

Canonbury West people-friendly streets trial

Results from the interim monitoring report







Summary of key findings

This interim monitoring report shows that at this point in the Canonbury West people-friendly streets (PFS) trial, the project is having the intended impacts in the area of reducing motorised traffic across internal roads, reducing motorised traffic overall across internal and boundary roads, increasing levels of cycling on some internal roads, and reducing levels of speeding on internal roads, while air quality has improved in line with borough trends.



Local streets within the neighbourhood are healthier, with traffic **falling overall by 46**%



Traffic on Clephane Road has **decreased by 83%**, the greatest decrease of any street



Air quality data from within the Canonbury West neighbourhood, shows that nitrogen dioxide levels have fallen in line with borough trends



On local streets within the neighbourhood, average vehicle speeds **fell by 12%**



No significant impact on London Fire Brigade response times



No significant impact on anti-social behaviour and crime rates



Cycling increased at 30% of sites. The greatest cycling increase has been on Canonbury Square which has seen a 241% increase in the westbound direction.



Cycling has **increased by 58%** on the internal roads.



Overall across boundary roads, total volumes of motorised traffic have fallen by 14%. Traffic on St Paul's Road - one of the boundary roads surrounding the neighbourhood - **rose by 15**%. However, traffic has fallen on both Canonbury Road and Essex Road, so there may be other factors affecting traffic flow on these roads. The council will continue to monitor traffic on main roads and make changes where appropriate.

The above figures reflect before and after comparisons between July 2020 and June 2021. The traffic figures have been normalised to account for the impacts of Covid-19 lockdowns. More information on this process is available in the main report. The council will continue to closely monitor all boundary roads and implement mitigating measures as appropriate.



Why are we doing this?

Islington's streets belong to everyone. They are a place where life happens and where the community comes together, no matter what our individual circumstances or daily routines look like. But as technology has changed, we've seen more and more traffic taking short cuts through local streets.

Traffic in London is increasing at an alarming rate, making it increasingly difficult to walk, cycle and wheel around. 24.3 million more miles were driven through Islington in 2019 than 2013, an almost 10% increase, and traffic on London's local roads has risen by 72% in the past 12 years. Without intervention this trend will create huge problems for our road network and our communities, and will further damage the environment, including higher levels of air pollution, which is already a serious issue for public health.

The council has always worked hard to make things better and has been planning initiatives to improve Islington's streets for some time but Covid-19 has had a big impact on the way we use our streets. During the first lockdown, they were quieter, felt safer and journeys were quicker. Residents told us they really benefited and were able to enjoy their neighbourhood more. But research shows that traffic volumes will continue to increase making our streets more unsafe, unhealthy, and worse than before the crisis began.

Nothing will ever be quite the same after the pandemic, which is why now is the time to make bold changes for a cleaner, greener and healthier Islington. So, we took this opportunity to look at how we can make our neighbourhoods better and safer, for living, working and playing, for everyone.

Through the people-friendly streets programme, we want to bring life back to Islington's streets. Taking the best of what we have learnt in the past year, to make our borough cleaner, greener, healthier and more equal place for everyone. Canonbury West, like many neighbourhoods within the borough, has suffered from increased traffic volumes in recent years from the use of the area as a short cut.

Quantitative evidence from other areas shows that low traffic neighbourhoods (LTNs) are a successful way for us to achieve these objectives. The data in this interim monitoring report shows that they can also make a positive difference in Islington. People-friendly streets make it easier, safer and more pleasant for people to walk, cycle and use wheelchairs, buggies and scooters. Every local trip switched from a motor vehicle to another way of travelling means one fewer vehicle on the road, leaving the roads clearer for people who have no choice but to use cars.

The Canonbury West people-friendly streets trial went live in November 2020, as one of the low traffic neighbourhoods under the people-friendly streets programme. As part of the council's urgent Covid-19 response, the trial was implemented swiftly to make walking and cycling easier and safer as alternatives to public transport and prevent a car-based recovery. It was also introduced at a similar time to two bordering low traffic neighbourhoods, covering Canonbury East and Highbury.





Objectives

As the project was implemented as a trial under an experimental traffic order (ETO) it is very important to monitor it using key data points in order to understand its impact. It is also important to us to make this information publicly available so residents can find out about the impact in their area.

The PFS area trials are intended to contribute to the following three objectives from the Islington Transport Strategy:

Objective One: Healthy

To encourage and enable residents to walk and cycle as a first choice for local travel.

Objective Two: Safe

To work with the Mayor of London to achieve "Vision Zero" by 2041, by eliminating all deaths and serious injuries on Islington's streets and reducing the number of minor traffic collisions on our streets.

Objective Three: Cleaner and greener

To contribute to the council's commitment to Islington becoming net zero carbon by 2030, to improve air quality, and protect and improve the environment by reducing all forms of transport pollution.

This mid-trial, interim monitoring report reflects a before and after assessment of the trial using the following data: motorised traffic counts and speeds, cycling counts, air pollution data, London Fire Brigade response times, crime and anti-social behaviour (ASB) data, and bus journey times.

These will be monitored over time in the PFS trial area to measure the success of the trial against the previously mentioned objectives:

- Reduce motorised traffic and vehicle emissions across internal roads
- Reduce motorised traffic overall across internal and boundary roads
- Increase levels of cycling across internal roads
- Reduce levels of speeding on internal roads

In addition to this, the council is monitoring:

- Levels of motorised traffic and related air pollution on boundary roads
- Crime and ASB on internal roads
- Emergency service response times
- Levels of speeding on boundary roads
- Bus journey times

The council is also exploring how to monitor the following through further quantitative and qualitative monitoring and analysis:

- Reduce collisions across internal and boundary roads
- Increase levels of walking
- Increase sense of community
- Impact on people with disabilities and their ability to travel

Future decisions to keep, remove or amend the Canonbury West people-friendly streets trial are not dependent on any single metric, but with feedback from the online survey and upcoming consultations with residents and stakeholders.





Interim results



Motorised traffic on internal roads

- Motorised traffic has decreased on most internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the trial.
- Overall, motorised traffic volumes on internal roads have decreased by an average of 46%. The greatest decrease has been on Clephane Road (northern site), where there was an 83% decrease.
- Across internal roads, average speeds have decreased by 12% and the proportion of vehicles speeding has decreased by 4%.
- The above figures have been normalised to account for the impacts of COVID-19 on motorised traffic levels in September 2020 and in May 2021. More information on this process is available in the main report.



Motorised traffic on boundary roads

- Across the boundary roads, the total volumes of motorised traffic have fallen by 14%, which is a positive result in line with the objectives of the trial.
- There is a mixed picture in terms of the change in motorised traffic volumes on boundary roads. On average, motorised traffic volumes have changed on:
 - Essex Road by -9%
 - St Paul's Road by +15%
 - Canonbury Road by -42% (average)
- Across boundary roads, average speeds have seen a negligible change (-1%).



Cycling on internal roads

- Overall cycling has increased by 58% across the internal road locations.
- The greatest increase has been on Canonbury Square, which cycling has increased by 241%.



Air quality

NO2 levels in Canonbury West have been below the annual objective level of 40µg/m³ at most monitoring sites post-implementation (July 2020 to June 2021), except on St Paul's Road ($41\mu g/m^3$). Levels of NO2 in Canonbury West (Nov 2020-Feb 2021) are lower than the previous year at most sites where data is available from 2019. This reflects borough-wide trends, suggesting the PFS trial has not had an adverse impact on air quality.



London Fire Brigade response times

 Comparing the 2019 average response time and the post-implementation period average, response times are within the service's targets overall in the Canonbury Ward, despite a negligible increase. Given the extent of variables that affect response times, these results are considered negligible by the LFB and the council. As such, it is the view of the LFB and the council that the PFS area in Canonbury West has not impacted on the emergency service's attendance times.



Anti-social behaviour and crime

Analysis shows anti-social behaviour and crime patterns in the area are in line with patterns across the borough overall, suggesting the PFS trial in Canonbury West has not had an impact on anti-social behaviour and crime patterns.

People-friendly streets neighbourhoods are being introduced on a trial basis, with a full public consultation twelve months into each scheme to give residents the chance to give their views. A pre-consultation monitoring report will also be produced in time to inform the consultation with one year-on monitoring data.

Until then, residents in the Canonbury West area can also fill in our survey at www.islington.gov.uk/roads/ people-friendly-streets/canonbury-west

Contents

Glossary	8
Independent production of the report by Project Centre Ltd	10
Canonbury West PFS area in context	
External Factors	11
Traffic counts approach	15
Traffic counts in the Canonbury West PFS area	15
Analysis and normalisation methodology overview	16
Interpreting count results	19
Indicators	20
Motorised traffic on internal roads	20
Motorised traffic volumes on internal roads	24
Motorised traffic speeds and speeding on internal roads	26
Motorised traffic on boundary roads	
Motorised traffic volumes on boundary roads	30
Insights: motorised traffic on boundary roads (combined monitoring)	31
Motorised traffic speeds and speeding on boundary roads	33
Cycling volumes on internal and boundary roads	35
Cycling volumes on internal roads	38
Cycling volumes on boundary roads	40
Insights: cycling volumes on internal, boundary and beyond boundary roads (combined)	41
Air Quality	42

Emergency vehicles access	52
London Ambulance Service	52
Metropolitan Police Service	52
London Fire Brigade	53
Anti-social behaviour and Crime patterns	56
ASB and Crime Pattern Results	56
Concluding remarks	62
Appendices	63
Appendix 1: Internal Roads counts	64
Canonbury Square	64
Compton Road	65
Canonbury Park North	66
Canonbury Park South	67
Clephane Road (North)	68
Ramsey Walk	69
Nightingale Road	70
Clephane Road (South)	71
Appendix 2: Boundary roads counts	72
St Paul's Road (Western Site)	72
St Paul's Road (Eastern Site)	73
Canonbury Road (Northern Site)	74
Canonbury Road (Southern Site)	75
Essex Road	76
Appendix 3: Speed results	77

Appendix 4: Canonbury West traffic count locations and type	80
Appendix 5: Traffic count normalisation methodologies	
Traffic counts	
Appendix 6: Air quality monitoring	83
Appendix 7: Project Centre Ltd statement	86

Glossary

Below are the meanings of some words used throughout this report that you may be unfamiliar with, or which may have a specific meaning in this context:

AM peak – In this report "AM peak" refers to the hours between 0700h and 1000h.

Automatic Traffic Counters – "Automatic traffic counters" (ATCs) measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. They are considered to be approximately 98% reliable. (See Appendix 4 for more details).

Boundary roads – For the purpose of this report, the "boundary roads" of the Canonbury West trial area are Essex Road (A104) to the south-east, St Paul's Road (A1201 and A1199) to the north, and Canonbury Road (A1200) to the south-west. Canonbury Road and St Paul's Road meet at Highbury Corner, which connects to A1 Upper Street (south) and A1 Holloway Road (north). These roads are the boundary roads of multiple LTN trial areas and there have been major transformation works at Highbury Corner, all of which may have impacted some of the results. These are explored in more detail in the results and insights sections throughout the report.

Experimental traffic order – An "Experimental Traffic Order" (ETO) is like a permanent Traffic Regulation Order in that it is a legal document that imposes traffic and parking restrictions. However, unlike a Traffic Regulation Order an Experimental Traffic Order can only stay in force for a maximum of 18 months while the effects are monitored and assessed. An Experimental Traffic Order is made under Sections 9 and 10 of the Road Traffic Regulation Act 1984.

Internal roads — These are roads which fall in between two or more boundary roads in low traffic neighbourhoods. For the purpose of this report, "internal roads" are local roads in the Canonbury West trial area where the project aims to reduce the amount of traffic through the introduction of traffic filters. These roads are generally narrower than boundary roads. We have collected traffic counts on some, but not all, of the internal roads in the Canonbury West area.

Low traffic neighbourhood — A "low traffic neighbourhood" (LTN) is an area where a number of traffic filters are strategically placed to make it impossible or very difficult to cut through an area by motor vehicle. This stops drivers using local streets as shortcuts and makes it safer and easier to walk and cycle. In this report the Canonbury West people-friendly streets (PFS) trial refers to a low traffic

neighbourhood implemented in Islington under an experimental traffic order. The position of the traffic filters means that drivers (including residents, deliveries and emergency services) are still able to reach any part of the neighbourhood.

Normalised — In this report "normalising" means to adjust traffic count figures to take into account the impact of Covid-19 on traffic patterns. This methodology is explained below in more detail, but in simple terms it means that the traffic count figures have been increased to project what the 2020 traffic counts may have looked like if traffic levels were at 2019 levels.

Observed — In this report "observed" means the data that was collected, which has not been adjusted to take into account the impact of Covid-19 on traffic patterns. This is the actual data that was supplied by the data collection company used.

Patched sites/data — When counting equipment is damaged, leading to a loss of data for certain time periods, this data is patched. This means that periods of missing data are backfilled using data from the same day, either a week before or week after when the counts were taken to ensure that the data is representative of that day. If this data is not available, another day of the same type, either weekday or weekend-day, is used.

People-friendly streets - The people-friendly streets (PFS) programme refers to the implementation of low traffic neighbourhood (under an Experimental Traffic Order) and School Streets in Islington. Through the PFS programme, the council wants to make Islington's streets safer, healthier and greener. By installing inexpensive measures like bollards and smart cameras, the council aims to create more space for everyone to enjoy their neighbourhoods as they walk, wheel and cycle around.

PM peak – In this report "PM peak" refers to the hours between 1600h and 1900h.

Radar Traffic Counters — Radar counts monitor speeds and vehicle volumes to a less specific categorisation using a radar sensor. These radar counts classify pedal cycles and motorcycles in the same class (<5.6m). As such, for radar assessed sites, the motorised traffic volumes do not include motorcycles, and pedal cycle volumes are unavailable. Radars measure traffic volumes and speed using high frequency radar signals to measure one or two lanes of traffic. Manufacturers consider the method to be 98% accurate (with 95% Confidence) at measuring traffic volumes with speed considered to be around +/- 2mph or 3% whichever is greater with 95% confidence. Radars detect vehicle lengths (+/- 40cm or 5% whichever is greater with 95% confidence) so assumptions need to be made with regards to vehicle classes. Inaccuracies in the data can occur due to vehicles following closely resulting in larger lengths being detected. Radars are widely used for monitoring traffic schemes due to their unobtrusive nature and being less detectable by drivers

meaning they are less likely to change speeding behaviours. Radars are used to monitor traffic on TfL managed roads, on the strategic road network.

Traffic filters - "Traffic filters" are restrictions in the street to prevent motor vehicles passing through, either by presenting a physical barrier, such as bollards or planters, or by camera enforcement. Camera enforcement is used to enable buses and emergency vehicles to access the area. People are legally able to walk, cycle and wheel through the filter (and use non-motorised scooters).

Independent production of the report by Project Centre Ltd

This report has been produced by Project Centre Ltd in partnership with Islington Council. Project Centre is a multi-disciplinary design, engineering and landscaping architecture consultancy, whose highly talented people are passionate about creating places that are attractive, innovative, sustainable and safe. Project Centre's areas of expertise include air quality improvement schemes, neighbourhood traffic schemes, pedestrianisation, cycle design, road safety, traffic modelling and traffic data analysis.

The methodologies and analyses in this report are set out in greater detail in Appendix 5 and have been independently peer reviewed. Drafting the baseline from TfL count locations outside of Islington and from additional years was considered and tested in the peer review, but resulted in only small differences and therefore was not taken forward as the chosen methodology.

Canonbury West PFS area in context

As part of Islington Council's PFS programme and the need for an urgent transport response to Covid-19, Canonbury West became the fifth PFS trial area in the borough. It has been created to allow more space for people to walk and cross the road safely, cycle as part of everyday life, and to use buggies or wheelchairs, thereby making the area's roads safer, cleaner and healthier for residents.

The traffic filters in the Canonbury West PFS area have been installed at four locations:

- Canonbury Place;
- Alwyne Road;
- Clephane Road; and
- Ramsey Walk.

The traffic filters are all enforced by cameras to allow access for emergency vehicles. In order to install the modal filters, it was necessary to remove eight parking bays. One of these was a disabled parking bay, which was moved to a new location nearby.

This monitoring report provides data and insights relating to the Canonbury West PFS trial. The PFS went live in November 2020, so the analysis compares data from before and after that date. The baseline ("before") traffic counts were collected in July 2020, before the PFS was put in place. The interim ("after") traffic counts were collected in June 2021, approximately seven months after the scheme became operational.

It is important to consider these results in the context of other external factors which could be impacting on the data. There are four main external factors which could all be influencing results:

External Factors

Nearby Low Traffic Neighbourhoods – As can be seen in Map 1, the Canonbury West area is in close proximity to a number of other low traffic neighbourhoods. Highbury and Canonbury East are both located in Islington and share boundary roads with Canonbury West. It is therefore not possible to separate out the impacts these may be having on traffic on the boundary roads.

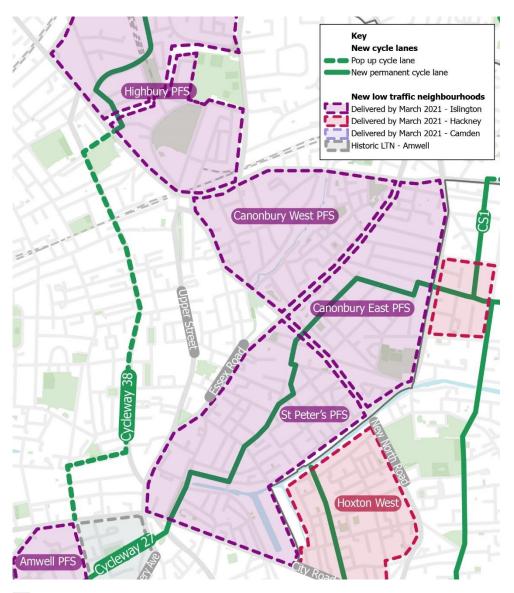
Nearby major traffic projects – The redevelopment of Highbury Corner was completed by Transport for London (TfL) in 2019 as part of a London-wide Safer Junctions programme to reduce road danger at a number of intersections including roundabouts, which the council supports. There has been concerns that this project has increased congestion on the surrounding roads. As this scheme is particularly close to Canonbury West this congestion directly impacts St Paul's Road which is a western continuation of Balls Pond Road.

Weather – Weather can have a significant impact on air pollution and travel choices, especially cycling. During the week the baseline traffic counts were taken at the end of July 2020 the minimum temperature was 9°C and the maximum was 34°C. UK weather data shows that the mean temperature for July 2020 was 14.3°C, however the brief hot southerly incursion on the 30th and 31st brought unusually high temperatures to many parts of the UK.

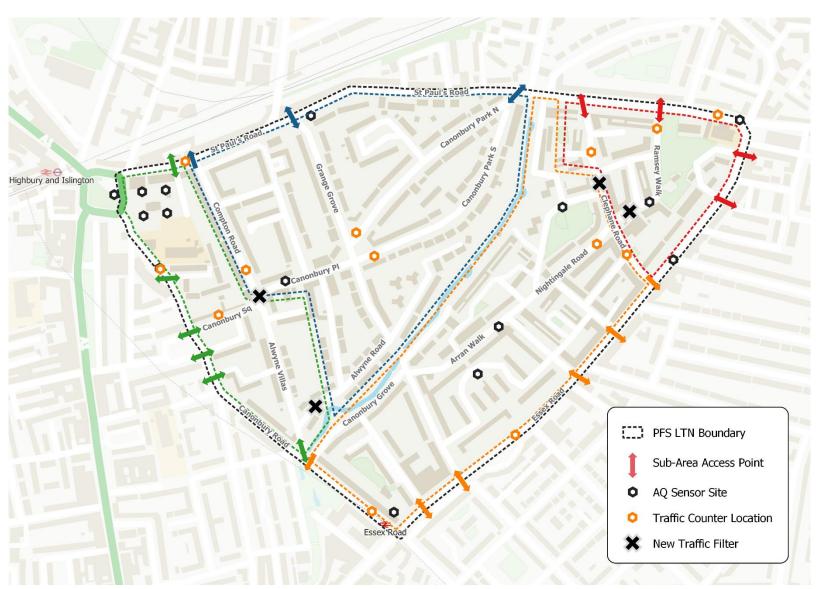
During the week the interim traffic counts were taken in June 2021, the minimum temperature was 11°C and the maximum was 27°C. UK-wide data shows that June 2021 mean temperature was 14.2°, 1.2° above June average, and had London seeing double its average rainfall. As such, the higher rainfall in July 2021, when the interim counts were taken, may have had a somewhat supressing impact on cyclist volumes. Data was not available on a regional or sub-regional level.

National lockdowns – as England has been going in and out of national lockdowns as a result of COVID-19, it is worth noting that the baseline counts in July 2020 took place as restrictions were being eased across the country, including the reopening of pubs, bars and restaurants. Local lockdowns were brought into place, but these did not affect the scheme areas at the time that the baseline traffic counts were taken. When the counts in June 2021 were taken, the government was in the process of lifting restrictions from the third national lockdown. Most rules affecting outdoor social contact had been removed, two households or six people were allowed to meet indoors, indoor hospitality services were provided and hotels had been opened on 17th May. All restrictions were eventually lifted on 19th July, (delayed from the original planned date in June) due to concerns over the Delta variant.

Map 1: Canonbury West PFS area in wider context of nearby LTN areas and cycle lanes



Map 2: Canonbury West PFS measures and monitoring sites



Traffic counts approach

Traffic counts in the Canonbury West PFS area

The count data presented in this report is not traffic modelling, but actual observed traffic. The data compares traffic flows in July and August 2020, before the implementation of the Canonbury West People Friendly Streets (PFS) area, with repeat counts in June 2021, approximately seven months after the scheme went live. The repeat counts were delayed due to on-going utility works within the area.

Implementation of the Canonbury West PFS first commenced on 8th October 2020. However, due to a number of instances of vandalism, the completion of the scheme was significantly delayed, and work on delivery was suspended. The scheme went live during the week commencing 9th November 2020.

On two of the internal roads, Canonbury Park North and Compton Road, utility works were in operation when baseline figures were collected in July 2020, which affected traffic. For these particular streets, data from November 2020 was compared with data from June 2021. This means that figures for the overall increase or decrease in traffic and cycling on internal roads does not include these streets.

Dates of traffic counts

Baseline ("before") counts: 27th July – 2nd August 2020

Additional baseline ("before") counts: 9^{th -} 15th November 2020 (repeated due to utility works on the original survey dates)

Canonbury West trial goes live: 9th November 2020

Interim ("after") counts: 14th – 20th June 2021

The council is using various traffic counting methods to understand traffic volumes and speeds within and around the PFS area to assess if the scheme is having the desired impact and respond (if required) with mitigating actions.

Automatic Traffic Counts (ATCs) are used at all sites in the Canonbury West PFS area. ATCs measure motorised and cycle traffic volumes and motorised traffic speeds, classifying the traffic by type. More information about the different types of counts and which type was used at each site is detailed in Appendix 4.

There were issues with data collection at some of the ATC sites, which had to be accounted for in the results. These are outlined below:

- Essex Road: The data from the baseline traffic counts for Essex Road had substantial gaps. The ATC was located between the junctions of Elmore Street and Halliford Street and collected data from 27th July to 2nd August 2020. This data was replaced with data from a count site at the same location on Essex Road. This was carried out for the Canonbury East monitoring scheme from the 3rd to the 9th of July 2020.
- Canonbury Park North and Compton Road: The baseline data was not accurate due to the utility works and a partial road closure during the counts as mentioned above. These were replaced with November 2020 counts for both sites.
- Grange Grove: The baseline data was not accurate due to utility works and partial road closure during counts. There were no suitable replacement counts. There was also data loss during the interim counts, so this site was excluded from the report.
- Alwyne Villas: The baseline data for Alwyne Villas was also affected due to the utility works. It appeared that a large quantity of traffic was diverted through Alwyne Villas while the works were running, giving unusually high volumes in the survey results. There were no suitable replacement counts for the baseline, so this site has been excluded from the report.

Analysis and normalisation methodology overview

All of these counts were undertaken in full awareness of the disruption caused by the Covid-19 travel restrictions, and the need for a process to interpret the results in a way that accounts for this disruption.

Daily volumes of motorised traffic have been drawn from 12 permanent traffic counters managed by Transport for London (TfL) across Islington and used to establish monthly averages in 2019 and 2020. The locations of these counters are detailed in Appendix 4. The percentage difference between the same month across the two different years has been used to adjust each set of counts to normalise for Covid-19 disruption in the months in which counts have been taken. The methodology is set out in greater detail in Appendix 5. Determining the baseline from TfL count locations outside of Islington and from additional years was considered and tested. The tests resulted in only small differences. Given that there have been substantial differences in traffic levels within Islington, this methodology was considered unrepresentative and not taken forward.

Considering the months in which the Canonbury West counts took place, in July 2020 (baseline counts), motorised traffic across the permanent counters in Islington was approximately 13% lower than in July 2019. In June 2021 (interim counts), motorised traffic was approximately 9% lower than in June 2019. As such, the baseline and interim motorised traffic counts have been increased by 13% and 9% respectively, to bring the figures in line with those expected under more "normal" circumstances.

For context, the difference was greatest in April, where 2020 motorised traffic was approximately 50% of what it had been in April 2019.

Table 1 below shows the percentage proportions that average traffic had fallen by per month, according to the Transport for London counters. This is in comparison with similar data from 2019.

Table 1: Normalisation factors for 2020 and 2021 traffic in Islington

Month	Recorded traffic volumes against 2019 equivalents (%)
March 2020	-27.97%
April 2020	-49.87%
May 2020	-38.34%
June 2020	-22.10%
July 2020	-13.46%
August 2020	-6.55%
September 2020	-6.90%
October 2020	-10.48%
November 2020	-22.13%
December 2020	-16.11%
January 2021	-25.69%
February 2021	-24.84%
March 2021	-31.28%
April 2021	-22.52%
May 2021	-18.68%
June 2021	-8.90%
July 2021	-6.16%
August 2021	-2.60%

Interpreting count results

Unless specified otherwise, the seven-day daily average (both directions) has been used and discussed in traffic volume analysis in this report. Results for other time period parameters are available for each site in Appendices 1 - 5.

Raw data has been analysed and compared to give the observed results. The observed results have been through the normalisation process described in the previous section to arrive at the normalised results. Both the normalised results and the observed results can be found in the results tables in this report and in the appendices. The figures given for changes in volumes of traffic in this report are normalised, and percentages have been drawn from the differences between normalised results.

A negative number or percentage indicates a decrease between the two counts, while a positive number or percentage indicates an increase.

Please note that traffic flows fluctuate on a daily basis (generally up to 10%). As such, changes within -10% to 10% are considered insignificant (i.e. no or negligible change).

In addition, it must be noted that, as vehicles travelling through the PFS area are likely to go through multiple counter sites, it is almost certain that the number of vehicles counted in the area is higher than the actual number of trips made.

Indicators

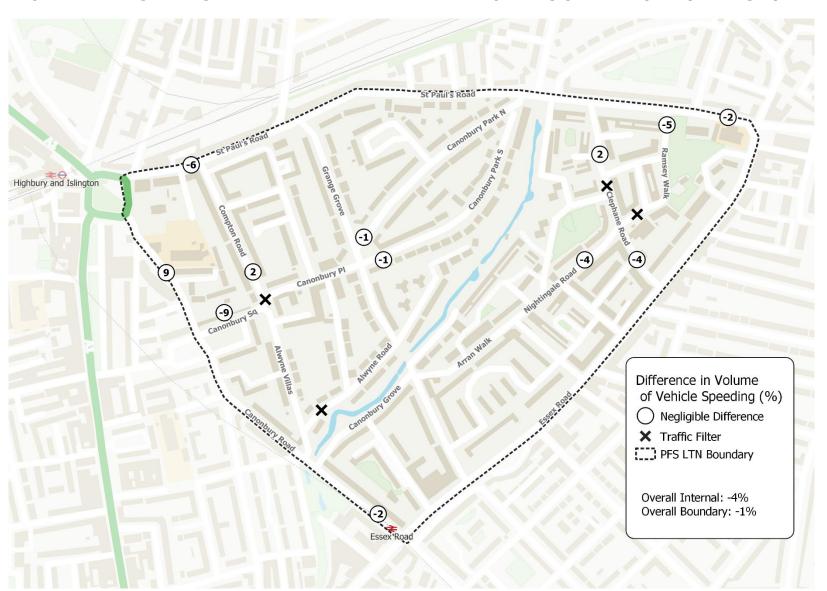
Motorised traffic on internal roads

Map 3 summarises the percentage change in motorised traffic volumes and Map 4 summarises the percentage change in volume of motorised vehicles exceeding the posted speed limit (generally 20mph in Islington).

Map 3: Percentage change in motorised traffic volumes (seven-day daily averages)



Map 4: Percentage change in volume of motorised vehicles speeding (seven-day daily averages)



Motorised traffic volumes on internal roads

Results (seven-day daily averages)

The motorised traffic count results for the internal roads (i.e. roads within the Canonbury West PFS area) are summarised in Table 2 to Table 4.

Table 2: Motorised traffic volumes on internal roads

	Baseline Observed- July 2020	Baseline Normalised- July 2020	Interim Observed- June 2021	Interim normalised- June 2021	Difference (Normalised)	Difference (Normalised) %
Canonbury Square	1818	2101	546	599	-1502	-71 %
Canonbury Park South	329	381	297	326	-55	-14%
Clephane Road (northern site)	2164	2501	381	418	-2083	-83%
Ramsey Walk	364	421	358	393	-28	-7%
Nightingale Road	878	1015	338	371	-645	-63%
Clephane Road (southern site)- Southbound	891	1030	336	369	-661	-64%
Overall Internal	6444	7449	2256	2476	-4974	-46%

Table 3: Motorised traffic volumes on Compton Road

	Baseline observed – Nov 2020	Baseline normalised – Nov 2020	Interim observed – June 2021	Interim normalised – June 2021	Difference (Normalised)	Difference (Normalised) %
Compton Road*	1091	1401	919	1009	-391	-28%

^{*} Baseline data on Compton Road was not accurate in the original survey due to utility works in the area in July 2020, so data from November 2020 was used instead.

Table 4: Motorised traffic volumes on Canonbury Park North

	Baseline observed – Nov 2020	Baseline normalised – Nov 2020	Interim observed – June 2021	Interim normalised – June 2021	Difference (Normalised)	Difference (Normalised) %
Canonbury Park North**	1450	1862	1503	1650	-211	-11%

^{**} Baseline data on Canonbury Park North was not accurate due to utility works and a partial road closure in July 2020, so data from November 2020 was used instead.

Insights: motorised traffic on internal roads

Raw data has been analysed and compared to give the observed results in the traffic volume results tables. The observed results have been through the normalisation process described in the previous section to the give the normalised results.

It is worth noting that, as vehicles travelling through the PFS area are likely to go through multiple counter sites, it is almost certain that the number of vehicles counted in the area is higher than the actual number of trips. Therefore, the number of vehicles counted should not be conflated with the number of trips or number of vehicles present within the area, as a vehicle could be counted multiple times.

Motorised traffic has decreased on the majority of internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the scheme. Overall, normalised motorised traffic on internal roads has decreased by 46%. The greatest decrease has been on Clephane Road (northern site) where there was an 83% decrease, representing a fall in traffic of 2083 vehicles per average day (normalised figures).

As part of monitoring the Canonbury West LTN a rise in queuing traffic on Compton Road and other local streets in the area during the morning peak has been noted. This is likely due to the westbound AM peak traffic on St Paul's Road, where some drivers attempt to jump ahead of the queue by turning into Canonbury Park North and onto Compton Road to re-join St Paul's Road nearer to Highbury Corner. The data as provided in this report has shown an overall decrease in traffic volumes on Canonbury Park North, Compton Road and other internal roads since the start of the trial and six months into the trial. However, the council will continue to monitor Compton Road and other local roads to gather more information about this issue over a longer period and take mitigating actions if required.

Motorised traffic speeds and speeding on internal roads

Speeding is a major contributing factor to road traffic collisions, so reducing speeding is vital to making our roads safer for all.

Traffic counters measure motorised traffic speeds as well as volumes. Details about the dates and locations of the traffic volume and speed monitoring are in Appendix 4. Full speed monitoring results are available in Appendix 3 (absolute speeds from baseline and interim results).

The speed limit is 20mph on all of the internal roads.

Speed monitoring results have not been normalised as they are not considered to have been impacted by Covid-19 in the same way and to the same extent as traffic volumes, though speeds may settle into new patterns post-Covid-19. The results presented here are sevenday averages. The 85th percentile is used in transport monitoring to gauge changes in speeds and speeding behaviour. It is the speed at which 85% of traffic will be travelling at, or below, along a street (and therefore 15% of traffic will be travelling faster than this speed).

Results (seven-day averages, 'change in volumes' use seven-day daily averages)

Table 5: Changes in speeds on internal roads (July 2020 to June 2021)

Location	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in proportion of vehicle speeding (%)
Canonbury Square	-3.68	-24%	-4.68	-25%	-9%
Canonbury Park South	-0.07	0%	-0.47	-3%	-1%
Clephane Road (northern site)	-1.45	-10%	-0.81	-4%	2%
Ramsey Walk	-2.29	-16%	-3.22	-18%	-5%
Nightingale Road	-1.33	-8%	-1.12	-6%	-4%
Clephane Road (southern site) - southbound	-1.94	-13%	-2.01	-11%	-4%
Overall	-1.79	-12%	-2.05	-11%	-4%

Table 6: Changes in speeds on Compton Road

November 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in proportion of vehicle speeding (%)
Compton Road*	1.29	10%	1.51	9%	2%

^{*} Baseline data on Compton Road was not accurate in the original survey due to utility works in the area in July 2020, so data from November 2020 was used instead.

Table 7: Changes in speeds on Canonbury Park North

November 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in proportion of vehicle speeding (%)
Canonbury Park North**	1.13	8%	-0.20	-1%	-1%

^{**} Baseline data on Canonbury Park North was not accurate due to utility works and a partial road closure in July 2020, so data from November 2020 was used instead.

Insights: motorised traffic speeds and speeding on internal roads

General insights

On average across the internal road sites, average speeds have shown a moderate fall of around 12%. 85th percentile speeds have fallen by 11% on average. The proportion of vehicles speeding has fallen by a small amount, around 3% overall.

At Clephane Road (northern site) there was a negligible (4%) increase in the proportion of vehicles speeding, despite the fact that average speeds had fallen. Using seven-day average figures, in July 2020 there were 176 vehicles travelling over 20mph, while in June 2021 there were 45 vehicles travelling over 20mph. However, as the overall volume of traffic has fallen, this has resulted in an increase in the proportion of vehicles speeding.

Compton Road

There has been a slight increase in vehicle speeds on Compton Road, leading to a negligible (2%) rise in the proportion of vehicles speeding. The difference in average vehicle speeds has also shown an increase of 1.29 mph which equates to a 10% increase. This increase in average speed is only marginally significant and may be down to random factors. This will be reviewed at the preconsultation stage to see if it is part of a trend.

Motorised traffic on boundary roads

The council's analysis of the impact of PFS area schemes on boundary roads (i.e. the roads that go around the PFS area) will draw on monitoring results from traffic counts (volumes), and smart congestion monitoring.

This monitoring report provides data and insights relating to the Canonbury West PFS trial specifically by comparing data from before implementation in November 2020 to seven months after implementation in June 2021.

It is important to consider all these results in the context of other external factors which could be contributing towards the results. For example the scheme shares boundaries with the Canonbury East and Highbury PFSs, delivered on a similar timeframe to the Canonbury West PFS; and several transport projects have been implemented in the area as set out earlier in the report. It is not possible to separate out the impacts these may be having on traffic on this boundary road. A more detailed analysis is in the insights section on motorised traffic on boundary roads.

Motorised traffic volumes on boundary roads

Results (seven-day daily averages)

Table 8: Motorised traffic volumes on boundary roads

	Baseline Observed- July 2020	Baseline Normalised- July 2020	Interim Observed- June 2021	Interim normalised- June 2021	Difference (Normalised)	Difference (Normalised %)
St Paul's Road (western site)	18382	21243	22189	24357	3114	15%
St Paul's Road (eastern site)	10357	11968	12509	13731	1763	15%
Canonbury Road (northern site)	16349	18893	6920	7596	-11297	-60%
Canonbury Road (southern site)	13795	15941	11005	12080	-3861	-24%
Overall Boundary	58884	68045	52623	57764	-10281	-14%

Table 9: Motorised traffic volumes on Essex Road

	Baseline Observed- July 2020	Baseline Normalised- July 2020	Interim Observed- June 2021	Interim normalised- June 2021	Difference (Normalised)	Difference (Normalised %)
Essex Road *	16,488	19,053	15,735	17,272	-1,781	-9%

^{*}There was substantial data loss from the Essex Road ATC, so an ATC was substituted that was carried out for the Canonbury East PFS scheme. This ATC was deployed at the same location, at the start of July 2020.

Bus journey times on boundary roads

TfL monitors bus journey times across its network, which can add an additional layer of understanding about the impacts of transport schemes. Bus journey times around the Canonbury West PFS area are therefore being monitored. The council will look to include an analysis of this data in the pre-consultation monitoring report in order to include a full year of data.

Insights: motorised traffic on boundary roads (combined monitoring)

General insights

Note, raw motorised traffic count data has been analysed and compared to give the observed results in the traffic volume results tables. The observed results have been through the normalisation process described in the introductory section to give the normalised results. In the longer term, travel behaviour is expected to adjust, resulting in lower motorised traffic levels overall, though essential trips will continue.

It is worth noting that vehicles travelling around the PFS area may pass through multiple counting sites, and therefore the number of vehicles counted across boundary road sites may be higher than the actual number of trips. Therefore, the number of vehicles counted should not be conflated with the number of trips or number of vehicles present within the area, as a vehicle could be counted multiple times.

It must be noted that changes in travel times on boundary roads could be influenced by factors other than the Canonbury West PFS trial as explored more on page 35.

There is a mixed picture in terms of the change in motorised traffic volumes on boundary roads. Traffic has risen on St Paul's Road, but fallen on Canonbury Road and Essex Road, which had similar results to those reported in the Canonbury East interim monitoring report. Across the boundary roads, the total change in volume of traffic is a fall of 14%.

Canonbury Road

The interim data shows that traffic has fallen on Canonbury Road. At the southern site, observed motorised traffic volumes in June 2021 were an average of 11,005 per day. However, at the northern site, motorised traffic volumes were 6,920 per day. The only location

where traffic could leave Canonbury Road between the two sites is at Canonbury Square, heading west to the A1. Prior to the PFS being put in place, traffic could travel between Canonbury Road and St Paul's Road via Compton Road to avoid the junction with Highbury Corner. However, the introduction of the modal filter at Canonbury Place means that it is no longer possible for motorised vehicles to use this route.

St Paul's Road

It is likely that the Highbury Corner redevelopment has had a significant impact on traffic on St Paul's Road (this is discussed further in the following section). Motorised traffic volumes have risen by 15% at both count locations on St Paul's Road. Traffic volumes are consistently higher at the western site in both the baseline and interim counts. This is likely to be due to traffic joining and leaving from the A1201 Highbury Grove / Blackstock Road.

Highbury Corner (as of August 2021)

The Highbury Corner scheme was introduced by Transport for London (TfL) in 2019 as part of a London-wide Safer Junctions programme to reduce road danger at a number of intersections including roundabouts, which the council supports.

The scheme has provided safer facilities for cyclists as well as an improved and enlarged public space for pedestrians outside Highbury & Islington station, including additional seating and access to greenery.

The council has continued to work with TfL to raise our concerns and those raised by our residents regarding congestion on the surrounding roads. TfL have carried out a comprehensive review of the traffic signal arrangements at Highbury Corner. This has included site visits and the analysis of data on their systems, with the intention of introducing signal strategies to ease congestion in the area and allow traffic to flow more efficiently. TfL began to test these strategies on 9 August 2021 and will continue to monitor the network as additional checks and adjustments may be required. The council will continue to liaise with them on their review and findings.

Motorised traffic speeds and speeding on boundary roads

The traffic counts carried out also measure motorised traffic speeds. These are the same counts that have been analysed for their volume results. The details regarding the dates and locations of these counts are in Appendix 4. Full speed monitoring results are available in Appendix 3 (absolute speeds from baseline and interim results).

The speed limit is 20mph on all roads where counts were taken. Speed monitoring results have not been normalised. The results presented here are seven-day averages. The 85th percentile is used in transport monitoring to gauge changes in speeds and speeding behaviour. It is the speed at which 85% of traffic will be travelling at, or below, along a street (15% of traffic will be travelling faster than this speed, therefore).

Results (seven-day averages, 'change in volumes' use seven-day daily averages)

Table 10: changes in speeds on boundary roads

July 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
St. Paul's Road (west)	-1.52	-10%	-1.68	-8%	-806	-4%	-6%
St. Paul's Road (east)	-0.18	-1%	-0.27	-1%	853	8%	-2%
Canonbury Road (north)	0.51	3%	1.59	7%	-2,315	-13%	9%
Canonbury Road (south)	-0.26	-2%	-0.33	-1%	-1,070	-7%	-2%
Essex Road	-0.52	-3%	-0.52	-2%	-583	-4%	-4%
Overall Average	-0.39	-3%	-0.24	-1%	-784	-4%	-1%

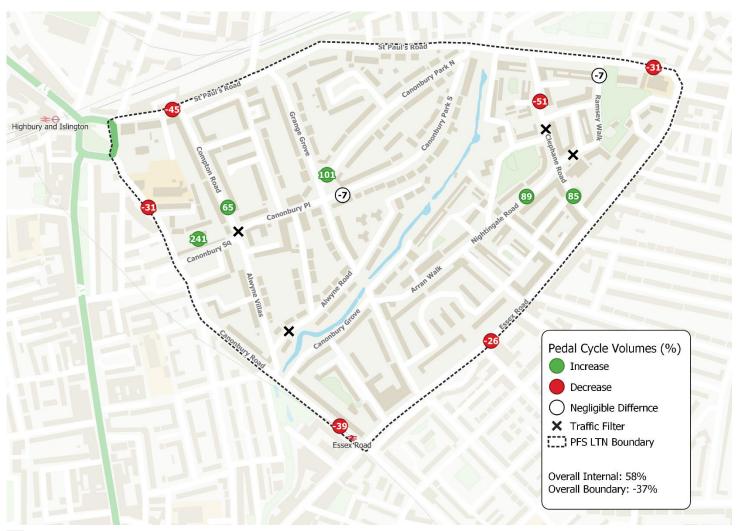
Insights: motorised traffic speeds and speeding on boundary roads

General insights

On average across the boundary road sites, average speeds and the 85th percentile speed have changed negligibly (less than 10%). The volume and proportion of vehicles speeding have also changed negligibly overall across boundary roads.

Cycling volumes on internal and boundary roads

Map 5: Percentage change in cycling volumes (seven-day daily averages)



We have not normalised cycling figures for Covid-19 due to the lack of an available source that encompasses all cycle users, and because there are likely at least two key variables impacting these results: Covid-19 disruption, and seasonal variation. As such, the different contexts during which the two counts were taken is especially important to take into account when considering the cycle volumes analysis.

In July 2020, when the baseline counts were taken, Covid-19 related lockdown restrictions were substantially lifted across the country, with local lockdowns occurring in some areas.

When the interim counts were taken in June 2021, the government's lockdown restrictions were being lifted altogether, with all restrictions removed by 19th July 2021.

Despite this, the effect of lockdowns may have resulted in slightly less cyclists on the road during both the baseline and interim periods.

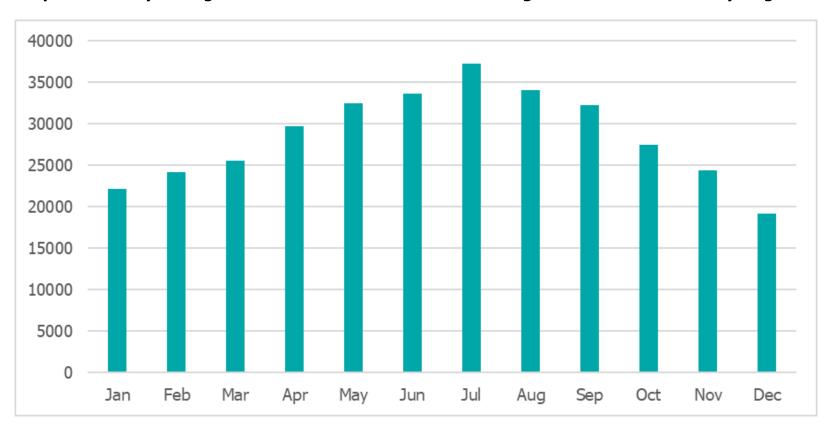
Cycling levels are also impacted by seasonal weather change including temperature and rainfall; for example, there is normally much more cycling participation in July than in February. There are several interlinked factors when it comes to the impact seasonal weather variation has on cycling levels, while weather can still vary within a season. As an indication of the impact weather can have, one 2011 study found a doubling in temperature could lead to a 43% – 50% increase in cycling levels, before having a negative impact if too high (Study by Miranda-Moreno and Nosal, 2011).

Cyclist's route choices will be impacted by the availability of nearby protected cycle infrastructure and Low Traffic Neighbourhoods, including the recently constructed Cycle Way 38, and will likely impact local traffic volumes travelling through the area.

During the week the baseline traffic counts were taken in July 2020 the minimum temperature was 9°C and the maximum was 34°C. England-wide weather data shows that July 2020 was a dry, sunny and exceptionally hot month. During the week the interim traffic counts were taken in June 2021, the minimum temperature was 11°C and the maximum was 27°C. UK-wide data shows that June 2021 saw double the average rainfall in London, which may have slightly reduced the numbers of cyclists on the roads. Data was not available on a regional or sub-regional level. It is not possible to separate out or control for the impact of weather on the results in this report.

Graph 1 demonstrates the seasonal variation in cycling. While Graph 1 would indicate that cycling levels in June and July would normally be similar, it is important to note it is based on 2019 data; and as discussed in the previous paragraphs, there were specific weather and lockdown restriction measures that may have affected the difference between the two months.

Graph 1: Monthly average Santander hire trend in 2019 showing seasonal difference in cycling levels



Cycling volumes on internal roads

Results (seven-day daily averages)

Table 11: Pedal cycles volumes on internal roads (July 2020 to June 2021)

	Observed Pedal Cycles- July 2020	Observed Pedal Cycles - June 2021	Difference July 2020- June 2021	Difference July 2020- June 2021
Canonbury Square	182	620	438	241%
Canonbury Park South	324	303	-21	-7%
Clephane Road (north)	197	96	-101	-51%
Ramsey Walk	88	82	-6	-7%
Nightingale Road	82	156	73	89%
Clephane Road (south) - Southbound	93	171	79	85%
Overall internal	966	1428	462	58%

Table 12: Pedal cycles volumes on Compton Road

	Observed Pedal	Observed Pedal	Difference	Difference
	Cycles-	Cycles	Nov 2020- June	Nov 2020-
	Nov 20	- Jun 2021	2021	June 2021
Compton Road*	121	200	79	65%

^{*} Baseline data on Compton Road was not accurate in the original survey due to utility works in the area in July 2020, so data from November 2020 was used instead.

Table 13: Pedal cycles volumes on Canonbury Park North

	Observed Pedal	Observed Pedal	Difference	Difference
	Cycles-	Cycles	Nov 2020- June	Nov 2020-
	Nov 20	- Jun 2021	2021	June 2021
Canonbury Park North*	178	357	179	101%

^{**} Data on Canonbury Park North baseline was not accurate due to utility works and a partial road closure in July 2020, so data from November 2020 was used instead.

Cycling volumes on boundary roads

Results (seven-day daily averages).

Table 14: Pedal cycles volumes on boundary roads

	Observed Pedal Cycles- July 2020	Observed Pedal Cycles- June 2021	Difference July 2020- June 2021	Difference July 2020- June 2021
St. Pauls Road (western road)	904	499	-405	-45%
St. Paul's Road (eastern site)	723	500	-223	-31%
Canonbury Road (northern site)	1478	1018	-460	-31%
Canonbury Road (southern site)	918	565	-354	-39%
Overall Boundary	4023	2582	-1441	-37%

Table 15: Pedal cycles volumes on boundary roads

	Observed	Observed	Difference	Difference
	Pedal Cycles-	Pedal Cycles-	July 2020- June	July 2020- June
	July 2020	June 2021	2021	2021
Essex Road	1296	961	-335	-26%

Insights: cycling volumes on internal, boundary and beyond boundary roads (combined)

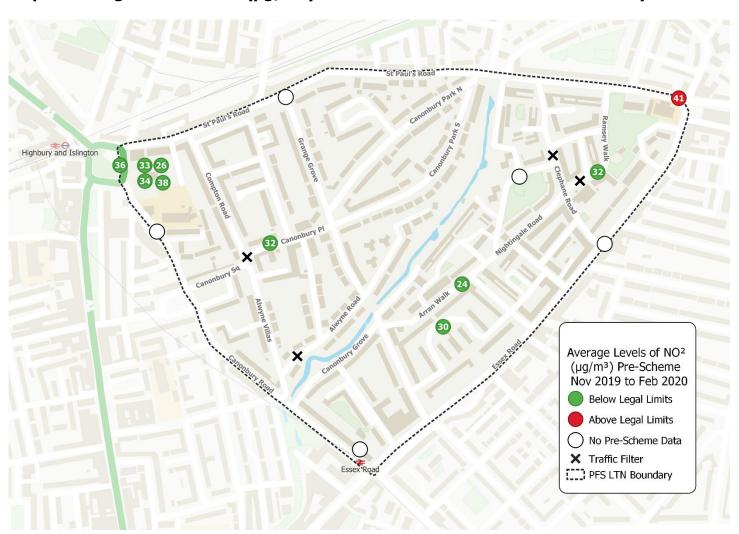
On average across internal roads, cycling has increased by 58%, and increased at 62% of internal sites (five out of eight). On the boundary roads, they have decreased by 37% overall.

In terms of numbers, cycling on internal roads has increased from 966 per average day to 1,428. There were increases on Compton Road and Canonbury Park North, but this may be partially due to seasonal variations; the baselines were taken in November, while the interim counts were carried out in June.

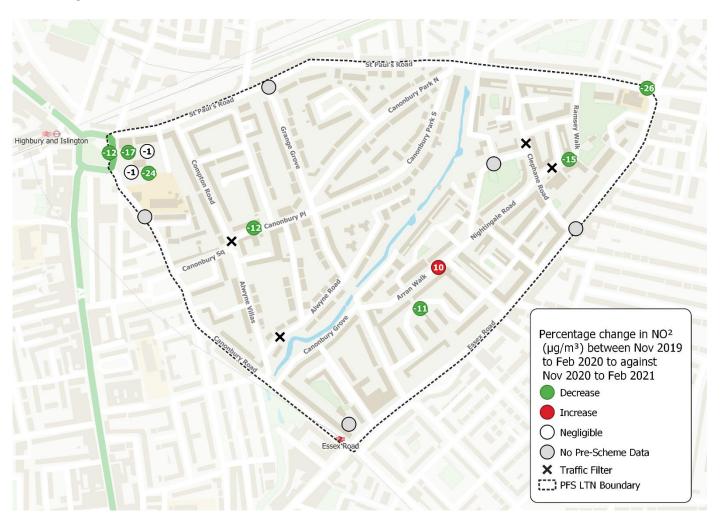
On the boundary roads, cycling numbers fell overall from 4,023 to 2,582. This may be explained in part by cyclists using the quieter internal roads instead of the boundary roads. As traffic levels have risen overall since 2020 this may be discouraging cyclists from using the main roads. There may also be an element of double counting on the boundary roads, especially on St Paul's Road and Canonbury Road where there are more than one counter.

Air Quality

Map 6: Average levels of NO_2 ($\mu g/m3$) Pre-Scheme November 2019 to February 2020

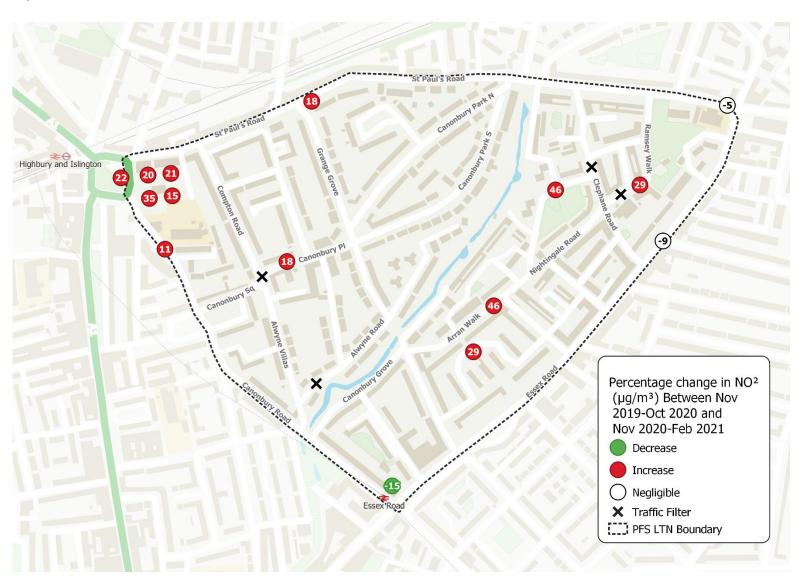


Map 7: Percentage change in NO_2 ($\mu g/m3$) between November 2019 to February 2020 against November 2020 to February 2021



^{*}These sites were installed in summer 2020, and therefore do not have data from the baseline period for comparison with interim results

Map 8: Percentage change in NO_2 ($\mu g/m3$) between November 2019-October 2020 and November 2020 to February 2021



Map 8 above compares air pollution in the four months since the low traffic neighbourhood was introduced to air pollution over the full year prior to introduction. The four months after the introduction of the low traffic neighbourhood were during winter, when air pollution is often worse than in spring and summer months. In comparing pollution levels observed in winter months to a full year of data, pollution levels often will look higher, as seen in Map 8. This is why we also compared these results to the borough averages which show a similar result and the same time period the year before (see Map 7 and Tables 16-19).

Air quality refers to the air around us, how clean it is and how many pollutants (harmful chemicals or substances) it contains. The more pollutants the air contains the more air pollution there is and the worse the air quality is. Poor air quality is a concern as air pollution can impact health. The two main pollutants of concern that we monitor are:

- Particulate matter of 10μm or less in size (PM₁₀) tiny bits of solid material made of a range of substances suspended in the air.
- Nitrogen dioxide (NO₂) one of a group of gases called nitrogen oxides.

There are three types of monitors in use, which will give slightly different data:

- Automatic monitors: monitor NO₂ and PM₁₀ 24 hours a day at two locations in the borough. These are our most accurate monitors.
- Diffusion tubes: provide monthly readings of NO₂. While not as accurate as the automatic monitors they can be more widely deployed to provide trends over a larger area and time period and are a nationally approved monitoring technique.
- Sensors: these sensors can monitor a range of pollutants in a continuous manner like the automatic monitors, however they can have more uncertainty with regard to accuracy and these monitors have not gone through the same quality control process as our other monitors.

Islington's air quality sites are classified based on their location using <u>Defra guidance</u>, but are referred to in these PFS monitoring reports using PFS terminology. This has required the addition of a further category, as will now be explained. According to Defra, "Roadside sites" are those within one to five metres of a busy road. In the PFS monitoring reports, roadside monitoring equates to boundary road sites. According to Defra, "Urban background sites" are those in an urban location but more distanced from traffic sources. For the PFS monitoring we have further split the urban background results into sites on internal roadsides and sites away from roads. These categorisations apply to the PFS area and borough wide. We are looking to make monthly results for individual sites available on the council website as soon as possible.

The long-term sites in Islington consist of nine roadside diffusion tubes, ten background urban diffusion tubes, one automatic main road site and one automatic background urban site. One of the main road diffusion tubes has been moved in 2019, and is therefore not being included in PFS monitoring using this time period. One of the long term urban background sites is located within Canonbury West, so this monitors has not been included as part of wider borough sites for this area, but instead looked at as part of Canonbury West averages. More details of these sites can be viewed in our annual report.

The air quality monitoring sites in the Canonbury West area are listed in Appendix 6, with details about type and if they have been added as part of the PFS programme or were pre-existing. The long-term sites that are being used for comparison work in this interim Canonbury West report consist of eight main road diffusion tubes and nine background urban diffusion tubes, as the sensor data we have for this area does not have enough data to be meaningfully analysed at this stage.

Methodology

Time period of study

Air quality varies over time due to a variety of factors, including weather. It is therefore important to look at trends over a longer period of time to identify real changes in air quality due to this scheme. It is preferable to compare a year's worth of data to account for seasonal variation.

More air quality analysis will be included in the future Canonbury West pre-consultation monitoring report, when there is more 'after' data available. However, due to the importance and interest in air quality in the PFS trials, we are including interim analysis to provide an initial view of air quality levels in the area.

Every month, our diffusion tube monitors are collected and sent to a laboratory for analysis, meaning results are not immediate and it can take a few months to get results. We therefore have only four months of 'after' data since the scheme was introduced and in the case of new monitoring sites we also have limited baseline data to compare this to. The newer monitoring sites are therefore less reliable to provide comparison data, as the pre-scheme monitoring period is too short. However, the ultimate goal of our air quality strategy is to reduce air pollution as much as possible, and certainly to within legal limits. As such, the newer sites will be used to monitor if air quality is at legal levels in and of itself.

Results: air quality diffusion tubes

Table 16, Table 17, This includes five monitoring locations for Canonbury West internal roads. Four of the monitoring sites provided data for the full 16-month period, the remaining site provides data from July 2020 and as such data has been adjusted for periods of missing data (see appendix 6 for more detail). There were five whole borough long term monitoring sites.

Table 18, Table 19 and Graph 2 in this section use NO_2 data from diffusion tubes only, as the sensors in Canonbury West do not have any before-scheme monitoring. There are therefore no results for PM_{10} for Canonbury West.

The Tables show the results since the PFS scheme broken down as follows:

- Pre-Scheme Comparable (Nov 2019-Feb 2020): Data over a similar period from the previous year;
- All Pre-Scheme (Nov 2019-Oct 2020): All available data up to when the PFS was put in place;
- Post Scheme (Nov 2020-Feb 2021): Available data after the PFS was put in place.

The pollution levels in these periods are likely to have been impacted by Covid-19. <u>Studies</u> into the impacts of lockdown on air pollution, by Defra, for example, show lower than average levels of the pollutant NO₂ with the first lockdown.

Please note, the values in the Tables show the average results for all monitors in each category, with figures rounded to the nearest whole number, so the differences may look different to what is expected from the NO₂ values given for time periods A-C.

Table 16: (Boundary roads) NO₂ levels in Canonbury West and borough long term diffusion tube sites

	Pre-Scheme Comparable (Nov 2019-Feb 2020) NO2 (µg/m3)	All Pre-Scheme (Nov 2019-Oct 2020) NO2 (µg/m3)	Post Scheme (Nov 2020-Feb 2021) NO2 (µg/m3)	Pre-Scheme Compared to Post Scheme (µg/m3)	Pre-Scheme Compared to Post Scheme (% change)
Canonbury W	38	33	34	-4	-11%
Whole borough long term sites	41	32	36	-6	-15%

This includes six monitoring locations for Canonbury West boundary roads. Two of the monitoring sites provided data for the full 16-month period, the remaining four sites provide data from July 2020 and as such data has been adjusted for periods of missing data (see Appendix 6 for more detail). There were eight whole borough long term monitoring sites.

Table 17: (Internal roads) NO₂ levels in Canonbury West and borough long term diffusion tube sites

	Pre-Scheme Comparable (Nov 2019-Feb 2020) NO2 (µg/m3)	All Pre-Scheme (Nov 2019-Oct 2020) NO2 (µg/m3)	Post Scheme (Nov 2020-Feb 2021) NO2 (µg/m3)	Pre-Scheme Compared to Post Scheme (µg/m3)	Pre-Scheme Compared to Post Scheme (% change)
Canonbury W	29	21	28	-1	-3%
Whole borough long term sites	31	22	29	-2	-10%

This includes five monitoring locations for Canonbury West internal roads. Four of the monitoring sites provided data for the full 16-month period, the remaining site provides data from July 2020 and as such data has been adjusted for periods of missing data (see appendix 6 for more detail). There were five whole borough long term monitoring sites.

Table 18: (Non-street-based sites) NO₂ levels in Canonbury West and borough long term diffusion tube sites

	Pre-Scheme	All Pre-Scheme	Post Scheme	Pre-Scheme	Pre-Scheme
	Comparable (Nov	(Nov 2019-Oct	(Nov 2020-Feb	Compared to	Compared to Post
	2019-Feb 2020)	2020) NO2	2021) NO2	Post Scheme	Scheme
	NO2 (µg/m3)	(μg/m3)	(µg/m3)	(µg/m3)	(% change)
Canonbury W	34	24	29	-5	-15%

Whole borough	20	20	26	4	120/
long term sites	30	20	20	-4	-13%

This includes four monitoring locations for Canonbury West non-street locations. There were four whole borough long term monitoring sites.

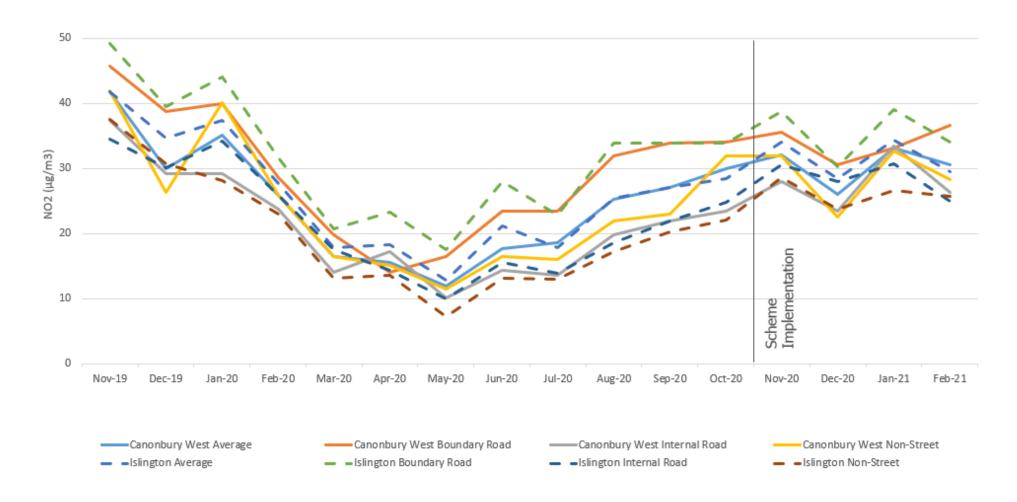
Table 19: (Overall) NO₂ levels in Canonbury West and borough long term diffusion tube sites

	Pre-Scheme Comparable (Nov 2019-Feb 2020) NO2 (µg/m3)	All Pre-Scheme (Nov 2019-Oct 2020) NO2 (µg/m3)	Post Scheme (Nov 2020-Feb 2021) NO2 (µg/m3)	Pre-Scheme Compared to Post Scheme (µg/m3)	Pre-Scheme Compared to Post Scheme (% change)
Canonbury W	34	26	30	-4	-12%
Whole borough long term sites	35	26	32	-4	-11%

To allow better comparison between Canonbury West and the wider borough changes non-street sites have been included in the whole borough average. This includes seventeen long term monitoring sites for the whole borough for each time period and fifteen Canonbury West Sites (with some monitors only in place since July 2020). In Canonbury West values are adjusted to account for periods of missing data (see Appendix 6 for further explanation).

Graph 2 compares the trends in NO₂ levels in Canonbury West and across Islington overall from November 2019 through to February 2021.

Graph 2: Average NO₂ levels in Canonbury West compared to long term borough-wide sites from diffusion tubes



Insights: air quality

The results in Table 16, Table 17, This includes five monitoring locations for Canonbury West internal roads. Four of the monitoring sites provided data for the full 16-month period, the remaining site provides data from July 2020 and as such data has been adjusted for periods of missing data (see appendix 6 for more detail). There were five whole borough long term monitoring sites. Table 18 and Table 19 show that there has been a decrease in pollution at almost all monitoring sites in Canonbury West when the post-implementation period is compared with the same period the year before. This is similar to changes seen at wider borough sites where slight decreases can be observed when the post implementation period is compared to the same period the year before. This is across Canonbury West and the borough, where 2019 data is available.

As Graph 2 shows, the borough-wide and Canonbury West monitoring site averages all dropped to a low in May 2020 before rising. This aligns to a period of national lockdown measures, which started in March 2020 and were eased by July 2020 as well as potential seasonal variations where NO₂ can often be lower in summer months. The post-implementation period of the PFS trial in Canonbury West (November 2020 – March 2021) was at the same time as rising trends in the borough more widely. As such, while NO₂ levels in the trial area have increased since it was implemented end of November 2020 and show higher values compared to the whole year before, this is in line with borough-wide trends and can therefore be viewed as related to the impact of lockdown measures, and seasonal variation, and suggests the impact of wider factors on pollution levels, with no distinct impact on air quality to date due to the trial. Post implementation, December 2020 and February 2021 have shown lower results than November 2020.

In summary these results show:

- Changes in levels of NO₂ in Canonbury West reflect those in the borough more widely.
- However, this is from only four months of data and based on a limited number of monitoring sites in Canonbury West. Further observation will be carried out for the pre-consultation report.
- In the post-implementation period, average NO₂ levels by site type at Canonbury West sites have been within the annual objective level of 40µg/m3.
- Levels of NO₂ in Canonbury West since PFS started (November 2020 February 2021) are lower than the previous year at all but one of the sites where comparable data for the same months is available from November 2019 February 2020. This is in line with wider borough trends where NO₂ levels have been similar.

- Levels of NO₂ in Canonbury West since PFS started (November 2020-February 2021) are higher than average levels for the whole year before (November 2019-October 2020). However, this is comparable to wider borough changes and likely shows the impact of seasonal variations and Covid-19.
- The Air Quality Team are satisfied that the interim results show no discernible negative impacts on air quality in the cell, but they will continue to monitor air pollution over a longer time period to get a better understanding of any changes.

Emergency vehicles access

London Ambulance Service

The Council is in conversation with the London Ambulance Service (LAS) about where it may be able to feed into future reports regarding traffic schemes within the Borough and continues to monitor schemes and provide feedback to the council traffic officers should any delays occur to emergency responses.

As of 24 June 2021, there have not been any reported delays in LAS response times as a result of the People Friendly Street area being implemented in Canonbury West. The LAS will continue to monitor this closely in the future.

Metropolitan Police Service

The council continues to engage and consult with the Metropolitan Police Service (MPS) as part of the implementation of its PFS programme.

The following statement has been provided by the MPS:

Analysis of call data for the past 12 months, up to the end of July 2021, shows there has been no difference in average response times across the London Borough of Islington when compared to the previous 12 months (2019/2020) for both immediate and standard graded calls. There is no specific data available for low traffic neighbourhoods. Of note, over the past 12 months there has been a considerable reduction in call demand due to the effects of the coronavirus pandemic, c.2,800 fewer calls than the 12 months between

August 2019 to end of July 2020 and a 19% reduction in offences. As we come out of the pandemic restrictions, we will continue to monitor call data to see if changes in road layouts across the borough affect our response times.

London Fire Brigade

The London Fire Brigade (LFB) monitors the time it takes their vehicles to attend emergencies (attendance times). They are sharing data with the council to enable us to understand if the PFS schemes have adversely impacted attendance times.

The LFB use average attendance times to monitor attendance times. This is because there are a significant number of variables that can impact attendance times – for example, responding vehicles are not always setting off from the same place.

As detailed in the London Safety Plan, London Fire Brigade's intention is always to get to an emergency incident as quickly as possible on each and every occasion. But the Brigade also sets itself targets for the time it should take to arrive at an incident. The Brigade's London-wide attendance targets are:

- To get the first fire engine to an incident within an average of six minutes.
- To get the second fire engine to an incident within an average of eight minutes.
- To get a fire engine anywhere in London within 12 minutes on 95 per cent of occasions.

PFS monitoring analysis methodology

As advised by the LFB, the 2019 average attendance times for Islington and Canonbury ward are used as the baseline against which to compare the post-implementation averages for each area.

The average attendance times for the Canonbury ward are considered together with average attendance times for the whole borough, to ascertain to what degree the scheme has impacted the post-implementation attendance times in the PFS area compared to the borough overall, thus accounting for any potential Covid-19 disruption.

Please note that data from LFB is only available by ward. Canonbury ward also contains the Canonbury East PFS area, so it is not possible to isolate the impacts of Canonbury West PFS. However, as shown in Table 20 and Table 21, there have been negligible changes to response time in Canonbury ward.

The results cover response times to incidents attended by the brigade to an address in the specified area. They do not include the times of response vehicles that passed through the area to attend an incident in a different area.

London Fire Brigade Response Time Results

Table 20: Average attendance times of the London Fire Brigade – Islington-Wide Data

Period	No. of mobilisations - Islington	Average Attendance 1st Appliance (minutes)	Average Attendance 2nd Appliance (minutes)
2019 (baseline)	2,076	04:36	06:17
2020 (full year)	2,046	04:29	06:02
11/2020 to 04/2021	942	04:44	06:06
Change against 2019 data	n/a	+00:08	-00:11

Table 21: Average attendance times of the London Fire Brigade – Canonbury Ward Data

Period	No. of mobilisations — Canonbury Ward	Average Attendance 1st Appliance (minutes)	Average Attendance 2nd Appliance (minutes)
2019 (baseline)	124	04:47	06:16

2020 (full year)	150	04:59	06:24
07/2020 to 06/2021	54	05:07	06:16
Change against 2019 data	n/a	+00:20	00:00

Insights: London Fire Brigade response times

Given the extent of variables that affect response times, the differences between the 2019 baseline, the 2020 pre-implementation period and the post-implementation period are considered negligible by the LFB and the council. As such, it is the view of the LFB and the council that the PFS area in Canonbury West has not impacted this emergency service's attendance times. We will continue to monitor this indicator.

Anti-social behaviour and Crime patterns

Data about anti-social behaviour (ASB) calls, including the location that is being referred to, is gathered in the council's Community Safety team. This data has been analysed to monitor for changes in the volume of calls within PFS areas, especially around the traffic filters. The nature of the issue being reported has also been taken into consideration.

Data has been drawn from the Canonbury West PFS area and the whole of Islington, and results from the two areas compared month by month to monitor for Covid-19 disruption.

ASB and Crime Pattern Results

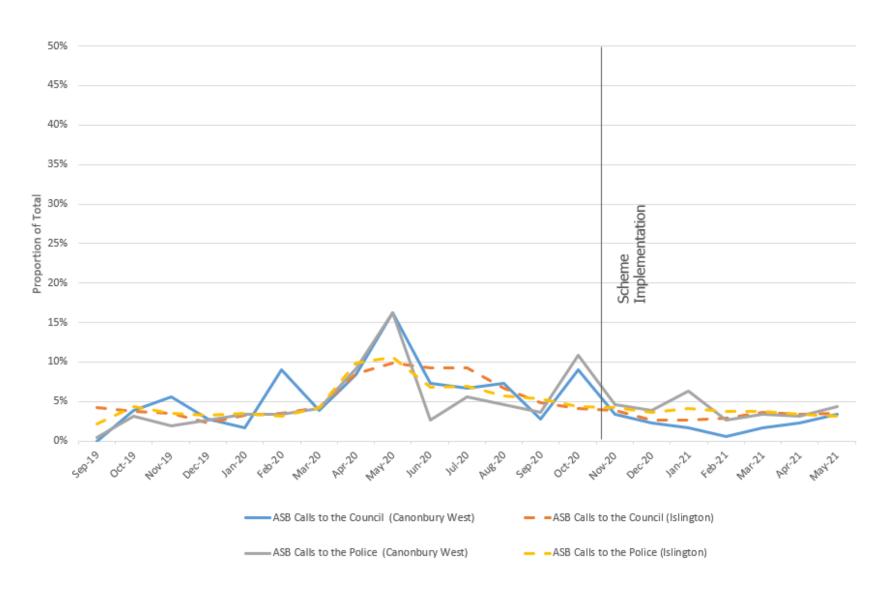
Table 22: Calls and crimes in Canonbury West and Islington (proportion as a percentage of Sep 2019 – May 2021)

Month	ASB Calls to the Council - Canonbury West	ASB Calls to the Council - Islington	ASB Calls to the Police - Canonbury West	ASB Calls to the Police - Islington	Street-based Criminal Offences - Canonbury West	Street-based Criminal Offences - Islington
Sep-19	0.0%	4.3%	0.5%	2.2%	6.1%	5.6%
Oct-19	3.9%	3.7%	3.1%	4.3%	5.2%	6.1%
Nov-19	5.6%	3.5%	1.9%	3.5%	5.0%	6.7%
Dec-19	2.8%	2.3%	2.7%	3.3%	5.9%	5.8%
Jan-20	1.7%	3.3%	3.4%	3.5%	8.0%	6.0%
Feb-20	9.0%	3.5%	3.4%	3.2%	7.2%	6.1%
Mar-20	3.9%	4.2%	4.1%	4.3%	2.8%	4.5%
Apr-20	8.4%	8.5%	9.2%	9.9%	3.7%	3.3%
May-20	16.3%	9.9%	16.2%	10.6%	3.3%	4.0%
Jun-20	7.3%	9.2%	2.7%	6.8%	3.7%	4.1%
Jul-20	6.7%	9.3%	5.6%	7.0%	6.5%	4.7%
Aug-20	7.3%	6.7%	4.6%	5.7%	3.7%	5.4%
Sep-20	2.8%	4.9%	3.6%	5.4%	6.1%	5.1%
Oct-20	9.0%	4.1%	10.9%	4.3%	6.1%	4.9%
Nov-20	3.4%	3.9%	4.6%	4.2%	3.5%	4.5%
Dec-20	2.2%	2.7%	3.9%	3.6%	3.0%	4.1%
Jan-21	1.7%	2.7%	6.3%	4.1%	3.3%	3.5%
Feb-21	0.6%	2.9%	2.7%	3.8%	5.2%	3.1%
Mar-21	1.7%	3.6%	3.4%	3.7%	4.1%	4.0%
Apr-21	2.2%	3.3%	3.1%	3.4%	3.0%	4.1%
May-21	3.4%	3.5%	4.3%	3.2%	4.6%	4.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

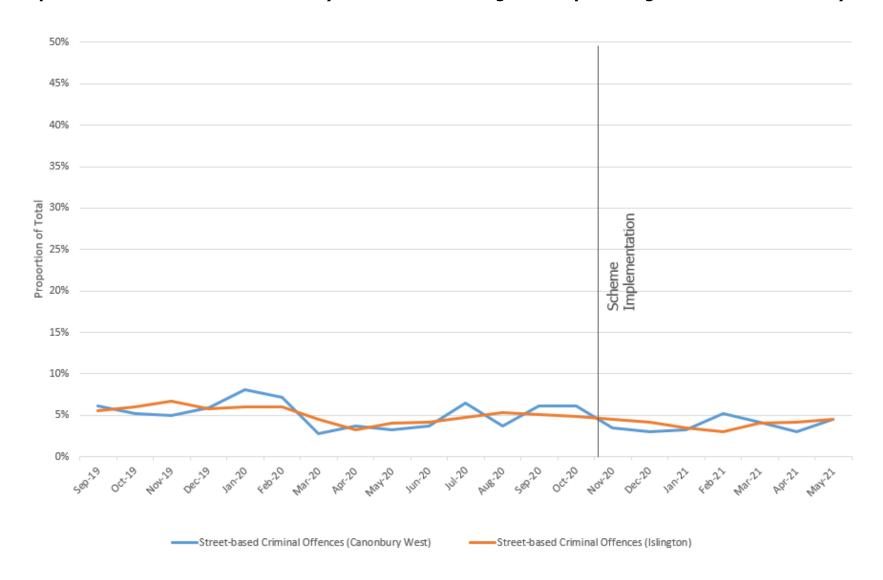
Table 23: Volume of calls and crimes in the Canonbury West area and Islington

Month	ASB Calls to the Council - Canonbury West	ASB Calls to the Council - Islington	ASB Calls to the Police - Canonbury West	ASB Calls to the Police - Islington	Street-based Criminal Offences - Canonbury West	Street-based Criminal Offences - Islington
Sep-19	<5	347	<5	359	28	853
Oct-19	7	305	13	705	24	929
Nov-19	10	285	8	577	23	1026
Dec-19	5	187	11	539	27	885
Jan-20	<5	265	14	573	37	919
Feb-20	16	284	14	521	33	932
Mar-20	7	343	17	699	13	694
Apr-20	15	693	38	1612	17	502
May-20	29	805	67	1732	15	620
Jun-20	13	749	11	1108	17	636
Jul-20	12	756	23	1135	30	726
Aug-20	13	544	19	935	17	822
Sep-20	5	399	15	880	28	781
Oct-20	16	335	45	703	28	745
Nov-20 (PFS implemented)	6	317	19	685	16	697
Dec-20	<5	218	16	588	14	635
Jan-21	<5	217	26	674	15	530
Feb-21	<5	240	11	614	24	470
Mar-21	<5	295	14	604	19	621
Apr-21	<5	272	13	562	14	635
May-21	6	284	18	518	21	694
Total	178	8,140	414	16,323	460	15,352

Graph 3: ASB calls to the Council and Police in Canonbury West and Islington as a percentage of the total over one year



Graph 4: Street crimes in the Canonbury West area and Islington as a percentage of the total over one year



Insights: anti-social behaviour and crime patterns

In terms of volumes of crime and ASB during the past 18 months, the Canonbury West PFS area showed similar trends to those of Islington as a whole. On average, calls in the Canonbury West area are low, as can be seen in Table 23.

Across the various analyses of the volume of ASB calls and crimes in Canonbury West and Islington, the monthly volume of calls and crimes as a proportion of the total over the year period has remained approximately consistent between Canonbury West and Islington.

Table 22, Table 23, Graph 3 and Graph 4 show increases in anti-social behaviour calls during the first lockdown last year in both Canonbury West and Islington. Contributing to this will have been reporting of people breaching the rules set out by Central Government.

The council's ASB team have found no evidence to suggest that the rate increased following the implementation of the PFS area. The council will continue to monitor this metric in this area and will be able to present data for more months in the pre-consultation report.

Concluding remarks

This interim monitoring report shows that, at this point in the Canonbury West people-friendly streets (PFS) trial, the project is generally having the intended impacts in the area of reducing motorised traffic across internal roads, as well as levels of speeding on internal and boundary roads, thereby making the area's roads safer, cleaner and healthier for residents. There has been a negligible change in crime and anti-social behaviour patterns and London Fire Brigade response times. The trial has not had an adverse impact on air quality to date, as nitrogen dioxide levels have risen in line with borough trends.

The local streets within Canonbury West are cleaner, greener and healthier. Traffic levels have fallen by 46% and rates of speeding have fallen by 12%. The volume of cycle traffic has increased by 58% following the introduction of the PFS.

On the boundary roads, although the traffic volume has fallen on Canonbury Road by an average of 42%, there has been a 15% increase in traffic volume on St Paul's Road. The traffic patterns in the area may have been affected by the works to improve Highbury Corner, which could have led to the rise on St Paul's Road. The council will continue to monitor this situation.

Future decisions to keep, remove or amend the Canonbury West PFS trial is not dependent on any single metric, but a combination of them together with feedback from the online survey and upcoming consultation with residents and stakeholders.

People-friendly streets schemes are being introduced on a trial basis, with a full public consultation twelve months into each scheme to give residents the chance to give their views. A pre-consultation monitoring report will also be produced in time to inform the consultation with one-year-on monitoring.

Until then, residents in the Canonbury West area can also fill in our survey through the Council's people friendly streets webpage: https://www.islington.gov.uk/roads/people-friendly-streets/canonbury-west.

Appendices

Appendix 1: Internal Roads counts

Canonbury Square

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	11920	13775	3820	4193	-8100	-9581	-68%	-70%
7 day daily average	1818	2101	546	599	-1272	-1502	-70%	-71%
5 day total	8641	9985	2754	3023	-5887	-6962	-68%	-70%
5 day daily average	1905	2202	551	605	-1354	-1597	-71%	-73%
AM peak hourly average (weekdays)	60	69	34	37	-27	-33	-44%	-47%
PM peak hourly average (weekdays)	195	226	47	52	-148	-174	-76%	-77%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1212	4342	3130	258%
7 day daily average	182	620	438	241%
5 day total	908	3578	2670	294%
5 day daily average	195	716	521	267%
AM peak hourly average (weekdays)	15	57	42	287%
PM peak hourly average (weekdays)	14	64	50	349%

Compton Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	7637	9807	6434	7062	-1203	-2745	-16%	-28%
7 day daily average	1091	1401	919	1009	-172	-392	-16%	-28%
5 day total	6242	8016	5329	5850	-913	-2166	-15%	-27%
5 day daily average	1248	1603	1066	1170	-183	-433	-15%	-27%
AM peak hourly average (weekdays)	109	140	113	124	4	-16	4%	-11%
PM peak hourly average (weekdays)	85	110	58	63	-28	-47	-32%	-43%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	844	1399	555	66%
7 day daily average	121	200	79	65%
5 day total	657	1150	493	75%
5 day daily average	131	230	99	76%
AM peak hourly average (weekdays)	10	15	5	50%
PM peak hourly average (weekdays)	9	22	13	144%

Canonbury Park North

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	10148	13031	10505	11531	357	-1500	4%	-12%
7 day daily average	1450	1862	1503	1650	54	-211	4%	-11%
5 day total	8664	11126	8720	9572	56	-1554	1%	-14%
5 day daily average	1733	2225	1748	1918	15	-307	1%	-14%
AM peak hourly average (weekdays)	182	233	214	235	33	2	18%	1%
PM peak hourly average (weekdays)	99	128	87	95	-12	-32	-12%	-25%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1243	2485	1242	100%
7 day daily average	178	357	179	101%
5 day total	1018	2029	1011	99%
5 day daily average	204	409	205	101%
AM peak hourly average (weekdays)	15	28	13	85%
PM peak hourly average (weekdays)	17	40	23	136%

Canonbury Park South

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	2306	2665	2057	2258	-249	-407	-11%	-15%
7 day daily average	329	381	297	326	-33	-55	-10%	-14%
5 day total	1626	1879	1584	1739	-42	-140	-3%	-7%
5 day daily average	325	376	320	352	-5	-24	-1%	-6%
AM peak hourly average (weekdays)	17	20	26	29	9	9	51%	44%
PM peak hourly average (weekdays)	24	28	20	22	-4	-6	-16%	-20%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	2267	2104	-163	-7%
7 day daily average	324	303	-21	-7%
5 day total	1777	1734	-43	-2%
5 day daily average	355	351	-5	-1%
AM peak hourly average (weekdays)	23	27	4	16%
PM peak hourly average (weekdays)	32	30	-3	-9%

Clephane Road (North)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	14783	17083	2665	2925	-12118	-14158	-82%	-83%
7 day daily average	2164	2501	381	418	-1784	-2083	-82%	-83%
5 day total	11180	12919	1985	2179	-9195	-10741	-82%	-83%
5 day daily average	2311	2670	397	436	-1914	-2234	-83%	-84%
AM peak hourly average (weekdays)	110	127	19	21	-91	-107	-83%	-84%
PM peak hourly average (weekdays)	166	191	29	32	-136	-159	-82%	-83%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1349	673	-676	-50%
7 day daily average	197	96	-101	-51%
5 day total	998	449	-549	-55%
5 day daily average	206	90	-116	-56%
AM peak hourly average (weekdays)	13	6	-7	-54%
PM peak hourly average (weekdays)	16	6	-10	-64%

Ramsey Walk

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	2548	2944	2507	2752	-41	-193	-2%	-7%
7 day daily average	364	421	358	393	-6	-28	-2%	-7%
5 day total	1969	2275	1807	1984	-162	-292	-8%	-13%
5 day daily average	394	455	361	397	-32	-58	-8%	-13%
AM peak hourly average (weekdays)	17	19	20	22	4	3	21%	15%
PM peak hourly average (weekdays)	26	31	22	24	-5	-7	-18%	-22%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	615	572	-43	-7%
7 day daily average	88	82	-6	-7%
5 day total	485	457	-28	-6%
5 day daily average	97	91	-6	-6%
AM peak hourly average (weekdays)	4	4	0	-7%
PM peak hourly average (weekdays)	8	8	0	1%

Nightingale Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Diffence norised (%)
7 day total	6121	7073	2363	2594	-3758	-4480	-61%	-63%
7 day daily average	878	1015	338	371	-541	-645	-62%	-63%
5 day total	4615	5333	1689	1854	-2926	-3479	-63%	-65%
5 day daily average	923	1067	338	371	-585	-696	-63%	-65%
AM peak hourly average (weekdays)	38	44	17	19	-21	-25	-55%	-58%
PM peak hourly average (weekdays)	63	72	19	21	-43	-51	-69%	-70%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	573	1090	517	90%
7 day daily average	82	156	73	89%
5 day total	445	850	405	91%
5 day daily average	89	170	81	91%
AM peak hourly average (weekdays)	5	8	3	51%
PM peak hourly average (weekdays)	8	16	8	94%

Clephane Road (South)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	6032	6970	2147	2357	-3885	-4614	-64%	-66%
7 day daily average	891	1030	336	369	-555	-661	-62%	-64%
5 day total	4547	5254	1512	1660	-3035	-3595	-67%	-68%
5 day daily average	956	1105	342	376	-614	-729	-64%	-66%
AM peak hourly average (weekdays)	47	54	17	19	-29	-35	-63%	-65%
PM peak hourly average (weekdays)	64	74	19	20	-46	-54	-71%	-73%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	618	1113	495	80%
7 day daily average	93	171	79	85%
5 day total	448	898	450	100%
5 day daily average	97	201	104	107%
AM peak hourly average (weekdays)	9	14	5	53%
PM peak hourly average (weekdays)	6	16	10	165%

Appendix 2: Boundary roads counts

St Paul's Road (Western Site)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	123621	142855	155326	170498	31705	27643	26%	19%
7 day daily average	18382	21243	22189	24357	3807	3114	21%	15%
5 day total	85932	99302	110023	120770	24091	21468	28%	22%
5 day daily average	18044	20851	22005	24154	3961	3303	22%	16%
AM peak hourly average (weekdays)	843	975	1058	1161	214	186	25%	19%
PM peak hourly average (weekdays)	1069	1236	1302	1430	233	194	22%	16%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	6074	3496	-2578	-42%
7 day daily average	904	499	-405	-45%
5 day total	4511	2758	-1753	-39%
5 day daily average	948	552	-397	-42%
AM peak hourly average (weekdays)	57	35	-22	-39%
PM peak hourly average (weekdays)	68	36	-32	-47%

St Paul's Road (Eastern Site)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	72499	83779	87566	86085	15067	2307	21%	3%
7 day daily average	10357	11968	12509	13731	2152	1763	21%	15%
5 day total	47136	54470	60267	66154	13131	11684	28%	21%
5 day daily average	9427	10894	12053	13231	2626	2337	28%	21%
AM peak hourly average (weekdays)	450	520	614	674	164	154	37%	30%
PM peak hourly average (weekdays)	537	620	680	746	143	126	27%	20%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	5062	3500	-1562	-31%
7 day daily average	723	500	-223	-31%
5 day total	3659	2742	-917	-25%
5 day daily average	732	548	-183	-25%
AM peak hourly average (weekdays)	36	28	-8	-21%
PM peak hourly average (weekdays)	63	50	-12	-20%

Canonbury Road (Northern Site)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	114445	132251	48440	53172	-66005	-79079	-58%	-60%
7 day daily average	16349	18893	6920	7596	-9429	-11297	-58%	-60%
5 day total	82056	94823	33302	36555	-48754	-58268	-59%	-61%
5 day daily average	16411	18965	6660	7311	-9751	-11654	-59%	-61%
AM peak hourly average (weekdays)	835	965	377	414	-459	-552	-55%	-57%
PM peak hourly average (weekdays)	979	1132	316	347	-664	-785	-68%	-69%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	10343	7126	-3217	-31%
7 day daily average	1478	1018	-460	-31%
5 day total	7855	5681	-2174	-28%
5 day daily average	1571	1136	-435	-28%
AM peak hourly average (weekdays)	111	67	-43	-39%
PM peak hourly average (weekdays)	114	108	-7	-6%

Canonbury Road (Southern Site)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	96142	111100	77036	84561	-19106	-26539	-20%	-24%
7 day daily average	13795	15941	11005	12080	-2790	-3861	-20%	-24%
5 day total	70166	81083	55230	60625	-14936	-20458	-21%	-25%
5 day daily average	14122	16319	11046	12125	-3076	-4194	-22%	-26%
AM peak hourly average (weekdays)	791	915	652	716	-139	-199	-18%	-22%
PM peak hourly average (weekdays)	921	1064	663	728	-257	-336	-28%	-32%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	6395	3952	-2443	-38%
7 day daily average	918	565	-354	-39%
5 day total	4739	3186	-1553	-33%
5 day daily average	955	637	-318	-33%
AM peak hourly average (weekdays)	71	35	-36	-51%
PM peak hourly average (weekdays)	63	61	-2	-4%

Essex Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	115414	133371	110146	120905	-5268	-12466	-5%	-9%
7 day daily average	16488	19053	15735	17272	-753	-1781	-5%	-9%
5 day total	83187	96130	78504	86172	-4683	-9958	-6%	-10%
5 day daily average	16637	19226	15701	17234	-937	-1992	-6%	-10%
AM peak hourly average (weekdays)	726	839	774	850	48	10	7%	1%
PM peak hourly average (weekdays)	1071	1237	909	998	-161	-239	-15%	-19%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	9072	6729	-2343	-26%
7 day daily average	1296	961	-335	-26%
5 day total	6428	5389	-1039	-16%
5 day daily average	1286	1078	-208	-16%
AM peak hourly average (weekdays)	77	82	5	7%
PM peak hourly average (weekdays)	102	76	-26	-26%

Appendix 3: Speed results

Speeds on internal roads (seven-day daily averages)

July 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Canonbury Square	-3.68	-24%	-4.68	-25%	-183	-9%	-9%
Canonbury Park South	-0.07	0%	-0.47	-3%	-11	-2%	-1%
Clephane Road (north)	-1.45	-10%	-0.81	-4%	-131	-6%	2%
Ramsey Walk	-2.29	-16%	-3.22	-18%	-21	-5%	-5%
Nightingale Road	-1.33	-8%	-1.12	-6%	-84	-9%	-4%
Clephane Road (south) - southbound	-1.94	-13%	-2.01	-11%	-56	-6%	-4%
Overall	-3.04	-12%	-2.05	-11%	-81.01	-6%	-3%

Speeds on Compton Road (seven-day daily averages)

November 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Compton Road*	1.29	10%	1.51	9%	24	2%	2%

^{*}Baseline data on Compton Road was not accurate in the original survey due to utility works in the area in July 2020, so data from November 2020 was used instead.

Speeds on Canonbury Park North (seven-day daily averages)

November 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Canonbury Park North*	1.13	8%	-0.20	-1%	16	1%	-1%

^(*) Baseline Nov. 2020

Speeds on Boundary Roads (seven-day daily averages)

July 2020 vs June 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
St. Paul's Road (west)	-1.52	-10	-1.68	-8%	-806	-4%	-6%
St. Paul's Road (east)	-0.18	-1	-0.27	-1%	853	8%	-2%
Canonbury Road (Northern Site)	0.51	3	1.59	7%	-2,315	-13%	9%
Canonbury Road (Southern Site)	-0.26	-2	-0.33	-1%	-1,070	-7%	-2%
Essex Road	-0.52	-3	-0.52	-2%	-583	-4%	-1%

Appendix 4: Canonbury West traffic count locations and type

Islington-commissioned ATC traffic count sites

Boundary	Baseline Count Start	Interim Count Start Date	
	Date (7 day survey)	(7 day survey)	
St Pauls Road (West)	27.07.2020	14.06.2021	
St Pauls Road (East)	27.07.2020	14.06.2021	
Canonbury Road (North)	27.07.2020	14.06.2021	
Canonbury Road (South)	27.07.2020	14.06.2021	
Essex Road	03.07.2020	14.06.2021	
Internal			
Canonbury Square	27.07.2020	14.06.2021	
Compton Road	09.11.2020	14.06.2021	
Canonbury Park (North)	09.11.2020	14.06.2021	
Canonbury Park (South)	27.07.2020	14.06.2021	
Clephane Road (North)	27.07.2020	14.06.2021	
Ramsey Walk	27.07.2020	14.06.2021	
Nightingale Road	06.08.2020	14.06.2021	
Clephane Road	27.07.2020	14.06.2021	

TfL permanent traffic sites and coordinates (all ATCs)

Street name	Northing	Easting
A1 Archway	529219	187254
Pentonville Road	531004	183093
Camden Road	529924	185126
Caledonian Road	530708.1	183517.3
Clerkenwell Road	531863	182129
City Road	532762	182386
Old Street	532668	182448
St Johns Street	531460	183048
A1 Upper Street	531650	184311
Holloway Road	531239	185120
Canonbury Road	531885.4	184353.7
Southgate Road	532956	184553

TfL also has a counter on Essex Road, which has not been included in the normalisation methodology because of incomplete data that has not been processed.

ATCs measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. The supplier considers the accuracy of ATCs to be similar to those described for radar, as detailed below. Inaccuracies can arise when, for example, two vehicles pass at the same time they may be counted as one, or if a car and bicycle pass at the same time, it may be read as one car. However, the same method is used before and after and the method is considered a good industry standard. They are used as a standard in monitoring transport schemes.

Appendix 5: Traffic count normalisation methodologies

Traffic counts

To calculate the normalised percentage differences, the June 2020 traffic count volumes have been divided by 0.7790, the July 2021 traffic counts by 0.9384 to give normalised volumes. In other words, in order to account for the fact that there was less traffic on Islington streets from March 2020 onwards we have provided adjusted figures that provide an estimate for what the traffic would have been if there was no Covid-19 disruption. This allows us to analyse the impacts of the PFS area scheme rather than the impacts of Covid-19 on the traffic volumes.

To calculate the percentage change the difference has then been taken between the two, and divided by the normalised baseline volume to arrive at a normalised percentage change.

The normalisation figure for each month is reached by calculating the average daily percentage difference between the 'baseline' month (pre-Covid-19 impact) and the corresponding 'COVID-19 impacted' month (i.e. September 2019 and September 2020) across all the permanent TfL counter sites around Islington, and taking an average difference for the whole month.

Appendix 6: Air quality monitoring

We have been monitoring air quality since 2000 and have 21 long term monitoring sites across the borough. We also have additional monitoring in place for specific projects and have been monitoring air quality outside every school in the borough since 2018. As such, there is significant long-term air quality data collection across the borough, which will be used in the normalisation process. It also means there is existing air quality monitoring within the Canonbury West trial area, though some monitoring equipment has been added to expand the air quality monitoring in and around an area.

The air quality monitoring sites in the Canonbury West area are listed below, with details about type and if they have been added as part of the PFS programme, or were pre-existing.

Table 11.1: Canonbury West air quality monitoring sites type and period of installation and additional monitors just outside area included in data comparisons for the area

Locations	PFS road type	Monitoring type	Installation	Site Type by DEFRA classification*
Highbury Corner	Boundary Road	Diffusion tube	January 2016	Roadside
Canonbury Road	Boundary Road	Diffusion tube	February 2018	Roadside
St Paul's Road	Boundary Road	Diffusion tube	July 2018	Roadside
Canonbury Road	Boundary Road	Diffusion tube	July 2020	Roadside
Essex Road	Boundary Road	Diffusion tube	July 2020	Roadside
St Paul's Road/Grange Grove	Boundary Road	Diffusion tube	July 2020	Roadside
Arran Walk	Internal Road	Diffusion tube	June 1905	Urban background
Ramsey Walk	Internal Road	Diffusion tube	December 2019	Urban background
Canonbury Crescent	Internal Road	Diffusion tube	December 2019	Urban background
Canonbury Place	Internal Road	Diffusion tube	July 2018	Urban background
Clifton Road	Internal Road	Diffusion tube	July 2020	Urban background
Dixon Clark Court	Non-street	Diffusion tube	January 2016	Urban background
Dixon Clark Court	Non-street	Diffusion tube	January 2016	Urban background
Dixon Clark Court	Non-street	Diffusion tube	February 2016	Urban background
Walk between Dixon Clark Court and Highbury Corner	Non-street	Diffusion tube	February 2016	Urban background

Islington's air quality team classify sites using <u>Defra guidance</u> based on their location. Roadside sites are those within one to five metres of a busy road, while urban background sites are those in an urban location but more distanced from sources and therefore more representative of wider background conditions.

Methodology

Data quality control

As a council we are legally obliged to monitor air quality and report on this every year. To ensure data is as accurate as possible we follow national guidance for monitoring air quality, in terms of deployment and results analysis. For example: use of accredited monitors, personnel and laboratories or correction of diffusion tube data based on annual comparisons to automatic monitors. More information on this process can be found in our <u>annual reports</u>.

The data used in this analysis will follow these rules as much as possible, especially in regards to monitor deployment. However it will not have fully gone through this process, especially in regards to normal end of year analysis processes for 2021, and should therefore be treated as provisional. This is even more the case with the sensor data, which is not an approved monitoring type for official reports and where the uncertainties are more unknown.

The 2019 data in this report has been adjusted using a correction factor of 0.88, and 0.94 for 2020. Adjusting data in this way is standard practice in making air quality data as accurate as possible, more information on this factor can be found in the 2019 annual report, and in the 2020 annual report when this is published. The data for 2021 is still raw as a bias correction factor has not yet been calculated. For time periods where less than 75% of data was captured the data has been "annualised", meaning it has been adjusted by comparing it to monitors that had data for the whole period. More information can be found on this process in the annual air quality report.

Insights background

Pollution levels are impacted by a range of local and wider sources. For example, the <u>source apportionment study</u> conducted for Islington in 2015 found only 3% of London's NOx emissions came from inside Islington. Therefore, it can be very hard to pick up on local changes caused by schemes such as people-friendly streets.

Pollution also varies a lot over time due to a range of external factors (such as weather) for which this study has not corrected, therefore ideally a longer period of study would be required to analyse these results more fully. This would also allow further quality control of data that has not been possible with these results. There is also further uncertainty in recent results and whether these will represent longer term trends due to Covid-19. Studies of the first lockdown in March, for example by the <u>Greater London Authority</u>, show a decrease in overall motorised traffic and NO₂ levels but no consistent change in PM due to weather impacts.

Appendix 7: Project Centre Ltd statement

Project Centre is a multi-disciplinary design, engineering and landscaping architecture consultancy, whose highly talented people are passionate about creating places that are attractive, innovative, sustainable and safe. Project Centre's areas of expertise include air quality improvement schemes, neighbourhood traffic schemes, pedestrianisation, cycle design, road safety, traffic modelling and traffic data analysis.

Project Centre Ltd (PCL) has been commissioned by the London Borough of Islington (LBI) to prepare their report, the Canonbury West People-Friendly Streets trial Interim Monitoring Report. It is intended that this report provides an accurate, neutral evaluation of the impact of the Canonbury West people-friendly street scheme.

The key areas of focus were that the agreed methodology followed the correct process; that the conclusions were drawn without bias; that the tables and charts in both the report and appendices corresponded exactly with the underlying data analysis; and that this analysis corresponded with the methodology set out within the report and was free from error.

PCL carried out extensive checks on the data analysis. This included checking that formulae correctly reflected the processes described in the reports as well containing the correct values or cell references. Checks were also made that data had been correctly copied through a mixture of verifying complete tables against those in the report and appendices and spotchecking values in the raw data and analyses calculations.

Neither PCL nor LB Islington can be held accountable for errors in the data provided by third parties, where these errors have not been identified through the usual checking processes.

In preparing the report, application of the agreed methodology and data, PCL assessed whether the approaches taken and methods of presentation used provided a neutral evaluation of the scheme. Care was taken so that data was treated even-handedly and had in no-way exaggerated results that could be considered beneficial or hidden those that could be considered negative.

The methodology followed made appropriate assumptions that allowed for a fair comparison of counts taken before and after the trial implementation against a background of fluctuating overall traffic volumes as a consequence of COVID-19.