

People-Friendly Streets Better places for everyone

Canonbury East people-friendly streets trial

Results from the six month monitoring report







Summary of key findings

This interim monitoring report shows that at this point in the Canonbury East people-friendly streets (PFS) trial, the project is generally having the intended impacts 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 the trial has not had an adverse impact on air quality. London Fire Brigade response times are within the service's targets, although there has been an increase in first appliance response times.



Overall, traffic has fallen by 78%. This amounts to an overall reduction of 12,120 vehicles a day



On average, traffic on Downham Road has **decreased by 98% (3,409 vehicles a day)** and on Englefield Road by **87% (5,146 vehicles a day**)



On boundary roads, traffic has **decreased by 10%**, an overall reduction of **10,162 vehicles a day**



Air quality data from within the Canonbury East area, including on boundary roads, shows that **nitrogen dioxide levels have fallen** in line with borough trends



On local streets within the neighbourhood, rates of speeding **fell by 88%**



No significant impact on anti-social behaviour and crime rates



The London Ambulance has not reported any delays to response times as a result of the trial while London Fire Brigade response times are **within the**



Cycling has **decreased by 28%** on the internal roads, which is likely to be due to lockdown and seasonal differences

service's targets of six minutes in the Canonbury ward overall, although the response times **have increased**. The council is working with the London Fire Brigade to closely monitor this and explore changes if required

The above figures reflect before and after comparisons between July 2020 and Feburary 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 the indicators to understand the impacts of the PFS area.



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 benefitted 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 safer, 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 safer, healthier, greener and a fairer place for everyone. Canonbury East, 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 East people-friendly streets trial was implemented in August 2020 as a low traffic neighbourhood 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 shortly after the St Peter's low traffic neighbourhood.





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 East people-friendly streets trial are not dependent on any single metric, but a combination of them together with feedback from the formal consultation with residents and stakeholders.





Interim results

Motorised traffic on internal roads

- Motorised traffic has decreased on all but one internal road, which is a positive outcome in line with the objectives of the trial.
- Overall, motorised traffic volumes on internal roads have decreased by an average of 78%. The greatest decreases have been on Downham Road (98%) and Englefield Road (87%). Motorised traffic has increased on Oakley Road by 38%. However the actual volume increase is approximately an extra 110 vehicles a day. In the morning peak, this translates to an increase of nine vehicles an hour.
- Across internal roads, the number of vehicles speeding has decreased by 88%, while there has been a negligible change (down 8%) to average speeds.
- The above figures have been normalised to account for the impacts of COVID-19 on motorised traffic levels in August 2020 and in February 2021. More information on this process is available in the main report.

Motorised traffic on boundary roads

- Overall, across boundary roads, there has been a negligible change in motorised traffic (down 10%). On average, motorised traffic volumes have changed on New North Road (up 7%), Balls Pond Road (up 7%), Essex Road, (up 5% and down 3% at two different locations), Southgate Road (down 13% and down 49% at two different locations) and Baring Street (down 8%).
- The New North Road results are encouraging compared to the St Peter's low traffic neighbourhood interim monitoring results, as they suggest that motorised traffic is stabilising and may yet stabilise further. We will continue to monitor this site.
- Average speeds have seen a negligible change.

Cycling

- Overall, cycling has decreased by 28% across internal roads, and by 39% on boundary roads.
- The indicator will continue to be monitored, and pre consultation monitoring is expected to give a better picture due to more comparable weather conditions, although this also depends on future lockdowns.



Air quality

- NO2 levels in Canonbury East since the trial (August -November 2020) are lower than the previous year at all sites where comparable data for the same year is available from 2019. This reflects boroughwide trends, suggesting the trial has not had an adverse impact on air quality.
- In the post-implementation period, NO2 levels at Canonbury East sites have been within the annual objective level at all but two boundary roads, with averages for the area being below the annual objective. While these two sites show levels above the annual objectives, this correlates with wider borough trends in the same period, suggesting the trial has not had an adverse impact on air quality to date.

London Fire Brigade response times

London Fire Brigade (LFB) response times are within the service's targets in the Canonbury ward overall, although there has been a response time increase. There are a number of potential reasons for this, which are explored in the report. The council will continue to engage with the LFB and explore mitigations if required. No immediate action is required as the attendance times are still within still within target of six minutes.



Anti-social behaviour and crime

In terms of volumes of crime and ASB, the Canonbury East PFS area showed similar trends to those of Islington as a whole, suggesting the trial 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 allow residents the chance to give their views. A preconsultation monitoring report will also be produced in time to inform the consultation with one year-on monitoring data.

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

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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 07h00 and 10h00.

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 6 for more details).

Boundary roads – For the purpose of this report, the "boundary roads" of the Canonbury East trial area are New North Road to the south-west, Baring Street to the south, Southgate Road to the east, Balls Pond Road to the North and Essex Road to the north-west. For simplicity throughout the report this entire stretch of road from Essex Road station to the junction with Balls Pond Road is referred to as 'Essex Road'. These roads are the boundary roads of multiple LTN trial areas and lead to Old Street roundabout where there have been major transformation works, 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.

INRIX – INRIX refers to a smart traffic analysis system accessed via an online platform which aggregates GPS data from a variety of sources to provide average travel speeds on various streets. Historically collected data can be compared to analyse average speeds and travel times on various segments of roads.

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 East 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 St Peter's 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 East 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, and 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.

PM peak – In this report "PM peak" refers to the hours between 16h00 and 19h00.

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 though the filter (and use non-motorised scooters).

Canonbury East PFS area in context

As part of Islington Council's PFS programme and the need for an urgent transport response to Covid-19, Canonbury East has become the second PFS area trial 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 East PFS area have been installed at ten locations: Henshall Street, Dove Road, Ockendon Road, Englefield Road, Northchurch Road, Elmore Street, Cleveland Road, Halliford Street, Downham Road and Shepperton Road. At Downham Road there is a bus gate to allow access for the 812 bus service, once the service has been resumed following its suspension due to Covid-19. Dove Road also operates as a bus gate. Henshall Street, Cleveland Road and Shepperton Road traffic filters use bollards, operating without camera enforcement.

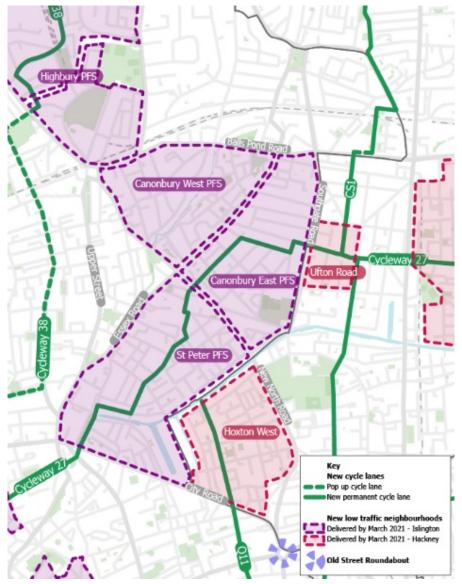
This monitoring report provides data and insights relating to the Canonbury East PFS trial specifically by comparing data from before implementation in July 2020 (referred to as "baseline traffic counts") to five months after implementation in February 2021 (referred to as "interim traffic counts"). Two sites have a different baseline: New North Road (June 2020) and Shepperton Road (February 2020). However, it is important to consider all these results in the context of other external factors which could be contributing towards the data. There are four main external factors which could all be influencing results.

Nearby Low Traffic Neighbourhoods – As can be seen in Map 1, the Canonbury East area is in close proximity to a number of other low traffic neighbourhoods. St Peter's and Canonbury West are both located in Islington and share boundary roads with Canonbury East. They were delivered shortly before (St Peter's, June 2020) and after (Canonbury West, October 2020) the Canonbury East area. To the south of Canonbury East, Hackney has also implemented the Hoxton West low traffic neighbourhood, and the historic low traffic neighbourhood of De Beauvoir is located to the east of the Canonbury East area. It is therefore not possible to separate out the impacts these may be having on traffic on the boundary roads.

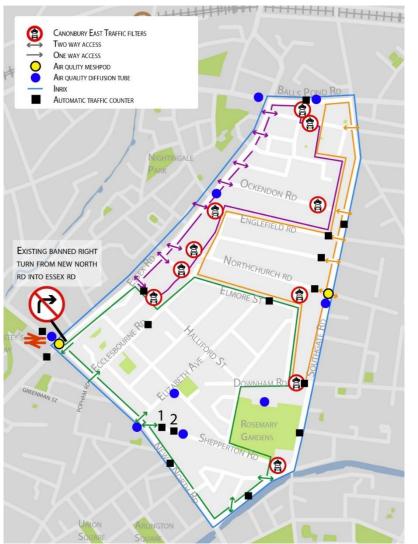
Weather – Weather can have a significant impact on travel choices and air pollution. During the week the baseline traffic counts were taken in July 2020 the minimum temperature was 7°C and the maximum was 22°C as it was summer. During the week the interim traffic counts were taken in February 2021 the minimum temperature was -3°C and the maximum was 11°C. It is not possible to separate out or control for the impact of weather on the results in this report, however the pre-consultation monitoring report will include data collected in July 2021 so the weather is likely to be similar to the 'before' counts taken in July 2020.

Nearby major traffic projects – In close proximity to the Canonbury East PFS trial area, Transport for London (TfL) has implemented a major project at Old Street roundabout which took place during the trial period. It is not possible to separate out or control for the impact of the Old Street roundabout works on the boundary roads from the impact of the low traffic neighbourhood. Highbury Corner is another strategic traffic project which occurred in the vicinity of Canonbury East – it directly impacts St Paul's Road which is a western continuation of Balls Pond Road.

National lockdowns – as England has been going in and out of national lockdowns as a result to Covid-19, it is worth noting that the baseline counts in July 2020 took place after the first national lockdown was lifted. By contrast, February 2021 was under the third national lockdown, where the official advice was for people to stay at home, avoid public transport and work from home when possible.



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



Map 2: Canonbury East PFS measures and monitoring sites

The baseline and repeat counts on Shepperton Road are in slightly different locations, and are represented on the map with numbers 1 (baseline, February 2020) and 2 (interim, February 2021).

Traffic counts approach

Traffic counts in the Canonbury East PFS area

The count data presented in this report is not traffic modelling, but actual observed traffic, comparing traffic flow before the implementation of the Canonbury East PFS area and six months after the scheme went live, July 2020 with February 2021.

The exceptions to this are:

- Shepperton Road, for which a baseline was taken in February 2020 and repeated in February 2021. Note that due to an error in placing the counters, the two counts at Shepperton Road were undertaken from two locations 40 meters apart, and that only 5 days (weekday) data is available for the February 2020 baseline. For these reasons, Shepperton Road was not included in the overall calculations for internal roads, and separated in tables.
- New North Road, for which a baseline was taken in June 2020 and repeated in February 2021. Due to this different baseline New North Road is not included in the overall boundary road calculations.

During the trial, based on the feedback from Rotherfield School, the council added two monitoring counts at Elizabeth Avenue and Rotherfield Street. The results of these counts will be published as part of the pre-consultation report. Traffic, speed and cycle volumes were also recorded in August 2020 in Shepperton Road at the junction with New North Road. All these counts will be repeated at 11 months and included in the pre-consultation monitoring report.

Data was also collected in November 2021 to identify a potential 'leak' at Elmore Street. The results showed the leak to be marginal and the issue is now being monitored by camera.

Completed and anticipated dates of traffic counts

Baseline ("before") counts: 6 – 12 July 2020. 5 - 11 February 2020 for Shepperton Road and 8 - 14 June for New North Road.

Canonbury East trial begins: 3 August 2020

Short-term interim ("after") counts: 1 – 7 February 2021

Pre-consultation counts: Summer 2021

Pre-decision counts: Winter 2022

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 the majority of sites in Canonbury East. ATCs measure motorised and cycle traffic volumes and motorised traffic speeds and classify the traffic by type. Information about the different types of counts and which type was used at each site is detailed in Appendix 6.

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.

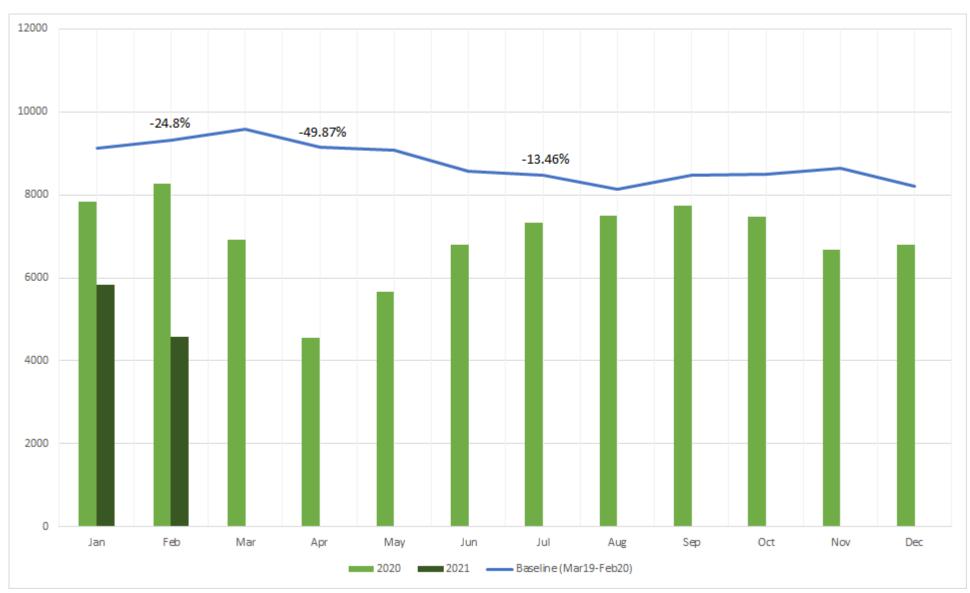
Daily volumes of motorised traffic have been drawn from a range of 12 permanent traffic counters managed by TfL across Islington and used to establish monthly averages in 2019 and 2020. The locations of these counters are detailed in Appendix 6. The percentage difference between the same months across the two different years has been used to adjust the counts to normalise for Covid-19 disruption between the months in which counts have been taken. The methodology is set out in greater detail in Appendix 7 and has been independently peer reviewed (more information on the peer review is available on the <u>St Peter's monitoring report</u> page 9 and 105?). Drafting the baseline from TfL count locations outside of Islington and from additional years was considered and tested but resulted in only small differences and therefore was not taken forward as the chosen methodology.

Using the months of the Canonbury East counts in July 2020, motorised traffic across the permanent counters in Islington was approximately 13.5% lower than in July 2019. In February 2021, motorised traffic was approximately 25% lower than in February 2020.

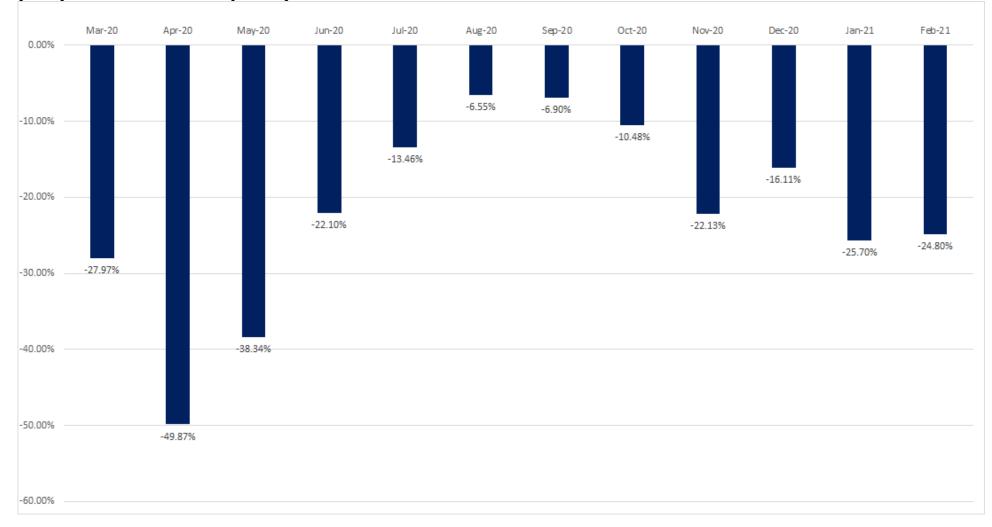
For context, the difference was greatest in April, where 2020 motorised traffic was approximately 50% of what it had been in April 2019.

Specific data collection points have a different baseline month and interim month date:

For New North Road the baseline was June 2020 (traffic was -22.10% lower than in June 2019) and for Shepperton Road it was February 2020 (no normalisation used as pre-COVID travel disruption).







Graph 2: Percentage difference between monthly average of daily traffic volumes in Islington compared to baseline year (March 2019-February 2020)

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Interpreting count results

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

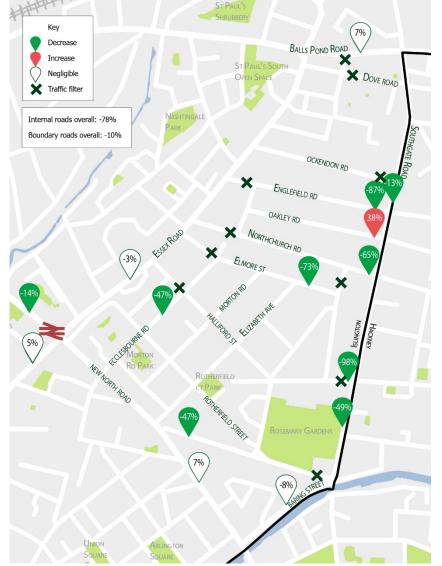
Raw data has been analysed and compared to give the observed results. The observed results have been through the normalisation process described in the previous section to the give the normalised results.

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.

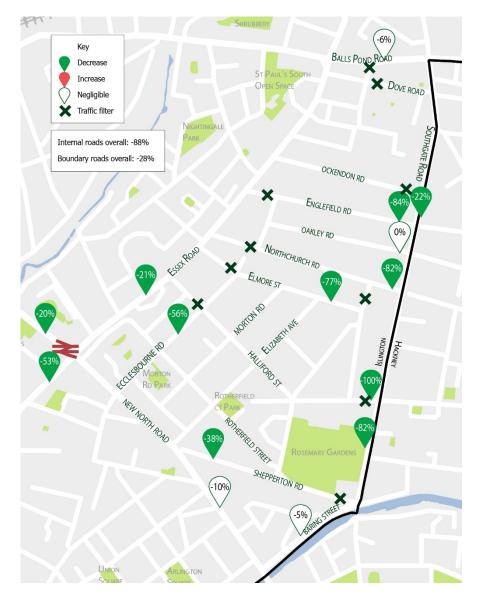
A negative number or percentage indicates a decrease between the two counts, while a positive number or percentage indicates an increase.

Please note: 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.



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)

Indicators

Motorised traffic on internal roads

The motorised traffic count results for the internal roads (i.e. roads within the Canonbury East PFS area) are summarised in tables 1 and 2.

Additional motorised traffic volumes on internal roads

The council is undertaking additional data collection with regards to the school streets on Elizabeth Avenue and Rotherfield Street and will publish traffic count analysis as part of the pre-consultation. Traffic, speed and cycle volumes were also recorded in August 2020 in Shepperton Road at the junction with New North Road. All these counts will be repeated at 11 months and included in the pre-consultation report.

Results (seven-day daily averages)

Table 1: Motorised traffic volumes on internal roads

	July 2020 observed	July 2020 normalised	February 2021 observed	February 2021 normalised	Difference observed			Difference normalised (%)
Ecclesbourne Road	1,296	1,497	593	788	-703	-709	-54%	-47%
Northchurch Road	2,017	2,331	601	808	-1,410	-1,523	-70%	-65%
Elmore Street	1,699	1,964	392	521	-1308	-1442	-77%	-73%
Englefield Road	5,095	5,888	557	741	-4,538	-5,146	-89%	-87%
Oakley Road	248	286	298	396	50	110	20%	38%
Downham Road	3,019	3,489	60	80	-2,959	-3,409	-98%	-98%
Overall internal	13374	15455	2506	3335	-10868	-12120	-81%	-78%

Table 2: Motorised traffic volumes on Shepperton Road - 5 days

	February 2020			February 2021	Difference	Difference		Difference normalised
	observed	normalised	observed	normalised	observed	normalised	observed (%)	(%)
Shepperton Road*	1645	1645	657	874	-988	-771	-60%	-47%

Shepperton Road has a different baseline: in February 2020 the normalisation is 0% compared to February 2021. The results have been taken out of internal road totals.

The baseline count for Shepperton Road is located slightly to the east of the February 2021 count. The distance between the two counts is around 40 metres. This change does not have any impact on the ability of the counter to record traffic volumes.

Due to a different baseline, the Shepperton baseline counts are 5 days (weekday) only, 7 day counts are not available.

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.

Motorised traffic has decreased on all but one of internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the scheme. Overall motorised traffic on internal roads has decreased by 78% after normalisation. The greatest decrease has been on Downham Road (eastern site, -98%) and Englefield Road (-87%).

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.

Oakley Road

The data shows a 38% increase of traffic on Oakley Road. When this is viewed in terms of actual volumes the count results show that less than 400 vehicles a day in February 2021 used Oakley Road on average, and the actual volume increase is approximately 110 extra vehicles day. In the AM peak, although traffic volumes have increased by 81%, this translates to an increase of 9 vehicles an hour. In the PM peak, traffic has increased by 13%, or 3 vehicles an hour.

It is likely that the primary cause of increase is the existing banned right turn from Englefield Road (Hackney side) into Southgate Road. This might push vehicles to turn left onto Southgate Road, entering Oakley Road by turning right, make a three-point turn and exit via Crowland Terrace and Englefield Road to travel north on Southgate Road. Furthermore, if a number of vehicles make three-point turns on Oakley Road, they might have been picked up twice by the radar, unless vehicles loop around Oakley Road, Crowland Terrace and Englefield Road to travel north on Southgate Road to understand the issue.

Islington and Hackney Councils are discussing the potential to lift the right turn ban on Englefield Road, which could have a positive impact on Oakley Road.

Motorised traffic speeds and speeding on internal roads

Speeding is a major contributing factor to road danger, 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 6. Full speed monitoring results are available in Appendix 5 (absolute speeds from baseline and interim results). The speed limit is 20mph on all 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)

	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85 th percentile (mph)	Difference in 85 th percentile (%)	Difference in volume of vehicles speeding	Difference in volume of vehicles speeding (%)	Difference in proportion of vehicles speeding (%)
Ecclesbourne	-0.23	-2%	-0.20	-1%	-52	-56%	0%
Road							
Northchurch Road	-0.74	-5%	-0.60	-3%	-147	-73%	-1%
Elmore Street	-0.45	-3%	-0.11	-1%	-176	-77%	0%
Englefield Road	0.03	0%	0.50	3%	-256	-84%	3%
Oakley Road	0.31	3%	0.20	-2%	0	0%	0%
Downham Road	-5.68	-34%	-8.38	-39%	-777	-100%	-24%
Overall	-1.13	-8%	-1.43	-8%	-1407	-88%	-4%

Table 3: Changes in speeds on internal roads

	Difference in average speed (mph)		Difference in 85 th percentile (mph)	Difference in 85 th percentile (%)	Difference in volume of vehicles speeding	Difference in volume of vehicles speeding (%)	Difference in proportion of vehicles speeding (%)
Shepperton Road – baseline February 2020*	0.47	3%	0.70	3%	-69	-38%	9%

Table 4: Changes in speeds on internal roads – Shepperton Road - 5 days only

*Shepperton Road has a different baseline: in February 2020, the normalisation is 0% compared to February 2021. The results have been taken out of internal road totals.

The baseline count for Shepperton Road is located slightly to the east of the February 2021 count. The distance between the two counts is around 40 metres. This change does not have any impact on the ability of the counter to record traffic volumes. This is explained in more detail in the insights section on Shepperton Road.

Due to this different baseline, the Shepperton baseline counts are 5 days (weekday) only, 7 day counts are not available.

Insights: motorised traffic speeds and speeding on internal roads

General insights

On average across the internal road sites, average speeds have negligibly changed (-8%) and 85th percentile speed have decreased by 8% as well. The proportion of vehicles speeding has shown negligible change at all sites, except Downham Road (-24%). The number of vehicles speeding has decreased on average across internal roads by 88%, which is likely related to the overall decrease in volume of motorised traffic. The average speeds on internal roads have negligibly changed (-8%) from 14.50mph to 13.37mph.

The volume of vehicles speeding has decreased by more than 50% at most sites and by over 70% at more than half of the sites, which is a positive interim outcome in line with the objectives of the scheme.

These results suggest that a decrease in motorised traffic on internal roads does not necessarily increase speeding. In fact, when the speed and volume results are considered together, these may imply the opposite is true.

Shepperton Road

Shepperton Road uses a baseline from February 2020 to analyse speed results, as the original baseline count in August 2020 and interim counts were taken in different locations, which impacted speeds monitoring. The baseline count taken in August 2020 was located almost at the junction with New North Road, making it unlikely to be representative of vehicles' eventual travelling speed along Shepperton Road, as vehicles need to give way and slow down when approaching New North Road or would have just entered the road and not reached their full speed. Speed data from the August 2020 baseline could therefore not be used for this report, making the comparison with February 2021 invalid.

The February 2020 baseline to Shepperton Road is located approximately 40m into Shepperton Road, the distance between this count and the interim February 2021 baseline is around 40 metres. This location change does not have any impact on the capacity of the counter to record motorised traffic volumes.

The interim count taken in February 2021 was located approximately 80m into Shepperton Road, picking up typical speeds of vehicles travelling along it. It must also be noted that due to this different baseline, the Shepperton baseline counts are 5 days (weekday) only, 7 day data is not available.

The speeding results, shown in Table 4, show that the difference in volume of vehicles speeding is -38% between February 2020 and February 2021, whilst the proportion of vehicles speeding has negligibly changed by (+9%). The average speed on Shepperton road has negligibly changed (+3%) from 16.60mph to 17.07mph.

The location of the February 2021 counts further along Shepperton Road, away from the New North Road junction, was intended to pick up the speed of vehicles after residents raised concerns over the potential of the new road layout at Rotherfield Street, Sherborne Street and Shepperton Road to increase speeds. There were concerns that the new travel distances for vehicles entering or exiting the area during school street hours would trigger increases in speeds.

While the February 2020 counts serves as a sufficient baseline for this interim report thanks to its more appropriate location, it does not reflect speeds immediately prior to the PFS area implementation as the other speed analysis provides. As such, counts will be taken at both locations on Shepperton Road for the pre-consultation report to better understand the changes in speeding in relation to the PFS area and school street.

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), smart congestion monitoring, and bus journey times.

This monitoring report provides data and insights relating to the Canonbury East PFS trial specifically by comparing data from before implementation in July 2020 to five months after implementation in February 2021. However, it is important to consider all these results in the context of other external factors which could be contributing towards the results. For example, there are other low traffic neighbourhoods which share boundary roads with Canonbury East and were delivered shortly before and after the Canonbury East area. It is therefore not possible to separate out the impacts these may be having on motorised traffic on the boundary roads. In addition to this, during the trial period it is likely that the works at nearby Old Street roundabout were having an impact on motorised traffic flows on New North Road, which leads to the gyratory. The gyratory switch took place on 18 January 2021, just before the interim counts. It is not possible to separate out or control for the impact of the Old Street roundabout works or the nearby low traffic neighbourhoods on the boundary roads from the impact of Canonbury East trial. A more detailed analysis is in the insights section on motorised traffic on boundary roads on page 44.

Motorised traffic volumes on boundary roads

Results (seven-day daily averages)

Table 5: Motorised traffic volumes on boundary roads

	July 2020 observed	July 2020 normalised	February 2021 observed	February 2021 normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
Southgate Road (northern site)	11,896	13,747	9,005	11,981	-2,891	-1,765	-24%	-13%
Southgate Road (southern site)	11,190	14,365	5,720	7,346	-5,470	-7,019	-49%	-49%
Balls Pond Road	15,082	17,428	14,014	18,646	-1,068	1,218	-7%	7%
Canonbury Road	11,298	13,055	8,452	11,245	-2,846	-1,810	-25%	-14%
Essex Road (western site)	13,706	15,839	12,454	16,571	-1,252	732	-9%	5%
Essex Road (eastern site)	16,488	19,053	13,880	18,467	-2,608	-586	-16%	-3%
Baring Street	9,733	11,247	7,752	10,315	-1,980	-932	-20%	-8%
Total	89392	104733	71277	94571	-18115	-10162	-20%	-10%

Table 6: Motorised traffic volumes on boundary roads

		June 2020 normalised		February 2021 normalised				Difference normalised (%)
New North Road*	11,369	14,594	11,781	15,675	412	1,081	4%	7%

*It must be noted that the baseline for New North Road is not July 2020 but June 2020. This is reflected in the normalisation. to this different baseline New North Road is not included in the overall boundary road calculations.

Motorised traffic travel times on boundary roads

Islington Council has procured a smart traffic analysis system called INRIX (refer to glossary for fuller definition) that provides more continuous monitoring of motorised traffic speed data to measure average travel times. These 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 motorised traffic volumes, though speeds may settle into new patterns post-Covid-19. The INRIX capture areas for the roads can be seen in Map 5. The results are presented in minutes and seconds (mm:ss).

BALLS POND ROAD Key X DOVE BO X Traffic filter OCKENDON RD × ENGLEFIELD RD

Map 5: Area of roads included in INRIX analysis



Results

A note on interpreting the results: table 6 shows that in June 2020 during the AM peak hours (7am – 10am), it took an average of two minutes and six seconds to travel along New North Road between the Junction with Essex Road and the bridge over the Regent's Canal. In February 2021, it took an average of two minutes and 32 seconds to travel the same distance. That is, it took on average 26 seconds longer.

It must be noted that the increase on New North Road could be influenced by factors other than the Canonbury East PFS trial, explained in the insights section for motorised traffic on boundary roads.

The baseline used for New North Road in this INRIX analysis is June 2020, as the baseline traffic counts were taken then. The baseline for the other boundary roads is July 2020, when their baseline counts were taken.

Table 7: Southgate Road both directions

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	03:02	03:02	00:00
Weekday PM peak average (1600 – 1900)	03:06	03:12	00:05
7 day 0700 - 1900 average	03:01	03:01	00:00

Table 8: Southgate Road Northbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	03:11	03:05	-00:05
Weekday PM peak average (1600 – 1900)	03:20	03:19	-00:01
7 day 0700 - 1900 average	03:12	03:08	-00:03

Table 9: Southgate Road Southbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:54	02:58	00:04
Weekday PM peak average (1600 – 1900)	02:53	03:02	00:09
7 day 0700 - 1900 average	02:50	02:56	00:06

Table 10: Balls Pond Road both directions

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:48	00:52	00:04
Weekday PM peak average (1600 – 1900)	00:49	00:54	00:05
7 day 0700 - 1900 average	00:49	00:50	00:01

Table 11: Balls Pond Road Westbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:48	00:56	00:09
Weekday PM peak average (1600 – 1900)	00:47	00:53	00:06
7 day 0700 - 1900 average	00:49	00:52	00:03

Table 12: Balls Pond Road Eastbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:49	00:48	-00:01
Weekday PM peak average (1600 – 1900)	00:52	00:55	00:03
7 day 0700 - 1900 average	00:49	00:49	00:00

Table 13: New North Road (both directions)

	Jun-20 (mm:ss)	Feb-21 (mm:ss)	June 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:06	02:32	00:26
Weekday PM peak average (1600 – 1900)	02:07	02:32	00:25
7 day 0700 - 1900 average	02:03	02:25	00:21

Table 14: New North Road Northbound

	Jun-20 (mm:ss)	Feb-21 (mm:ss)	June 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:09	02:42	00:34
Weekday PM peak average (1600 – 1900)	02:07	02:39	00:32
7 day 0700 - 1900 average	02:05	02:33	00:28

Table 15: New North Road Southbound

	Jun-20 (mm:ss)	Feb-21 (mm:ss)	June 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:04	02:22	00:18
Weekday PM peak average (1600 – 1900)	02:06	02:18	00:12
7 day 0700 - 1900 average	02:02	02:17	00:15

Table 16: Essex Road both directions

Table 10. Essex Road Both directions									
	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)						
Weekday AM peak average (0700-1000)	02:33	02:37	00:04						
Weekday PM peak average (1600 – 1900)	04:	02:41	00:04						
7 day 0700 - 1900 average	02:39	02:29	-00:10						

Table 17: Essex Road Eastbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:26	02:15	-00:09
Weekday PM peak average (1600 – 1900)	02:50	02:43	-00:07
7 day 0700 - 1900 average	02:40	02:23	-00:17

Table 18: Essex Road Westbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	02:41	02:59	00:19
Weekday PM peak average (1600 – 1900)	02:24	02:38	00:14
7 day 0700 - 1900 average	02:38	02:35	-00:03

Table 19: Baring Street both directions

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:38	00:39	00:01
Weekday PM peak average (1600 – 1900)	00:36	00:42	00:06
7 day 0700 - 1900 average	00:36	00:38	00:02

Table 20: Baring Street North-eastbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:33	00:35	00:02
Weekday PM peak average (1600 – 1900)	00:31	00:37	00:06
7 day 0700 - 1900 average	00:31	00:35	00:03

Table 21: Baring Street South-westbound

	Jul-20 (mm:ss)	Feb-21 (mm:ss)	July 2020 - Feb 2021 difference (mm:ss)
Weekday AM peak average (0700-1000)	00:44	00:43	-00:01
Weekday PM peak average (1600 – 1900)	00:41	00:46	00:05
7 day 0700 - 1900 average	00:41	00:42	00:01

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 East PFS area are therefore being monitored. The Council will look to include an analysis of this data in the pre-consultation monitoring report so as to include a full year of data.

Insights: motorised traffic on boundary roads (combined monitoring)

General insights

Please 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 previous section to the give the 'normalised' results.

Overall, across boundary roads the total changes in volumes of motorised traffic show a negligible change (-10%), which is a positive interim outcome in line with the objectives of the scheme.

There is a negligible change (+7%) in motorised traffic on New North Road and Balls Pond Road, Essex Road (western site) (+5%), and Essex Road (eastern site) (-3%).

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.

New North Road

New North Road has seen a negligible change (+7%) in motorised traffic. This is a positive development since the St Peter's interim report (which used the same baseline as is used here). There were changes at Old Street - works to remove the roundabout began in spring 2019, with the switch to make the motorised traffic flow two-way and reduce congestion only made in January 2021 after the St Peter's interim counts. However, these results could suggest that the old layout at Old Street could have been contributing to the increase in traffic seen in November 2020, and that the new layout has helped traffic flow.

When the analysis is broken down by times of day, there has been an increase of 20% at this site in the AM peak, though the travel time for this period has only increased by 26 seconds. The PM peak shows no increase in motorised traffic volumes (0%). As set out in the St Peter's interim report, New North Road is located between four low traffic neighbourhoods that have been implemented one after the other (Islington: St Peter's in early July, Canonbury East at the beginning of August, Canonbury West in September, and Hackney: Hoxton West in August). These interim results for Canonbury East show a positive development compared to the St Peter's interim monitoring results, suggesting that motorised traffic is stabilising, though may yet stabilise further. We will continue to monitor this site.

Essex Road

There has been a negligible change in motorised traffic on Essex Road at both sites (eastern site -3%; western site +5%). Before the implementation of the traffic filters in Canonbury East, there were popular east-west and south-north routes through the neighbourhood for travelling from Essex Road to Southgate Road and New North Road. These results indicate that the east-west cut- through in Canonbury East was removed by the implementation of the people-friendly streets scheme, reducing motorised traffic on internal roads with a negligible impact on Essex Road.

The AM peak at the eastern site has seen a 33% increase in motorised traffic volumes, with the greatest increase for the westbound direction. However in terms of travel times, there has been an increase of only 9 seconds in the AM peak on Essex Road. We will continue to monitor this site.

Balls Pond Road

Balls Pond Road shows an overall negligible change in motorised traffic. Although the AM peak indicates a 37% increase in motorised traffic volumes, average journey times for that stretch of boundary road during the same period only take around 9 seconds longer. Other journey times have not been significantly impacted, as shown in the INRIX data. It is likely that this increase during this specific time period is also influenced by Highbury Corner as well as Canonbury West PFS. The Council will continue monitoring this site.

Southgate Road

The two locations monitored on Southgate Road show a decrease in motorised traffic. At the northern site, motorised traffic has decreased overall by 13%. The second location, at the southern site, shows a motorised traffic reduction of overall 49%, and a 35% reduction in the AM and PM peaks. Spanning both sites, average travel times for both directions have remained the same, or shown a 5 second increase in the AM peak. The southbound 7-day daytime peak (07:00 – 19:00) average travel time has increased from 2 minutes 8 seconds to 2 minutes 38 seconds, a 30 second time difference. Differences in other journey times were under 10 seconds.

Baring Street

Baring Street shows a negligible change (-8%) in the overall motorised traffic. Although motorised traffic in the AM peak has increased by 24%, this is not reflected in additional journey time data analysis, which shows AM peak journey times increased on average by only

1 second. The PM peak has shown a 15% decrease in motorised traffic. Overall, changes in journey times on Baring Street are between -1 second to +6 seconds.

Motorised traffic speeds and speeding on boundary roads

The motorised traffic counts carried out in Canonbury East also measure motorised traffic speeds. These are the same counts that have been analysed for their volume results. The details about the dates and locations of these counts are in Appendix 6. Full speed monitoring results are available in Appendix 5 (absolute speeds from baseline and interim results).

The speed limit is 20mph on every boundary road. Speed monitoring results have not been normalised. 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 speeds' use seven-day daily averages)

	Difference in average speed (mph)	Difference in average speed (%)	in 85 th	Difference in 85 th Percentile (%)	Difference in volume of vehicles speeding	Difference in volume of vehicles speeding (%)	Difference in proportion of vehicles speeding (%)
Southgate Road north	0,46	2%	0,10	0%	-1,432	-22%	2%
Southgate Road south	-4.54	-22%	-4.30	-17%	-4,624	-82%	-33%
Balls Pond Road	-0,05	0%	0,00	0%	-308	-6%	-1%
Canonbury Road	0,20	1%	0,30	1%	-479	-20%	2%
Essex Road western site	-3,05	-16%	-4,90	-20%	-2,196	-53%	-15%
Essex Road eastern site	0,09	0%	-0,40	-2%	-1,284	-21%	-2%
Baring Street	-0,53	-2%	-0,40	-1%	-1,710	-26%	-5%
Overall (average)	-1,06		-1,37				-7%
Overall (total)		-5%		-6%	-12,033	-28%	

 Table 22: changes in speeds on boundary roads

Table 23: changes in speeds on New North Road

	Difference in average speed (mph)	in average speed (%)	in 85 th	in 85 th Percentile	vehicles	volume of	Difference in proportion of vehicles speeding (%)
New North Road*	-0,89	-4%	-0,70	-3%	-614	-10%	-7%

*It must be noted that the baseline for New North Road is not July 2020 but June 2020. This is reflected in the normalisation. to this different baseline New North Road is not included in the overall boundary road calculations.

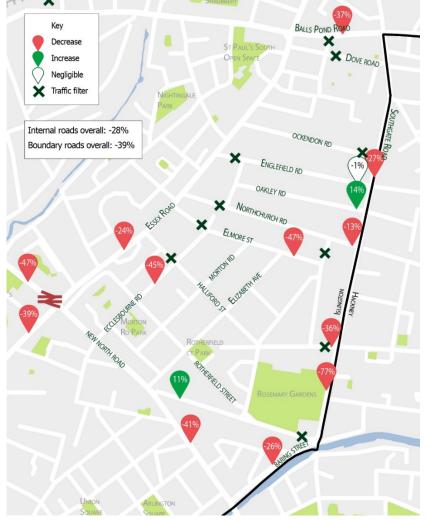
Insights: motorised traffic speeds and speeding on boundary roads

General insights

On average across the boundary road sites, average speeds and 85th percentile speeds, and the percentage change of vehicles speeding have all shown a negligible change. The overall volume of vehicles speeding at boundary roads sites has decreased by 29%. No specific issues have been identified.

Cycling volumes on internal and boundary roads

Map 6: Percentage change in cycling volumes (seven-day daily averages)

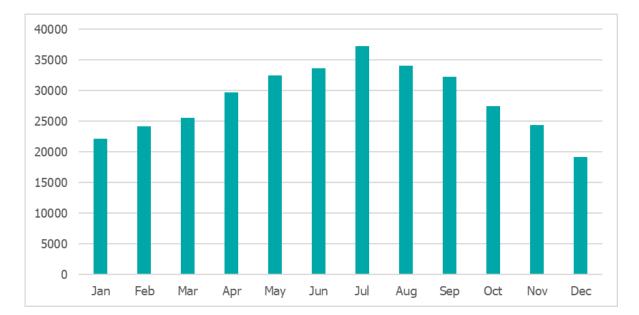


We have not normalised cycling figures for Covid-19 due to the lack of an available source that encompasses all cycle users, and because there are likely at least two key variables impacting these results: Covid-19 disruption, and seasonal variation. As such, the different contexts during which the two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

By July 2020 the first national lockdown had been released, whereas February 2021 was marked by the third national lockdown, by which people were advised to stay at home. Cycleway 27, a key commuter route from north-east London into central London goes through Canonbury East, the suppression of commuter travel in February 2021 could explain in part lower cycle numbers.

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. During the week the baseline traffic counts were taken in July 2020 the minimum temperature was 7°C and the maximum was 22°C. During the week the interim traffic counts were taken in February 2021 the minimum temperature was -3°C and the maximum was 11°C. It is not possible to separate out or control for the impact of weather on the results in this report, however the next monitoring report will include data collected in July 2021 so the weather is likely to be similar to the 'before' counts taken in July 2020.

Graph 3 demonstrates the seasonable variation in cycling. For example, in 2019 the levels of Santander Cycle hires in February were around 33% lower than in July. In the pre-consultation report we will be able to compare results from the same season, which will account for seasonal weather variation and therefore it is likely that there will be a greater increase in cycling.





Cycling volumes on internal roads

Results (seven-day daily averages, five-day daily average for Shepperton Road)

Where a street is part of Cycleway C27, this has been indicated in the results table (table 22).

	July 2020	February 2021	Difference	Difference (%)
Ecclesbourne Road (C27)	676	369	-306	-45%
Northchurch Road (C27)	1374	1191	-184	-13%
Elmore Street (C27)	757	404	-353	-47%
Englefield Road	227	226	-1	-1%
Oakley Road	37	42	5	14%
Downham Road	202	130	-72	-36%
Overall internal	3272	2361	-911	-28%

Table 24: Pedal cycles volumes on internal roads - 7 days

Table 25: Pedal cycles volumes on Shepperton Road – 5 days

	February 2020	February 2021	Difference	Difference (%)
Shepperton Road*	230	255	25	11%

* As set out under 'Traffic counts approach', Shepperton Road is not included in the overall internal road calculations. The baseline was February 2020 was a 5 days (weekday) only.

Cycling volumes on boundary roads

Results (seven-day daily averages).

Table 26: Pedal cycles volumes on boundary roads

	July 2020 observed	February 2021 observed	Difference observed	Difference observed (%)
Southgate Road north	592	434	-158	-27%
Southgate Road south	718	168	-550	-77%
Balls Pond Road	862	541	-321	-37%
New North Road*	970	569	-401	-41%
Canonbury Road	681	359	-322	-47%
Essex Road western site	726	445	-281	-39%
Essex Road eastern site	1,296	980	-316	-24%
Baring Street	372	275	-97	-26%
Total	5,247	3,202	-2,045	-39%

Table 27: Pedal cycles volumes on boundary roads

	June 2020 observed	February 2021 observed	Difference observed	Difference observed (%)
New North Road*	970	569	-401	-41%

*It must be noted that the baseline for New North Road is not July 2020 but June 2020. This is reflected in the normalisation. to this different baseline New North Road is not included in the overall boundary road calculations.

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

On average across internal roads, cycling has decreased by 28%, and it has decreased on boundary roads by 39%.

It is worth noting that, although ATCs are very accurate (as explained in Appendix 6), if a cycle, or multiple cycles pass the counter at the same time as a motorised vehicle, it is possible that there could be under-counting of cycles. This is likely to occur more on roads with more motorised traffic.

It is important to note the different contexts in which the two sets of counts were taken in the cycling analysis because the volumes have not been normalised to account for Covid-19 disruption, and because the weather can have a big impact on cycling levels. One first element of explanation for the results is the national lockdown. By July 2020 the first national lockdown had been released, whereas February 2021 was marked by the third national lockdown, by which people were advised to stay at home. Cycleway 27, a key commuter route from north-east London into central London goes through Canonbury East; the suppression of commuter travel in February 2021 could explain lower cycle volumes on this route.

Cycling levels are also impacted by seasonal weather change including temperature and rainfall; with February tending to be lower than July in a 'typical' year. In the pre-consultation report we will be able to compare results from the same season, which will account for seasonal weather variation and will provide more detailed analysis regarding any changes in cycling.

Graph 3 demonstrates the seasonable variation in cycling. For example, in 2019 the levels of Santander Cycle hires in February were around 33% lower than in July. In the pre-consultation report we will be able to compare results from the same season, which will account for seasonal weather variation and therefore it is likely that there will be a greater increase in cycling.

During the week that the baseline traffic counts were taken in July 2020 the minimum temperature was 7°C and the maximum was 22°C as it was summer. During the week that the interim traffic counts were taken in February 2021 the minimum temperature was - 3°C and the maximum was 11°C as it was winter. It is not possible to separate out or control for the impact of weather on the results in this report, however the next monitoring report will include data collected in July 2021 so the weather is likely to be similar to the 'before' counts taken in July 2020.

Although this interim decrease on internal and boundary roads is not in line with the programme's intended objectives, it is considered that it is likely linked to the variation in season and lockdown restrictions between the two. The indicator will continue to be monitored, and pre-consultation monitoring is expected to be more accurate due to similar weather (as the comparison will be between July 2020 and July 2021), although this could also be impacted by potential future lockdowns.

Air Quality

Map 7: Average levels of NO_2 (µg/m3) August 2019 to -July 2020



Values with asterisk are unknown, as the data is not available for the whole annual period. 52



Map 8: Percentage change in NO₂ (µg/m3) between August 2019 – July 2020 and August-November 2020

Values with asterisk are unknown, as the data is not available for the whole annual period.

Key (0%) BALLS POND ROAD Decrease Increase X DOVE ROAD Negligible X Traffic filter * OCKENDON RD × × ENGLEFIELD RD OAKLEY RD × NORTHCHURCH RD ESSTROND × * ELMORE ST × × TAILIFORD ST × * * * SHEPPERTON RD

Map 9: Percentage change in NO₂ (µg/m3) between August - November 2019 and August - November 2020

Values with asterisk are unknown, as the data is not available for the whole annual period.



Map 10: Average levels of NO₂ (μ g/m3) August-November 2020

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 $10\mu m$ 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 motorised 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 was moved in 2019 and is therefore not being included in PFS monitoring using this time period. One of the long-term boundary road sites is a boundary road in this area and so has been included in the averages for Canonbury East rather than wider borough sites. More details of these sites can be <u>viewed in</u> <u>our annual report</u>.

The air quality monitoring sites in the Canonbury East area are listed in Appendix 8, with details about type and if they have been added as part of the PFS programme or were pre-existing. This includes four boundary road sites, two internal roadside sites and one non-road site using diffusion tubes. 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 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 pre-consultation 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 'before' 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.

Results: air quality diffusion tubes

Tables 28 to 31 and graph 4 in this section use NO₂ data from diffusion tubes only, as the sensors in Canonbury East do not have any before-scheme monitoring. There are therefore no results for PM₁₀ for Canonbury East.

Tables 28 to 31 show the results since the people-friendly streets scheme has been in place (Period C) compared to the same period in 2019 (Period A) and the whole year before implementation (Period B). The pollution levels in these periods, particularly Period B, are likely to have been impacted by Covid-19. Studies into the impacts of lockdown on air pollution, for example by <u>Defra</u> show lower than average levels of the pollutant NO₂ with the first lockdown.

Please note, the values in tables 28 - 31 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.

		NO ₂ (μg/m3) in				-	-
	Aug-Nov 2019 (Period A)	Aug 2019-July 2020 (Period B)		to C (µg/m3)	to C (% change)		to C (% change)
Canonbury East	41	34	37	-5	-11%	2	7%
Whole borough long term sites	42	34	37	-5	-12%	3	10%

Table 28: (Boundary roads) NO₂ levels in Canonbury East and borough long term diffusion tube sites

This includes seven monitoring locations for the whole borough long-term sites for each time period, one monitoring locations in Canonbury East for period A, one monitoring locations in period B (except for July 2020 where there is data from three further sites) and four monitoring sites in period C.

It is worth noting the boundary road sites in Canonbury East are likely to have been impacted by factors other than the Canonbury East PFS trial. For example, Essex Road borders Canonbury West, Balls Pond Road is the continuation of St Paul's Road, which might have been impacted by Highbury Corner, and Southgate Road is a boundary road with Hackney, as stated in the Canonbury East PFS area in context section of this report.

	NO2 (µg/m3) in Aug-Nov 2019 (Period A)	NO2 (µg/m3) in Aug 2019-July 2020 (Period B)	Aug-Nov 2020			to C	B compared to C (% change)
Canonbury East	32	26	27	-6	-17%	1	3%
Whole borough long term sites	27	23	25	-2	-8%	2	11%

Table 29: (Internal roads) NO₂ levels in Canonbury East and borough long term diffusion tube sites

This includes one monitoring site in Canonbury East for period A and two monitoring locations for Canonbury East in period B and C, with values adjusted to account for periods of missing data in period B (see Appendix 8 for further explanation). There are six monitoring locations for the whole borough long term sites for each time period.

Table 30: (Non-street-based sites) NO₂ levels in Canonbury East and borough long-term diffusion tube sites

	NO₂ (µg/m3) in Aug-Nov 2019 (Period A)	NO2 (µg/m3) in Aug 2019-July 2020 (Period B)	Aug-Nov 2020	-	•	to C	B compared to C (% change)
Canonbury East	No data	24	25	No data	No data	1	4%
Whole borough long term sites	27	21	24	-3	-11%	2	10%

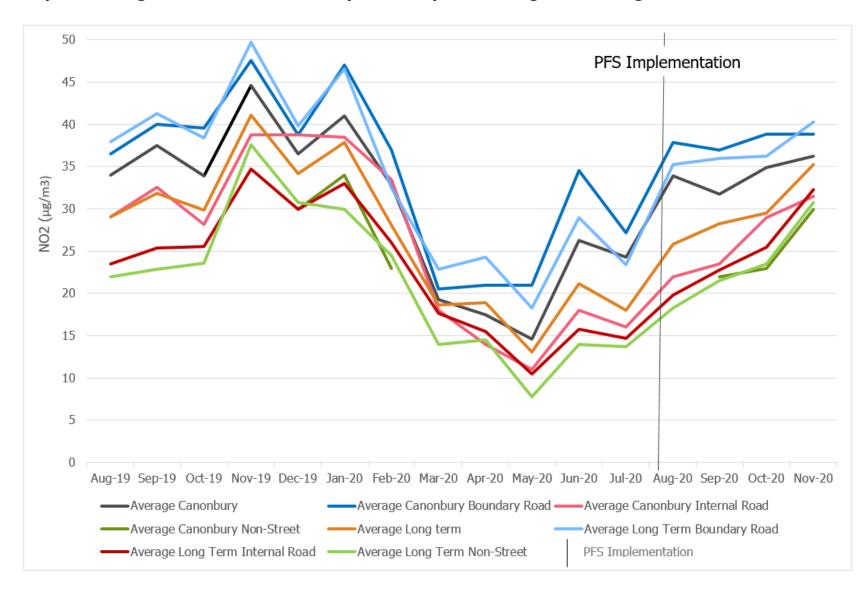
This includes no monitoring for Canonbury East in period A, one monitoring location for Canonbury East for B and C, with values adjusted to account for periods of missing data in period B (see Appendix 8 for further explanation), and four monitoring locations for the whole borough long term sites.

Table 31: (Overall) NO₂ levels in Canonbury East and borough long-term diffusion tube sites

	NO ₂ (µg/m3) in Aug-Nov 2019 (Period A)	NO2 (µg/m3) in Aug 2019-July 2020 (Period B)	NO2 (µg/m3) in Aug-Nov 2020 (Period C)		•	to C	d B compared to C (% change)
Canonbury East	35	28	32	-3	-8%	4	15%
Whole borough long term sites	33	27	30	-3	-10%	3	11%

This includes 17 monitoring locations for the whole borough long term sites for each time period, two monitoring locations in Canonbury East for period A, four for period B with values adjusted to account for periods of missing data (see Appendix 8 for further explanation) and seven monitoring locations in period C.

Graph 4 compares the trends in NO₂ levels in Canonbury East and across Islington overall from August 2019 through to November 2020.



Graph 4: Average NO₂ levels in Canonbury East compared to long term borough-wide sites from diffusion tubes

Insights: air quality

The results in tables 19 to 22 show that there has been a decrease in pollution when the post-implementation period is compared with the same period the year before. There is no clear difference in changes in Canonbury East compared to the whole borough when looking at the overall average. This is across Canonbury East and the borough where 2019 data is available, as data is limited for Canonbury East in 2019.

As graph 4 shows, the borough-wide and Canonbury East monitoring site averages all dropped to a low in May 2020 before generally 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 East (August – November 2020) 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 in August 2020 and show higher values compared to the whole year before, this is in line with borough-wide trends and suggests the impact of wider factors on pollution levels, with no distinct impact on air quality to date due to the trial.

In summary, these results show

- Changes in levels of NO2 in Canonbury East reflect those in the borough more widely.
- Levels of NO2 in Canonbury East since people-friendly streets started (August- November 2020) are lower than the same time period from the previous year at all sites where that comparable data is available from 2019.
- For the four month period since the implementation of the PFS in Canonbury East, the average NO2 levels have been within the annual objective of 40µg/m3 at all but two sites. These two sites do not have before data, or data for a full year so it is not possible to know the impact of the trial on the on these locations.
- While these two sites show levels above the annual objectives for the period four months post-implementation, this is in line with wider borough trends at similar sites in the same time period.
- It is also worth noting that values above 40 µg/m3 for four months do not mean the sites will definitely fail the annual objective, as this looks at average values over the whole year.
- The Air Quality Team are satisfied that the interim results show no discernible 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

As of 1 March 2021, there have not been any reported delays in London Ambulance Service response times as a result of the People Friendly Street area being implemented in Canonbury East.

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.

Metropolitan Police Service

The Council continues to engage and consult with the Metropolitan Police Service (MPS) as part of the implementation of its peoplefriendly streets programme. The Council and MPS are currently exploring ways in which the impact of the people-friendly streets schemes can be accurately assessed using response time data in future monitoring reports.

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 allow 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. The potential reasons for delays include:

- Attending the emergency not from the station
- Issues with the address given for the emergency, or delays at the premises

- Equipment or communication issues, or the arrival time being recorded incorrectly
- Traffic calming measures
- Traffic and roadworks
- Weather conditions
- The call being non-emergency (normal speeds)

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."

In 2021, the LFB published 'Fire Facts: Incident response times 2020', which includes the following statement about low-traffic neighbourhoods and their general impact on response times:

"LTNs have been part of London's transport strategy since the 1970's. LTNs help to make streets around London easier to walk and cycle on by stopping cars, vans and other vehicles from using quiet roads as shortcuts.

In 2020 a number of LTNs were introduced across London as temporary measures to create more space for walking and cycling, allowing people to travel more safely during the COVID pandemic.

During the pandemic we have had more resources that are immediately available to respond and roads (during lockdown periods) have been quieter.

That being the case, we haven't yet noticed any impact on our attendance times due to the LTN schemes established in 2020; however, we will continue to monitor their impact at a local level. The attendance times to boroughs in inner London, where the majority of the LTNs seem to be, still remain quicker than those in outer London."

PFS monitoring analysis methodology

As advised by the LFB, the 2019 averages for Islington and Canonbury are used as the baseline against which to compare the postimplementation averages for each area. It must be noted that the data is for the whole ward of Canonbury, which encompasses an area which is bigger than Canonbury East LTN.

The averages for Canonbury are considered together with averages 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.

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.

Results

Table 28: Average attendance times of the London Fire Brigade

	No. of mobilisations	Average Attendance 1st Appliance (mm:ss)	Average Attendance 2nd Appliance (mm:ss)
Islington 2019 (baseline)	2,076	04:36	06:17
Canonbury 2019 (baseline)	124	04:47	06:16
Islington August – December 2020 (post-implementation)			
	873	04:36	06:16
Canonbury August – December 2020 (post-implementation)			
	67	05:28	06:25

Insights: London Fire Brigade response times

There are many variables that affect response times, and which could be contributing to the increase in the Canonbury ward. It must also be noted the results above show the volume of responses for the Canonbury ward overall, rather than the Canonbury East PFS area.

The post-implementation period results for Canonbury were explored to understand the potential causes for the increase in response time.

Of the 67 attendances within the Canonbury Ward, 15 were attended by appliances coming from stations further away (due to the appliance in Islington already attending another incident); 5 were recorded as being delayed due to 'traffic, roadworks etc', and on 3 occasions, the delay was recorded as being due to 'traffic calming measures'.

Of these total 8 delays due to 'traffic, roadworks etc' or 'traffic calming measures', two affected appliances which originated from Islington fire station, the closest station to Canonbury East. However, three of these delays were recorded as affecting appliances originating from the Shoreditch, Whitechapel and Stoke Newington fire stations, which are all located further afield, which could be a source of explanation of the delay.

Due to the categorisation of delay causes, it is also difficult to know for sure whether the traffic-related delays are related to PFS areas. In addition to wider neighbourhood interventions, such as PFS areas, 'traffic calming measures' could refer to a number of measures, including historic speed bumps or width restrictions.

As such, it is the view of the LFB and the council that the data available it is inconclusive whether the PFS area in Canonbury East impacted this emergency service's attendance times. The average attendance time for the first appliance remains within the target time of 6 minutes, and the average attendance time for the second appliance remains well within the target time of 8 minutes. We will continue to monitor this indicator as additional data may provide more insights. This will be reported on in the pre-consultation monitoring report.

The council will continue to engage with the LFB and monitor this and explore mitigations if required. No immediate action is required as the attendance times are still within target of 6 minutes.

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 East PFS area and the whole of Islington, and results from the two areas compared month by month to monitor for Covid-19 disruption.

Results (proportion as a percentage of the period August 2019 – December 2020)

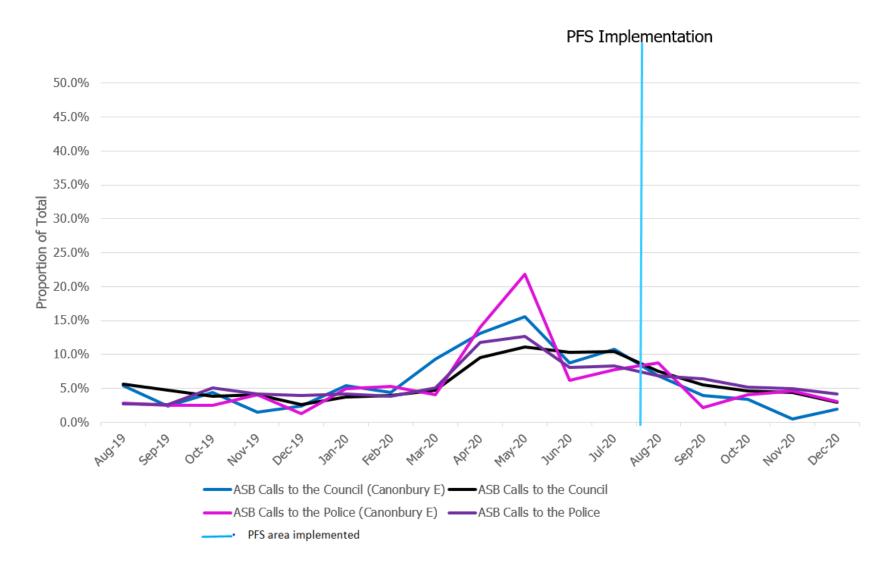
Month	Canonbury	Islington	Canonbury	Islington	Canonbury East	Islington
		ASB Calls to the		ASB Calls to	Street-based	Street-based
	ASB Calls to	Council	ASB Calls to	the Police	Criminal Offences	Criminal Offences
	the Council		the Police			
Aug-19	5%	6%	3%	3%	5%	6%
Sep-19	2%	5%	2%	3%	6%	7%
Oct-19	4%	4%	2%	5%	7%	8%
Nov-19	1%	4%	4%	4%	6%	7%
Dec-19	2%	3%	1%	4%	5%	6%
Jan-20	5%	4%	5%	4%	7%	7%
Feb-20	4%	4%	5%	4%	9%	7%
Mar-20	9%	5%	4%	5%	4%	5%
Apr-20	13%	10%	14%	12%	3%	4%
May-20	16%	11%	22%	13%	4%	5%
Jun-20	9%	10%	6%	8%	7%	5%
Jul-20	11%	10%	8%	8%	6%	6%
Aug-20 (PFS	7%	8%	9%	7%	8%	6%
implemented)						
Sep-20	4%	6%	2%	6%	6%	6%
Oct-20	3%	5%	4%	5%	7%	6%
Nov-20	0%	4%	5%	5%	5%	5%
Dec-20	2%	3%	3%	4%	5%	5%
Total	100%	100%	100%	100%	100%	100%

Table 32: Calls and crimes in the Canonbury East area and Islington

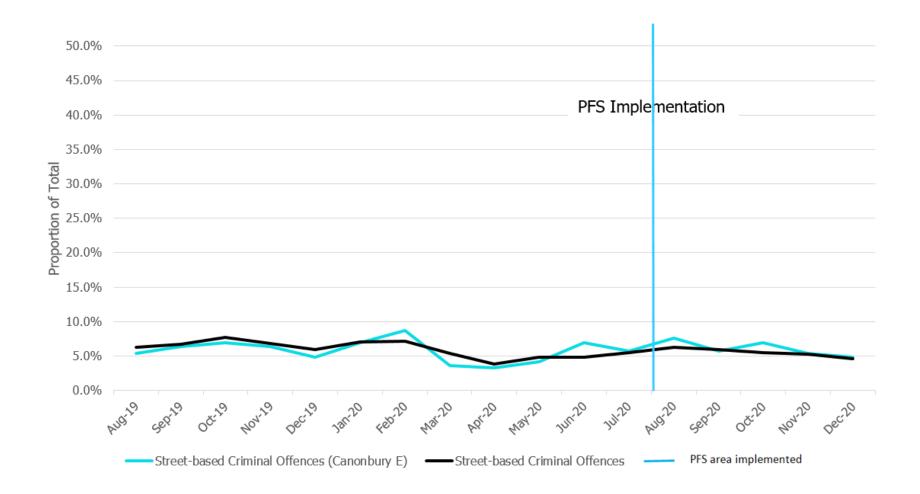
Month	Canonbury East ASB Calls to the Council	Islington ASB Calls to the Council	Canonbury East ASB Calls to the Police	Islington ASB Calls to the Police	Canonbury East Street-based Criminal Offences	Islington Street-based Criminal Offences
Aug-19	11	408	9	378	18	784
Sep-19	5	341	8	351	21	851
Oct-19	9	281	8	688	23	972
Nov-19	3	296	13	577	21	860
Dec-19	5	193	4	539	16	750
Jan-20	11	266	16	573	23	893
Feb-20	9	284	17	521	29	905
Mar-20	19	343	13	699	12	684
Apr-20	27	693	45	1612	11	486
May-20	32	805	70	1732	14	606
Jun-20	18	749	20	1108	23	612
Jul-20	22	756	25	1135	19	694
Aug-20 (PFS	14		28		25	
implemented)		545		935		790
Sep-20	8	399	7	880	19	748
Oct-20	7	335	13	703	23	695
Nov-20	1	317	15	685	18	671
Dec-20	4	216	10	573	16	586
Total	205	7,227	321	13,689	331	12,587

Table 33: Volume of calls and crimes in the Canonbury East area and Islington

Graph 5: ASB calls to the Council and Police in Canonbury East and Islington as a percentage of the total over one year



Graph 6: Street crimes in the Canonbury East area and Islington as a percentage of the total over one year



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Insights: anti-social behaviour and crime patterns

In terms of volumes of crime and ASB, Canonbury East PFS area showed similar trends to that of Islington as a whole during the past 17 months. Across the various analyses of the volume of ASB calls and crimes in Canonbury East 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 East and Islington.

There was a spike in vehicle related ASB calls to the police during July and August 2020 in Canonbury East, but calls significantly reduced in the following months. Earlier this year there were six criminal damage offences, some of which were linked to criminal damage to PFS equipment. Overall, however, crime levels in the Canonbury East have been in line with borough trends during the 17-month period.

Tables 32 and 33 and graphs 5 and 6 show increases in anti-social behaviour during the first lockdown last year. Contributing to this will have been reporting of people breaching the rules set out by Central Government. Similarly related to Covid-19, we have seen large decreases in crime due to lockdown, which has been born out in both Islington and the Canonbury East 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 East PFS trial, the project is having the intended impacts in the area of reducing motorised traffic across internal roads, reducing motorised traffic overall both across internal and boundary roads, and reducing levels of speeding on internal roads. There has been no unacceptable interim increase in motorised traffic on boundary roads and there has been negligible change in crime and anti-social behaviour patterns. London Fire Brigade response times are within the service's targets in the Canonbury ward overall. It is the view of the LFB and the council that from the data available it is inconclusive whether the PFS area in Canonbury East impacted this emergency service's attendance times. Furthermore, the trial has not had an adverse impact on air quality to date.

People-friendly streets areas 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.

Future decisions to keep, remove or amend the Canonbury East PFS trial is not dependent on any single metric, but a combination of them together with feedback from the formal consultation with residents and stakeholders. Until then, residents in the Canonbury East area can also fill in our survey through the <u>Council's people friendly streets webpage</u>.

Appendices

Appendix 1: Internal Roads counts

Ecclesbourne Road

	Before observed	Before normalised	After observed	After normalised	Difference observed	Difference	Difference observed (%)	Difference normalised (%)
7 day total	9070	10481	4148	5519	-4922	-4962	-54%	-47%
7 day daily average	1296	1497	593	788	-703	-709	-54%	-47%
5 day total	6930	8008	3057	4067	-3873	-3941	-56%	-49%
5 day daily average	1386	1602	611	813	-775	-788	-56%	-49%
AM peak hourly average (weekdays)	65	75	27	36	-38	-39	-58%	-52%
PM peak hourly average (weekdays)	102	118	45	60	-57	-58	-56%	-49%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	4729	2585	-2144	-45%
7 day daily average	676	369	-306	-45%
5 day total	3630	2019	-1611	-44%
5 day daily average	726	404	-322	-44%
5 day AM peak hourly average	55	33	-22	-39%
5 day PM peak hourly average	70	38	-32	-45%

Northchurch Road

	Before observed			After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	14122	16319	4250	5655	-9872	-10664	-70%	-65%
7 day daily average	2017	2331	607	808	-1410	-1523	-70%	-65%
5 day total	10410	12030	3087	4107	-7323	-7922	-70%	-66%
5 day daily average	2082	2406	617	821	-1465	-1584	-70%	-66%
5 day AM peak hourly average	107	124	36	48	-71	-75	-66%	-61%
5 day PM peak hourly average	176	203	45	60	-130	-143	-74%	-70%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	9619	8334	-1285	-13%
7 day daily average	1374	1191	-184	-13%
5 day total	7164	6813	-351	-5%
5 day daily average	1433	1363	-70	-5%
5 day AM peak hourly average	94	115	20	22%

Elmore Street

		Before normalised		After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	11895	13746	2742	3648	-9153	-10097	-77%	-73%
7 day daily average	1699	1964	392	521	-1308	-1442	-77%	-73%
5 day total	10382	11997	2148	2858	-8234	-9139	-79%	-76%
5 day daily average	2076	2399	430	572	-1647	-1828	-79%	-76%
5 day AM peak hourly average	99	114	22	29	-77	-85	-78%	-74%
5 day PM peak hourly average	160	185	29	38	-132	-147	-82%	-80%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	5297	2829	-2468	-47%
7 day daily average	757	404	-353	-47%
5 day total	4056	2398	-1658	-41%
5 day daily average	811	480	-332	-41%
5 day AM peak hourly average	55	43	-12	-22%
5 day PM peak hourly average	78	38	-40	-52%

Englefield Road

			After observed	After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	35664	41213	3900	5189	-31764	-36024	-89%	-87%
7 day daily average	5095	5888	557	741	-4538	-5146	-89%	-87%
5 day total	25940	29976	2862	3808	-23078	-26168	-89%	-87%
5 day daily average	5188	5995	572	762	-4616	-5234	-89%	-87%
5 day AM peak hourly average	263	304	27	36	-236	-268	-90%	-88%
5 day PM peak hourly average	406	470	39	51	-368	-418	-91%	-89%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	1591	1582	-9	-1%
7 day daily average	227	226	-1	-1%
5 day total	1126	1232	106	9%
5 day daily average	225	246	21	9%
5 day AM peak hourly average	12	16	4	35%
5 day PM peak hourly average	21	20	-1	-3%

Oakley Road

			After observed	After normalised		Difference	observed	Difference normalised (%)
7 day total	1734	2004	2083	2772	349	768	20%	38%
7 day daily average	248	286	298	396	50	110	20%	38%
5 day total	1283	1483	1481	1971	198	488	15%	33%
5 day daily average	257	297	296	394	40	98	15%	33%
5 day AM peak hourly average	10	11	15	20	6	9	57%	81%
5 day PM peak hourly average	19	21	18	24	0	3	-2%	13%

	Before observed	After observed	Difference	Difference observed (%)
7 day total	258	293	35	14%
7 day daily average	37	42	5	14%
5 day total	190	216	26	14%
5 day daily average	38	43	5	14%
5 day AM peak hourly average	3	3	0	0%
5 day PM peak hourly average	3	3	0	0%

Downham Road

	Before observed	Before normalised				Difference normalised		Difference normalised (%)
7 day total	21132	24420	420	559	-20712	-23861	-98%	-98%
7 day daily average	3019	3489	60	80	-2959	-3409	-98%	-98%
5 day total	15247	17619	312	415	-14935	-17204	-98%	-98%
5 day daily average	3049	3524	62	83	-2987	-3441	-98%	-98%
5 day AM peak hourly average	154	178	2	3	-151	-175	-98%	-98%
5 day PM peak hourly average	211	244	4	5	-208	-239	-98%	-98%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	1413	907	-506	-36%
7 day daily average	202	130	-72	-36%
5 day total	996	698	-298	-30%
5 day daily average	199	140	-60	-30%
5 day AM peak hourly average	8	7	-1	-9%
5 day PM peak hourly average	18	11	-7	-38%

Shepperton Road

		Before normalised		After normalised		Difference	observed	Difference normalised (%)
5 day total	8223	8223	3285	4371	-4938	-3852		-47%
5 day daily average	1645	1645	657	874	-988	-771	-60%	-47%
5 day AM peak hourly average	126	126	42	56	-84	-70	-67%	-56%
5 day PM peak hourly average	125	125	43	57	-82	-68	-66%	-54%

	Before observed	After observed	Difference observed	Difference observed (%)
5 day total	1150	1276	126	11%
5 day daily average	230	255	25	11%
5 day AM peak hourly average	74	64	-10	-14%
5 day PM peak hourly average	68	93	25	37%

Only 5 days (weekday) data is available for the February 2020 baseline.

Appendix 2: Boundary roads counts

Southgate Road (northern site)

Motorised traffic

							Difference	Difference
	Before	Before	After	After	Difference	Difference	observed	normalised
	observed	normalised	observed	normalised	observed	normalised	(%)	(%)
7 day total	83275	96231	62886	83672	-20389	-12559	-24%	-13%
7 day daily average	11896	13747	8984	11953	-2913	-1794	-24%	-13%
5 day total	60972	70458	47295	62928	-13677	-7531	-22%	-11%
5 day daily average	12194	14091	9481	12615	-2713	-1476	-22%	-10%
5 day AM peak hourly average	626	723	551	733	-75	10	-12%	1%
5 day PM peak hourly average	858	991	665	885	-192	-106	-22%	-11%

Cycling

	Before observed	After observed	Difference	Difference observed (%)
7 day total	4148	3019	-1129	-27%
7 day daily average	592	434	-158	-27%
5 day total	3123	2445	-678	-22%
5 day daily average	625	491	-134	-21%
5 day AM peak hourly average	42	36	-6	-15%
5 day PM peak hourly average	53	37	-16	-30%

Southgate Road (southern site)

Motorised traffic

	Before observed	Before normalised		After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	78333	90520	40043	53279	-38290	-37242	-49%	-41%
7 day daily average	11190	12931	5720	7611	-5470	-5320	-49%	-41%
5 day total	57338	66259	32444	43168	-24894	-23091	-43%	-35%
5 day daily average	11468	13252	6489	8634	-4979	-4618	-43%	-35%
5 day AM peak hourly average	631	729	367	488	-264	-240	-42%	-33%
5 day PM peak hourly average	725	837	406	541	-318	-296	-44%	-35%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	5027	1176	-3851	-77%
7 day daily average	718	168	-550	-77%
5 day total	3769	1023	-2746	-73%
5 day daily average	754	205	-549	-73%
5 day AM peak hourly average	48	14	-35	-72%
5 day PM peak hourly average	66	13	-53	-80%

Balls Pond Road

Motorised traffic

	Before observed			After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	105572	121997	98096	130520	-7476	8523	-7%	7%
7 day daily average	15082	17428	14014	18646	-1068	1218	-7%	7%
5 day total	72647	83950	71172	94697	-1475	10747	-2%	13%
5 day daily average	14529	16790	14234	18939	-295	2149	-2%	13%
5 day AM peak hourly average	667	771	794	1057	127	286	19%	37%
5 day PM peak hourly average	882	1020	813	1082	-69	62	-8%	6%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	6034	3789	-2245	-37%
7 day daily average	862	541	-321	-37%
5 day total	4214	3050	-1164	-28%
5 day daily average	843	610	-233	-28%
5 day AM peak hourly average	44	35	-9	-20%
5 day PM peak hourly average	79	49	-31	-39%

Essex Road (western site)

Motorised traffic

				After normalised		Difference	observed	Difference normalised (%)
7 day total	95943	820	947	766	1019	-54	71	-7%
7 day daily average	13706	15839	12454	16571	-1252	732	-9%	5%
5 day total	65409	75586	64169	85379	-1240	9793	-2%	13%
5 day daily average	13082	15117	12834	17076	-248	1959	-2%	13%
5 day AM peak hourly average	571	660	671	893	100	233	18%	35%
5 day PM peak hourly average	820	947	766	1019	-54	71	-7%	8%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	5084	3114	-1970	-39%
7 day daily average	726	445	-281	-39%
5 day total	3918	2448	-1470	-38%
5 day daily average	784	490	-294	-38%
5 day AM peak hourly average	39	18	-21	-54%
5 day PM peak hourly average	62	45	-17	-27%

Essex Road (eastern site)

Motorised traffic

	_	_	_	_				Difference
	Before		After	After		Difference		normalised
	observea	normalised	observea	normalised	observed	normalised	(%)	(%)
7 day total	115414	133371	97158	129272	-18256	-4099	-16%	-3%
7 day daily average	16488	19053	13880	18467	-2608	-586	-16%	-3%
5 day total	83187	96130	72363	96281	-10824	152	-13%	0%
5 day daily average	16637	19226	14473	19256	-2165	30	-13%	0%
5 day AM peak hourly average	726	839	839	1116	112	277	15%	33%
5 day PM peak hourly average	1071	1237	870	1158	-201	-80	-19%	-6%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	9072	6858	-2214	-24%
7 day daily average	1296	980	-316	-24%
5 day total	6428	5523	-905	-14%
5 day daily average	1286	1105	-181	-14%
5 day AM peak hourly average	77	80	3	4%
5 day PM peak hourly average	102	81	-21	-20%

New North Road

Motorised traffic

				After normalised		Difference normalised		Difference normalised (%)
7 day total	79583	102156	82467	109725	2884	7569	4%	7%
7 day daily average	11369	14594	11781	15675	412	1081	4%	7%
5 day total	58604	75227	60718	80787	2114	5560	4%	7%
5 day daily average	11721	15045	12144	16157	423	1112	4%	7%
5 day AM peak hourly average	624	800	722	960	98	160	16%	20%
5 day PM peak hourly average	835	1072	808	1075	-27	3	-3%	0%

	Before observed	After observed	Difference	Difference observed (%)
7 day total	6788	3980	-2808	-41%
7 day daily average	970	569	-401	-41%
5 day total	4865	3211	-1654	-34%
5 day daily average	973	642	-331	-34%
5 day AM peak hourly average	58	41	-16	-28%
5 day PM peak hourly average	84	54	-30	-35%

Canonbury Road

Motorised traffic

				After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	79084	91388	59161	78716	-19923	-12673	-25%	-14%
7 day daily average	11298	13055	8452	11245	-2846	-1810	-25%	-14%
5 day total	56538	65334	44005	58550	-12533	-6784	-22%	-10%
5 day daily average	11308	13067	8801	11710	-2507	-1357	-22%	-10%
5 day AM peak hourly average	541	625	541	720	0	95	0%	15%
5 day PM peak hourly average	833	962	577	768	-256	-194	-31%	-20%

	Before observed	After observed	Difference	Difference observed (%)
7 day total	4764	2510	-2254	-47%
7 day daily average	681	359	-322	-47%
5 day total	3289	2012	-1277	-39%
5 day daily average	658	402	-255	-39%
5 day AM peak hourly average	37	24	-13	-35%
5 day PM peak hourly average	53	35	-18	-34%

Baring Street

Motorised traffic

	Before observed			After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	68128	78728	54267	72204	-13861	-6524	-20%	-8%
7 day daily average	9733	11247	7752	10315	-1980	-932	-20%	-8%
5 day total	48695	56271	39901	53090	-8794	-3182	-18%	-6%
5 day daily average	9739	11254	7980	10618	-1759	-636	-18%	-6%
5 day AM peak hourly average	430	497	461	614	31	117	7%	24%
5 day PM peak hourly average	653	755	483	642	-170	-112	-26%	-15%

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	2604	1928	-676	-26%
7 day daily average	372	275	-97	-26%
5 day total	1878	1539	-339	-18%
5 day daily average	376	308	-68	-18%
5 day AM peak hourly average	17	16	-1	-3%
5 day PM peak hourly average	40	24	-16	-40%

Appendix 3: Directional breakdown of motorised traffic counts at specific sites

Oakley Road

Eastbound

				After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	908	1049	1044	1389	136	340	15%	32%
7 day daily average	130	150	149	198	19	48	15%	32%
5 day total	670	774	738	982	68	208	10%	27%
5 day daily average	96	111	105	140	9	29	9%	26%
5 day AM peak hourly average	16	18	24	32	8	13	50%	73%
5 day PM peak hourly average	18	21	26	35	8	14	44%	66%

Westbound

	Before observed			After normalised		Difference normalised	observed	Difference normalised (%)
7 day total	826	955	1039	1382	213	428	26%	45%
7 day daily average	118	136	148	197	30	61	25%	44%
5 day total	613	708	530	705	-83	-3	-14%	0%
5 day daily average	122	141	106	141	-16	0	-13%	0%
5 day AM peak hourly average	12	14	26	35	14	20	113%	145%
5 day PM peak hourly average	28	32	29	39	1	6	4%	19%

Appendix 4: Directional breakdown of cycling volume counts at specific sites

Oakley Road

Eastbound

	Before observed	After observed	Difference observed	Difference observed (%)
7 day total	104	141	37	36%
7 day daily average	15	20	5	33%
5 day total	76	107	31	41%
5 day daily average	15	21	6	40%
5 day AM peak hourly average	4	6	2	50%
5 day PM peak hourly average	4	4	0	0%

Westbound

	Before observed	After observed	Difference	Difference observed (%)
7 day total	154	151	-3	-2%
7 day daily average	22	22	0	0%
5 day total	114	109	-5	-4%
5 day daily average	23	22	-1	-4%
5 day AM peak hourly average	4	2	-2	-47%
5 day PM peak hourly average	6	6	0	7%

Appendix 5: Speed results

Speeds	Average speed before (mph)	Average Speed after (mph)	85th percentile speed before (mph)	85th percentile speed after (mph)	Volume over Posted Speed Limit before	Volume over Posted Speed Limit after	% Over Posted Speed Limit before	% Over Posted Speed Limit after
Ecclesbourne								
Road	-0.23	-2%	-0.20	-1%	-363	-52	-56%	0%
Northchurch Road	-0.74	-5%	-0.60	-3%	-1030	-147	-73%	-1%
Elmore Street	-0.45	-3%	-0.11	-1%	-1229	-176	-77%	0%
Englefield Road	0.03	0%	0.50	3%	-1793	-256	-84%	3%
Oakley Road	0.31	3%	0.20	2%	0	0	0%	0%
Downham Road	-5.68	-34%	-8.38	-39%	-5437	-777	-100%	-24%
Overall average	-1.13		-1.43					-4%
Overall total / %		-8%		-8%	-9852	-1407	-88%	

 Table 6.1a: Speeds on internal roads (seven-day totals)

Table 6.1b: Speeds on Shepperton Road (five-day totals)

Speeds	Average speed before (mph)		percentile	percentile	Volume over Posted Speed Limit before	Posted	Posted Speed Limit	% Over Posted Speed Limit after
Shepperton Road	0.47	3%	0.70	3%	-485	-69	-38%	9%

Speeds	Average speed before (mph)	Average Speed after (mph)	85th percentile speed before (mph)	85th percentile speed after (mph)	Volume over Posted Speed Limit before	Volume over Posted Speed Limit after	% Over Posted Speed Limit before	% Over Posted Speed Limit after
Southgate Road								
north	20.92	21.38	25.80	25.90	46141	36115	55.4%	57.4%
Southgate Road								
south	20.18	15.64	24.90	20.60	39295	6929	50.2%	17.3%
Balls Pond Road	18.35	18.30	23.10	23.10	35164	33011	33.3%	32.4%
Canonbury Road	16.22	16.42	21.20	21.50	17130	13774	21.7%	23.3%
Essex Road								
western site	18.75	15.70	25.10	20.20	29179	13808	30.4%	15.8%
Essex Road								
eastern site	18.78	18.87	22.90	22.50	43104	34113	37.4%	35.1%
Baring Street	22.42	21.89	26.90	26.50	46793	34824	68.7%	64.2%
Total	19.37	18.31	24.27	22.90	256806	172574	42.43%	35.08%

 Table 6.3: Speeds on New North Road (seven-day totals)

Speeds	Average speed before (mph)	•		percentile	Volume over Posted Speed Limit before	Posted	Posted	% Over Posted Speed Limit after
New North Road*	21.11	20.22	25.30	24.60	44494	40197	55.9%	48.7%

* New North Road has a different baseline in June 2020.

Appendix 7: Canonbury East traffic count locations and type

Table 7.1: Islington-commissioned traffic count sites and type

Boundary	Туре
Southgate Road north	Radar
Southgate Road south	ATC
Balls Pond Road	ATC
New North Road*	ATC
Canonbury Road	ATC
Essex Road western site	ATC
Essex Road eastern site	ATC
Baring Street	ATC
Internal	
Ecclesbourne Road	ATC
Northchurch Road	ATC
Elmore Street	ATC
Englefield Road	ATC
Oakley Road	ATC
Downham Road	ATC
Shepperton Road	ATC

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

Table 7.2: TfL permanent traffic sites and coordinates (all ATCs)

TfL also has a counter on Essex Road / Canonbury Road and Southgate 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. They are considered to be approximately 98% reliable. 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 for 'before' and 'after' counts so any of these inconsistencies would be similar and comparable over both sets of counts. These types of counters are considered a good industry standard throughout the UK.

Radar counts monitor speeds and vehicle volumes to a less specific categorisation using a radar sensor and do not include cycles. The suppliers state their accuracy rate is 98%.

Motorised traffic includes: light vehicles (cars and small vans), medium vehicles (light goods vehicles up to four axel trucks, and buses), and heavy vehicles (articulated trucks, heavy goods vehicles).

Appendix 8: Traffic count normalisation methodologies

Traffic counts

To calculate the normalised percentage differences, the July motorised traffic count volumes have been divided by 0.8654, and the February 2021 motorised traffic counts by 0.7515 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.

New North Road was a different baseline, taken in June 2020; the motorised traffic count volumes have been divided by 0.7790.

To calculate the percentage change, the difference has then been taken between the baseline and interim counts, 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. August 2019 and August 2020) across all the permanent TfL counter sites around Islington, and taking an average difference for the whole month.

Appendix 9: Air quality monitoring

The Council has been monitoring air quality since 2000 and has 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 East 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 East area are listed below, with details about type and if they have been added as part of the PFS programme, or were pre-existing.

Locations	PFS road type	Monitoring type	Installation	Site Type by DEFRA classification*
Balls Pond Road (BIS005/09)	Boundary	Diffusion tube	Pre-existing (since 2000)	Roadside
New North Road (PF1)	Boundary	Diffusion tube	New (since July 2020)	Roadside
Northchurch Road (PF2)	Boundary	Diffusion tube	New (since July 2020)	Roadside
Essex Road (PF4)	Boundary	Diffusion tube	New (since July 2020)	Roadside
Elizabeth Avenue (S46)	Internal	Diffusion tube	Pre-existing (since 2018)	Background urban
Shepperton Road (N47)	Internal	Diffusion tube	Pre-existing (December 2019)	Background urban
Rosemary Gardens (N48)	Non-street- based site	Diffusion tube	Pre-existing (December 2019)	Background urban

Table 9.1: Canonbury East air quality monitoring sites type and period of installation

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 regard to the deployment of monitors. However it will not have fully gone through this process, especially in regard to normal end of year analysis processes for 2020, 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 less known.

The 2019 data in this report has been adjusted using a correction factor of 0.88. 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 <u>annual report</u>. The data for 2020 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 significantly 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. Since the introduction of people-friendly streets in Canonbury East there has been two further lockdown.