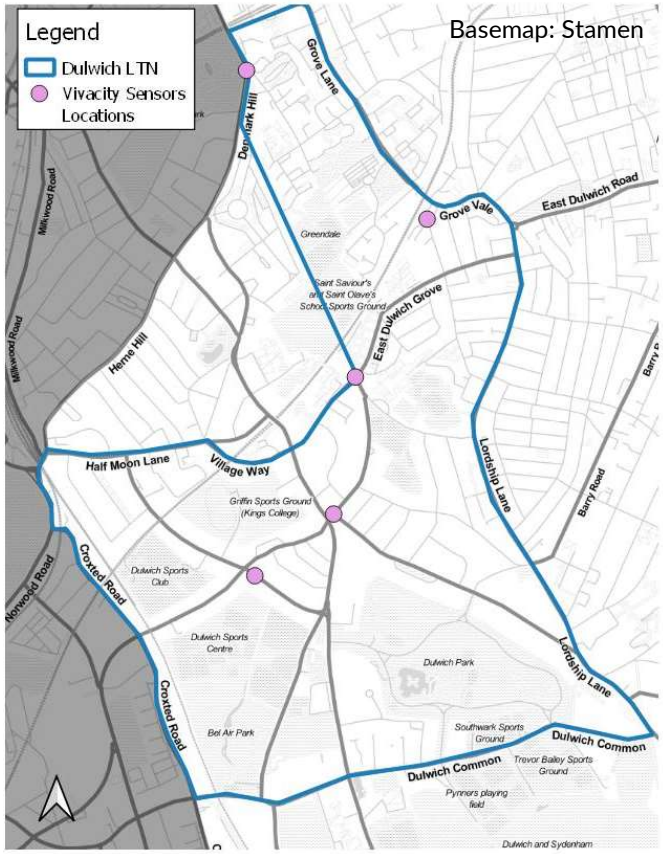


NB. Court Lane East and Burbage Road North, comparison is to June 2020 rather than data collected pre-COVID, meaning likely smaller comparative increase.

Vivacity Data Analysis – Cycle Flow Changes

- Vivacity Data is recorded through sensors that are able to recognise and differentiate between road users. LB Southwark has placed Vivacity Sensors in key junctions around the Streetspace schemes since implementation. Where data has been collected at the same location prior to implementation, a comparison has been made.
- Vivacity Data collected in March, April and June 2021 has been compared to counts of the numbers of people cycling made in September or October 2019, either via manual turning counts or an ATC. The results are shown below*.

Site	Sept / Oct 2019	March 2021	Change	April 2021	Change	June 2021	Change
Calton Avenue / Dulwich Village	923 (manual count)	2,146	+133%	2,083	+126%	2,020	+119%
Townley Road	1,003 (manual count)	1,367	+36%	1,488	+48%	1,505	+50%
Champion Hill North	41 (ATC)	139	+239%	161	+292%	142	+247%
Burbage Road	352 (ATC)	855	+129%	857	+143%	813	+131%
Melbourne Grove	155 (ATC)	243	+57%	300	+94%	318	+105%

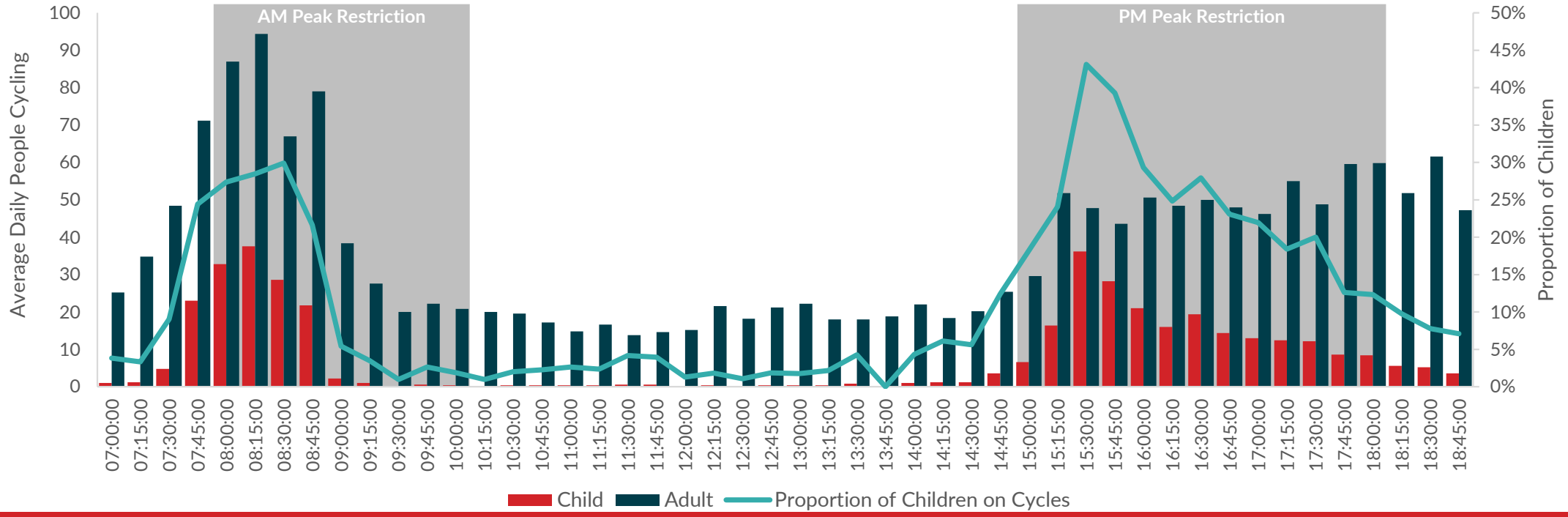


- All sites have shown increases in the number of people counted cycling between pre- and post-implementation of the Streetspace schemes. These increases are beyond what may have been expected as a result of seasonality or COVID-19 alone.

*Average total number of cycles recorded 7AM – 7PM, School Term Time Weeks Compared Only

Profile of People Cycling

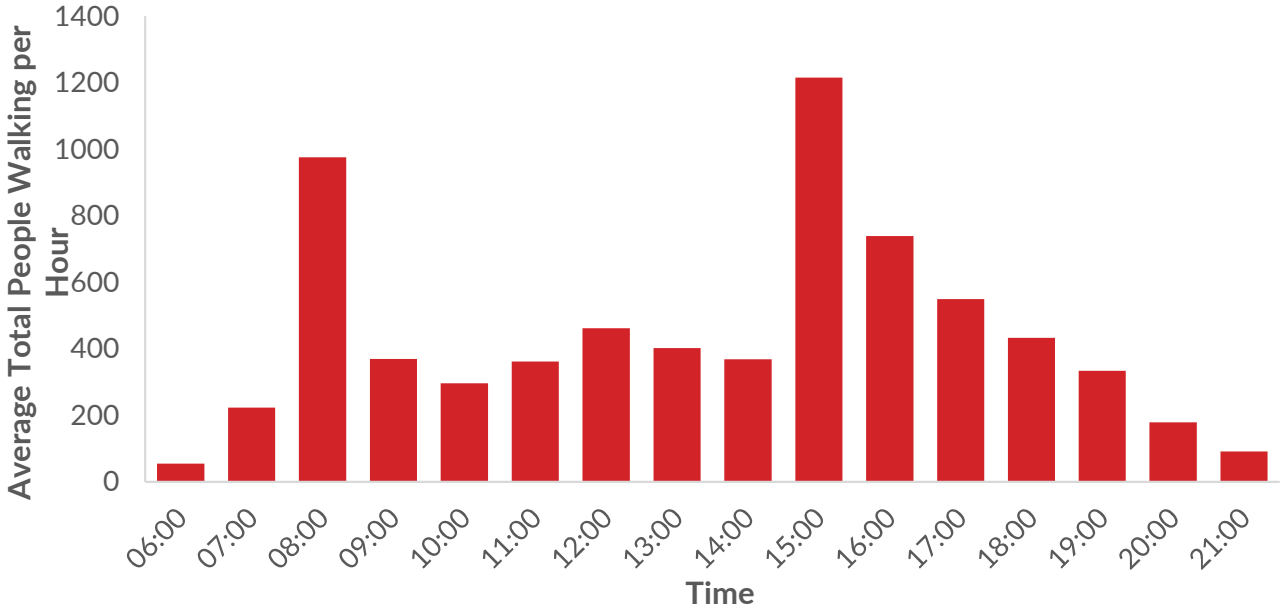
- The chart below shows a breakdown of cyclists by age at the junction of Calton Avenue and Dulwich Village.
- Children make up over 20% of people cycling between 07:45 – 08:45 and 15:15 – 17:45. At peak children exceed 40% of those cycling, compared to 7% on average in London during peak hours[1].
- Data from the weekend shows children making up 15% of all people cycling during the day.

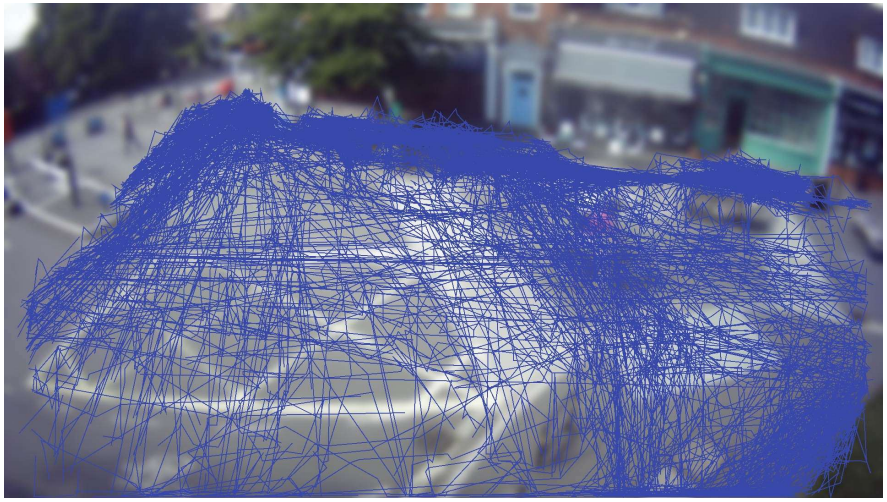


[1]Based on analysis of National Travel Survey data for London for the years 2017-2019. Data available from https://beta.ukdataservice.ac.uk/datacatalogue/studies/study?id=5340

Vivacity Data Analysis – Pedestrian Volumes

- Vivacity Data can also be used to count the number of people walking, and track the paths taken. The chart below shows an estimate of the volume of people walking through the north side of the Calton Avenue / Dulwich Village Junction on an average weekday in 2021. The image to the right shows the routes taken for a sample peak hour, with each line representing the movement of one person.



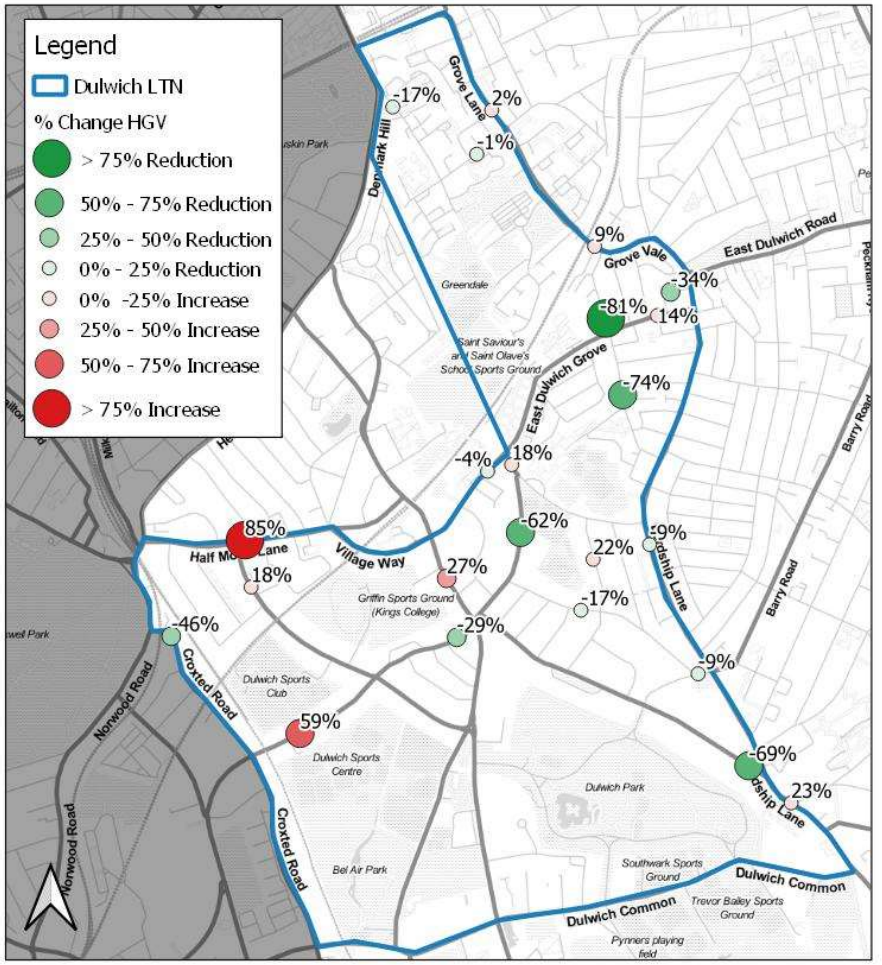


- In the busiest hour over 1,000 people walk through the junction, using the full extent of the space.
- Peak times align with school opening and closing, being 8 - 9AM and 3-4PM.

June 2021 Flow Change– HGV

- The map to the right outlines changes in counts of HGVs compared to pre-implementation, at sites where data has been collected in June 2021.
- HGV flows have increased at some sites, with the largest increases recorded on Half Moon Lane (+85%), which is higher than the increase recorded in April (+39%). Other increases are similar or higher than those recorded in April 2021 at the same sites.
- A slight increase in flows has been recorded on Grove Vale (+9%) and Grove Lane (+2%), while on the same sites there had been a decrease of -23% and -28% respectively in April 2021.
- **It should be noted, that on a national basis, whilst car traffic was at 91% of pre-COVID levels in June 2021, HGV traffic exceeded pre-COVID volumes[1].**

Basemap: Stamen



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

Further Count Sites

- A check has also been performed on streets east of Lordship Lane between Dulwich and Peckham. The changes in total numbers of **motor vehicles** on Barry Road and Underhill Road from data recorded prior to implementation, and pre-COVID with data collected in June 2021 is shown in the table below.
- It can be seen that on average in June 2021 on Barry Road traffic was down compared to before the Streetspace scheme, but on Underhill Road was up slightly.

Location	Pre-Implementation Daily Flow	Post-Implementation Daily Flow	Actual Change in Daily Flow	% Change in Daily Flow
Barry Road	7,813	6,963	-850	-11%
Underhill Road	4,039	4,141	+102	+3%

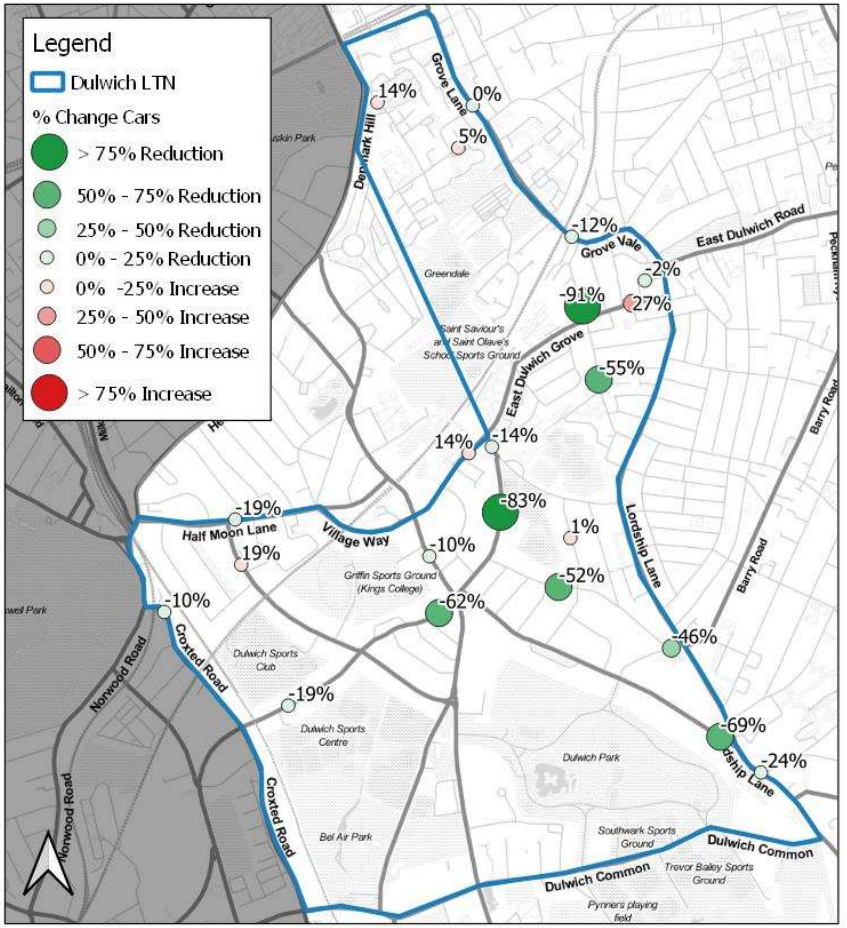
Post-Implementation Monitoring Round 3/April 2021

April 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 has been collected in April 2021.
- Increases in flows have been observed on East Dulwich Grove, Burbage Road, Zenoria Street and Dovercourt Road, the largest of these being +27% on East Dulwich Grove (East). These increases are higher than those recorded in March 2020 at the same sites.
- The decreases in flows on internal roads remain similar to the those recorded in March 2021.
- Lordship Lane has recorded a higher decrease in flows than in March 2021 (-24% compared to -16% in March).

- **Note that overall traffic levels in Southwark were down 12% in April 2021 vs. April 2019.**

Basemap: Stamen

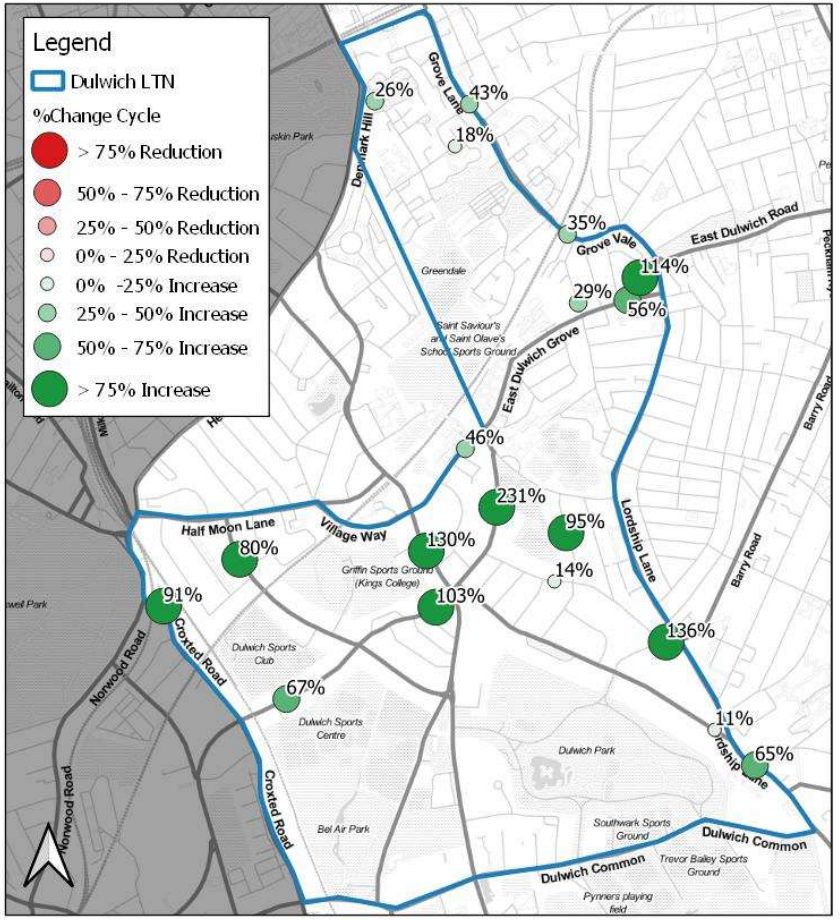


NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to previous counts.

April 2021 Flow Change – Cycles

- The map to the right outlines changes in cycles counted compared to pre-implementation, at sites where data has been collected in April 2021.
- Most sites have seen an increase in cycling, with the largest being a 231% increase on Calton Avenue. Other sites around Dulwich Village have also seen large increases in cycle counts, such as on Eynella Road (+136%) and Dulwich Village (+130%).
- A higher increase in flows compared to March 2021 has also been recorded on external roads, such as on Croxted Road (+91%), Grove Lane (+43%) and Grove Vale (+35%).

Basemap: Stamen

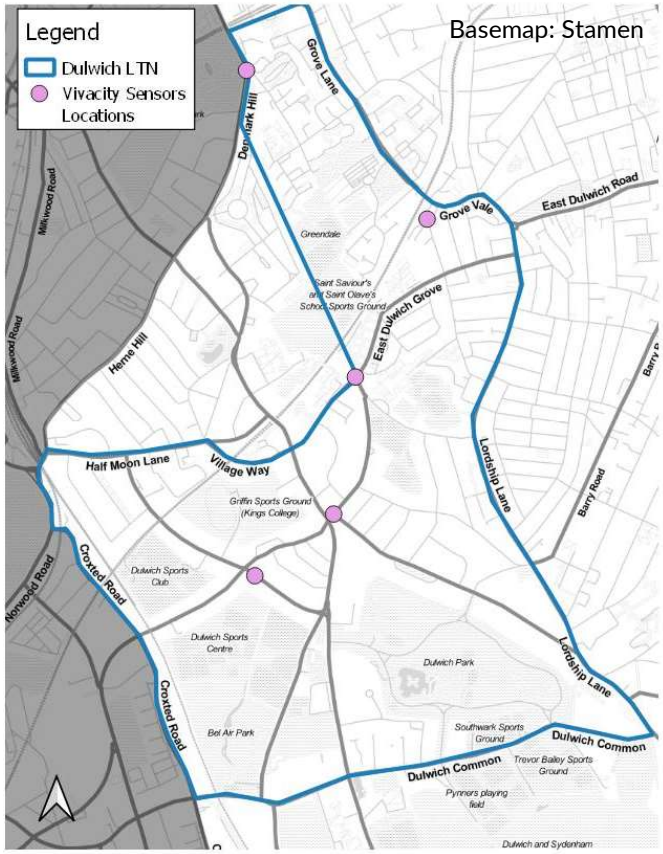


NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to September 2019 and 2020 counts. These are likely to have affected cycle counts more so than motor vehicles, the former are therefore not shown. Court Lane East and Burbage Road North, comparison is to June 2020 rather than data collected pre-COVID, meaning likely smaller comparative increase.

*Some sites excluded due to ATC appearing to have lost some or all cycle data

Vivacity Data Analysis – Cycle Flows

- Vivacity Data is recorded through sensors that are able to recognise and differentiate between road users. LB Southwark has placed Vivacity Sensors in key junctions around the Streetspace schemes since implementation. Where data has been collected at the same location prior to implementation, a comparison has been made.
- Vivacity Data collected in March and April 2021 has been compared to counts of the numbers of people cycling made in September 2019, either via manual counts or an ATC. The results are shown below*.



Site	September 2019	March 2021	Change	April 2021	Change
Calton Avenue / Dulwich Village	923	2,146	+133%	2,083	+126%
Townley Road	1,003	1,367	+36%	1,488	+48%
Champion Hill	41	139	+239%	161	+292%
Burbage Road	460	855	+86%	857	+86%
Melbourne Grove	178	243	+37%	300	+69%

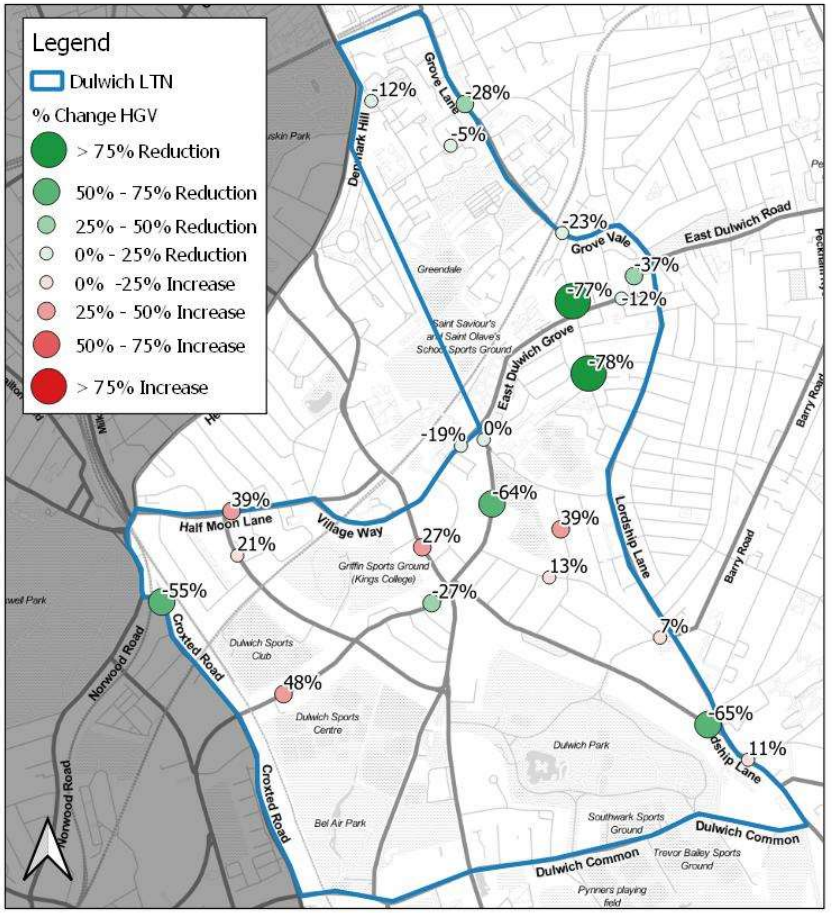
- All sites have shown increases in the number of people counted cycling between pre- and post-implementation of the Streetspace schemes. These increases are beyond what may have been expected as a result of seasonality or COVID-19 alone.

*Average total number of cycles recorded 7AM – 7PM, School Term Time Weeks Compared Only

April 2021 Flow Change– HGV

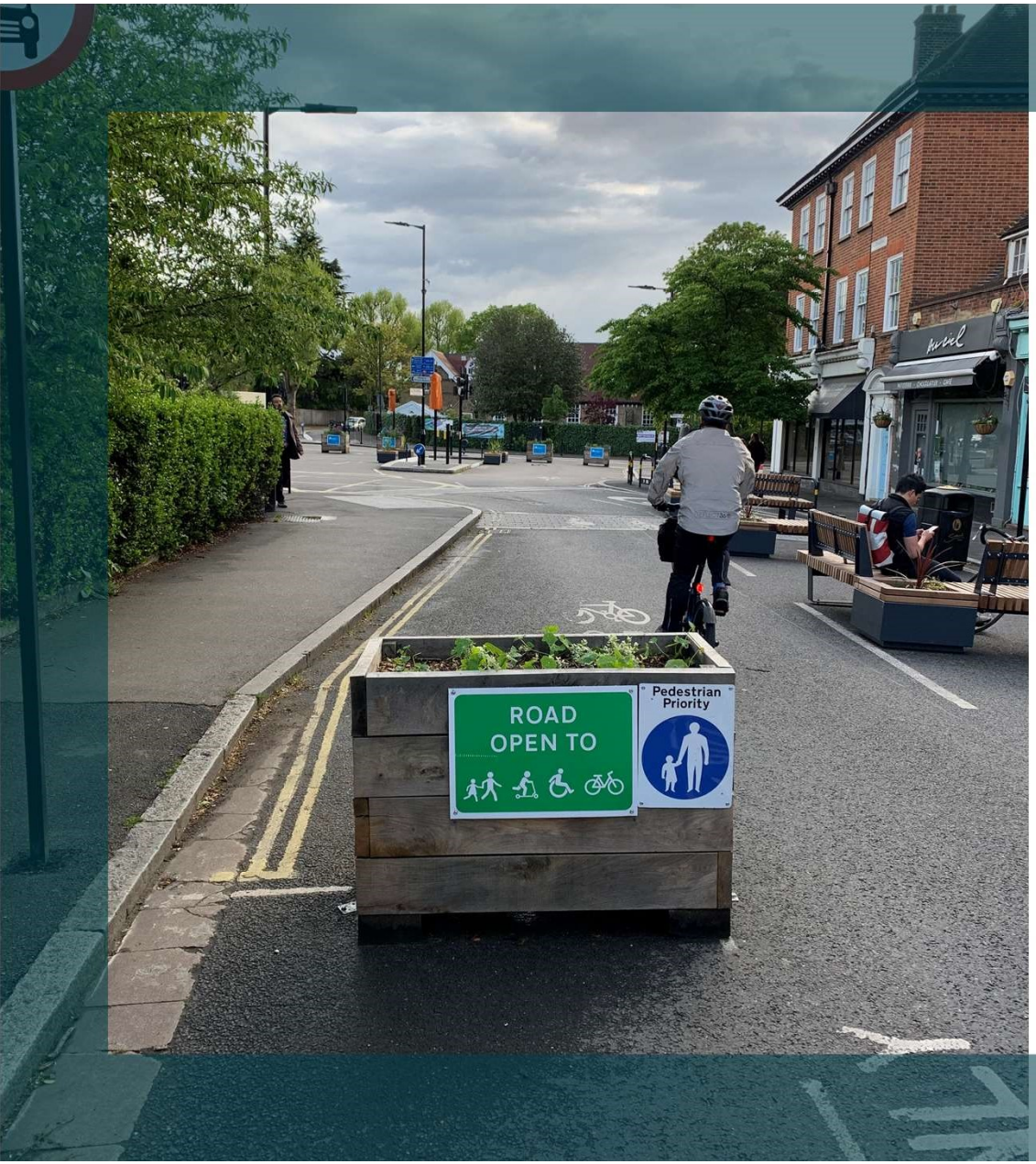
- The map to the right outlines changes in counts of HGVs compared to pre-implementation, at sites where data has been collected in April 2021.
- HGV flows have increased at many sites, with the largest increases recorded on Townley Road West (+48%), Half Moon Lane and Dovercourt Road (both +39%). These increases are equal or lower than those recorded in March 2021 at the same sites.
- Some external roads where flows had increased in March 2021 recorded a decrease in flows, such as Grove Vale (-23%) and East Dulwich Grove South (-19%)
- **It should be noted, that on a national basis, whilst car traffic was at 84% of pre-COVID levels in April 2021, HGV traffic was exceeding pre-COVID volumes[1].**

Basemap: Stamen



NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to previous counts.

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



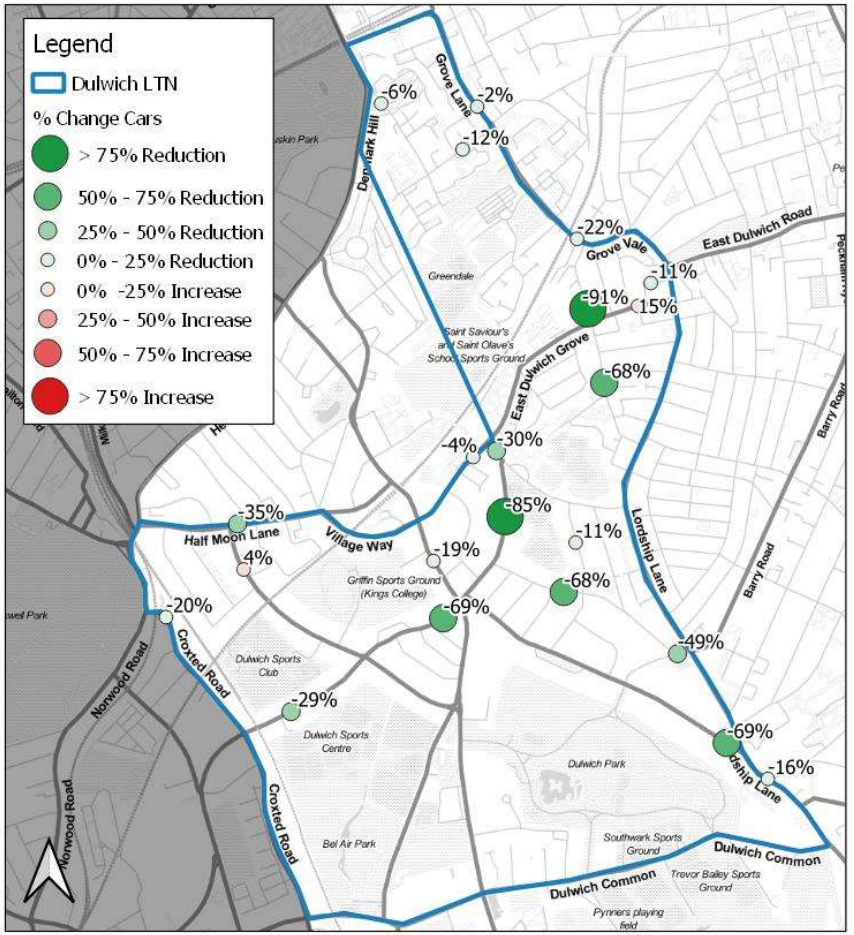
Post-Implementation Monitoring Round 2/March 2021

March 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 has been collected in March 2021. This is after the implementation of the Dulwich Village timed restrictions.
- Flows have decreased at nearly all sites where restrictions were in place, with the largest reductions on Calton Avenue (-85%) and Melbourne Grove North (-91%).
- Increases in flows have been observed on Burbage Road (+4%) and East Dulwich Grove East (+15%). These increases are lower than those recorded in September 2020 at the same sites.

- **Note that overall traffic levels in Southwark were down 12% in March 2021 vs. April 2019.**

Basemap: Stamen

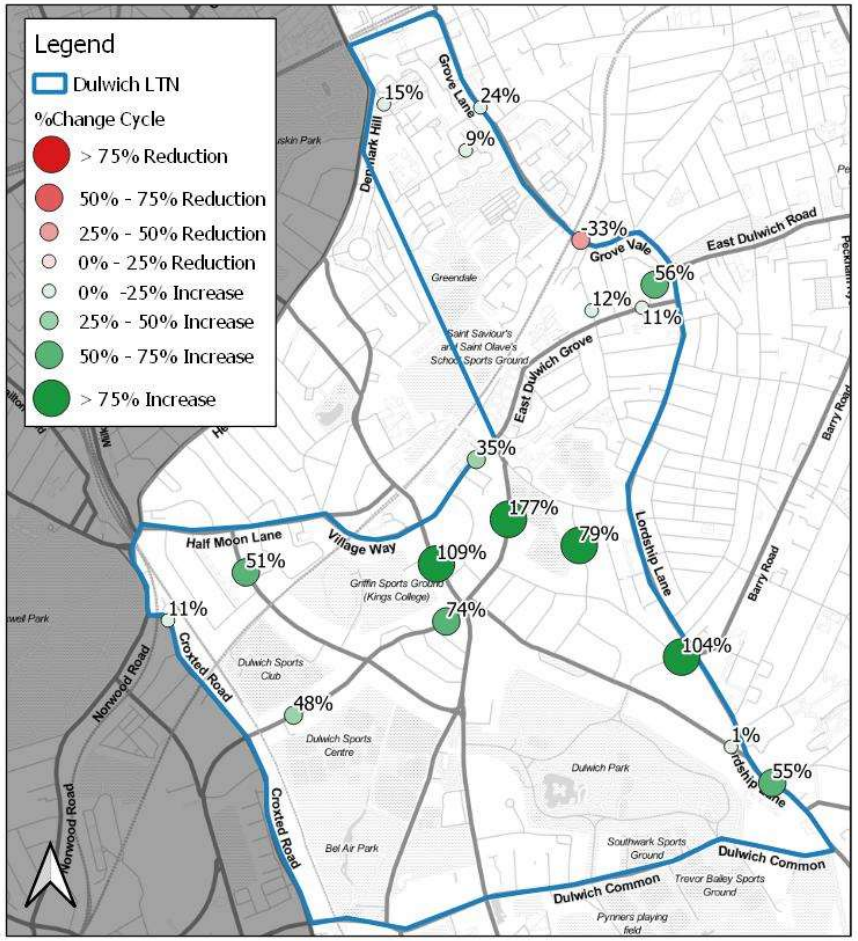


NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to September 2019 and 2020 counts.

March 2021 Flow Change – Cycles

- The map to the right outlines changes in counts of cycles compared to pre-implementation at sites where data has been collected in March 2021. This is after the implementation of the Dulwich Village timed restrictions.
- Most sites have seen an increase in cycling, with the largest being a +177% increase on Calton Avenue. Other sites around Dulwich Village have also seen large increases in cycle counts, namely Eynella Road (+104%) and Dulwich Village (+109%).
- Increases in cycle numbers are generally lower around Champion Hill and on external roads such as East Dulwich Grove and Croxted Road.
- It should be noted that, nationally, cycle numbers in March 2021 had reverted to close to pre-COVID levels.

Basemap: Stamen



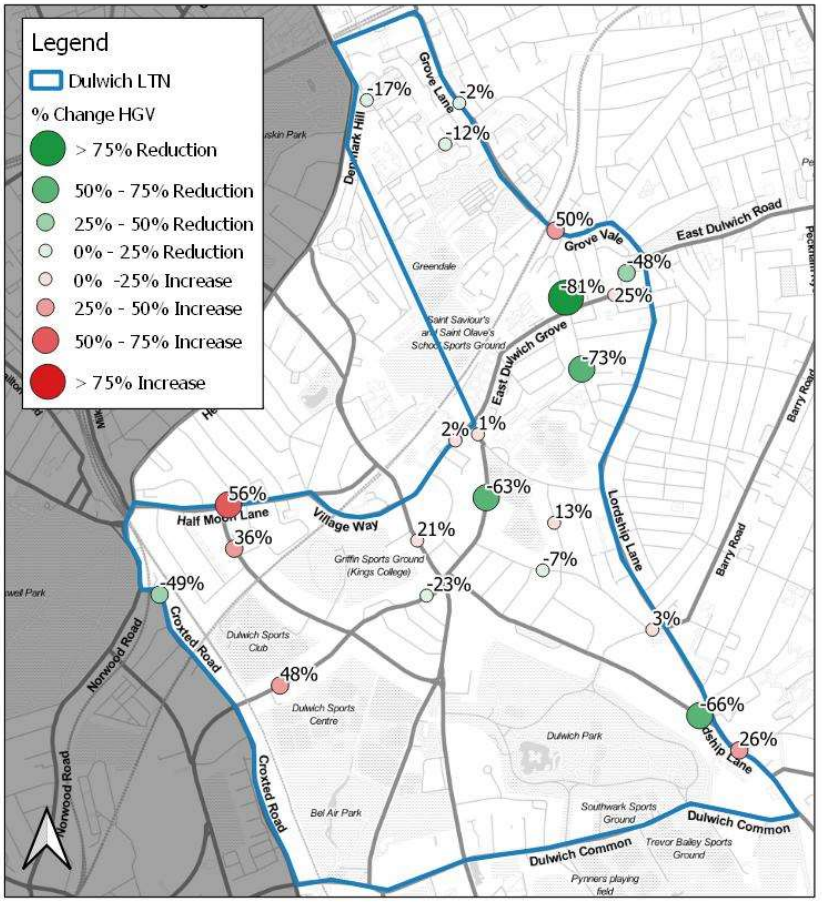
NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to September 2019 and 2020 counts. These are likely to have affected cycle counts more so than motor vehicles, the former are therefore not shown. Court Lane East and Burbage Road North, comparison is to June 2020 rather than data collected pre-COVID, likely explaining smaller comparative increase.

*Some sites excluded due to ATC appearing to have lost some or all cycle data

March 2021 Flow Change– HGV

- The map to the right outlines changes in counts of HGVs compared to pre-implementation at sites where data has been collected in March 2021. This is after the implementation of the Dulwich Village timed restrictions.
- HGV flows have increased at many sites, with the largest increases recorded on Half Moon Lane (+56%) and Grove Vale (+50%). Increases have also been observed on Burbage Road, Dulwich Village and Turney Road.
- Melbourne Grove, Court Lane and Calton Avenue have all seen decreases in flows.
- **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 volumes[1].**

Basemap: Stamen



NB. Position of ATC at Melbourne Grove South and Townley Road moved compared to September 2019 and 2020 counts.

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

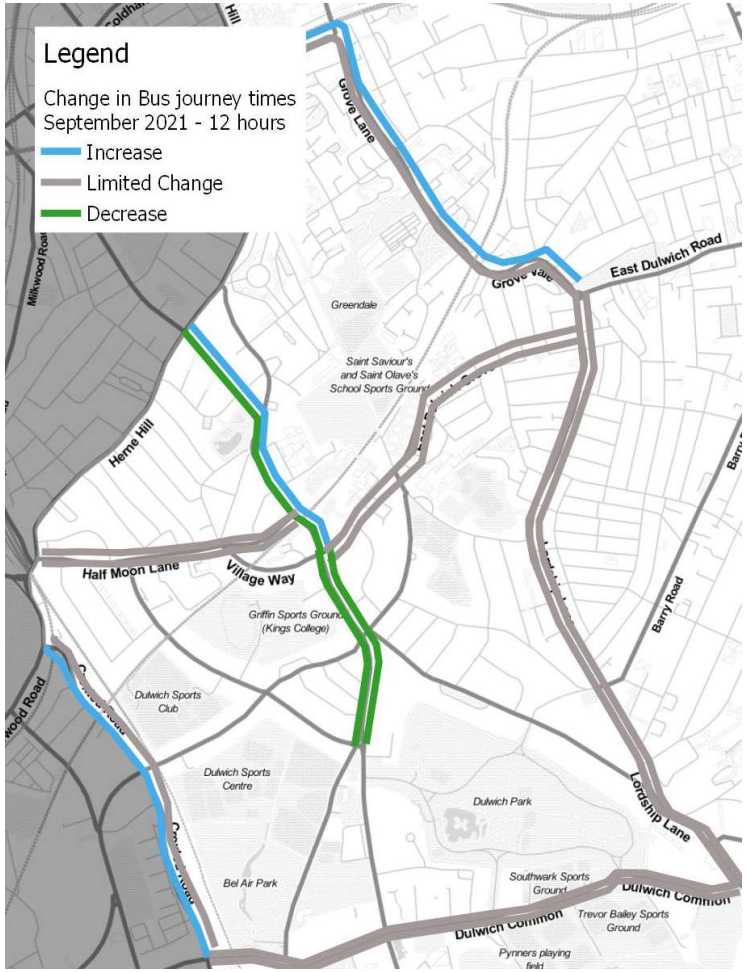
Bus Journey Time Monitoring

Bus Journey Times, Context

- TfL continuously monitors bus journey times. Analysis of this data has been completed, considering the average bus journey speeds, excluding time taken to pick up and drop off passengers.
- 2021 journey times have been compared to the average journey time in the 12 months prior to March 2020 for each bus corridor around or through Dulwich. The average speed for all routes, combined on each corridor, has been assessed.
- The maps on the following slides illustrate 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, as well as the AM Peak (7-10AM) and PM Peak (4PM-7PM).
- These maps show the averages for each of the months for which traffic data has been collected. Continuous data showing weekly journey times from March 2020 to date can be found in Appendix C.

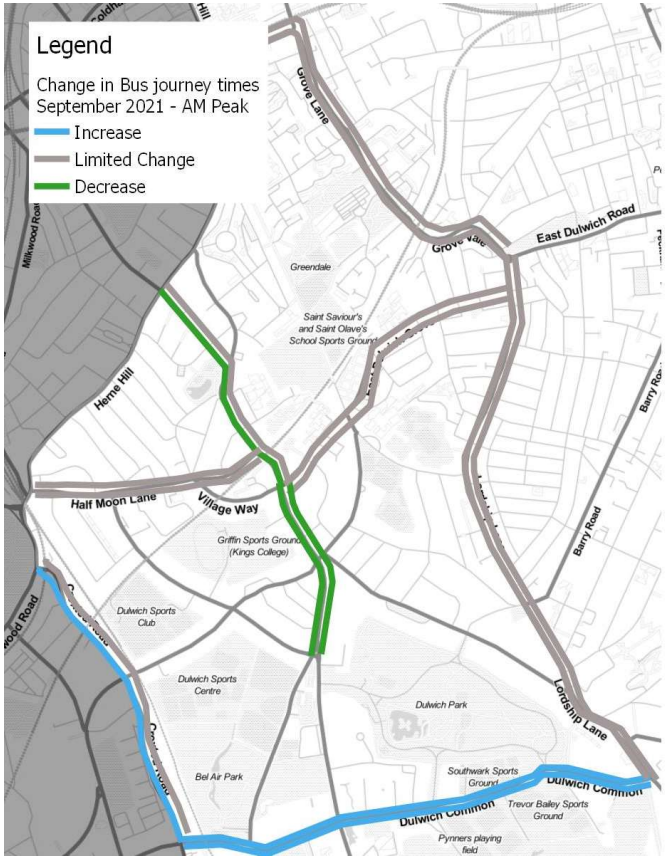
Bus Journey Time Analysis – September 2021

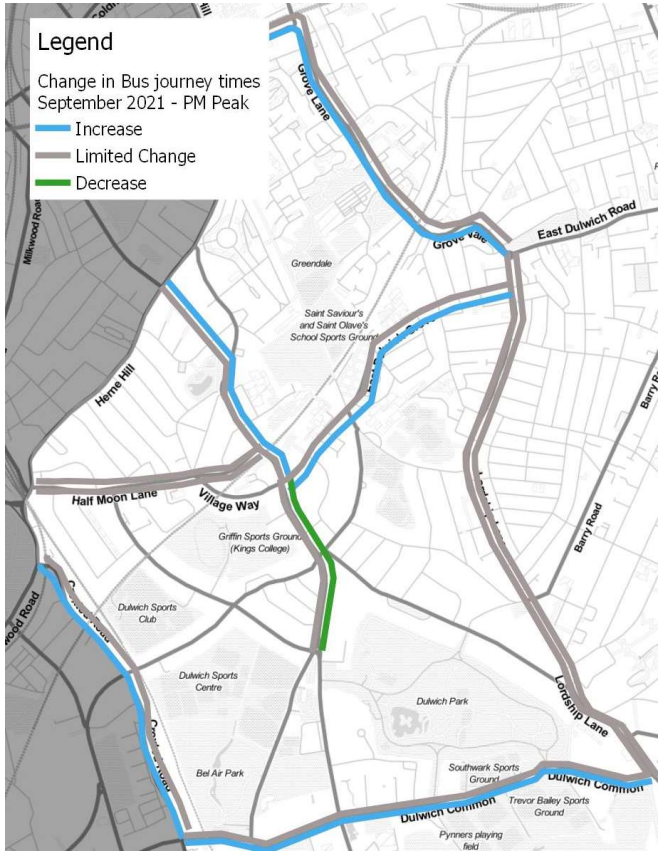
- Bus journey times for September 2021 have been compared with average pre-implementation journey times.
- The analysis shows an increase in bus journey times along, on Croxted Road northbound and on Red Post Hill and Grove Lane southbound.
- Improvement in journey times has been recorded on Dulwich Village in both directions and on Red Post Hill northbound, while on every other road only limited changes were recorded.
- This is an improvement against June 2021 where increased journey times were also recorded on East Dulwich Grove and Dulwich Common.



Bus Journey Time Analysis – September 2021, Peak Hours

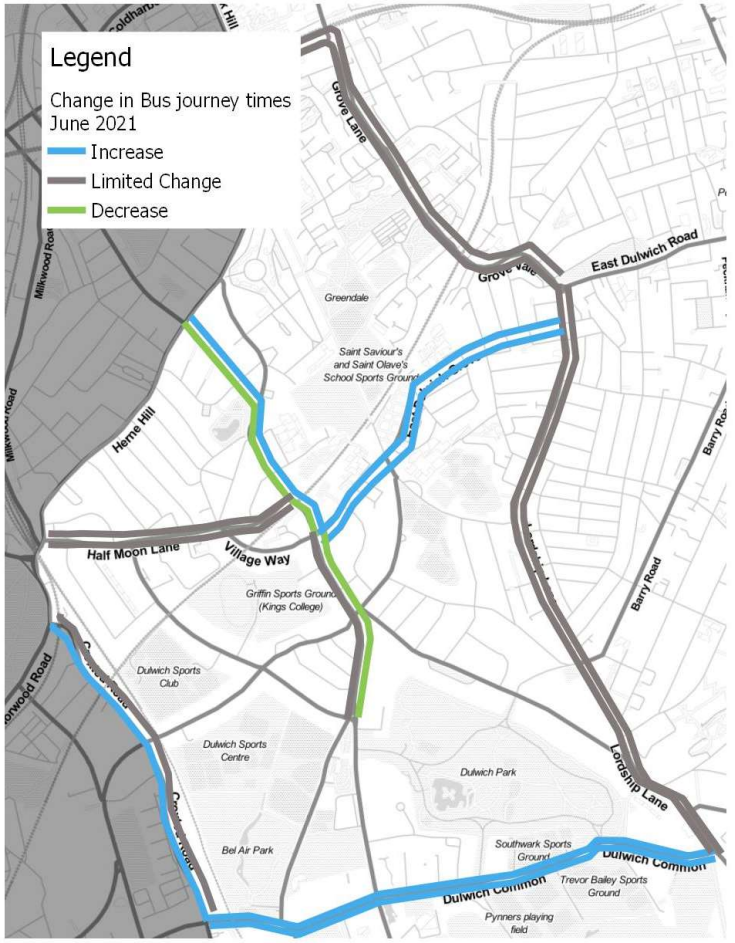
- The maps to the left show comparison to pre-COVID for the AM (7AM – 10 AM) and PM (4PM – 7PM) Peaks.
- Journey times have increased on Dulwich Common and Croxted Road in the AM peak, but decreased on Red Post Hill and Dulwich Village.
- In the PM peak journey times are up in at least one direction on Croxted Road, Dulwich Common, East Dulwich Grove, Red Post Hill and Grove Lane. Decreases are found on Dulwich Village.





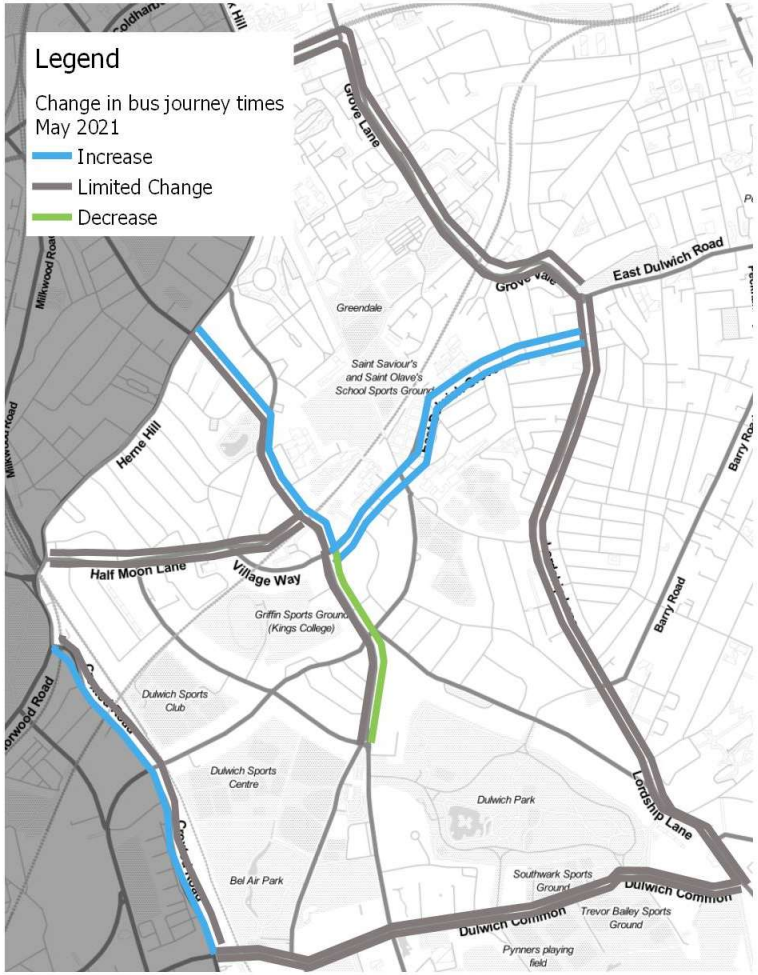
Bus Journey Time Analysis – June 2021

- Bus journey times for June 2021 have been compared with average pre-implementation journey times.
- The analysis shows an increase in bus journey times along East Dulwich Grove and the South Circular in both directions, on Croxted Road northbound and on Red Post Hill southbound.
- Improvement in journey times has been recorded on Dulwich Village southbound and on Red Post Hill northbound, while on every other road only limited changes were recorded.



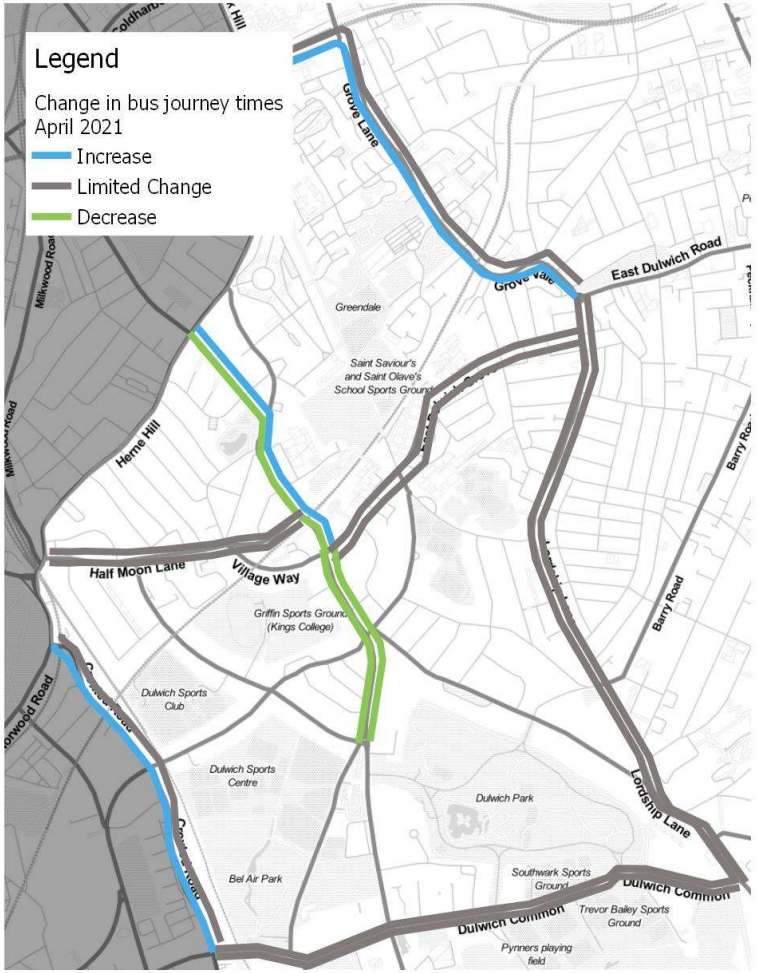
Bus Journey Time Analysis – May 2021

- Bus journey times for May 2021 have been compared with average pre-implementation journey times.
- The analysis shows an increase in bus journey times along East Dulwich Grove in both directions, on Croxted Road northbound and on Red Post Hill southbound.
- The only improvement in journey times has been recorded on Dulwich Village southbound, while in every other road only limited changes were recorded.



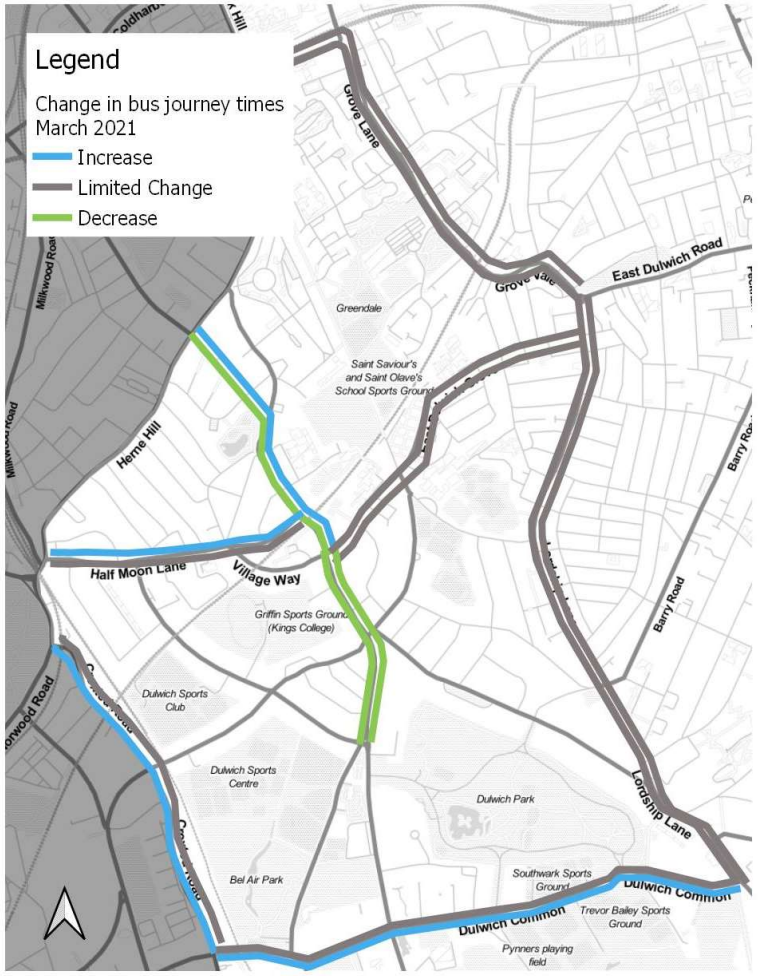
Bus Journey Time Analysis – April 2021

- Bus journey times for April 2021 have been compared with average pre-implementation journey times.
- Bus journey time analysis shows an increase in journey times on Croxted Road, Grove Lane northbound and Red Post Hill southbound.
- Improvements in journey have been recorded on Dulwich Village in both directions and on Red Post Hill northbound.



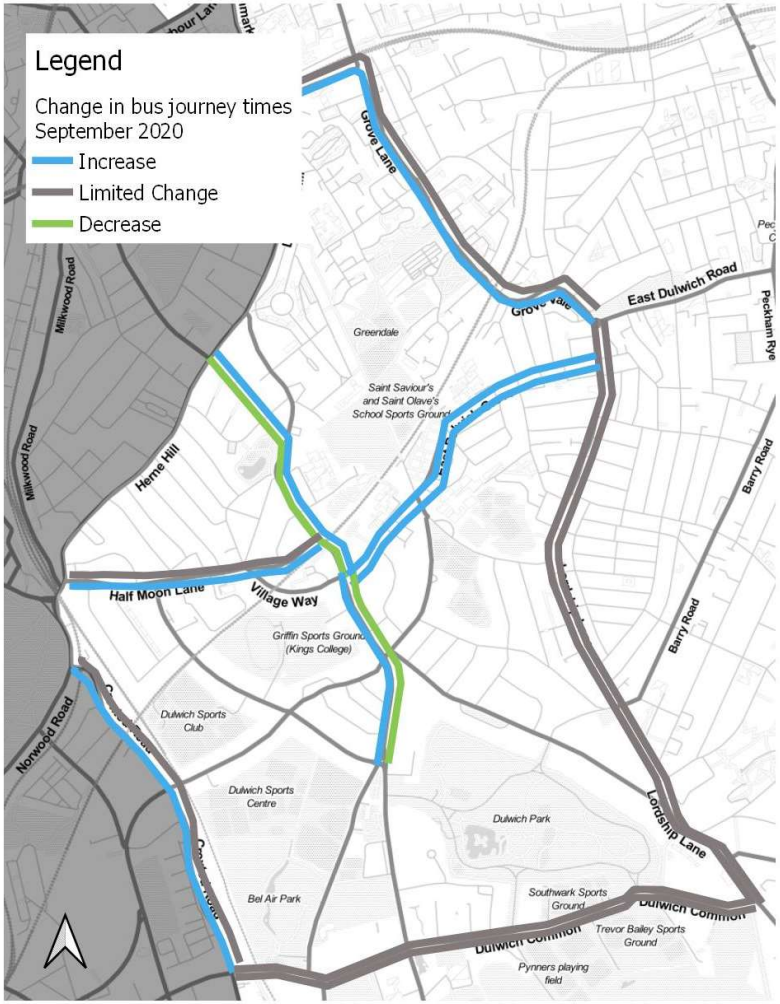
Bus Journey Time Analysis – March 2021

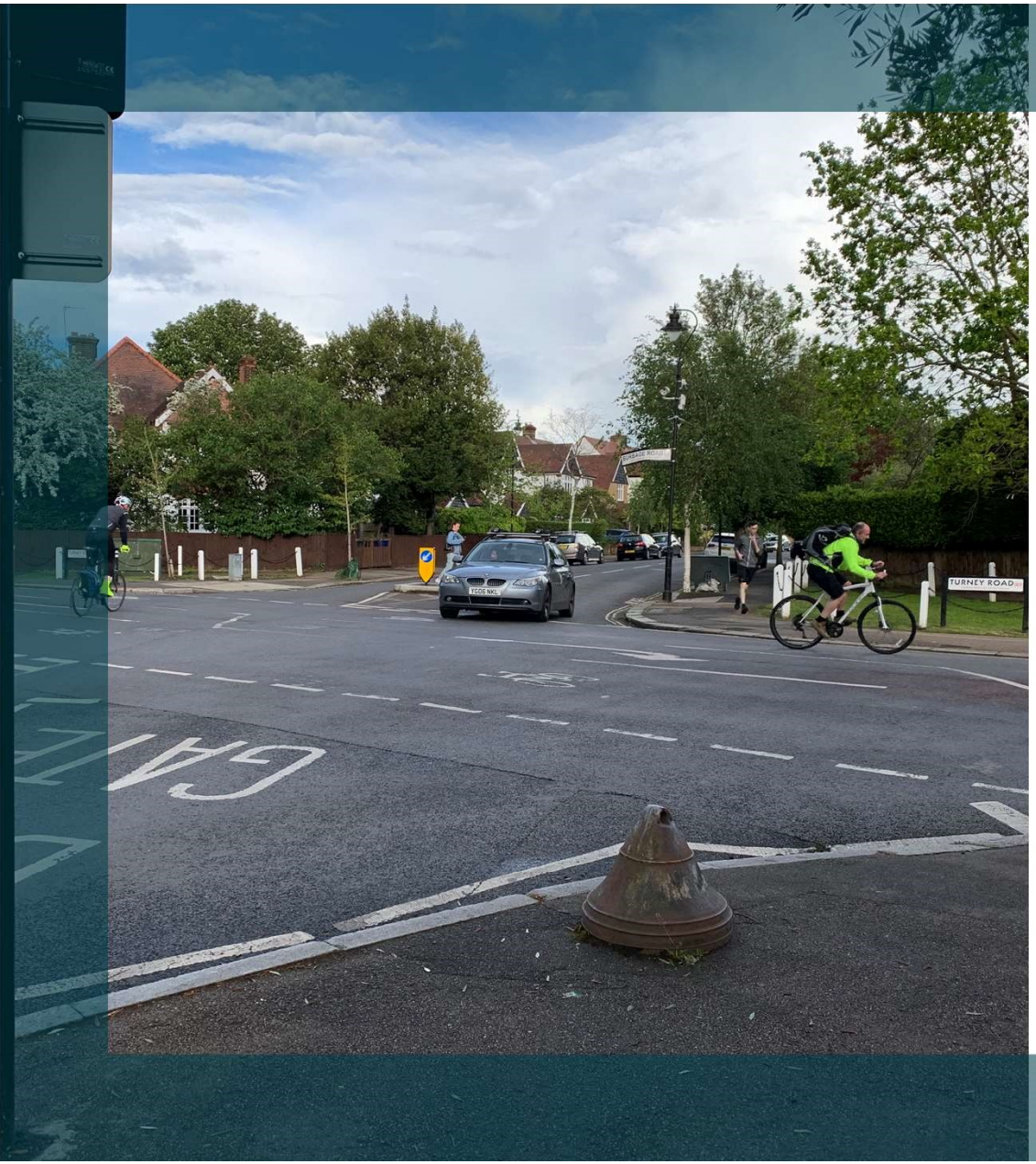
- Bus journey times for March 2021 have been compared with average pre-implementation journey times.
- The analysis shows improvements in journey times, on Dulwich Village in both directions and on Red Post Hill northbound.
- Journey times for buses travelling on the South Circular, Croxted Road, Red Post Hill and on Half Moon Lane have increased in one direction.
- It should be noted that the week commencing 19th March saw journey times double on many routes, before reverting to previous levels. This week has therefore been excluded, being anomalous and unlikely related to the Streetspace schemes.



Bus Journey Time Analysis – September 2020

- Bus journey times for September 2020 have been compared with average pre-implementation journey times.
- The analysis shows an increase in journey times along peripheral roads, especially along East Dulwich Grove in both directions.
- Bus journey times have improved on Red Post Hill northbound and Dulwich Village southbound.
- Limited change was recorded on other roads.





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 sites where greater changes have been recorded are:
  - **Croxted Road** - average speed has dropped from 24mph pre-implementation to around 20mph
  - **Dovercourt Road** – increase in % of drivers above speed limit from less than 5% to over 20%. This represents a roughly 1mph increase in average speeds.
  - **Dulwich Village North** – increase in % of drivers above speed limit from less than 5% to over 30%. This represents a roughly 1mph increase in average speeds.
  - **Lordship Lane South** – decrease in % of drivers above speed limit from over 70% to less than 60%
  - **Melbourne Grove South** – average speed has dropped from 18mph pre-implementation to 15mph

Quality Assurance

All results are presented in good faith and have had undertaken extensive quality assurance checks. 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.