People-Friendly Streets
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# Clerkenwell Green people-friendly streets trial

## Results from the six month monitoring report

ISLINGTON

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# Summary of key findings

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

Local streets within the neighbourhood are healthier, with traffic **falling overall by 34%**

Traffic on Bowling Green Lane has **decreased by 59%**, the greatest decrease of any street

**No significant impact** on London Fire Brigade response times


On local streets within the neighbourhood, rates of speeding **fell by 73%**

Air quality data from within the Clerkenwell Green area, including on boundary roads, shows that **nitrogen dioxide levels have fallen** in line with borough trends, suggesting the PFS trial has not had an adverse impact on air quality

**No significant impact** on anti-social behaviour and crime rates

Cycling has **decreased by 26%** on the internal roads, which is likely to be due to lockdown and seasonal difference

Overall across boundary roads, total volumes of motorised traffic show **an increase of 22%**. Traffic on St John Street and Skinner Street increased by 38% and 22%, respectively. However, average travel times on boundary roads have decreased; suggesting the increase in traffic volumes is not leading to congestion. The increases on St John Street and Skinner Street could be caused by other factors, such as the works at Old Street Roundabout, Smithfield Market and at Farringdon Station as part of Crossrail. The installation of the Amwell PFS trial soon after installation of the Clerkenwell Green trial may also have had an impact on traffic volumes.

The above figures reflect before and after comparisons between August 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 all boundary roads which had a more notable increase, and implement mitigating measures as appropriate.

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# 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. Clerkenwell Green, 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 Clerkenwell Green people-friendly streets trial was implemented in September 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 and Canonbury East low traffic neighbourhoods.

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# 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 Clerkenwell Green 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.

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# Interim results

## Motorised traffic on internal roads

- Motorised traffic has decreased on most internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the trial.
- Overall, motorised traffic volumes on internal roads have decreased by an average of 34%. The greatest decrease has been on Bowling Green Lane where there was a 59% decrease. Motorised traffic has increased on Woodbridge Street by 85%, and on Sekforde Street by 12%.
- Across internal roads, average speeds have decreased by 6% and the number of vehicles speeding has decreased by 73%.
- 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

- There is mixed picture in terms of the change in motorised traffic volumes on boundary roads. Overall across boundary roads, the volume of traffic has increased by 22%. Farringdon Lane has seen a negligible change (+7%). Although motorised traffic volumes have increased by an average of 38% on St. John Street, and 22% on Skinner Street, average travel times along boundary roads have decreased.
- Average speeds have seen a negligible change.

## Cycling

- Overall cycling has decreased by 26% across internal road, by 16% on boundary roads, by 84% on Clerkenwell Road and by 41% on Rosebery Avenue. Even though this interim decrease is not in line with the programme's intended objectives there are several possible explanations.
- 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
- We would expect to see increases in cycling during spring and summer, so the next round of traffic counts will be more comparable to the before counts taken in August 2020.

## Air quality

- NO2 levels in Clerkenwell Green since the people-friendly streets trial started (October 2020 - January 2021) are lower than the previous year at all sites where comparable data for the same year is available from 2019. This reflects borough-wide trends suggesting the PFS trial has not had an adverse impact on air quality.

## London Fire Brigade response times

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

## Anti-social behaviour and crime

- In terms of volumes of crime and ASB, during the past 18 months, the Clerkenwell Green PFS area showed similar trends to those of Islington as a whole. On average, calls in the Clerkenwell Green area are low.

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

Until then, residents in the Clerkenwell Green area can also fill in our survey at **www.islington.gov.uk/roads/people-friendly-streets/clerkenwell-green**

# Contents

# 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 9 for more details).

**Boundary roads** – For the purpose of this report, the "boundary roads" of the Clerkenwell Green trial area are St. John Street to the east, and Skinner Street to the north, and Farringdon Lane to the west. Note that, due to changes in projects to be delivered by the council, baseline counts were not taken on Clerkenwell Road, and therefore has not been included in the overall boundary roads analysis. Rosebery Avenue has not been included in the overall boundary roads analysis, although counts were taken here and are presented in separate tables. Rosebery Avenue may also have been impacted by the Amwell LTN trial area, which may have impacted 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 Clerkenwell Green 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 Clerkenwell Green 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 Clerkenwell Green 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) will still be able to reach their homes.

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).

# Clerkenwell Green PFS area in context

As part of Islington Council's PFS programme and the need for an urgent transport response to Covid-19, Clerkenwell Green became the third 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 Clerkenwell Green PFS area have been installed at four locations: Clerkenwell Green where it connects to Aylesbury Street, Sans Walk between St. James's Walk and Scotswood Street, and at both ends of Corporation Row, including the southbound entry lane to Corporation Row from Skinner Street. At each end of Corporation Row there is a camera-enforced bus gate to allow access for the 812 bus service, once the service has been resumed following its suspension due to Covid-19. The Clerkenwell Green and Sans Walk filters are enforced using bollards. The locations of these filters and the boundary roads make Clerkenwell Green one of the smaller PFS trial areas implemented by the council so far.

The council has longer term ambitions to improve Clerkenwell Green by creating a more pleasant and greener local environment, which was supported by the majority of respondents in a 2017 consultation. The Clerkenwell Green PFS scheme meets some of the through-traffic reduction elements of these proposals, and there are aspirations to improve the public realm in future.

This monitoring report provides data and insights relating to the Clerkenwell Green PFS trial specifically by comparing data from before implementation in August 2020 (referred to as "baseline traffic counts") to five months after implementation in February 2021 (referred to as "interim traffic counts"). 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.

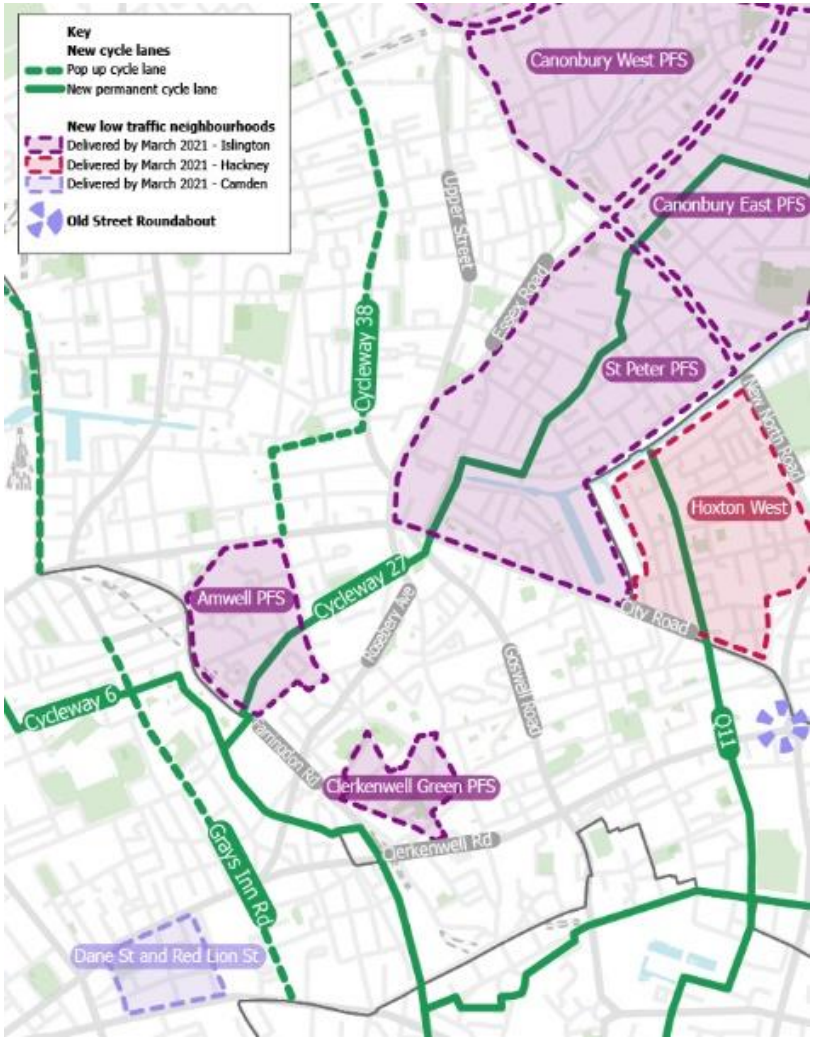
**Nearby Low Traffic Neighbourhoods** – As can be seen in Map 1, the Clerkenwell Green area is in close proximity to the Amwell low traffic neighbourhood, and shares Rosebery Avenue as a boundary Road, with Skinner Street and St. John Street also nearby. It is therefore not possible to separate out the impact the Amwell low traffic neighbourhood may also be having on Rosebery Avenue, St. John Street and Skinner Street.

**Weather** – Weather can have a significant impact on travel choices, especially cycling, and air pollution. During the week the 'baseline traffic counts were taken in August 2020 the minimum temperature was 15°C and the maximum was 34°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 as it

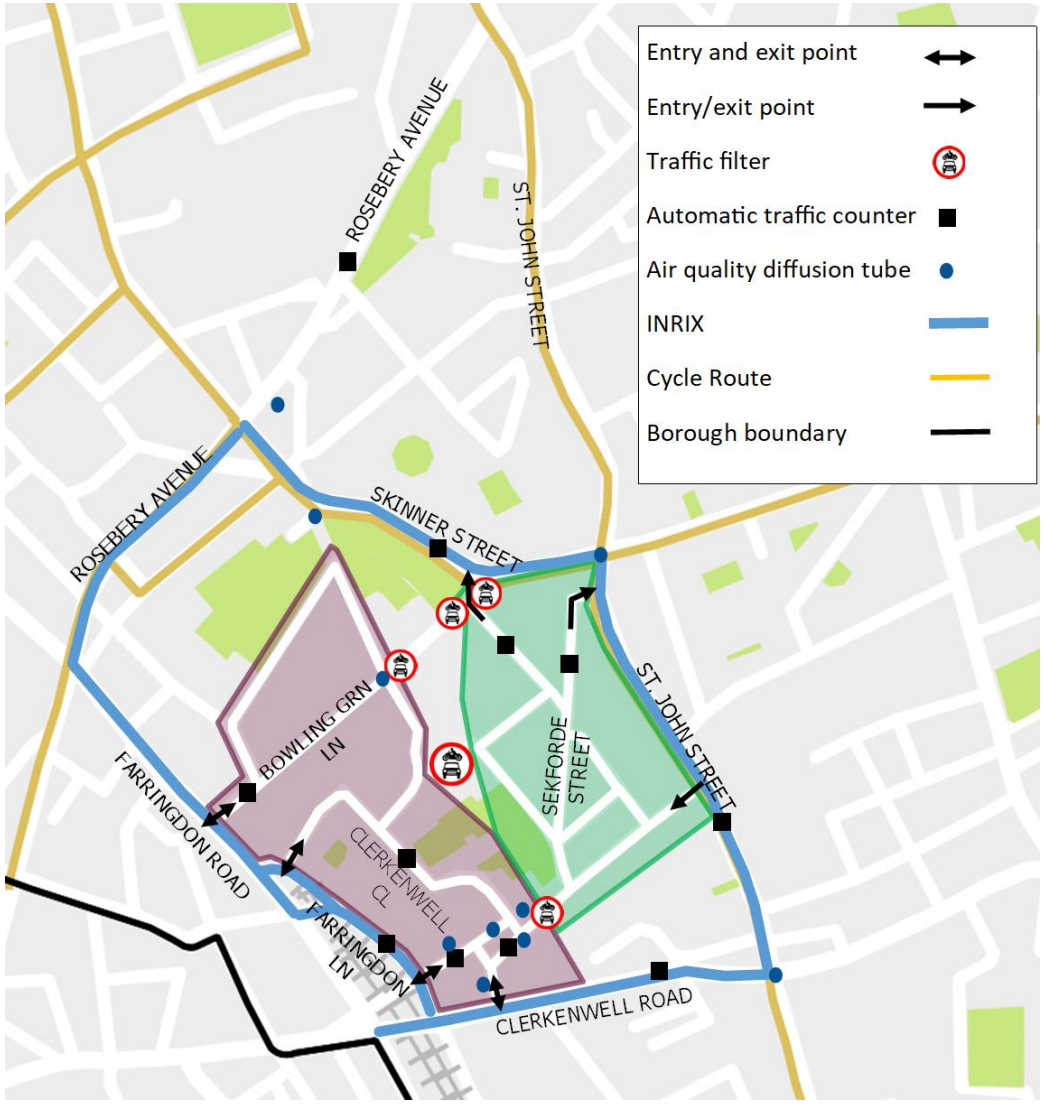
was winter. It is not possible to separate out or control for the impact of weather on the results in this report, however the next monitoring report will include data collected in August 2021 so the weather is likely to be similar to the baseline counts taken in August 2020.

**National lockdowns –** as England has been going in and out of national lockdowns as a result of COVID-19, it is worth noting that the baseline counts in August 2020 took place after the first national lockdown was lifted. By contrast, February 2021 was during 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: Clerkenwell Green PFS area in wider context of nearby LTN areas and cycle lanes**



## Map 2: Clerkenwell Green PFS measures and monitoring sites



# Traffic counts approach

## Traffic counts in the Clerkenwell Green PFS area

The count data presented in this report is not traffic modelling, but actual observed traffic, comparing traffic flows in August 2020 with February 2021, before the implementation of the Clerkenwell Green PFS area, and five months after the scheme went live.

The exception to this is Clerkenwell Road where, due to changes in nearby connected council traffic projects, no baseline counts were taken in August 2020. Therefore, the Clerkenwell Green baseline uses turning counts from Thursday March 28 2019, which only cover the AM and PM peak traffic volumes on this day. The site was included in the interim repeat counts, which used 7-day Automatic Traffic Counts (ACTs). In this report, the comparison for Clerkenwell Road extracts AM and PM peak totals from the Thursday of interim repeats, collected in March 2021. Clerkenwell Road is not included in the overall boundary road calculations because of these data type and collection differences from the other boundary roads.

Similarly related to the changes in nearby, connected council traffic projects, several counts were commissioned on roads further away from the Clerkenwell Green PFS area that are now not deemed relevant to analysis of the impacts of Clerkenwell Green PFS as a stand-alone scheme. The extra counts are listed in Appendix 9 under the heading 'Extra Roads'. Analysis of traffic at these locations has been carried out, and the data tables are shown in Appendices 7 and 8. However, as stated, Clerkenwell Green PFS is not considered to be connected to any changes in traffic patterns on these roads, as these roads are much further away from the scheme than those considered in this report.

Pedestrian counts were also taken during the AM (0700-100), Inter (1200-1400), and PM (1600-1900) peaks on both a Thursday and a Saturday during the weeks the baseline and interim counts were taken; this was Thursday 20 August 2020 and Saturday 22 August 2020 during the baseline counts, and Thursday 4 February 2021 and Saturday 6 February 2021 during the interim counts.

## Completed and anticipated dates of traffic counts

**Baseline ("before") counts**: 17 – 24 August 2020

**Clerkenwell Road Baseline ("before") counts**: 28 March 2019

**Clerkenwell Green trial begins**: 7 September 2020

**Interim ("after") counts**: 1 – 8 February 2021

**Clerkenwell Road interim ("after") counts:** 22 – 29 March 2021

**Pre-consultation counts**: August 2021

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

Automatic Traffic Counts (ATCs) are used at the majority of sites in the Clerkenwell Green PFS area. ATCs measure motorised and cycle traffic volumes and motorised traffic speeds, and classify the traffic by type. More information about the different types of counts and which type was used at each site is detailed in Appendix 9.

# Analysis and normalisation methodology overview

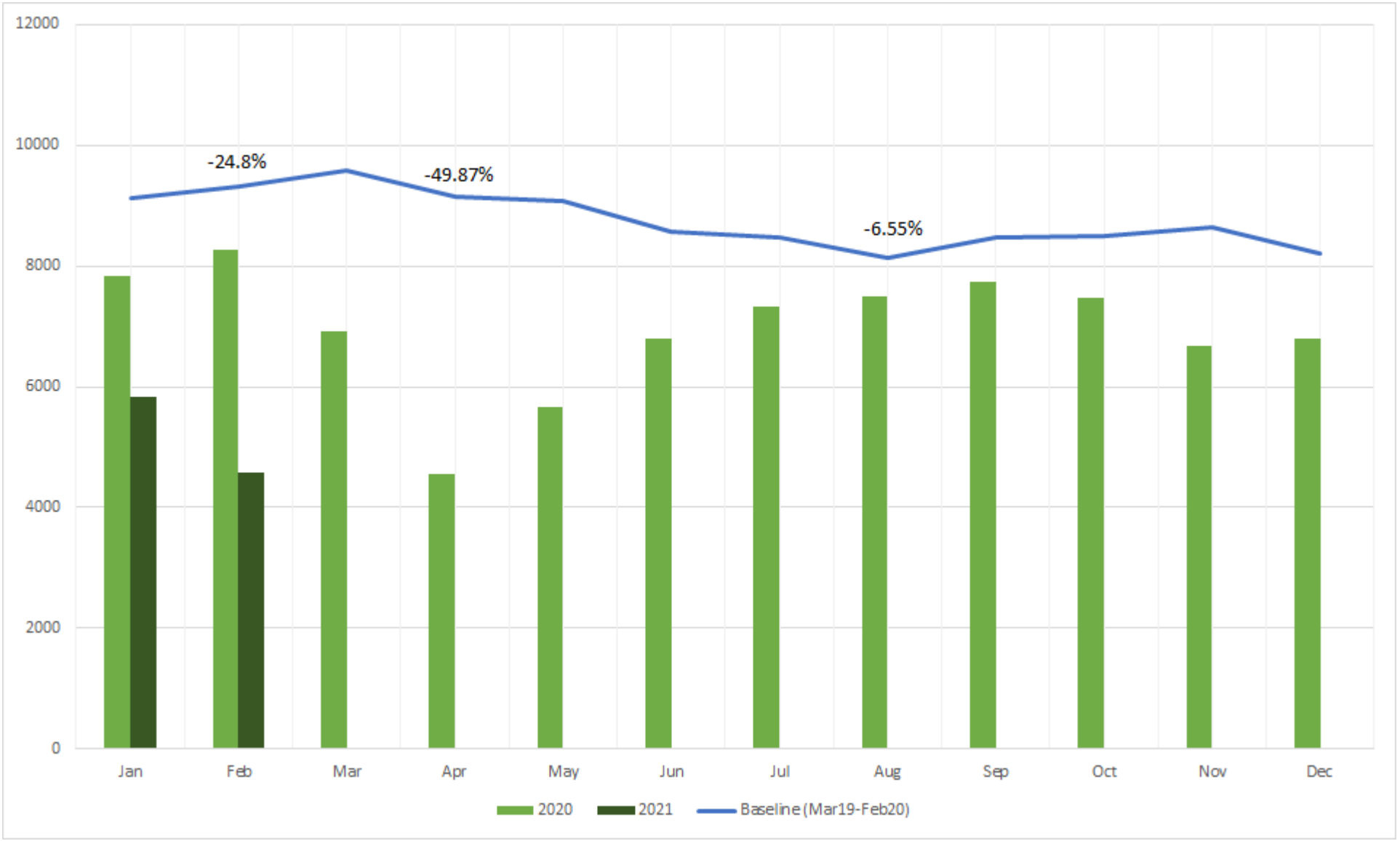
All of these counts were undertaken in full awareness of the disruption caused by the Covid-19 travel restrictions, and the need for a process to interpret the results in a way that accounts for this disruption.

Daily volumes of motorised traffic have been drawn from a range of 12 permanent traffic counters managed by Transport for London across Islington and used to establish monthly averages in 2019 and 2020. The locations of these counters are detailed in Appendix 9. The percentage difference between the same month 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 10, and has been independently peer reviewed (more information on the peer review is available in the St Peter's monitoring report, pages 14

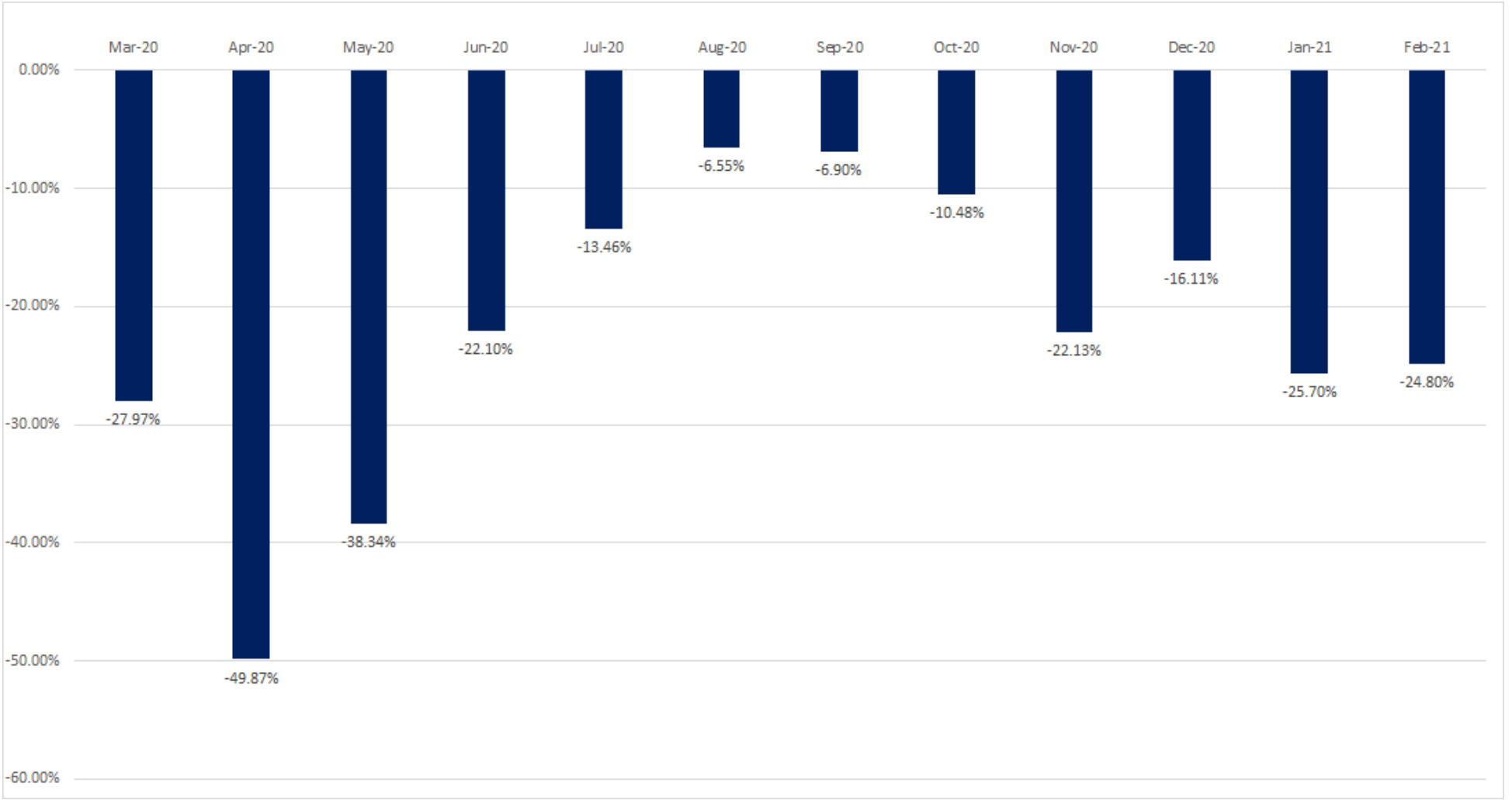
9 and 104). Drafting the baseline from TfL count locations outside of Islington and from additional years was considered and tested, but resulted in only small differences and was therefore was not taken forward as the chosen methodology.

Using the months of the Clerkenwell Green counts, in August 2020, motorised traffic across the permanent counters in Islington was approximately 7% lower than in August 2019. In February 2021, motorised traffic was approximately 25% lower than in February 2020. In March 2021, motorised traffic was approximately 31% lower than in March 2019. As such, the baseline and interim motorised traffic counts have been adjusted by a different amount. This could be explained by the fact that the first lockdown had been eased during the time the baseline counts were taken, but a new, strict lockdown had been imposed when the interim counts were taken in February 2021. Please note, the month in which the specific count batch was taken has been used. The Clerkenwell Road baseline traffic volumes are not normalised as they are from 2019.

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


12000
10000
8000
6000
4000
2000
0
-24.8%
-49.87%
-6.55%
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2020
2021
Baseline (Mar19-Feb20)

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



# 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.

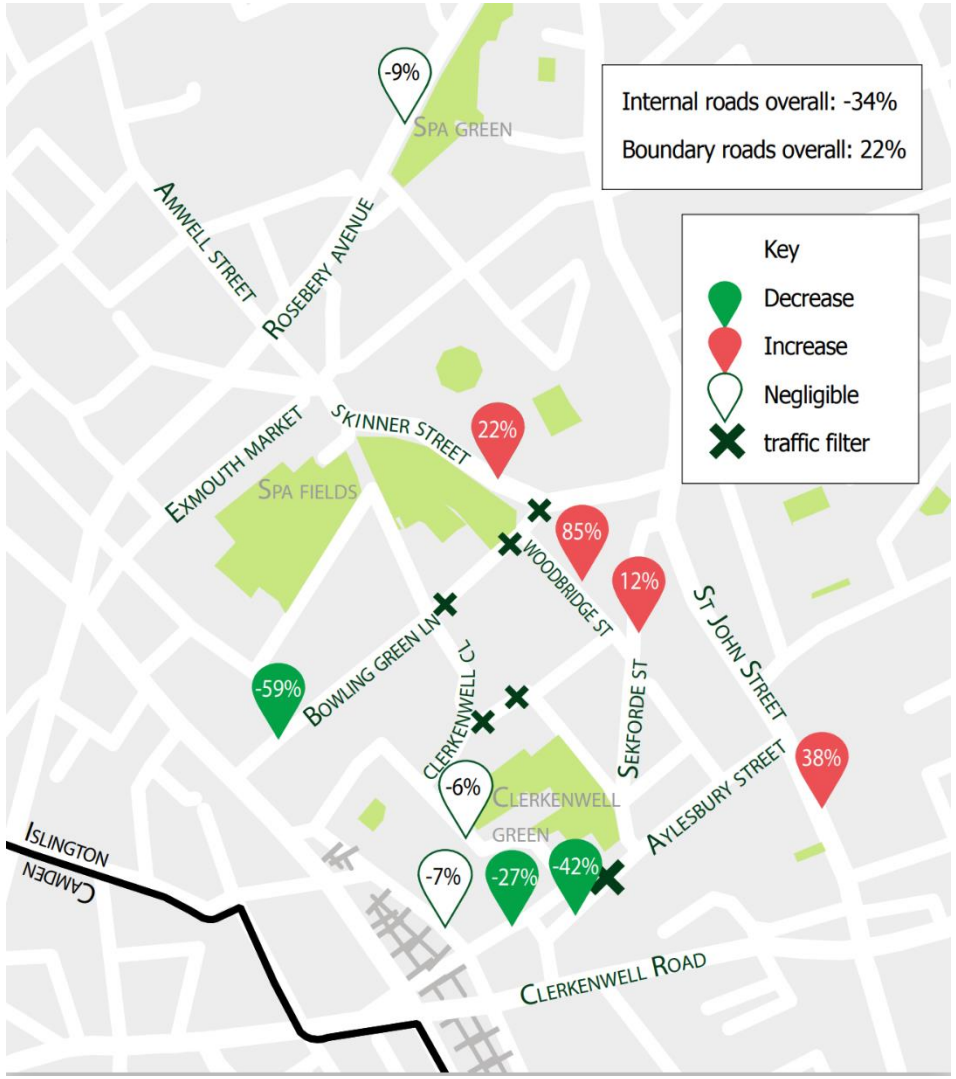
Both the normalised results and the observed results can be found in the results tables in this report and in the appendices. The figures given for changes in volumes of traffic in this report are normalised, and percentages have been drawn from the differences between normalised results.

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

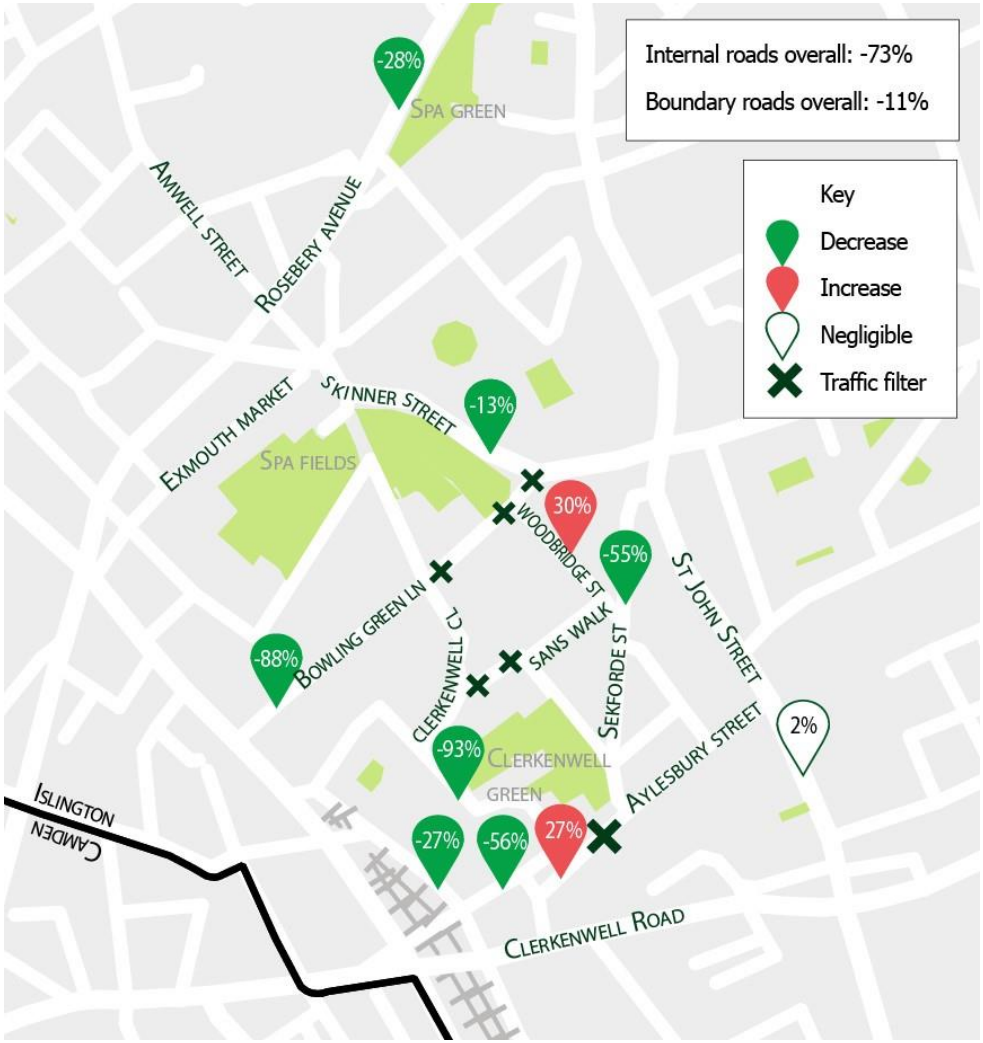
Please note: traffic flows fluctuate on a daily basis (generally up to 10%). As such, changes within -10% to 10% are considered insignificant (i.e. no or negligible change).

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 Clerkenwell Green PFS area) are summarised in table 1.

### Motorised traffic volumes on internal roads

#### Results (seven-day daily averages)

**Table 1: Motorised traffic volumes on internal roads**

| Location | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **Bowling Green Lane** | 1130 | 1209 | 372 | 495 | -759 | -715 | -67% | -59% |
| **Woodbridge Street** | 91 | 97 | 135 | 180 | 44 | 83 | 49% | 85% |
| **Sekforde Street** | 201 | 215 | 181 | 241 | -20 | 26 | -10% | 12% |
| **Clerkenwell Green southern site** | 472 | 505 | 219 | 292 | -253 | -213 | -54% | -42% |
| **Clerkenwell Green western site** | 723 | 774 | 425 | 566 | -298 | -208 | -41% | -27% |
| **Clerkenwell Close** | 219 | 234 | 166 | 220 | -53 | -14 | -24% | -6% |
| **Overall internal** | 2836 | 3035 | 1498 | 1993 | -1338 | -1041 | -47% | -34% |

## Insights: motorised traffic on internal roads

Note, 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 the majority of internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the scheme. Overall, normalised motorised traffic on internal roads has decreased by 34%. The greatest decrease has been on Bowling Green Lane where there was a 59% decrease. Motorised traffic has increased at Woodbridge Street by 85%, and at Sekforde Street by 12%. As such, they are explored in more detail below.

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.

### Woodbridge Street

Woodbridge Street within the PFS area has experienced an increase in motorised traffic. It is important to note that although the percentage increase is large, the observed volume increase of 83 additional vehicles on average per day equates to fewer than four additional vehicles per hour. The greatest increase is in the PM peak, where there has been an average increase of seven vehicles per hour to 14 vehicles per hour, after normalisation. A possible cause for this is that drivers who are unaware of the traffic filters may enter Aylesbury Street wishing to travel west through Clerkenwell Green without seeing the advance signage. Upon reaching the bollard filter at Clerkenwell Green, these drivers will have to redirect and exit the area via either Woodbridge Street or Sekforde Street; with westbound traffic more likely to exit via Woodbridge Street. The council will undertake a signage audit in the first instance to determine if additional signage could is needed, as well as continue to monitor traffic levels on Woodbridge Street, and consider possible mitigating measures against any problematic increase.

### Sekforde Street

It is likely that the 12% increase on Sekforde Street, equating to an average of just over one vehicle an hour, reflects the remainder of motorists in the scenario described in the Woodbridge Street section, who choose to exit via Sekforde Street rather than Woodbridge Street. It is worth noting that normal day-to-day fluctuation in traffic volumes can be up to 10%, so 12% is not considered an unacceptable

increase; though the council will continue to monitor the situation and undertake a signage audit in combination with Woodbridge Street to determine if additional signage is required.

# 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 9. Full speed monitoring results are available in Appendix 5 (absolute speeds from baseline and interim results). The speed limit is 20mph on all of the internal roads.

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

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

**Table 2: Changes in speeds on internal roads**

| | Difference in average speed (mph) | Difference in average speed (%) | Difference in 85th percentile (mph) | Difference in 85th percentile (%) | Difference in volume of vehicles speeding | Difference in volume of vehicles speeding (%) | Difference in proportion of vehicles speeding (%) |
|---|---|---|---|---|---|---|---|
| **Bowling Green Lane** | -1.95 | -13% | -1.80 | -10% | -360 | -88% | -3% |
| **Woodbridge Street** | -0.11 | -1% | -0.70 | -4% | 11 | 30% | -1% |
| **Sekforde Street** | -1.53 | -10% | -1.90 | -9% | -125 | -55% | -8% |
| **Clerkenwell Green southern site** | 0.84 | 7% | 1.28 | 8% | 10 | 27% | 2% |
| **Clerkenwell Green western site** | -0.35 | -2% | -0.40 | -2% | -92 | -56% | -1% |
| **Clerkenwell Close** | -2.37 | -16% | -2.40 | -13% | -381 | -93% | -3% |
| **Overall** | -0.91 | -6% | -0.99 | -6% | -937 | -73% | -2% |

# Insights: motorised traffic speeds and speeding on internal roads

## General insights

On average across the internal road sites, average speeds and the 85th percentile speed have both decreased by 6%. The proportion of vehicles speeding has shown negligible change at all sites. The number of vehicles speeding has decreased on average across internal roads by 73%, which is likely related to the overall decrease in volume of motorised traffic. The volume of vehicles speeding has decreased by more than 50% at four out of the six sites, and decreased by over 85% at the other two internal road sites, which is a positive interim outcome in line with the objectives of the scheme.

There have been increases in the volume of vehicles speeding at Woodbridge Street (30%) and Clerkenwell Green southern site (27%). It should be noted that the increase in actual volume of vehicles speeding at these locations is relatively low compared to the percentage values, with on average eleven additional vehicles speeding per day at Woodbridge Street, and ten at Clerkenwell Green.

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.

## Woodbridge Street

The volume of vehicles breaking the posted 20mph speed limit has increased by 30% at Woodbridge Street, while the proportion of vehicles speeding has negligibly changed (-1%). This could suggest that the increase in volume of vehicles speeding is linked to the overall increase in volume of traffic on Woodbridge Street, addressed in the 'Motorised traffic on internal roads' section. It is also important to note that although the percentage has increased by 30%, as an actual volume this translates to an average daily increase of 11 vehicles. The average speed and 85th percentile average have shown a negligible change.

As has been noted, the council will continue to monitor the situation on Woodbridge Street and take mitigating action if current trends are still evident in the pre-consultation monitoring report and this is deemed necessary.

**Clerkenwell Green southern site**

The volume of vehicles breaking the posted 20mph speed limit has increased by 27% at Clerkenwell Green southern site, while the proportion of vehicles speeding has changed negligibly (+2%). This percentage increase translates to an average daily volume increase of 11 vehicles driving above the posted speed limit. The council will continue to monitor the situation and take mitigating action if necessary.

The average speed and 85$^{th}$ percentile average have also shown negligible changes (+7% and +8% respectively).

# 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 Clerkenwell Green PFS trial specifically by comparing data from before implementation in August 2020 to five months after implementation in February 2021. The exception to this is Clerkenwell Road, as set out in the 'Traffic Counts Approach' section. Clerkenwell Road data is set out in table 4.

The data for Rosebery Avenue is also presented in a separate table (table 5), and is not included in the overall boundary roads average. This is because the location on Rosebery Avenue where traffic counts took place is not on the boundary of Clerkenwell Green PFS area. This counter on Rosebery Avenue was located further north, beyond the boundary section, in order to monitor for any wider impacts on the northern section of Rosebery Avenue in relation to the Clerkenwell Green PFS. The Skinner Street counter is expected to pick up any traffic changes on the section of Rosebery Avenue that borders the Clerkenwell Green PFS (between Farringdon Road and Tysoe Street).

It is important to consider all these results in the context of other external factors which could be contributing towards the results. For example, the Amwell low traffic neighbourhood, delivered shortly after the Clerkenwell Green low traffic neighbourhood, shares a boundary road with Clerkenwell Green. It is therefore not possible to separate out the impacts these may be having on traffic on this boundary road. A more detailed analysis is in the insights section on motorised traffic on boundary roads on page 35.

# Motorised traffic volumes on boundary roads

## Results (seven-day daily averages)

**Table 3: Motorised traffic volumes on boundary roads**

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **Skinner Street** | 3593 | 3844 | 3512 | 4673 | -80 | 829 | -2% | 22% |
| **St. John Street** | 2593 | 2775 | 2868 | 3817 | 275 | 1042 | 11% | 38% |
| **Farringdon Lane** | 2434 | 2604 | 2096 | 2789 | -338 | 185 | -14% | 7% |
| **Overall boundary** | 8620 | 9223 | 8477 | 11279 | -143 | 2055 | -2% | 22% |

**Table 4: Motorised traffic volumes on Clerkenwell Road**

| | March 2019 observed | March 2019 normalised | March 2021 observed | March 2021 normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **Clerkenwell Road* (single day AM &PM peaks only)** | 7282 | 7282 (no normalisation as 2019) | 5042 | 7337 | -2240 | 55 | -31% | 1% |

* As set out under 'Traffic counts approach', the exception to this is Clerkenwell Road, where due to changes in nearby council transport projects, no baseline counts were taken in August 2020. Therefore, the Clerkenwell Green baseline uses turning counts from Thursday March 28 2019, which only cover the AM and PM peak traffic volumes on this day. The site was included in the interim repeat counts, which used 7-day ATCs. In this report, the comparison for Clerkenwell Road extracts AM and PM peak totals from the Thursday of interim repeats, collected in March 2021. Clerkenwell Road is not included in the overall boundary road calculations because of these data type and collection differences from the other boundary roads.

**Table 5: Motorised traffic volumes on Rosebery Avenue**

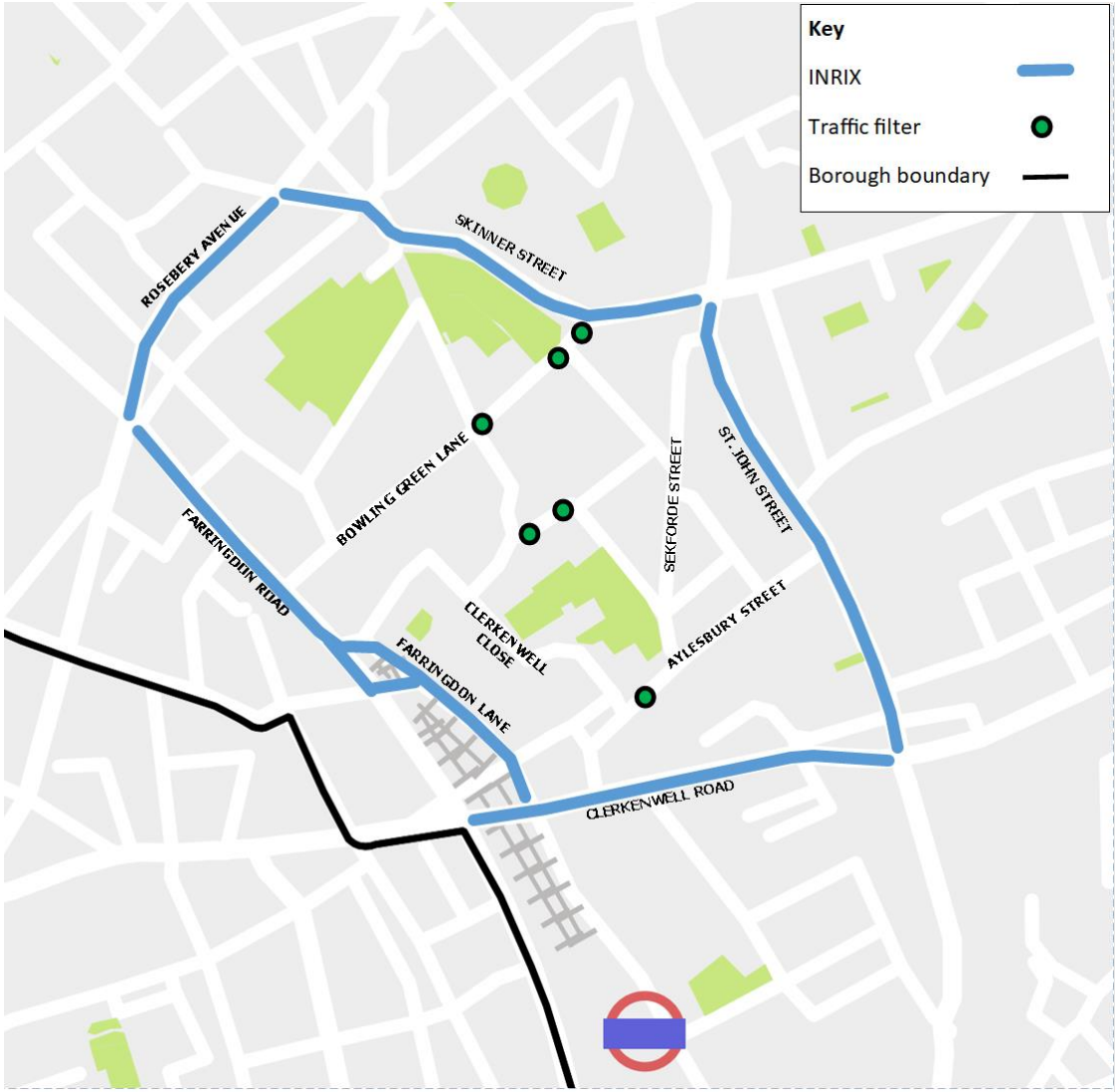
| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **Rosebery Avenue**** | 9017 | 9649 | 6630 | 8821 | -2387 | -827 | -26% | -9% |

** The data for Rosebery Avenue is presented in a separate table, and is not included in the overall boundary roads average. This is because the location on Rosebery Avenue where traffic counts took place is not actually on the boundary of Clerkenwell Green PFS area, which is also related to changes in nearby council traffic projects, as set out in the 'Traffic Counts Approach'.

# 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 traffic volumes, though speeds may settle into new patterns post-Covid-19. The INRIX capture areas for the roads that can be seen in Map 5. The results are presented in minutes and seconds (mm:ss).

## Map 5: Area of roads included in INRIX analysis



## Results

A note on interpreting the results: table 6 shows that in August 2020 during the AM peak hours (7am – 10am), it took an average of one minute and 18 seconds to travel along St. John Street between the junction with Clerkenwell Road and the junction with Skinner Street/Percival Street. In February 2021, it took an average of one minute and 16 seconds to travel the same distance. That is, it took on average 2 seconds less in February 2021 than in August 2020.

**Table 6: St. John Street (both directions)**

| | **Aug-20 (mm:ss)** | **Feb-21 (mm:ss)** | **Aug 2020 - Feb 2021 difference (mm:ss)** |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:18 | 01:16 | -00:02 |
| **Weekday PM peak average (1600 – 1900)** | 01:13 | 01:14 | 00:01 |
| **7 day 0700 - 1900 average** | 01:18 | 01:16 | -00:02 |

**Table 7: St. John Street Northbound**

| | **Aug-20 (mm:ss)** | **Feb-21 (mm:ss)** | **Aug 2020 - Feb 2021 difference (mm:ss)** |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:19 | 01:19 | 00:00 |
| **Weekday PM peak average (1600 – 1900)** | 01:14 | 01:15 | 00:01 |
| **7 day 0700 - 1900 average** | 01:19 | 01:18 | -00:01 |

**Table 8: St. John Street Southbound**

| | **Aug-20 (mm:ss)** | **Feb-21 (mm:ss)** | **Aug 2020 - Feb 2021 difference (mm:ss)** |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:18 | 01:14 | -00:04 |
| **Weekday PM peak average (1600 – 1900)** | 01:13 | 01:13 | -00:00 |
| **7 day 0700 - 1900 average** | 01:17 | 01:14 | -00:03 |

**Table 9: Skinner Street both directions**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:02 | 01:00 | -00:02 |
| **Weekday PM peak average (1600 – 1900)** | 01:03 | 01:03 | 00:00 |
| **7 day 0700 - 1900 average** | 01:02 | 01:02 | -00:00 |

**Table 10: Skinner Street Eastbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:04 | 01:02 | -00:02 |
| **Weekday PM peak average (1600 – 1900)** | 01:03 | 01:03 | 00:00 |
| **7 day 0700 - 1900 average** | 01:03 | 01:02 | -00:00 |

**Table 11: Skinner Street Westbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:00 | 00:58 | -00:02 |
| **Weekday PM peak average (1600 – 1900)** | 01:03 | 01:03 | -00:00 |
| **7 day 0700 - 1900 average** | 01:01 | 01:01 | 00:00 |

**Table 12: Clerkenwell Road both directions**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:07 | 00:57 | -00:10 |
| **Weekday PM peak average (1600 – 1900)** | 00:57 | 00:55 | -00:02 |
| **7 day 0700 - 1900 average** | 00:58 | 00:54 | -00:04 |

**Table 13: Clerkenwell Road Eastbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 00:58 | 00:54 | -00:04 |
| **Weekday PM peak average (1600 – 1900)** | 00:55 | 00:55 | -00:00 |
| **7 day 0700 - 1900 average** | 00:54 | 00:53 | -00:01 |

**Table 14: Clerkenwell Road Westbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:16 | 00:59 | -00:17 |
| **Weekday PM peak average (1600 – 1900)** | 01:00 | 00:55 | -00:05 |
| **7 day 0700 - 1900 average** | 01:02 | 00:55 | -00:06 |

**Table 15: Rosebery Avenue both directions**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 00:40 | 00:36 | -00:04 |
| **Weekday PM peak average (1600 – 1900)** | 00:42 | 00:38 | -00:04 |
| **7 day 0700 - 1900 average** | 00:39 | 00:37 | -00:02 |

**Table 16: Rosebery Avenue North-eastbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 00:38 | 00:34 | -00:04 |
| **Weekday PM peak average (1600 – 1900)** | 00:42 | 00:38 | -00:04 |
| **7 day 0700 - 1900 average** | 00:38 | 00:36 | -00:02 |

**Table 17: Rosebery Avenue South-westbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 00:42 | 00:38 | -00:04 |
| **Weekday PM peak average (1600 – 1900)** | 00:41 | 00:39 | -00:02 |
| **7 day 0700 - 1900 average** | 00:40 | 00:37 | -00:03 |

**Table 18: Farringdon Lane & Farringdon Road both directions**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:45 | 01:37 | -00:08 |
| **Weekday PM peak average (1600 – 1900)** | 01:34 | 01:31 | -00:03 |
| **7 day 0700 - 1900 average** | 01:34 | 01:29 | -00:05 |

**Table 19: Farringdon Lane & Farringdon Road North-westbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:43 | 01:32 | -00:11 |
| **Weekday PM peak average (1600 – 1900)** | 01:38 | 01:34 | -00:04 |
| **7 day 0700 - 1900 average** | 01:37 | 01:31 | -00:06 |

**Table 20: Farringdon Lane & Farringdon Road South-eastbound**

| | Aug-20 (mm:ss) | Feb-21 (mm:ss) | Aug 2020 - Feb 2021 difference (mm:ss) |
|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:48 | 01:41 | -00:07 |
| **Weekday PM peak average (1600 – 1900)** | 01:30 | 01:27 | -00:03 |
| **7 day 0700 - 1900 average** | 01:31 | 01:28 | -00:03 |

# 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 Clerkenwell Green PFS area are therefore being monitored. The council will look to include an analysis of this data in the pre-consultation monitoring report in order to include a full year of data.

# Insights: motorised traffic on boundary roads (combined monitoring)

**General insights**

Note, raw motorised traffic count data has been analysed and compared to give the 'observed' results in the traffic volume results tables. The observed results have been through the normalisation process described in the previous section to the give the 'normalised' results.

There is mixed picture in terms of the change in motorised traffic volumes on boundary roads. Overall across boundary roads, the total change in volume of traffic is an increase of 22%. Farringdon Lane has seen a negligible change (+7%). Although motorised traffic volumes have increased by an average of 38% at St. John Street, and 22% at Skinner Street, average travel times along all boundary roads decreased between August 2020 and February 2021, the only increase being by 1 second at St. John Street during the weekday PM peak (both directions); this suggests the increase in traffic volumes is not leading to congestion. The council will continue to closely monitor these sites, and publish further developments in the pre-consultation monitoring report.

It must be noted that the increase on St. John Street could be caused to a certain extent by factors other than the Clerkenwell Green PFS trial, which wider monitoring along the rest of St John Street suggests, as is explored more in the St John Street section. On Skinner Street, the increase is more directly due to the removal of the through route along Bowling Green Lane and Corporation Row, which is explored in the Skinner Street section. In the longer term, travel behaviour is expected to adjust, resulting in lower motorised traffic levels overall, though essential trips will continue.

It is worth noting that, 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.

## St. John Street

St. John Street has seen an increase of 38% in motorised traffic. It must be noted that the increase on St. John Street could be caused to a certain extent by factors other than the Clerkenwell Green PFS trial.

For example, the works to remove Old Street roundabout were a major transport infrastructure project that may have impacted traffic flows, as drivers seek alternative north-south routes to avoid the works area (works to remove the roundabout took place from spring 2019, with the switch to make the traffic flow two-way and reduce congestion only made in January 2021, so drivers are likely to have been still adjusting when the interim counts were taken in February 2021).There are also building works being carried out in the vicinity of Smithfield Market and as part of Crossrail at Farringdon Station, which may impact traffic volumes.

Indeed, in the traffic counts that were taken on additional roads (see Appendix 7, 8 and 9), traffic increases can also be seen on the northern and southern sections of St. John Street, as well on St. John Street between Cowcross Street and Charterhouse Street. This increase in traffic volume along the entire length of St. John Street, rather than just the section of St. John Street that bounds Clerkenwell Green PFS, suggests that the increase cannot be seen as solely the result of Clerkenwell Green PFS, and may be linked to other factors such as the Old Street roundabout works.

A more granular directional breakdown of traffic flows shows that the increase on St. John's Street is concentrated in the northbound direction, particularly in the weekday PM peak (please see Appendix 3 for data tables). It is notable that travel times have in general decreased negligibly on St. John Street between Clerkenwell Road and Skinner Street, except for during the weekday PM peak, where they have increased negligibly by an average of 1 second (in both directions and northbound only).

The council will continue to monitor this situation to follow traffic volume trends and determine if mitigation is necessary.

## Skinner Street

Skinner Street has seen an increase of 22% in motorised traffic, with a similar increase showing in both peaks, at 26% in the AM peak, and 20% in the PM peak. A more granular directional breakdown of traffic flows shows that the increase on Skinner Street is concentrated in the eastbound direction, and focused particularly in the weekday AM peak (please see Appendix 3 for data tables). Despite these increases in volumes, the eastbound travel time during the AM peak has decreased by 2 seconds. Travel times for all analysed periods and directions have either decreased by 1 to 2 seconds, or stayed the same on Skinner Street.

These results suggests the increase in traffic at this time of day is not causing congestion.

### Farringdon Lane

Farringdon Lane has seen a negligible change (+7%), which is positive and aligns with the aims of the PFS trial scheme. This change is concentrated in the AM and PM peaks, which have seen increases of 19% and 20%, respectively.

Travel times along the stretch of road comprising Farringdon Lane and Farringdon Road (from Farringdon Lane to the junction with Rosebery Avenue) in the north-westbound direction, and Farringdon Road (from Rosebery Avenue to the junction with Ray Street Bridge), Ray Street Bridge, and Farringdon Lane in the south-eastbound direction, have decreased at all times and in both directions.

### Rosebery Avenue

The data for Rosebery Avenue is also presented in a separate table (Table 5), and is not included in the overall boundary roads average. This is because the location on Rosebery Avenue where traffic counts took place is not on the boundary of Clerkenwell Green PFS area. This counter on Rosebery Avenue was located further north, beyond the boundary section, in order to monitor for any wider impacts on the northern section of Rosebery Avenue in relation to the Clerkenwell Green PFS. The Skinner Street counter is expected to pick up any traffic changes on the section of Rosebery Avenue that borders the Clerkenwell Green PFS (between Farringdon Road and Tysoe Street).

Rosebery Avenue has seen a negligible change (-9%) in traffic volumes. There has been an increase of 11% in the AM peak, but a negligible change in the PM peak. This is relatively encouraging considering the implementation of the Amwell PFS scheme to the north of Rosebery Avenue, which could also cause traffic to reassign to Rosebery Avenue, as it suggests any reassignment is minor and/or that traffic is already adjusting to these two schemes. Travel times have also decreased along Rosebery Avenue during all analysed periods and in both directions.

### Clerkenwell Road

Only the AM and PM peak traffic volumes can be compared for the Clerkenwell Road baseline and interim counts, for reasons explained in the 'Traffic Counts Approach' section. In the pre-consultation monitoring report, a more comprehensive comparison can be provided between the interim counts and the pre-consultation counts.

The data from the AM and PM peaks shows a negligible change in traffic volume (+1%) on Clerkenwell Road.

Travel times have decreased in both directions and in both peaks along Clerkenwell Road between St. John Street and Farringdon Road, particularly in the AM peak, where they have decreased by 10 seconds on average. Therefore, Clerkenwell Road is not showing any concerning changes in traffic flow or travel times at this stage.

# Motorised traffic speeds and speeding on boundary roads

The traffic counts carried out also measure motorised traffic speeds. These are the same counts that have been analysed for their volume results. The details about the dates and locations of these counts are in Appendix 9. Full speed monitoring results are available in Appendix 5 (absolute speeds from baseline and interim results).

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

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

**Table 21: changes in speeds on boundary roads**

| | **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 (%)** |
|---|---|---|---|---|---|---|---|
| **Skinner Street** | -0.58 | -3% | -0.80 | -3% | -2116 | -13% | -7% |
| **St. John Street** | -0.25 | -1% | -0.50 | -2% | 174 | 2% | -3% |
| **Farringdon Lane** | -0.49 | -3% | -0.50 | -2% | -1022 | -27% | -3% |
| **Overall** | -0.44 | -2% | -0.60 | -3% | -2964 | -11% | -4% |

**Table 22: changes in speeds on Rosebery Avenue**

| | Difference in average speed (mph) | Difference in average speed (%) | Difference in 85th Percentile (mph) | Difference in 85th Percentile (%) | Difference in volume of vehicles speeding | Difference in volume of vehicles speeding (%) | Difference in proportion of vehicles speeding (%) |
|---|---|---|---|---|---|---|---|
| **Rosebery Avenue** | 0.12 | 1% | 0.50 | 2% | -11891 | -28% | -1% |

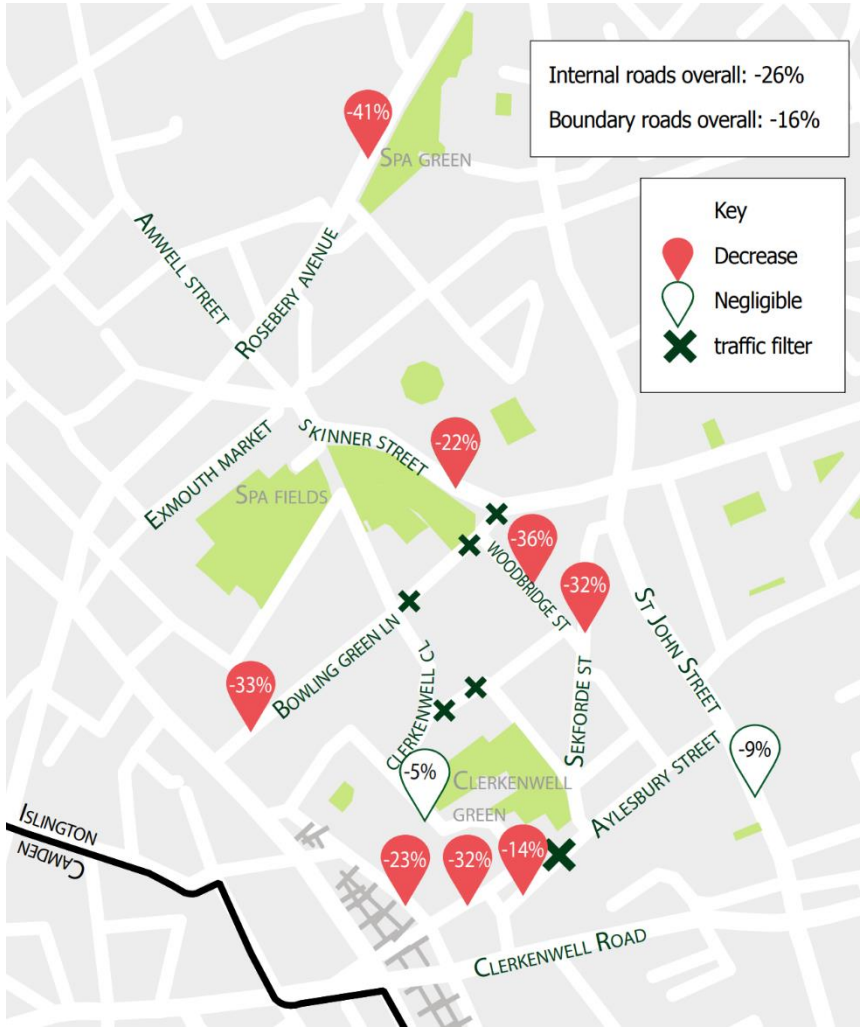
# Insights: motorised traffic speeds and speeding on boundary roads

### General insights

On average across the boundary road sites, average speeds and 85th percentile speeds, and the proportion of vehicles speeding have all shown a negligible change. Over the 7-day traffic count period, as well as a decrease in the proportion of vehicles speeding, there has been a decrease of in the number of volume of vehicles speeding.

# 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.

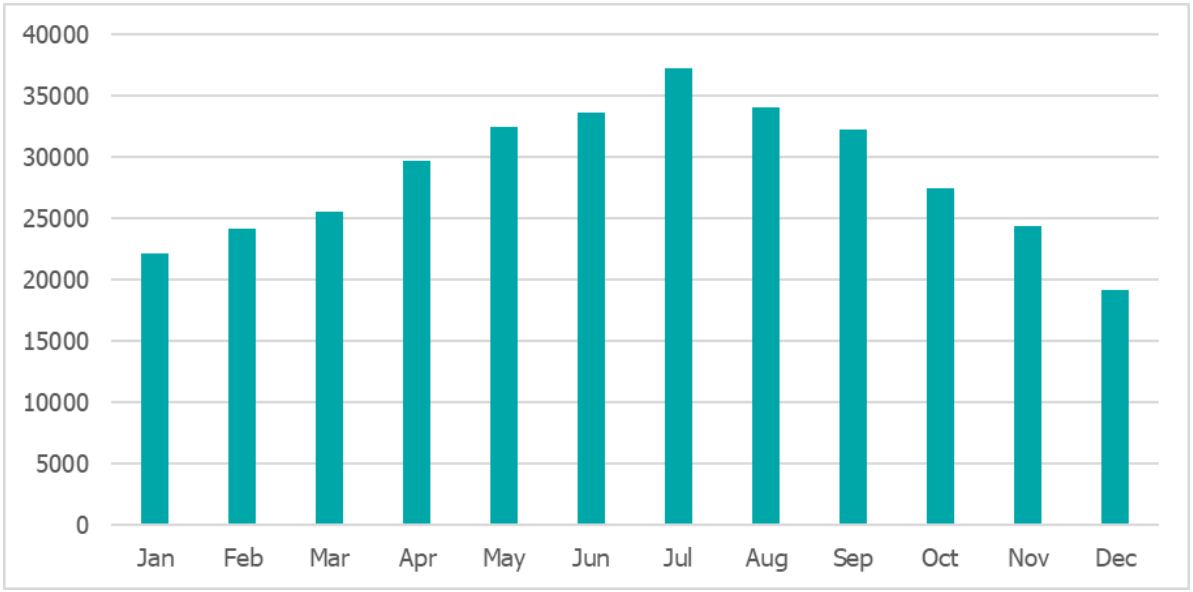
By August 2020 the first national lockdown had been lifted, whereas February 2021 was marked by the third national lockdown, during which people were advised to stay at home.

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

During the week the 'baseline traffic counts were taken in August 2020 the minimum temperature was 15°C and the maximum was 34°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 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 late summer 2021 so the weather is likely to be similar to the baseline counts taken in August 2020.

Graph 3 demonstrates the seasonable variation in cycling. For example, in 2019 the levels of Santander Cycle hires in November were on average 28% lower than in June. 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 an increase in cycling from the levels seen in this interim report.

**Graph 3: Monthly average Santander hire trend in 2019 showing seasonal difference in cycling levels**



# Cycling volumes on internal roads

## Results (seven-day daily averages)

**Table 23: Pedal cycles volumes on internal roads**

| | August 2020 | February 2021 | Difference | Difference (%) |
|---|---|---|---|---|
| **Bowling Green Lane** | 242 | 161 | -81 | -33% |
| **Woodbridge Street** | 33 | 21 | -12 | -36% |
| **Sekforde Street** | 63 | 43 | -20 | -32% |
| **Clerkenwell Green southern site** | 152 | 131 | -21 | -14% |
| **Clerkenwell Green western site** | 136 | 93 | -43 | -32% |
| **Clerkenwell Close** | 53 | 50 | -3 | -5% |
| **Overall internal** | 678 | 499 | -179 | -26% |

# Cycling volumes on boundary roads

## Results (seven-day daily averages).

**Table 24: Pedal cycles volumes on boundary roads**

| | August 2020 | February 2021 | Difference | Difference (%) |
|---|---|---|---|---|
| **Skinner Street** | 429 | 336 | -93 | -22% |
| **St. John Street** | 633 | 575 | -58 | -9% |
| **Farringdon Lane** | 230 | 177 | -53 | -23% |
| **Overall boundary** | 1292 | 1088 | -204 | -16% |

**Table 25: Pedal cycles volumes on Clerkenwell Road**

| | March 2019 | March 2021 | Difference | Difference (%) |
|---|---|---|---|---|
| **Clerkenwell Road*** | 4730 | 780 | -3950 | -84% |

*As set out in the 'Traffic Counts Approach' section, Clerkenwell Road uses different data from the other sites, and is therefore analysed separately. The data used is only for the AM and PM peaks on a Thursday from March 2019 and March 2021.

**Table 26: Pedal cycles volumes on Rosebery Avenue**

| | August 2020 | February 2021 | Difference | Difference (%) |
|---|---|---|---|---|
| **Rosebery Avenue**** | 1630 | 964 | -666 | -41% |

** The data for Rosebery Avenue is presented in a separate table, and is not included in the overall boundary roads average. This is because the location on Rosebery Avenue where traffic counts took place is not actually on the boundary of Clerkenwell Green PFS area, which is also related to changes in nearby council traffic projects, as set out in the 'Traffic Counts Approach'.

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

On average across internal roads, cycling has decreased by 26%, and decreased at most sites and negligibly changed at Clerkenwell Close and St John Street. On boundary roads it has decreased by 16%, on Clerkenwell Road by 84% during AM and PM peaks, and on Rosebery Avenue cycling has decreased by 41%.

It is worth noting that, although ATCs are very accurate (as explained in Appendix 9), 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.

February 2021 was a strict national lockdown period, which is likely to have lowered cycling numbers. Clerkenwell Green PFS is situated in the south of Islington, an area that draws many commuters in 'normal' times, many of whom will cycle; although when the baseline counts were taken, many people were still working from home, the first lockdown had been lifted and the number of people travelling to work and to use businesses and leisure facilities in the Clerkenwell Green area is likely to have been greater than during the strict national lockdown in February 2021, when the interim counts were taken.

Also likely to have reduced the volume of cyclists between the baseline and interim counts is the closure of local amenities and hospitality businesses in Clerkenwell Green due to the national lockdown (except for takeaway and delivery) during the interim counts. These factors will have reduced the reasons cyclists had for being in the area

Moreover, as has been noted in this section, the seasonal variation in weather impacts cycling levels, with February tending to be lower than August in a 'typical' year. During the week the baseline traffic counts were taken in August 2020 the minimum temperature was 15°C and the maximum was 34°C as it was summer. During the week the 'after' traffic counts were taken in February 2021 the minimum temperature was -3°C and the maximum was 11°C, s it was autumn. 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 August 2021, so the weather is likely to be similar to the baseline counts taken in August 2020.

Because of both of these factors, although cycling has decreased at most sites, and negligibly changed at two sites (Clerkenwell Close and St. John Street), it is difficult to draw any conclusions on the impact of Clerkenwell Green PFS on cycling. In the pre-consultation report we will be able to compare results from the same season, which will account for seasonal weather variation and allow for more informative analysis regarding any changes in cycling.

The decrease on Clerkenwell Road must be viewed in its specific context, as the baseline counts used are from March 2019. As cycling volumes have not been normalised, it must be highlighted that these results therefore show pre-lockdown cycling figures, at levels to be expected along a major cycling commuter route when most people travelled into workplaces. By contrast, the interim counts from March 2021 were taken during a national lockdown when the vast majority of employees were working from home and hospitality businesses were closed (except for takeaway and delivery).

Although this interim decrease in cycling 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 weather, although depending on future lockdowns.

# Pedestrian Counts at Clerkenwell Green

Pedestrian counts were taken at Clerkenwell Green in the same periods as the PFS area baseline and interim traffic counts. They use the same origin locations as counts that were taken in autumn 2016 for research regarding the Clerkenwell Green public realm transformation scheme. Origin locations are the points where pedestrians entered Clerkenwell Green, and those used for these surveys are shown in Map 7.

Counts were taken during the AM (0700-100), Inter (1200-1400), and PM (1600-1900) peaks on both a Thursday and a Saturday during the weeks the baseline and interim counts were taken; namely Thursday 20 August 2020 and Saturday 22 August 2020 during the baseline counts, and Thursday 4 February 2021 and Saturday 6 February 2021 during the interim counts.

Table 27 shows the volume and percentage difference of pedestrians entering Clerkenwell Green from each origin point between the counts taken in August 2020 and February 2021. Please see Appendix 6 for the data tables of counts by peak.

Please note that pedal cycles and electric scooters are not included in pedestrian counts. Mobility scooters are included.

**Map 7: Pedestrian count origin locations**

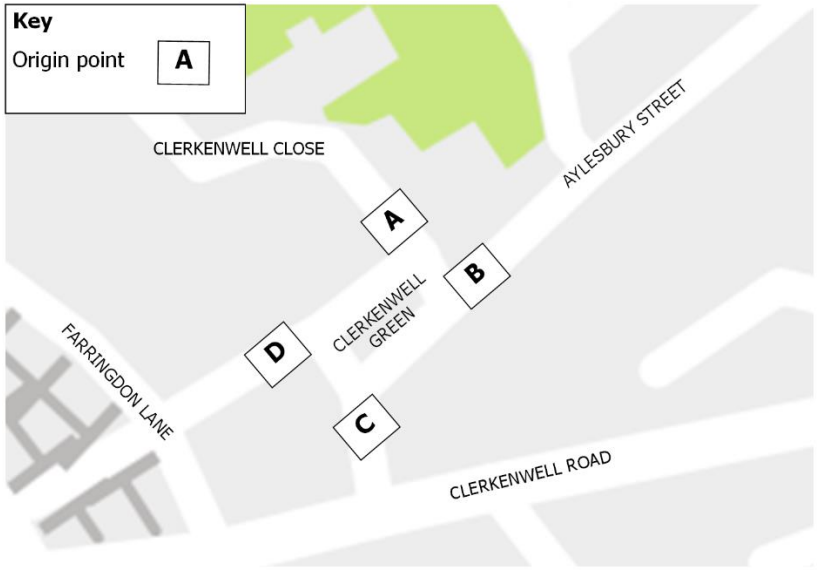



**Table 27: Change and percentage change in number of pedestrians at Clerkenwell Green between August 2020 and February 2021**

| Origin | Difference Aug 2020 - Feb 2021 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thursday | | | | | | Saturday | | | | | |
| | AM (0700-1000) | | Inter (1200-1400) | | PM (1600-1900) | | AM (0700-1000) | | Inter (1200-1400) | | PM (1600-1900) | |
| | difference | % diff | difference | % diff | difference | % diff | difference | % diff | difference | % diff | difference | % diff |
| **A** | -18 | -28% | -31 | -36% | -120 | -56% | 5 | 21% | 36 | 58% | -126 | -70% |
| **B** | -28 | -15% | -77 | -41% | -119 | -33% | 1 | 1% | 79 | 56% | -70 | -33% |
| **C** | -110 | -35% | -26 | -25% | -83 | -43% | -15 | -24% | 3 | 3% | -55 | -42% |
| **D** | -24 | -24% | -38 | -30% | -70 | -39% | -9 | -18% | 5 | 3% | -247 | -74% |
| **Total** | **-180** | **-27%** | **-172** | **-34%** | **-392** | **-42%** | **-18** | **-9%** | **123** | **28%** | **-498** | **-59%** |

# Insights: pedestrians at Clerkenwell Green

The number of pedestrians at Clerkenwell Green has decreased during all periods on a Thursday, and in the AM and PM peaks on a Saturday. The number of pedestrians has increased in the inter-peak period on the Saturday. Overall, across all monitored periods on both Thursday and Saturday, the total number of pedestrians was 32% lower in February 2021 than in August 2020.

The pattern on the Saturday is more mixed than on a Thursday; the AM peak volume of pedestrians negligibly changed (- 9%), whereas the PM peak number decreased by 59%. The Saturday Inter-peak volume of pedestrians increased by 28%.

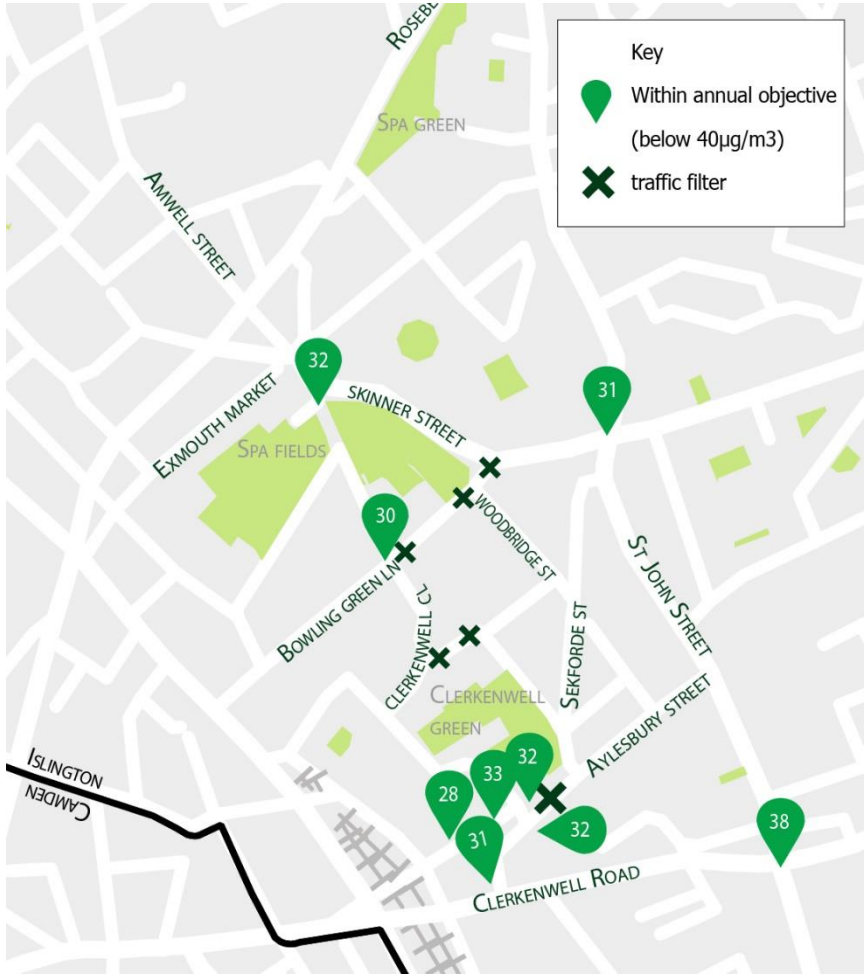
A very likely cause for the decrease in pedestrian numbers is the weather difference between August and February, and the increased hours of darkness in February; sunset in the week of the August counts ranged between 20:18 and 20:03, and in the week of the February counts between 16:50 and 17:03, giving at least three hours more hours of light in the evenings during the baseline counts. During the week the baseline pedestrian counts were taken in August 2020 the minimum temperature was 15°C and the maximum was 34°C as it was summer. During the week the interim pedestrian counts were taken in February 2021 the minimum temperature was -3°C and the maximum was 11°C as it was winter.

Also likely to have reduced the pedestrian footfall between August 2020 and February 2021 is the national lockdown that was being enforced in February 2021. Local amenities and hospitality businesses in Clerkenwell Green will have been closed (except for takeaway and delivery) during the interim pedestrian counts, and many more people would have been working from home during February compared to August. These factors will have reduced the reasons pedestrians had for being in the area.

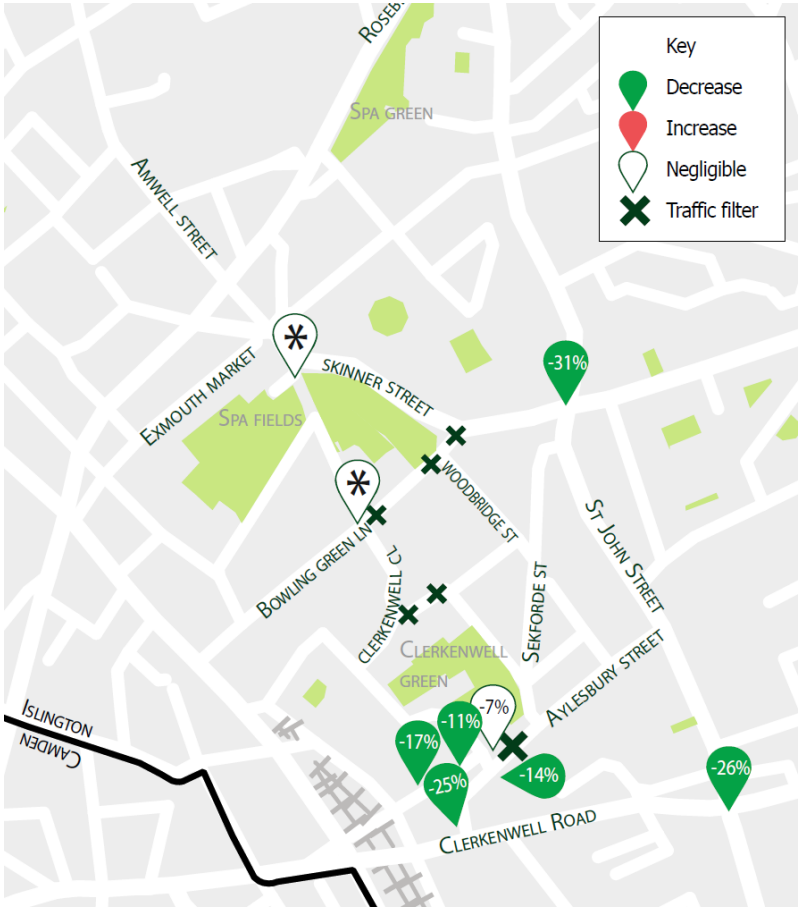
The pre-consultation monitoring report will include pedestrian data collected in August 2021 so the weather is likely to be similar to the baseline counts taken in August 2020, and more relaxed COVID-19 restrictions are currently expected. This will give a more accurate and longer-term picture of pedestrian changes in Clerkenwell Green.

# Air Quality

**Map 7: Average levels of NO2 (µg/m3) October 2020-January 2021**

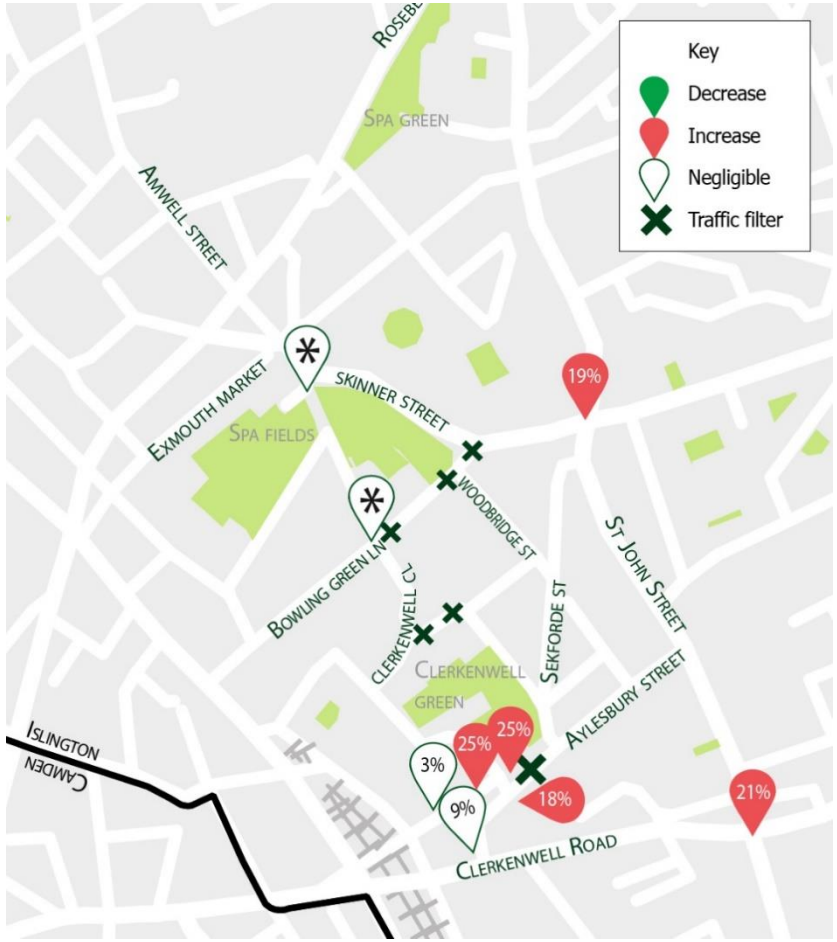


**Map 8: percentage change in NO2 (µg/m3) between October 2019- January 2020 and October 2020-January 2021**




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

**Map 9: Percentage change in $NO_2$ (µg/m3) between September 2019-August 2020 and October 2020-January 2021**




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

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

- Particulate matter of 10μm or less in size ($PM_{10}$) – tiny bits of solid material made of a range of substances suspended in the air.
- Nitrogen dioxide ($NO_2$) – 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 $NO_2$ and $PM_{10}$ 24 hours a day at two locations in the borough. These are our most accurate monitors.
- Diffusion tubes: provide monthly readings of $NO_2$. 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 Defra guidance, but are referred to in these PFS monitoring reports using PFS terminology. This has required the addition of a further category, as will now be explained. According to Defra, "Roadside sites" are those within one to five metres of a busy road. In the PFS monitoring reports, roadside monitoring equates to boundary road sites. According to Defra, "Urban background sites" are those in an urban location but more distanced from traffic sources. For the PFS monitoring we have further split the urban background results into sites on internal roadsides and sites away from roads. These categorisations apply to the PFS area and borough wide. We are looking to make monthly results for individual sites available on the council website as soon as possible.

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

The air quality monitoring sites in the Clerkenwell Green area are listed in Appendix 9, with details about type and if they have been added as part of the PFS programme, or were pre-existing. The long-term sites that are being used for comparison work in this interim Clerkenwell Green report consist of seven main road diffusion tubes and ten background urban diffusion tubes, as the sensor data we have for this area does not have enough data to be meaningfully analysed at this stage.

## Methodology

### Time period of study

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

More air quality analysis will be included in the 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 baseline data to compare this to. The newer monitoring sites are therefore less reliable to provide comparison data, as the pre-scheme monitoring period is too short. However, the ultimate goal of our air quality strategy is to reduce air pollution as much as possible, and certainly to within legal limits. As such, the newer sites will be used to monitor if air quality is at legal levels in and of itself.

## Results: air quality diffusion tubes

Tables 28 to 31 and graph 4 in this section use $NO_2$ data from diffusion tubes only, as the sensors in Clerkenwell Green do not have any before-scheme monitoring. There are therefore no results for $PM_{10}$ for Clerkenwell Green.

Tables 19 to 22 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 results for September 2020 (Period D) have been separated out as the scheme started half way through this month, but the monitors only give one value for the whole month. 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 Defra show lower than average levels of the pollutant $NO_2$ 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 $NO_2$ values given for time periods A-C.

**Table 28: (Boundary roads) $NO_2$ levels in Clerkenwell Green and borough long term diffusion tube sites**

| | **$NO_2$ (µg/m3) in Oct 2019-Jan 2020 (Period A)** | **$NO_2$ (µg/m3) in Sept 2019-Aug 2020 (Period B)** | **$NO_2$ (µg/m3) in Oct 2020-Jan 2021 (Period C)** | **$NO_2$ (µg/m3) in Sept 2020 (Period D)** | **A compared to C (µg/m3)** | **A compared to C (% change)** | **B compared to C (µg/m3)** | **B compared to C (% change)** |
|---|---|---|---|---|---|---|---|---|
| **Clerkenwell Green** | 48 | 28 | 34 | 28 | -14 | -29% | 5 | 18% |
| **Whole borough long term sites** | 43 | 33 | 37 | 35 | -6 | -14% | 4 | 12% |

This includes seven monitoring locations for the whole borough long term sites for each time period. In Clerkenwell Green this is two monitoring sites for period A and B, with values adjusted to account for periods of missing data (see Appendix 9 for further explanation) in period A and three monitoring sites in periods C.

It is worth noting both of the boundary road sites in Clerkenwell Green are likely to have been impacted by factors other than the Clerkenwell green PFS trial. For example, the removal of Old Street roundabout is a major transport infrastructure project that is being delivered to the east, and may have impacted traffic in the results.

**Table 29: (Internal roads) $NO_2$ levels in Clerkenwell Green and borough long term diffusion tube sites**

| | $NO_2$ (µg/m3) in Oct 2019-Jan 2020 (Period A) | $NO_2$ (µg/m3) in Sept 2019-Aug 2020 (Period B) | $NO_2$ (µg/m3) in Oct 2020-Jan 2021 (Period C) | $NO_2$ (µg/m3) in Sept 2020 (Period D) | A compared to C (µg/m3) | A compared to C (% change) | B compared to C (µg/m3) | B compared to C (% change) |
|---|---|---|---|---|---|---|---|---|
| **Clerkenwell Green** | 37 | 27 | 31 | 24 | -6 | -16% | 4 | 15% |
| **Whole borough long term sites** | 31 | 22 | 29 | 23 | -2 | -6% | 7 | 30% |

This includes five monitoring sites in Clerkenwell Green for periods A and B and six monitoring locations for period C. There are six monitoring locations for the whole borough long term sites for each time period.

**Table 30: (Non-street-based sites) $NO_2$ levels in Clerkenwell Green and borough long term diffusion tube sites**

| | $NO_2$ (µg/m3) in Oct 2019-Jan 2020 (Period A) | $NO_2$ (µg/m3) in Sept 2019-Aug 2020 (Period B) | $NO_2$ (µg/m3) in Oct 2020-Jan 2021 (Period C) | $NO_2$ (µg/m3) in Sept 2020 (Period D) | A compared to C (µg/m3) | A compared to C (% change) | B compared to C (µg/m3) | B compared to C (% change) |
|---|---|---|---|---|---|---|---|---|
| **Clerkenwell Green** | No data | No data | No data | No data | No data | No data | No data | No data |
| **Whole borough long term sites** | 30 | 21 | 27 | 22 | -3 | -11% | 6 | 29% |

There are no non-street monitoring sites in Clerkenwell Green for any time period. There are four monitoring locations for the whole borough long term sites for each time period, with values adjusted to account for periods of missing data (see Appendix 9 for further explanation) in period C.

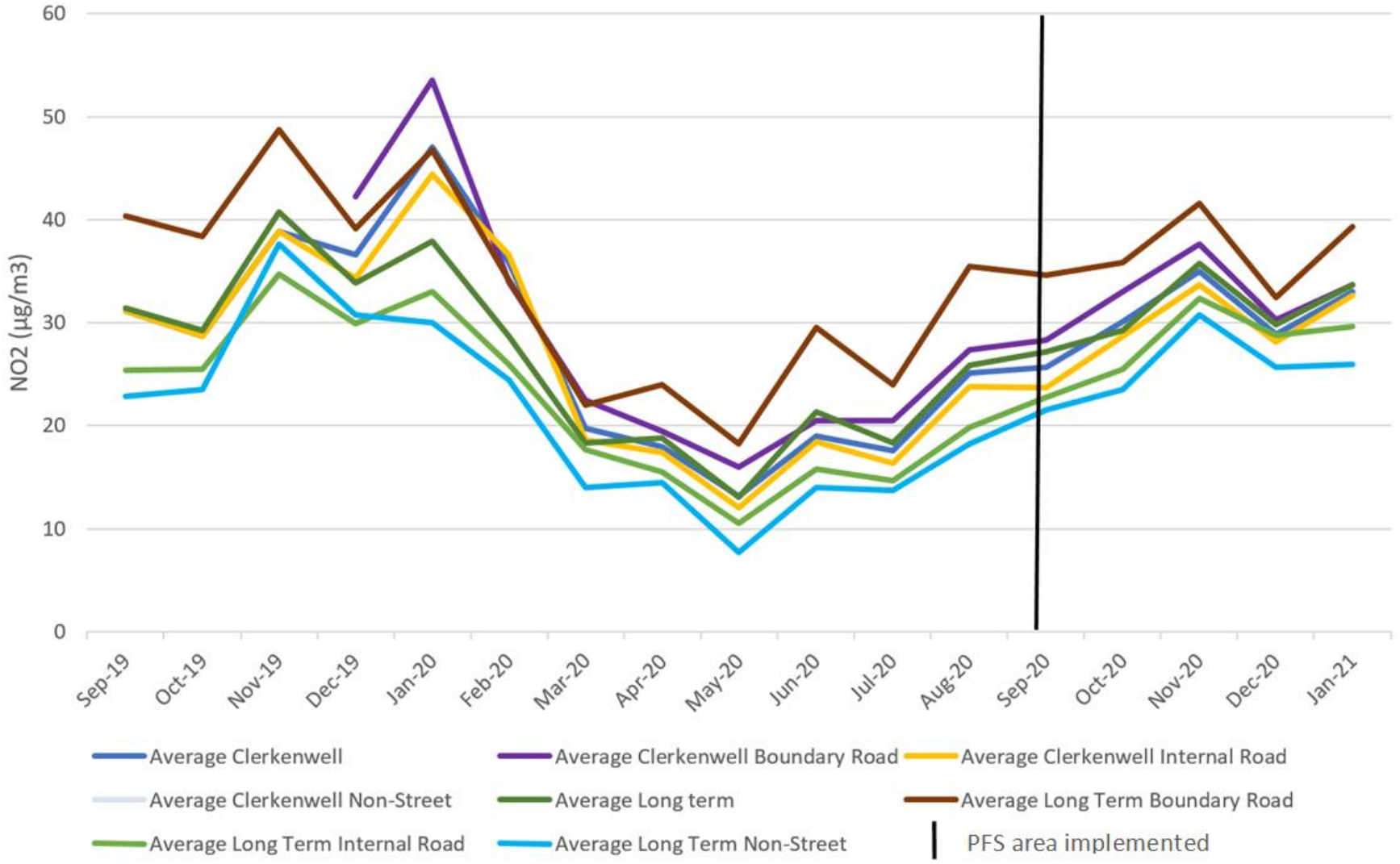
**Table 31: (Overall) $NO_2$ levels in Clerkenwell Green and borough long term diffusion tube sites**

| | **$NO_2$ (µg/m3) in Oct 2019-Jan 2020 (Period A)** | **$NO_2$ (µg/m3) in Sept 2019-Aug 2020 (Period B)** | **$NO_2$ (µg/m3) in Oct 2020-Jan 2021 (Period C)** | **$NO_2$ (µg/m3) in Sept 2020 (Period D)** | **A compared to C (µg/m3)** | **A compared to C (% change)** | **B compared to C (µg/m3)** | **B compared to C (% change)** |
|---|---|---|---|---|---|---|---|---|
| **Clerkenwell Green** | 38 | 28 | 32 | 26 | -6 | -16% | 4 | 15% |
| **Whole borough long term sites** | 35 | 26 | 31 | 27 | -4 | -12% | 5 | 18% |

This includes 17 total long term monitoring sites for the whole borough for each time period, with values adjusted to account for periods of missing data (see Appendix 9 for further explanation) in period C. In Clerkenwell Green there are seven total monitoring locations for period A and B, with values adjusted to account for periods of missing data (see Appendix 9 for further explanation) in period A, and nine monitoring locations in period C.

Graph 4 compares the trends in $NO_2$ levels in Clerkenwell Green and across Islington overall from September 2019 through to January 2021.

**Graph 4: Average $NO_2$ levels in Clerkenwell Green compared to long term borough-wide sites from diffusion tubes**



## Insights: air quality

The results in tables 28 to 31 show that there has been a decrease in pollution at all monitoring sites when the post-implementation period is compared with the same period the year before. There is no clear difference in changes in Clerkenwell Green compared to the whole borough when looking at the overall average. This is across Clerkenwell Green and the borough, where 2019 data is available.

As graph 4 shows, the borough-wide and Clerkenwell Green 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 $NO_2$ can often be lower in summer months. The post-implementation period of the PFS trial in Clerkenwell Green (October 2020 – January 2021) was at the same time as rising trends in the borough more widely. As such, while $NO_2$ levels in the trial area have increased since it was implemented in mid-September 2020 and show higher values compared to the whole year before, this is in line with borough-wide trends and can therefore be viewed as related to the impact of lockdown measures, and seasonal variation, and suggests the impact of wider factors on pollution levels, with no distinct impact on air quality to date due to the trial.

In summary these results show:

- Changes in levels of $NO_2$ in Clerkenwell Green reflect those in the borough more widely.
- In the post-implementation period, average NO2 levels by site type at Clerkenwell Green sites have been within the annual objective level of 40µg/m3.
- Levels of NO2 in Clerkenwell Green since people-friendly streets started (October 2020 - January 2021) are lower than the previous year at all sites where comparable data for the same months is available from 2019.
- For the four month period since the PFS area was implemented, from October 2020 to January 2021, levels at each site have been within the annual objective level at sites.
- 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 (LAS) response times as a result of the people-friendly streets area being implemented in Clerkenwell Green. We will continue to monitor this closely in the future.

The council is in conversation with the LAS about how 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 people-friendly 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 enable us to understand if the PFS schemes have adversely impacted attendance times.

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

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

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

## PFS monitoring analysis methodology

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

The averages for the Clerkenwell ward 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.

Please note that data from LFB is only available by ward. Clerkenwell ward also contains the Amwell PFS area, so it isn't possible to isolate the impacts of Clerkenwell Green PFS. However, as shown in table 23, there have been negligible changes to response time in Clerkenwell ward.

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

## Results

**Table 32: 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 |
| **Clerkenwell 2019 (baseline)** | 165 | 04:30 | 05:42 |
| **Clerkenwell January – September 2020 (pre-implementation)** | 106 | 04:16 | 05:06 |
| **Clerkenwell September 2020 – February 2021 (post-implementation)** | 43 | 04:09 | 05:27 |

## Insights: London Fire Brigade response times

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

# Anti-social behaviour and Crime patterns

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

Data has been drawn from the Clerkenwell Green 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 July 2019 – November 2020)

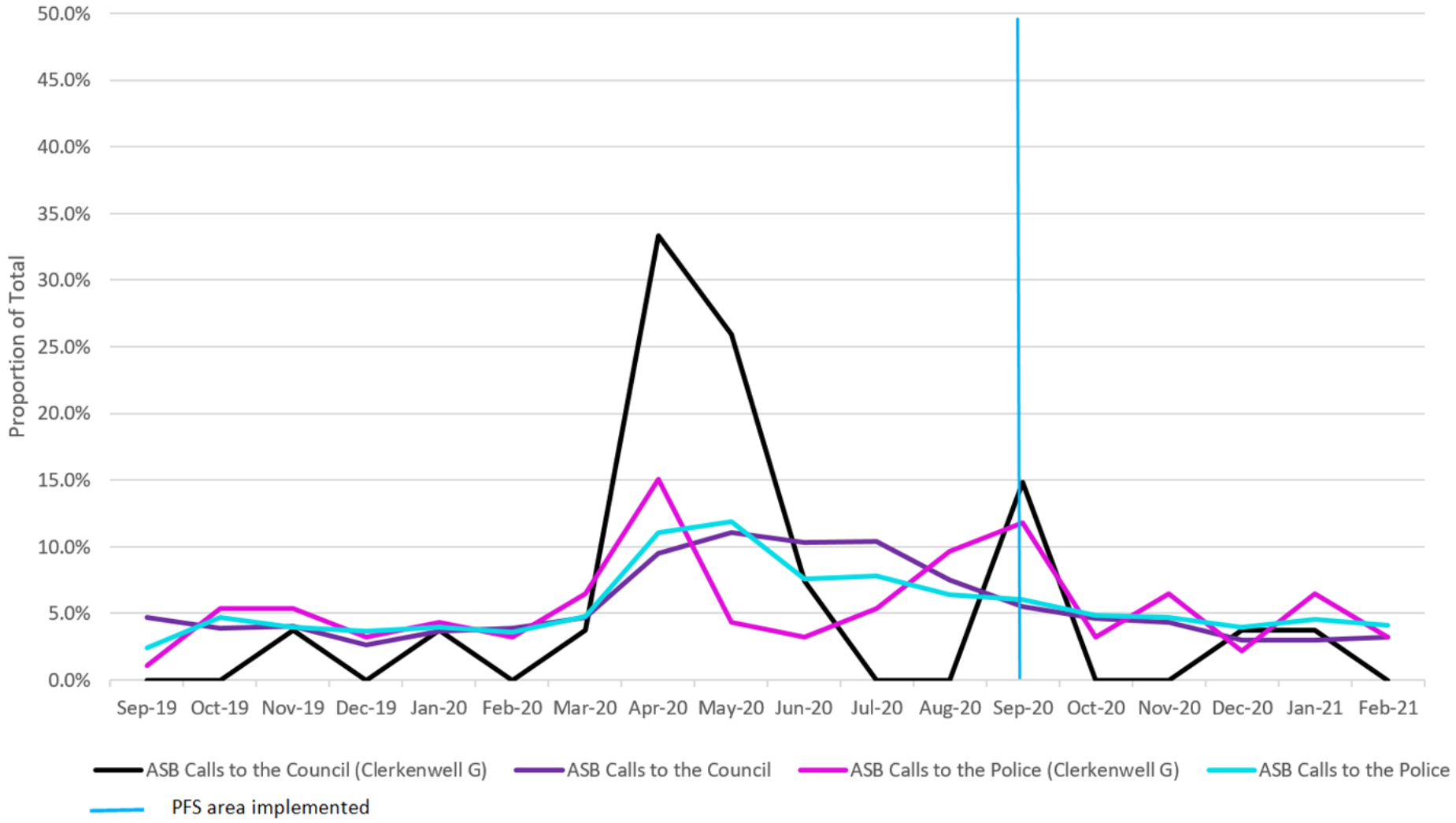
**Table 33: Calls and crimes in the Clerkenwell Green area and Islington**

| **Month** | **Clerkenwell Green** ASB Calls to the Council | **Islington** ASB Calls to the Council | **Clerkenwell Green** ASB Calls to the Police | **Islington** ASB Calls to the Police | **Clerkenwell Green** Street-based Criminal Offences | **Islington** Street-based Criminal Offences |
|---|---|---|---|---|---|---|
| **Sep-19** | 0% | 5% | 1% | 2% | 9% | 7% |
| **Oct-19** | 0% | 4% | 5% | 5% | 6% | 8% |
| **Nov-19** | 4% | 4% | 5% | 4% | 6% | 7% |
| **Dec-19** | 0% | 3% | 3% | 4% | 5% | 6% |
| **Jan-20** | 4% | 4% | 4% | 4% | 4% | 7% |
| **Feb-20** | 0% | 4% | 3% | 4% | 15% | 7% |
| **Mar-20** | 4% | 5% | 6% | 5% | 8% | 6% |
| **Apr-20** | 33% | 10% | 15% | 11% | 3% | 4% |
| **May-20** | 26% | 11% | 4% | 12% | 5% | 5% |
| **Jun-20** | 7% | 10% | 3% | 8% | 4% | 5% |
| **Jul-20** | 0% | 11% | 5% | 8% | 5% | 6% |
| **Aug-20** | 0% | 8% | 10% | 6% | 7% | 6% |
| **Sep-20 (PFS implemented** | 15% | 6% | 12% | 6% | 10% | 6% |
| **Oct-20** | 0% | 5% | 3% | 5% | 6% | 6% |
| **Nov-20** | 0% | 4% | 6% | 5% | 1% | 5% |
| **Dec-20** | 4% | 3% | 2% | 4% | 4% | 5% |
| **Jan-21** | 4% | 3% | 6% | 5% | 3% | 4% |
| **Feb-21** | 0% | 3% | 3% | 4% | 2% | 4% |
| **Total** | 100% | 100% | 100% | 100% | 100% | 100% |

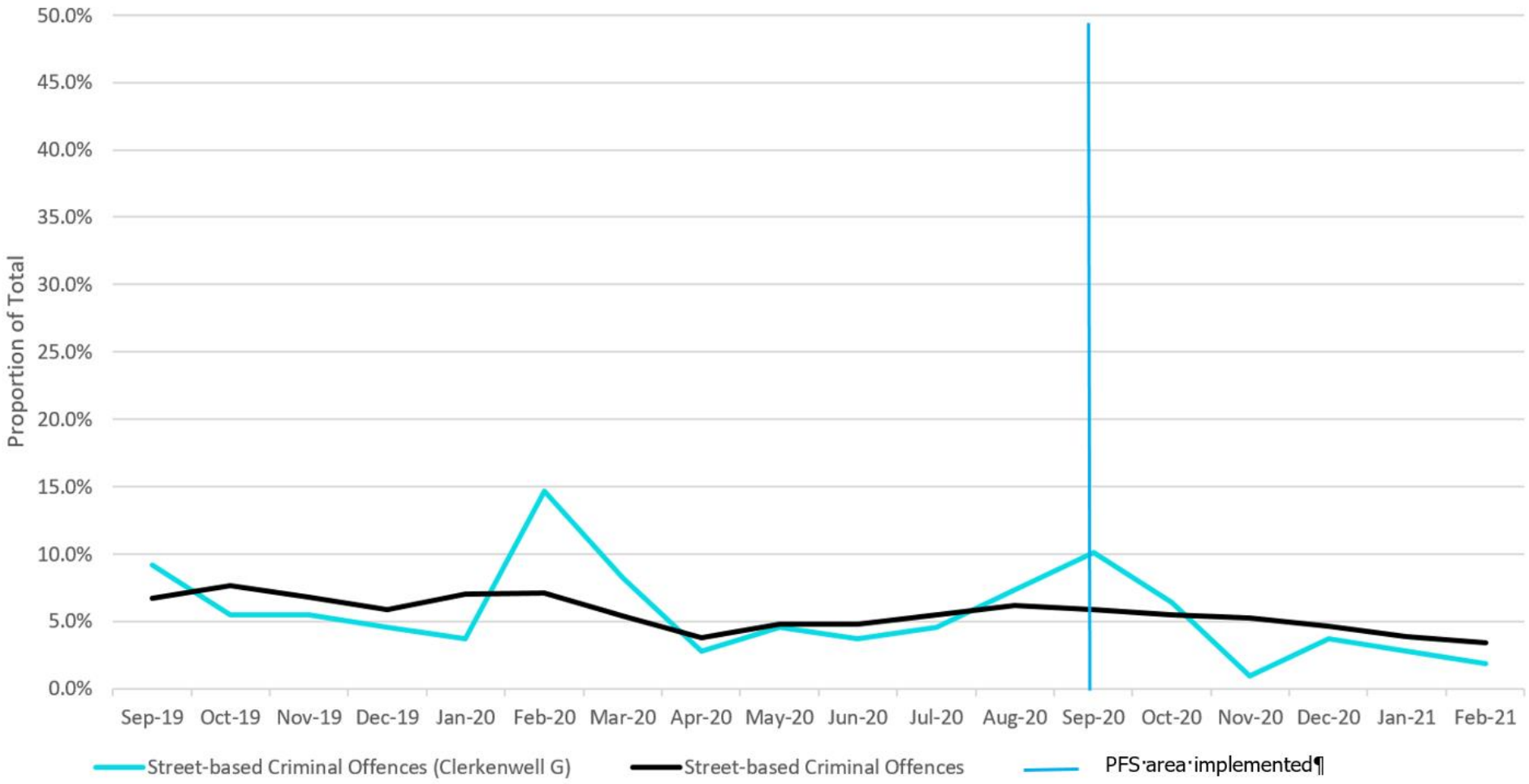
**Table 34: Volume of calls and crimes in the Clerkenwell Green area and Islington**

| **Month** | **Clerkenwell Green** ASB Calls to the Council | **Islington** ASB Calls to the Council | **Clerkenwell Green** ASB Calls to the Police | **Islington** ASB Calls to the Police | **Clerkenwell Green** Street-based Criminal Offences | **Islington** Street-based Criminal Offences |
|---|---|---|---|---|---|---|
| **Sep-19** | 0 | 341 | <5 | 351 | 10 | 851 |
| **Oct-19** | 0 | 281 | 5 | 688 | 6 | 972 |
| **Nov-19** | <5 | 296 | 5 | 577 | 6 | 860 |
| **Dec-19** | 0 | 193 | <5 | 539 | 5 | 750 |
| **Jan-20** | <5 | 266 | <5 | 573 | <5 | 893 |
| **Feb-20** | 0 | 284 | <5 | 521 | 16 | 905 |
| **Mar-20** | <5 | 343 | 6 | 699 | 9 | 684 |
| **Apr-20** | 9 | 693 | 14 | 1612 | <5 | 486 |
| **May-20** | 7 | 805 | <5 | 1732 | 5 | 606 |
| **Jun-20** | <5 | 749 | <5 | 1108 | <5 | 612 |
| **Jul-20** | 0 | 756 | 5 | 1135 | 5 | 694 |
| **Aug-20** | 0 | 545 | 9 | 935 | 8 | 790 |
| **Sep-20 (PFS implemented)** | <5 | 399 | 11 | 880 | 11 | 748 |
| **Oct-20** | 0 | 335 | <5 | 703 | 7 | 695 |
| **Nov-20** | 0 | 317 | 6 | 685 | <5 | 671 |
| **Dec-20** | <5 | 216 | <5 | 573 | <5 | 586 |
| **Jan-21** | <5 | 216 | 6 | 665 | <5 | 488 |
| **Feb-21** | 0 | 237 | <5 | 604 | <5 | 438 |
| **Total** | **27** | **7,139** | **93** | **14,461** | **109** | **12,408** |

**Graph 5: ASB calls to the Council and Police in Clerkenwell Green and Islington as a percentage of the total over one**



**Graph 6: Street crimes in the Clerkenwell Green area and Islington as a percentage of the total over one year**



## Insights: anti-social behaviour and crime patterns

In terms of volumes of crime and ASB, during the past 18 months, the Clerkenwell Green PFS area showed similar trends to those of Islington as a whole. On average, calls in the Clerkenwell Green area are low, as can be seen in Table 34.

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

Tables 33 and 34 and Graphs 5 and 6 show increases in anti-social behaviour calls during the first lockdown last year in both Clerkenwell Green and Islington. Contributing to this will have been reporting of people breaching the rules set out by Central Government. While the percentage increase of ASB and crime calls in March 2020 and April 2020 was higher in Clerkenwell Green than in Islington (Table 33), Table 34 shows that in both months, there were only nine and seven calls, respectively.

The increase in criminal activity in the Clerkenwell Green area compared to the rest of Islington in September 2020 was linked to a spate of theft offences (of pedal bikes and theft from motor vehicles).

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

# Concluding remarks

This interim monitoring report shows that, at this point in the Clerkenwell Green PFS trial, the project is generally having the intended impact in the area of reducing motorised traffic on most internal roads, and no adverse impacts on air quality or anti-social behaviour levels. There has also been no adverse impact on London Ambulance Service or Metropolitan Police response times, and no significant impact on London Fire Brigade response times.

It is necessary to continue to monitor Woodbridge Street and Sekforde Street within the PFS area, as these streets have seen some increase in traffic volumes, albeit low numbers. Though it is difficult to isolate the impact of the PFS trial on the increase on St. John Street from other factors, the council will continue to monitor traffic volumes here. The council will also continue to monitor Skinner Street, the other boundary road that saw a lesser increase in traffic, and all boundary roads surrounding the neighbourhood. Mitigating measures will be considered where appropriate. Despite some increase in traffic volumes on St John Street and Skinner Street boundary roads, the maximum increase in travel time at any time on any boundary road is 1 second, suggesting that the increase in traffic volumes is not resulting in congestion.

Speeding levels have tended to decrease on internal and boundary roads. The interim monitoring results reflecting decreases in the volume of cycles on the roads are not considered a robust indication of the impact of the Clerkenwell Green PFS on cycling due to the counts having been taken in winter, when cycling activity is recognised to fall, coupled with the figures not having been adjusted for the impacts of the national lockdowns. It will be possible to better judge the impact on cycling levels when the next set of counts are taken in summer 2021, as this data will be more comparable to the baseline counts taken in August 2020 than the interim counts taken in February 2021 during a national lockdown.

The council has longer term ambitions to improve Clerkenwell Green by creating a more pleasant and greener local environment, which was supported by the majority of respondents in a 2017 consultation. The Clerkenwell Green PFS scheme meets some of the through-traffic reduction elements of these proposals, and there are aspirations to improve the public realm in future.

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

Future decisions to keep, remove or amend the Clerkenwell Green 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 Clerkenwell Green area can also fill in our survey through the council's people friendly streets webpage.

# Appendices

# Appendix 1: Internal Roads counts

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 7912 | 8466 | 2602 | 3462 | -5310 | -5004 | -67% | -59% |
| **7 day daily average** | 1130 | 1209 | 372 | 495 | -759 | -715 | -67% | -59% |
| **5 day total** | 6511 | 6967 | 2130 | 2834 | -4381 | -4133 | -67% | -59% |
| **5 day daily average** | 1302 | 1393 | 426 | 567 | -876 | -827 | -67% | -59% |
| **AM peak hourly average (weekdays)** | 79 | 85 | 26 | 35 | -53 | -50 | -67% | -59% |
| **PM peak hourly average (weekdays)** | 95 | 101 | 19 | 25 | -76 | -76 | -80% | -75% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 1691 | 1129 | -562 | -33% |
| **7 day daily average** | 242 | 161 | -80 | -33% |
| **5 day total** | 1395 | 913 | -482 | -35% |
| **5 day daily average** | 279 | 183 | -96 | -35% |
| **AM peak hourly average (weekdays)** | 33 | 20 | -13 | -40% |
| **PM peak hourly average (weekdays)** | 25 | 15 | -10 | -39% |

# Woodbridge Street

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 15618 | 20049 | 5235 | 6723 | -10383 | -13326 | -66% | -66% |
| **7 day daily average** | 2231 | 2864 | 748 | 960 | -1483 | -1904 | -66% | -66% |
| **5 day total** | 11673 | 14985 | 3824 | 4911 | -7849 | -10074 | -67% | -67% |
| **5 day daily average** | 2335 | 2997 | 765 | 982 | -1570 | -2015 | -67% | -67% |
| **5 day AM peak hourly average** | 149 | 191 | 41 | 53 | -108 | -138 | -72% | -72% |
| **5 day PM peak hourly average** | 149 | 192 | 55 | 70 | -95 | -121 | -63% | -63% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 232 | 148 | -84 | -36% |
| **7 day daily average** | 33 | 21 | -12 | -36% |
| **5 day total** | 163 | 113 | -50 | -31% |
| **5 day daily average** | 33 | 23 | -10 | -31% |
| **AM peak hourly average (weekdays)** | 1 | 1 | -1 | -53% |
| **PM peak hourly average (weekdays)** | 3 | 2 | -1 | -35% |

# Sekforde Street

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 1404 | 1502 | 1266 | 1684 | -138 | 182 | -10% | 12% |
| **7 day daily average** | 201 | 215 | 181 | 241 | -20 | 26 | -10% | 12% |
| **5 day total** | 1102 | 1179 | 1044 | 1389 | -58 | 210 | -5% | 18% |
| **5 day daily average** | 220 | 236 | 209 | 278 | -12 | 42 | -5% | 18% |
| **AM peak hourly average (weekdays)** | 8 | 9 | 14 | 18 | 6 | 10 | 73% | 116% |
| **PM peak hourly average (weekdays)** | 18 | 19 | 14 | 18 | -4 | -1 | -24% | -5% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 440 | 299 | -141 | -32% |
| **7 day daily average** | 63 | 43 | -20 | -32% |
| **5 day total** | 354 | 240 | -114 | -32% |
| **5 day daily average** | 71 | 48 | -23 | -32% |
| **AM peak hourly average (weekdays)** | 5 | 2 | -3 | -62% |
| **PM peak hourly average (weekdays)** | 6 | 4 | -2 | -37% |

# Clerkenwell Green southern site

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 3306 | 3538 | 1536 | 2044 | -1770 | -1494 | -54% | -42% |
| **7 day daily average** | 472 | 505 | 219 | 292 | -253 | -213 | -54% | -42% |
| **5 day total** | 2789 | 2984 | 1239 | 1649 | -1550 | -1336 | -56% | -45% |
| **5 day daily average** | 558 | 597 | 248 | 330 | -310 | -267 | -56% | -45% |
| **AM peak hourly average (weekdays)** | 41 | 44 | 14 | 18 | -27 | -25 | -66% | -58% |
| **PM peak hourly average (weekdays)** | 28 | 30 | 14 | 18 | -14 | -12 | -51% | -39% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 1063 | 915 | -148 | -14% |
| **7 day daily average** | 152 | 131 | -21 | -14% |
| **5 day total** | 875 | 750 | -125 | -14% |
| **5 day daily average** | 175 | 150 | -25 | -14% |
| **AM peak hourly average (weekdays)** | 15 | 11 | -3 | -22% |
| **PM peak hourly average (weekdays)** | 14 | 11 | -3 | -21% |

# Clerkenwell Green western site

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 5061 | 5416 | 2977 | 3961 | -2084 | -1455 | -41% | -27% |
| **7 day daily average** | 723 | 774 | 425 | 566 | -298 | -208 | -41% | -27% |
| **5 day total** | 4266 | 4565 | 2455 | 3266 | -1811 | -1298 | -42% | -28% |
| **5 day daily average** | 853 | 913 | 491 | 653 | -362 | -260 | -42% | -28% |
| **AM peak hourly average (weekdays)** | 58 | 62 | 34 | 46 | -23 | -16 | -41% | -26% |
| **PM peak hourly average (weekdays)** | 52 | 56 | 35 | 47 | -17 | -8 | -32% | -15% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 950 | 650 | -300 | -32% |
| **7 day daily average** | 136 | 93 | -43 | -32% |
| **5 day total** | 793 | 531 | -262 | -33% |
| **5 day daily average** | 159 | 106 | -52 | -33% |
| **AM peak hourly average (weekdays)** | 11 | 8 | -3 | -25% |
| **PM peak hourly average (weekdays)** | 14 | 8 | -6 | -42% |

# Clerkenwell Close

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 1534 | 1641 | 1160 | 1543 | -374 | -98 | -24% | -6% |
| **7 day daily average** | 219 | 234 | 166 | 220 | -53 | -14 | -24% | -6% |
| **5 day total** | 1200 | 1284 | 945 | 1257 | -255 | -27 | -21% | -2% |
| **5 day daily average** | 240 | 257 | 189 | 251 | -51 | -5 | -21% | -2% |
| **AM peak hourly average (weekdays)** | 13 | 14 | 10 | 14 | -3 | 0 | -21% | -2% |
| **PM peak hourly average (weekdays)** | 12 | 13 | 10 | 14 | -2 | 1 | -14% | 7% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 368 | 350 | -18 | -5% |
| **7 day daily average** | 53 | 50 | -3 | -5% |
| **5 day total** | 286 | 301 | 15 | 5% |
| **5 day daily average** | 57 | 60 | 3 | 5% |
| **AM peak hourly average (weekdays)** | 4 | 6 | 1 | 27% |
| **PM peak hourly average (weekdays)** | 5 | 5 | 0 | -5% |

# Appendix 2: Boundary roads counts

# Skinner Street

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 25148 | 26910 | 24585 | 32711 | -563 | 5802 | -2% | 22% |
| **7 day daily average** | 3593 | 3844 | 3512 | 4673 | -80 | 829 | -2% | 22% |
| **5 day total** | 20612 | 22056 | 20584 | 27388 | -28 | 5332 | 0% | 24% |
| **5 day daily average** | 4122 | 4411 | 4117 | 5478 | -6 | 1066 | 0% | 24% |
| **AM peak hourly average (weekdays)** | 273 | 293 | 276 | 367 | 3 | 75 | 1% | 26% |
| **PM peak hourly average (weekdays)** | 280 | 300 | 270 | 360 | -10 | 60 | -4% | 20% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 3003 | 2350 | -653 | -22% |
| **7 day daily average** | 429 | 336 | -93 | -22% |
| **5 day total** | 2311 | 1827 | -484 | -21% |
| **5 day daily average** | 462 | 365 | -97 | -21% |
| **AM peak hourly average (weekdays)** | 33 | 26 | -7 | -20% |
| **PM peak hourly average (weekdays)** | 38 | 29 | -9 | -24% |

# St. John Street

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 18151 | 19422 | 20079 | 26716 | 1928 | 7293 | 11% | 38% |
| **7 day daily average** | 2593 | 2775 | 2868 | 3817 | 275 | 1042 | 11% | 38% |
| **5 day total** | 18151 | 19422 | 17287 | 23001 | -864 | 3578 | -5% | 18% |
| **5 day daily average** | 3630 | 3884 | 3457 | 4600 | -173 | 716 | -5% | 18% |
| **AM peak hourly average (weekdays)** | 196 | 209 | 212 | 283 | 17 | 73 | 9% | 35% |
| **PM peak hourly average (weekdays)** | 225 | 240 | 217 | 288 | -8 | 48 | -4% | 20% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 4432 | 4025 | -407 | -9% |
| **7 day daily average** | 633 | 575 | -58 | -9% |
| **5 day total** | 3490 | 3302 | -188 | -5% |
| **5 day daily average** | 698 | 660 | -38 | -5% |
| **AM peak hourly average (weekdays)** | 57 | 39 | -19 | -33% |
| **PM peak hourly average (weekdays)** | 58 | 53 | -5 | -9% |

# Farringdon Lane

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 17038 | 18231 | 14674 | 19524 | -2364 | 1293 | -14% | 7% |
| **7 day daily average** | 2434 | 2604 | 2096 | 2789 | -338 | 185 | -14% | 7% |
| **5 day total** | 13598 | 14551 | 11720 | 15594 | -1878 | 1043 | -14% | 7% |
| **5 day daily average** | 2720 | 2910 | 2344 | 3119 | -376 | 209 | -14% | 7% |
| **AM peak hourly average (weekdays)** | 141 | 151 | 134 | 179 | -6 | 28 | -4% | 19% |
| **PM peak hourly average (weekdays)** | 156 | 167 | 150 | 200 | -6 | 33 | -4% | 20% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 1612 | 1241 | -371 | -23% |
| **7 day daily average** | 230 | 177 | -53 | -23% |
| **5 day total** | 1349 | 1054 | -295 | -22% |
| **5 day daily average** | 270 | 211 | -59 | -22% |
| **AM peak hourly average (weekdays)** | 24 | 18 | -6 | -24% |
| **PM peak hourly average (weekdays)** | 21 | 17 | -4 | -18% |

# Rosebery Avenue

## Motorised traffic

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 63119 | 67540 | 46410 | 61750 | -16709 | -5790 | -26% | -9% |
| **7 day daily average** | 9017 | 9649 | 6630 | 8821 | -2387 | -827 | -26% | -9% |
| **5 day total** | 45930 | 49147 | 35826 | 47668 | -10104 | -1480 | -22% | -3% |
| **5 day daily average** | 9186 | 9829 | 7165 | 9534 | -2021 | -296 | -22% | -3% |
| **AM peak hourly average (weekdays)** | 442 | 473 | 392 | 522 | -49 | 50 | -11% | 11% |
| **PM peak hourly average (weekdays)** | 552 | 590 | 421 | 561 | -130 | -30 | -24% | -5% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 11412 | 6751 | -4661 | -41% |
| **7 day daily average** | 1630 | 964 | -666 | -41% |
| **5 day total** | 8678 | 5591 | -3087 | -36% |
| **5 day daily average** | 1736 | 1118 | -617 | -36% |
| **AM peak hourly average (weekdays)** | 118 | 77 | -41 | -35% |
| **PM peak hourly average (weekdays)** | 157 | 102 | -55 | -35% |

# Clerkenwell Road

## Motorised traffic

| | Baseline observed | Baseline normalised (no normalisation as date from 2019) | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **Thursday AM & PM peak total** | 7282 | 7282 | 5042 | 7337 | -2240 | 55 | -31% | 1% |
| **Thursday AM Peak average hourly total** | 1087 | 1087 | 866 | 1260 | -221 | 173 | -20% | 16% |
| **Thursday PM Peak average hourly total** | 1340 | 1340 | 815 | 1186 | -525 | -154 | -39% | -12% |

## Cycling

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **Thursday AM & PM peak total** | 946 | 156 | -790 | -84% |
| **AM peak hourly average** | 132 | 22 | -110 | -83% |
| **PM peak hourly average** | 183 | 30 | -153 | -84% |

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

# St. John Street

## Northbound

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 7938 | 8494 | 12070 | 16060 | 4132 | 7565 | 52% | 89% |
| **7 day daily average** | 1134 | 1213 | 1724 | 2294 | 590 | 1081 | 52% | 89% |
| **5 day total** | 6426 | 6876 | 10420 | 13864 | 3994 | 6988 | 62% | 102% |
| **5 day daily average** | 1285 | 1375 | 2084 | 2773 | 799 | 1398 | 62% | 102% |
| **AM peak hourly average (weekdays)** | 79 | 85 | 124 | 165 | 44 | 80 | 56% | 94% |
| **PM peak hourly average (weekdays)** | 75 | 80 | 132 | 176 | 58 | 96 | 77% | 120% |

## Southbound

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 10213 | 10928 | 8009 | 10656 | -2204 | -272 | -22% | -2% |
| **7 day daily average** | 1459 | 1561 | 1144 | 1522 | -315 | -39 | -22% | -2% |
| **5 day total** | 8331 | 8915 | 6867 | 9137 | -1464 | 222 | -18% | 2% |
| **5 day daily average** | 1666 | 1783 | 1373 | 1827 | -293 | 44 | -18% | 2% |
| **AM peak hourly average (weekdays)** | 96 | 103 | 89 | 118 | -7 | 15 | -8% | 15% |
| **PM peak hourly average (weekdays)** | 107 | 114 | 84 | 112 | -22 | -2 | -21% | -2% |

# Skinner Street

## Eastbound

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 14295 | 15296 | 15664 | 20841 | 1369 | 5545 | 10% | 36% |
| **7 day daily average** | 2042 | 2185 | 2238 | 2977 | 196 | 792 | 10% | 36% |
| **5 day total** | 11677 | 12495 | 13195 | 17556 | 1518 | 5061 | 13% | 41% |
| **5 day daily average** | 2335 | 2499 | 2639 | 3511 | 304 | 1012 | 13% | 41% |
| **AM peak hourly average (weekdays)** | 120 | 128 | 159 | 211 | 39 | 83 | 32% | 65% |
| **PM peak hourly average (weekdays)** | 182 | 195 | 189 | 252 | 7 | 56 | 4% | 29% |

## Westbound

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **7 day total** | 10853 | 11613 | 8921 | 11870 | -1932 | 256 | -18% | 2% |
| **7 day daily average** | 1550 | 1659 | 1274 | 1696 | -276 | 37 | -18% | 2% |
| **5 day total** | 8935 | 9561 | 7389 | 9831 | -1546 | 270 | -17% | 3% |
| **5 day daily average** | 1787 | 1912 | 1478 | 1966 | -309 | 54 | -17% | 3% |
| **AM peak hourly average (weekdays)** | 154 | 164 | 118 | 157 | -36 | -8 | -23% | -5% |
| **PM peak hourly average (weekdays)** | 98 | 105 | 81 | 108 | -17 | 3 | -17% | 3% |

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

# St. John Street

## Northbound

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 2555 | 2035 | -520 | -20% |
| **7 day daily average** | 365 | 291 | -74 | -20% |
| **5 day total** | 2015 | 1698 | -317 | -16% |
| **5 day daily average** | 403 | 340 | -63 | -16% |
| **AM peak hourly average (weekdays)** | 42 | 11 | -30 | -73% |
| **PM peak hourly average (weekdays)** | 27 | 36 | 8 | 30% |

## Southbound

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 1877 | 1990 | 113 | 6% |
| **7 day daily average** | 268 | 284 | 16 | 6% |
| **5 day total** | 1475 | 1604 | 129 | 9% |
| **5 day daily average** | 295 | 321 | 26 | 9% |
| **AM peak hourly average (weekdays)** | 16 | 27 | 11 | 72% |
| **PM peak hourly average (weekdays)** | 31 | 17 | -13 | -44% |

# Skinner Street

## Eastbound

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 2650 | 1892 | -758 | -29% |
| **7 day daily average** | 379 | 270 | -108 | -29% |
| **5 day total** | 2051 | 1493 | -558 | -27% |
| **5 day daily average** | 410 | 299 | -112 | -27% |
| **AM peak hourly average (weekdays)** | 31 | 23 | -7 | -23% |
| **PM peak hourly average (weekdays)** | 33 | 23 | -10 | -31% |

## Westbound

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **7 day total** | 353 | 458 | 105 | 30% |
| **7 day daily average** | 50 | 65 | 15 | 30% |
| **5 day total** | 260 | 334 | 74 | 28% |
| **5 day daily average** | 52 | 67 | 15 | 28% |
| **AM peak hourly average (weekdays)** | 2 | 2 | 0 | 23% |
| **PM peak hourly average (weekdays)** | 4 | 6 | 1 | 25% |

# Appendix 5: Speed results

**Table 5.1: Speeds on internal roads (seven-day totals)**

| 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 |
|---|---|---|---|---|---|---|---|---|
| **Bowling Green Lane** | 15.06 | 13.11 | 18.00 | 16.20 | 409 | 49 | 5.2% | 1.9% |
| **Woodbridge Street** | 12.93 | 12.82 | 17.10 | 16.40 | 37 | 48 | 5.8% | 5.1% |
| **Sekforde Street** | 15.95 | 14.42 | 20.30 | 18.40 | 227 | 102 | 16.2% | 8.1% |
| **Clerkenwell Green southern site** | 12.30 | 13.14 | 15.20 | 16.48 | 37 | 47 | 1.1% | 3.1% |
| **Clerkenwell Green western site** | 14.38 | 14.03 | 17.20 | 16.80 | 164 | 72 | 3.2% | 2.4% |
| **Clerkenwell Close** | 15.06 | 12.69 | 18.00 | 15.60 | 409 | 28 | 5.2% | 2.4% |

**Table 5.2: Speeds on boundary roads (seven-day totals)**

| 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 |
|---|---|---|---|---|---|---|---|---|
| **Skinner Street** | 21.78 | 21.20 | 25.80 | 25.00 | 16818 | 14702 | 66.9% | 59.8% |
| **St. John Street** | 19.05 | 18.80 | 23.50 | 23.00 | 7142 | 7316 | 39.3% | 36.4% |
| **Farringdon Lane** | 17.31 | 16.82 | 21.20 | 20.70 | 3842 | 2820 | 22.5% | 19.2% |
| **Rosebery Avenue** | 22.42 | 22.54 | 26.90 | 27.40 | 43102 | 31211 | 68.3% | 67.3% |

# Appendix 6: Pedestrian count data tables

| | August 2020 no. of pedestrians | | | | | |
|---|---|---|---|---|---|---|
| | Thursday 20th | | | Saturday 22nd | | |
| **Origin** | **AM** | **Inter** | **PM** | **AM** | **Inter** | **PM** |
| **A** | 64 | 85 | 213 | 24 | 62 | 179 |
| **B** | 181 | 188 | 360 | 69 | 141 | 210 |
| **C** | 315 | 104 | 191 | 62 | 86 | 130 |
| **D** | 100 | 126 | 178 | 50 | 149 | 332 |
| **Total** | **660** | **503** | **942** | **205** | **438** | **851** |

| | February 2021 no. of pedestrians | | | | | |
|---|---|---|---|---|---|---|
| | Thursday 4th | | | Saturday 6th | | |
| **Origin** | **AM** | **Inter** | **PM** | **AM** | **Inter** | **PM** |
| **A** | 46 | 54 | 93 | 29 | 98 | 53 |
| **B** | 153 | 111 | 241 | 70 | 220 | 140 |
| **C** | 205 | 78 | 108 | 47 | 89 | 75 |
| **D** | 76 | 88 | 108 | 41 | 154 | 85 |
| **Total** | **480** | **331** | **550** | **187** | **561** | **353** |

# Appendix 7: Extra roads traffic counts

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **St. John Street north** | 2613 | 2796 | 2409 | 3206 | -204 | 410 | -8% | 15% |
| **St. John Street south** | 2504 | 2679 | 2855 | 3799 | 351 | 1120 | 14% | 42% |
| **Cowcross Street** | 500 | 535 | 489 | 650 | -12 | 115 | -2% | 21% |
| **Spencer Street** | 1206 | 1290 | 929 | 1237 | -277 | -54 | -23% | -4% |
| **Percival Street** | 3776 | 4041 | 3060 | 4072 | -716 | 32 | -19% | 1% |
| **Hall Street** | 307 | 329 | 286 | 380 | -22 | 51 | -7% | 16% |
| **Overall** | 10907 | 11671 | 10029 | 13344 | -878 | 1673 | -8% | 14% |

| | Baseline observed | Baseline normalised | Interim observed | Interim normalised | Difference observed | Difference normalised | Difference observed (%) | Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|
| **St. John St near Charterhouse Street*** | 1634 | 1749 | 2204 | 2933 | 570 | 1184 | 35% | 68% |

* The St. John Street near Charterhouse Street traffic count was conducted using a camera-link, as the geometry of the road was not suitable for a regular ATC. The data here was collected between 0700-2200 for 7 days, rather than 24 hours a day as was the case at other sites.

# Appendix 8: Extra roads cycle counts

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **St. John Street north** | 458 | 323 | -135 | -29% |
| **St. John Street south** | 496 | 290 | -206 | -42% |
| **Cowcross Street** | 213 | 165 | -48 | -23% |
| **Spencer Street** | 28 | 267 | 239 | 844% |
| **Percival Street** | 605 | 479 | -126 | -21% |
| **Hall Street** | 55 | 78 | 23 | 41% |
| **overall internal** | 1856 | 1602 | -254 | -14% |

| | Baseline observed | Interim observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|
| **St. John St near Charterhouse Street *** | 987 | 742 | -245 | -25% |

* The St. John Street near Charterhouse Street was a camera-link count, as the geometry of the road was not suitable for a regular ATC. The data here was only collected between 0700-2200 for 7 days, rather than 24 hours a day as was the case at other sites.

# Appendix 9: Clerkenwell Green traffic count locations and type

**Table 9.1: Islington-commissioned traffic count sites and type**

| **Boundary** | **Type** |
|---|---|
| Skinner Street | ATC |
| Rosebery Avenue | ATC |
| St. John Street near Great Sutton Street | ATC |
| Farringdon Lane | ATC |
| **Boundary (different baseline)** | |
| Clerkenwell Road | March 2019: Turning Counts (0700-1000; 1600-1900)<br><br>March 2021: ATC |
| **Internal** | |
| Bowling Green Lane | ATC |
| Woodbridge Street | ATC |
| Sekforde Street | ATC |
| Clerkenwell Green southern site | ATC |
| Clerkenwell Green western site | ATC |
| Clerkenwell Close | ATC |
| **Extra Roads (not shown on map or included in analysis)** | |
| St. John Street south of Rosebery Ave | ATC |
| St. John Street near Passing Alley | ATC |
| St. John Street between Cowcross St and Charterhouse St | Camera Link (0700-1000) |
| Cowcross Street | ATC |
| Spencer Street | ATC |
| Percival Street | ATC |

| Boundary | Type |
|---|---|
| Hall Street | ATC |

**Table 9.2: TfL permanent traffic sites and coordinates (all ATCs)**

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

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

ATCs measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. 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 before and after and the method is considered a good industry standard. They are used as a standard in monitoring transport schemes.

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 10: Traffic count normalisation methodologies

## Traffic counts

To calculate the normalised percentage differences, the August traffic count volumes have been divided by 0.9345, the February traffic counts by 0.7516 to give normalised volumes, and the March traffic counts (Clerkenwell Road interim counts only) have been divided by 0.6872. In other words, in order to account for the fact that there was less traffic on Islington streets from March 2020 onwards we have provided adjusted figures that provide an estimate for what the traffic would have been if there was no Covid-19 disruption. This allows us to analyse the impacts of the PFS area scheme rather than the impacts of Covid-19 on the traffic volumes.

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

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

# Appendix 11: Air quality monitoring

We have been monitoring air quality since 2000 and have 21 long term monitoring sites across the borough. We also have additional monitoring in place for specific projects and have been monitoring air quality outside every school in the borough since 2018. As such, there is significant long-term air quality data collection across the borough, which will be used in the normalisation process. It also means there is existing air quality monitoring within the Clerkenwell Green 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 Clerkenwell Green area are listed below, with details about type and if they have been added as part of the PFS programme, or were pre-existing.

**Table 11.1: Clerkenwell Green air quality monitoring sites type and period of installation and additional monitor just outside area on Roseberry Avenue**

| Locations | PFS road type | Monitoring type | Installation | Site Type by DEFRA classification* |
|---|---|---|---|---|
| **Clerkenwell Road/St John Street (OC3)** | Boundary | Diffusion tube | Pre-existing (since December 2019) | Roadside |
| **St John Street (OC2)** | Boundary | Diffusion tube | Pre-existing (since December 2019) | Roadside |
| **Skinner Street/Rosoman Place (PF7)** | Boundary | Diffusion tube | New (since August 2020) | Roadside |
| **Clerkenwell Green (C1-5)** | Internal | Diffusion tube | Pre-existing (since 2018) | Background urban |
| **Northampton Road/Corporation Row (PF8)** | Internal | Diffusion tube | New (since August 2020) | Background urban |

Islington's air quality team classify sites using Defra guidance 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 annual reports.

The data used in this analysis will follow these rules as much as possible, especially in regards to monitor deployment. However it will not have fully gone through this process, especially in regards to normal end of year analysis processes for 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 more unknown.

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 annual report. 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 source apportionment study conducted for Islington in 2015 found only 3% of London's NOx emissions came from inside Islington. Therefore, it can be very hard to pick up on local changes caused by schemes such as people-friendly streets.

Pollution also varies a lot over time due to a range of external factors (such as weather) for which this study has not corrected, therefore ideally a longer period of study would be required to analyse these results more fully. This would also allow further quality control of data that has not been possible with these results. There is also further uncertainty in recent results and whether these will represent longer term trends due to Covid-19. Studies of the first lockdown in March, for example by the Greater London Authority, show a decrease in overall motorised traffic and $NO_2$ levels but no consistent change in PM due to weather impacts.