



## **People-Friendly Streets** Better places for everyone

# St. Mary's Church people-friendly streets trial

Results from the twelve month  
pre-consultation monitoring report



**ISLINGTON**

**For a more equal future**



# Summary of key findings

This pre-consultation monitoring report shows that at this point in the St. Mary's Church low traffic neighbourhood (LTN) trial, the project is having the intended impacts in the area of reducing motorised traffic across internal roads, without an adverse impact on boundary roads. Cycling levels were slightly to moderately down, as might be expected given data collection in January. Low to moderate speed reductions have been seen on internal roads. There was no significant impact on anti-social behaviour and London Fire Brigade response times, while air quality reflects wider borough trends.



Overall traffic flows on internal roads **decreased by 41%**. Volumes decreased at 8 of the 11 sites counted, including a 91% decrease on Braes Street and a 90% decrease on Hawes Street. Traffic on **Cross Street has decreased at two count sites by 85% and 87%**, dropping by between 3,500–4,500 vehicles per day – the greatest decrease by volume of any street. Traffic flows increased on Canonbury Square (57%) and Canonbury Lane (35%).\*



Overall, the changes in levels of nitrogen dioxide **reflect those in the borough more widely**.



On local streets within the neighbourhood, the average % of vehicles speeding **fell by 8 percentage points**.



The average London Fire Brigade attendance times **remain within target times**.



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



The greatest **increase in cycling trips was on Cross Street's eastern site, from 336 to 405 trips a day, an increase of 21%**.



Cycling volumes decreased by 15% on internal roads and 2% on boundary roads, likely due to the cold weather



Total vehicle flows on boundary roads **have also dropped by 12%**, driven largely by reductions on **Upper Street (25–27% reduction across the two sites)** and **Essex Road eastern site (13% reduction)**. **Canonbury Road's northern site also saw a moderate decrease in traffic (10% reduction) and its southern site saw a negligible 5% increase of vehicles**.

The above figures reflect before and after comparison between November 2021 and January 2023. The traffic figures have been normalised to account for the impacts of COVID-19 lockdowns, the cost-of-living crisis and other wider trends. More information on this process is available in the main report.

\*The council will continue to closely monitor all internal and boundary roads and introduce mitigating measures as appropriate.



# Why are we doing this?

**Islington's streets belong to everyone. They are a place where life happens and where the community comes together, no matter what our individual circumstances or daily routines look like. Local people have told us they want their streets to be friendlier places that are easier for everyone to use, to enjoy being outside in clean air, to make it safer for walking, cycling, using buggies and wheelchairs, and to relax or play.**

As part of our efforts to create a more equal Islington, we're determined to transform the borough's streets into safer, fairer and more environmentally friendly places where communities can come together and flourish. To achieve this, we need to be bold in order to tackle some of the significant challenges we face around climate change, air pollution, road danger and physical inactivity.

Since we began our people-friendly streets programme in June 2020, it has contributed to our long-term plan to transform the borough and progress against wider council ambitions related to public health, road danger reduction, clean air and addressing climate change. Low traffic neighbourhoods like St Mary's Church play a key role in making Islington a cleaner, greener, healthier and a more equal place for everyone.

We know how critical it is that we tackle the climate emergency within the borough. Islington is one of the six London boroughs most at risk to climate change, and we have seen through soaring summer temperatures how the climate emergency is already having an impact. We are taking steps to make our streets more environmentally friendly, including by cutting carbon emissions and air pollution through reducing the number of trips made by motor vehicle. Motor vehicles contribute 50% of Islington's nitrogen dioxide (NO<sub>2</sub>) emissions, so making it easier for local people to walk, wheel or cycle can help us create a net-zero carbon borough by 2030.

Road danger from traffic is one of the largest barriers preventing people from walking and

cycling. Nearly 70% of Islington households do not have access to their own motor vehicle, and the poorest fifth of Islington households are the least likely to own a car. Low traffic neighbourhoods can create less car-dominated streets where it's easier to travel actively, helping the many people in Islington who don't have a car to travel and also get their daily exercise.

40% of children in London are overweight or obese, and many children and adults do not meet the World Health Organisation (WHO) recommended minimum weekly amount of physical activity. Creating safer, more welcoming streets where it's easier to walk, cycle, scoot, and use buggies and wheelchairs will bring huge mental and physical health benefits for all, helping adults and children move around their neighbourhood safely and supporting young people's learning and development.

1/3 of London's journeys are under 2km and a further third are between 2-5km. Many trips that are currently made by car could be made by walking, cycling and public transport. 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. We have introduced our Blue Badge holder and Individual Exemptions policies to help people who need to drive to get around by car in LTNs.

By reducing the negative impacts of traffic, the people-friendly streets programme is achieving it's desired objectives of reducing road danger, improving accessibility and making it easier to walk, wheel and cycle in the borough. The data in this pre-consultation monitoring report shows that St. Mary's Church low traffic neighbourhood is contributing to these aims and is making a positive difference in Islington.

The St. Mary's Church people-friendly streets trial went live in February 2022, 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.



# 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 pre-consultation 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 areas 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 St. Mary's Church people-friendly streets trial is not dependent on any single metric. Feedback from the online survey and upcoming consultation with residents and stakeholders will be considered alongside the monitoring results.





# Pre-consultation results



## Motorised traffic on internal roads

- Motorised traffic has decreased on almost all internal roads in both observed and normalised results, which is a positive pre-consultation outcome in line with the objectives of the trial.
- Overall, motorised traffic volumes on internal roads have decreased by 41%. The greatest decrease by volume has been on Cross Street, where there has been a drop at the two count sites of 3,500 and 4,500 daily vehicle flows.
- Traffic increased on Canonbury Square (57%) and Canonbury Lane (35%) between November 2021 and January 2023. Both of these roads are still open to through traffic between Canonbury Road and Upper Street due to banned turns at Highbury Corner. The council will continue to monitor the traffic flows at these locations. Future potential measures in neighbouring areas to the west of Upper Street, if implemented, may reduce the flow of east-west traffic. This may benefit these streets by reducing cut through traffic.
- Despite the increases, traffic flows on Canonbury Lane, and by inference Canonbury Square, are still lower than pre-pandemic levels and follow a significant reduction in traffic flows likely as a result of the implementation of the neighbouring Canonbury West LTN on the eastern side of Canonbury Road which curtailed an east-west route through the wider area.
- Across internal roads, average speeds have decreased by 7% and the percentage of vehicles speeding has decreased by 8%.
- The above figures have been normalised to account for the impacts of COVID-19 lockdowns, the cost-of-living crisis and other wider trends on traffic in November 2021 and January 2023. More information on this process is available in the main report. Note that the normalisation will be applied based on the dates in which each wave of surveys was carried out.



## Motorised traffic on boundary roads

- Overall, there has been a decrease in motorised vehicle volumes on boundary roads as compared to baseline flows. On average, motorised traffic volumes have changed on:
  - Canonbury Road (North) by -10%
  - Canonbury Road (South) by 5%
  - Essex Road (East) by -13%
  - Essex Road (West) by -4%
  - Upper Street (near Barnsbury Street) by -25%
  - Upper Street (near Canonbury Lane) by -27%
- Across boundary roads, average speeds have seen negligible change.



## Air quality

- Overall changes in levels of NO<sub>2</sub> in St. Mary's Church reflect those in the borough more widely.
- Except for one site on Essex Road and one site on Canonbury Road, average annual NO<sub>2</sub> levels in St. Mary's Church have been within the annual objective level of 40µg/m<sup>3</sup> for comparable nine month period before and after the LTN was implemented.



## Cycling on internal roads

- Cycling has decreased on all internal roads except Cross Street (East), where it increased by 21%.



## London Fire Brigade response times

- Comparing the 2019 average response time and the post-implementation average, the response times are within target times for St. Mary's and St. James' Ward. Given the extent of variables that affect response times, it is the view of the LFB and the council that the St. Mary's Church LTN has not significantly impacted this emergency service's attendance times. We will continue to monitor this indicator.



## Anti-social behaviour and crime

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

The public consultation for the people-friendly streets neighbourhoods in St. Mary's Church is taking place between Wednesday 29 March and Wednesday 26 April 2023. More information is available at <https://www.islington.gov.uk/roads/peoplefriendlystreets/stmaryschurch>

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# Glossary

Below are the meanings of some words used throughout this report that you may be unfamiliar with, or which may have a specific meaning in the report 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 at which it passed. ATCs are considered to be extremely accurate. (See Appendix 1 for more details).

**Boundary roads** – For the purpose of this report, the “boundary roads” of the St. Mary’s Church trial area are Canonbury Road (A1200) to the north-east, Essex Road (A104) to the south-east and Upper Street (A1) to the west. Canonbury Road and Upper Street meet at Highbury Corner at the northern extent of the scheme, which then connects to St. Paul’s Road for points east and Holloway Road for points north and west, and Essex Road and Upper Street meet at Islington Green. These roads are the boundary roads of multiple LTN trial areas and permanent schemes and there have been major transformation works at Highbury Corner, all of which may have impacted some of the results, particularly between the baseline and pre-consultation period. These are explored in more detail in the results and insights sections throughout the report.

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

**Internal Roads** – These are roads which fall in between two or more boundary roads in low traffic neighbourhoods. For the purposes of this report, “internal roads” are local roads in the St. Mary’s Church LTN trial area on which the project aims to reduce the amount of traffic through the introduction of traffic filters, although some will still lie on through routes in the scheme area. These roads are



generally narrower than boundary roads. We have collected traffic counts on some, but not all, of the internal roads in the St. Mary's Church 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 the 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 St. Mary's Church 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, delivery workers and emergency services) are still able to reach any part of the neighbourhood.

**Normalised** – In this report, “normalising” means to adjust traffic count figures to take into account the impact of COVID-19 and other macro-scale factors 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 traffic counts may have looked like if traffic levels were at 2019 levels.

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

**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 through filters (and use non-motorised scooters).

# Introduction – St. Mary’s Church LTN Pre-Consultation Report

As part of Islington Council’s PFS programme and the need for an urgent transport response to COVID-19, St. Mary’s Church became the seventh LTN trial in the borough. The LTN has been created with the aim of allowing 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 cleaner, greener and healthier for residents. Camera enforcement is used so that buses, emergency vehicles, Blue Badge holders who live in the LTN and Individual Exemption permit holders can still pass through the traffic filters.

## Scheme Context

Camera enforced traffic filters were installed at four key locations in the St. Mary's Church LTN area, which are as follows:

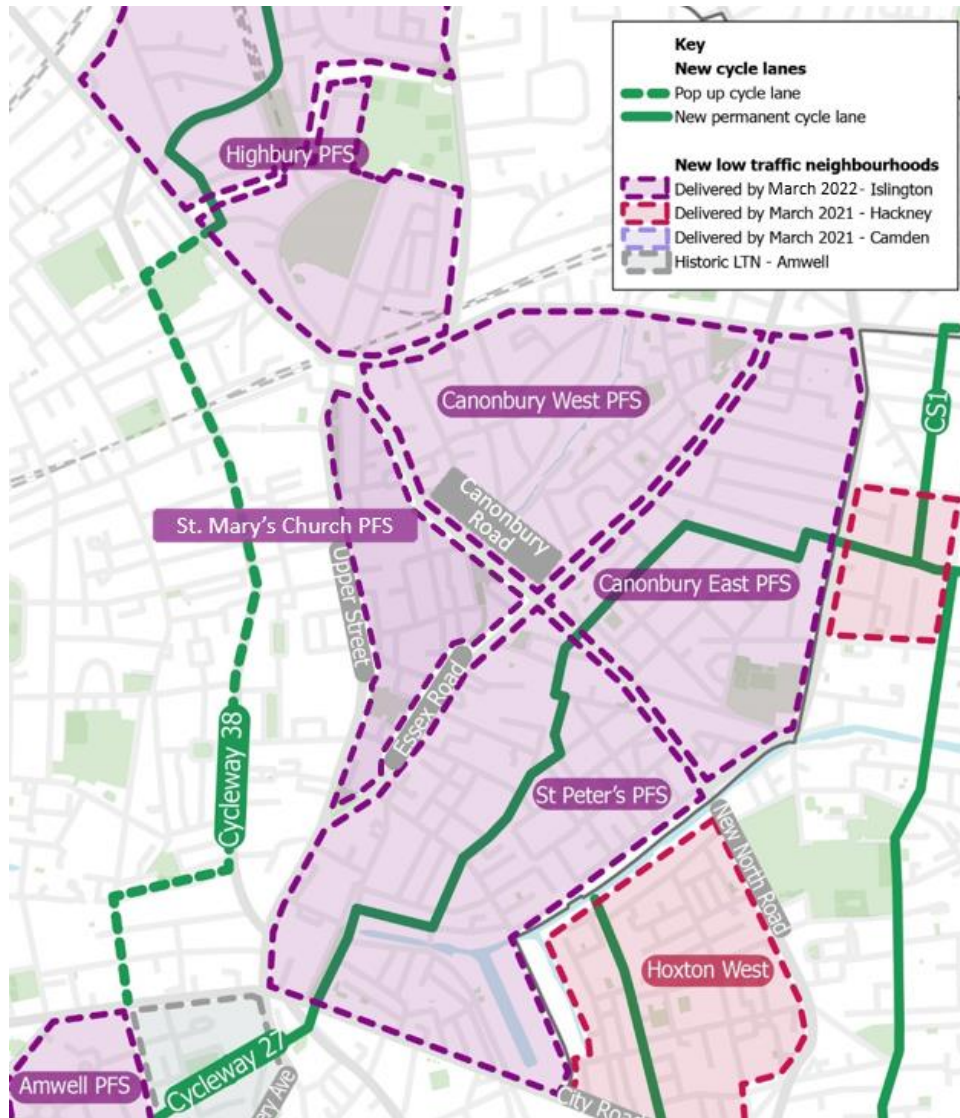
- Halton Road, just north of the junction with Braes Street and Richmond Grove
- Braes Street where it meets Canonbury Road
- Hawes Street just west of the junction with Shillingford Street
- Cross Street just west of the junction with Shillingford Street

The traffic filters are all enforced by cameras to allow access for emergency vehicles and Blue Badge holders who live in the LTN. In order to install the modal filters, it was necessary to remove around 13m of parking space (~2.5 spaces), none of which is designated for disabled users. Islington Council has also made improvements for people walking where the southwest section of Canonbury Square meets Canonbury Lane, which will improve safety for people walking and access to the green space in the middle of Canonbury Square. The Experimental Traffic Order (ETO) for the scheme came into force on 14 January 2022 and the scheme was enforced from 2 February 2022.

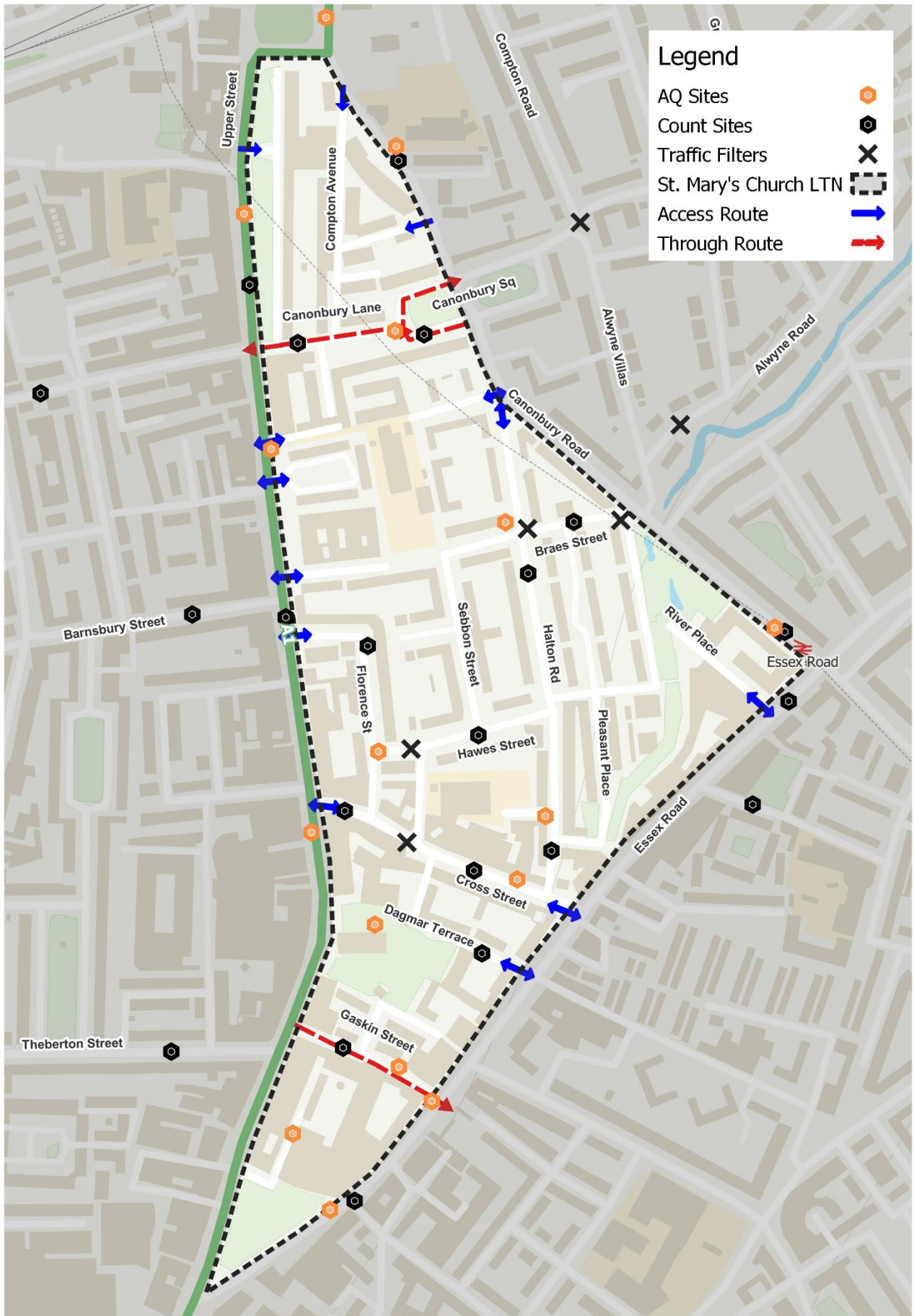
## Monitoring Report

This monitoring report provides data and insights relating to the St. Mary's Church LTN trial. The trial went live in February 2022, so the analysis compares data from before and after that date. The baseline ("before") traffic counts were collected in November 2021, before the LTN was put in place. The pre-consultation monitoring traffic counts were collected in January 2023, nearly a year after it was installed.

**Map 1 : St. Mary's Church LTN in wider context of nearby LTN areas and cycle lanes**



**Map 2: St Mary's Church LTN and monitoring sites**



## Independent Production of the Report by SYSTRA Ltd.

SYSTRA has been commissioned to prepare this report in partnership with the London Borough of Islington.

SYSTRA is a global leader in mass transportation and mobility, employing over 7,000 global employees across 80 countries. SYSTRA has the unique advantage of being not only a Transport Consultancy, but also Social and Market Research Consultancy. Their team members have an in-depth understanding of both the transport sector and of social and market research techniques, providing expert support in monitoring and evaluation both direct to clients and also in a peer review capacity. They provide a wealth of experience in conducting both qualitative and quantitative transport research with stakeholders to help understand their priorities and to inform options for future investment and policy development.

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



# Traffic Counts Approach

The count data presented in this report is not traffic modelling, but actual observed traffic, comparing traffic flows in November 2021 to those collected in January 2023.

The collection of data for the scheme was performed in the same manner for both survey periods, although due to anomalous events such as roadworks and other such interferences, data was collected for more than a week in both instances to ensure that a sufficient amount of quality data was available for analysis.

## Completed Dates of Traffic Counts

**Baseline counts:** 29 October 2021 – 14 November 2021 (weekly profile compiled by averaging available data over these two weeks)

**St. Mary's Church ETO comes into force:** 14 January 2022

**St. Mary's Church enforcement begins:** 2 February 2022

**Pre-Consultation counts:** 11-17 January 2023 (some data was collected on either side of this main data collection period, but this was generally partial days and thus not utilised)

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

Automatic Traffic Counts (ATCs) are used at the majority of sites for the St. Mary's Church LTN area. ATCs measure motorised and cycle traffic volumes and motorised traffic speeds and classify the traffic by type. There are also two radar counts, which are required by Transport for London (TfL) for use on the Transport for London Road Network (TLRN) – these measure four-wheel motorised traffic volumes and speeds, but not cycles or motorcycles. More information about the different types of counts and which type was used at each site is detailed in Appendix 1.



# Analysis and Normalisation Methodology Overview

All of these counts were undertaken in full awareness of the disruption caused by COVID-19 and ongoing national trends such as the cost-of-living crisis, and the need for a process to interpret the results in a way that accounts for these (and other) disruptions.

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 1. 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 2. 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 not taken forward as the chosen methodology.

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

Using the months of the St. Mary's Church counts, in November 2021 motorised traffic was approximately 5.9% lower than in November 2019 and in January 2023 motorised traffic was approximately 5.4% lower than in January 2019.

**Table 1: Normalisation factors since March 2020 for traffic in Islington**

Month	Impact
Mar-20	-27.97%
Apr-20	-49.87%
May-20	-38.34%
Jun-20	-22.10%
Jul-20	-13.46%
Aug-20	-6.55%
Sep-20	-6.90%
Oct-20	-10.48%
Nov-20	-22.13%
Dec-20	-16.11%
Jan-21	-25.69%
Feb-21	-24.84%
Mar-21	-31.28%
Apr-21	-22.52%
May-21	-18.68%
Jun-21	-8.90%
Jul-21	-6.16%
Aug-21	-2.59%
Sep-21	-4.17%
Oct-21	-4.90%
Nov-21	-5.85%
Dec-21	-6.83%
Jan-22	-4.98%
Feb-22	-2.20%
Mar-22	-15.85%
Apr-22	-14.35%
May-22	-11.92%
Jun-22	-8.10%
Jul-22	-6.86%
Aug-22	-6.72%
Sep-22	-5.91%
Oct-22	-5.61%
Nov-22	-7.84%
Dec-22	-5.90%
Jan-23	-5.42%

# Interpreting Count Results

Unless specified otherwise, the seven-day daily average has been used and discussed in traffic volumes analysis in this report. Full data and flow profiles are provided in Appendix 5.

Raw data has been analysed and compared to give the observed results. The observed results have then undergone the normalisation process described in the previous section to 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 that traffic flows fluctuate daily (generally up to 10%). As such, changes within -10% to +10% are considered insignificant (i.e. no or negligible change) and are not colour-coded. In contrast, changes of greater than 10% in a direction aligning with scheme goals (reduced traffic/pollution levels/speeds, and increased cycling) are highlighted in green, whilst changes of greater than 10% in the opposite direction are highlighted in red.

In addition, it must be noted that, as vehicles travelling through the LTN 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.

## External Factors

It is important to consider all these results in the context of other external factors which could be impacting on the data. Whilst broader trends occurring over longer timescales and larger geographies are likely addressed through normalisation, more local or short-term impacts may also be present. It is not possible to adjust for these in calculations. There are seven main external factors which could be influencing results, as follows:

**Nearby Low Traffic Neighbourhoods** – As can be seen in Map 1, St. Mary's Church borders the Canonbury West LTN (to the north east across Canonbury Road) and St. Peter's LTN (across Essex Road to the south east). The Canonbury East and Highbury LTNs are also nearby. As such, it is not possible to separate out the impacts these may be having on traffic on the boundary roads.

**Nearby Major Traffic Projects** – The redevelopment of Highbury Corner was completed by Transport for London (TfL) in 2019 as part of a London-wide Safer Junctions programme to reduce road danger at several intersections including roundabouts, which the council supports. There has been concerns that this project has increased congestion on the surrounding roads. As this scheme is particularly close to the St. Mary's Church LTN, this congestion directly impacts Upper Street, which lies south of Highbury Corner and west of the scheme area. It is considered that the impact of Highbury Corner will be minimal given that the baseline was several years on from the junction upgrade.

**Weather** – Weather can have a significant impact on travel choices, especially cycling, as well as on air pollution.

During the month in which baseline counts were conducted (November 2021), the average minimum temperature was 6°C and the average maximum was 11°C. Pre-consultation counts, taken in January 2023, show an average low of 4°C and average high of 9°C. This indicates that generally, temperatures were cooler in the latter data collection period than in the baseline period.

**COVID-19 Impacts** – During the baseline data collection period, minor COVID restrictions were in place, although there may have been a small impact on flows from the Omicron variant of the virus.

In comparison, by January 2023 all COVID restrictions had been removed for nearly a year under the government's "living with COVID" plan released at the end of February 2022, and tests were no longer free for citizens. The virus was still in active circulation in the UK, but symptoms tended to be fairly mild and advice was generally to avoid coming to work or leaving the house until symptoms abated.

Through both monitored periods, working from home was a significant driver of how much people travelled, with a larger proportion of people returning to offices at least part-time during the pre-consultation counts compared to the baseline ones. This should largely be captured in the normalisation methodology.

**Cost of Living Crisis** – In January 2023, during the pre-consultation counts, rising inflation had significantly increased the price of petrol and other critical items such as heating, with the cost of driving and taking public transportation increasing compared to previous years and the affordability of travel decreasing. This may have reduced the number of discretionary journeys taken by paid modes (both public and private), with some level of increase in walking and cycling likely despite the cold weather.

**ULEZ Extension** – In October 2021, directly before the baseline counts were taken, the ULEZ (Ultra Low Emission Zone) was extended to the North and South Circular Roads, encompassing the entirety of the Borough of Islington (previously, only areas south of City Road were subject to ULEZ levies). Given the baseline counts occurred soon after this, it is possible that there was still some lag in driver behaviour as motorists became more familiar with this restriction.

In July 2022 Transport for London published the [\*Expanded Ultra Low Emission Zone – Six Month Report Including Low Emission Zone – One Year Report\*](#). The report estimates that the new ULEZ reduced traffic by 21,000 vehicles in the zone on an average day, a reduction of 2 per cent of traffic flow compared to the weeks before the expanded ULEZ was implemented. Whilst it is expected that this broad change in cost of driving in the borough has been reflected in normalised data via TfL ATCs, it is possible that more localised effects exist.

## Data Patching

For this report, data was processed using SYSTRA's proprietary automated data processing tools, which draw together raw data from all reporting periods and apply formulae-based calculations to produce the following charts and tables and appendices. However, as it is not uncommon for there to be problems with data surveys (broken equipment, cars parked on ATC bands etc.) as well as anomalous readings from surveys resulting from one-off events (waterworks, gas leaks, accidents etc.), all data has been thoroughly checked by hand and "patched" (i.e. blank data or significantly anomalous data has been substituted by more representative data from the site/wave in question), which is a necessary task in order to maintain comparable data.

# Analysis of Vehicle Volumes

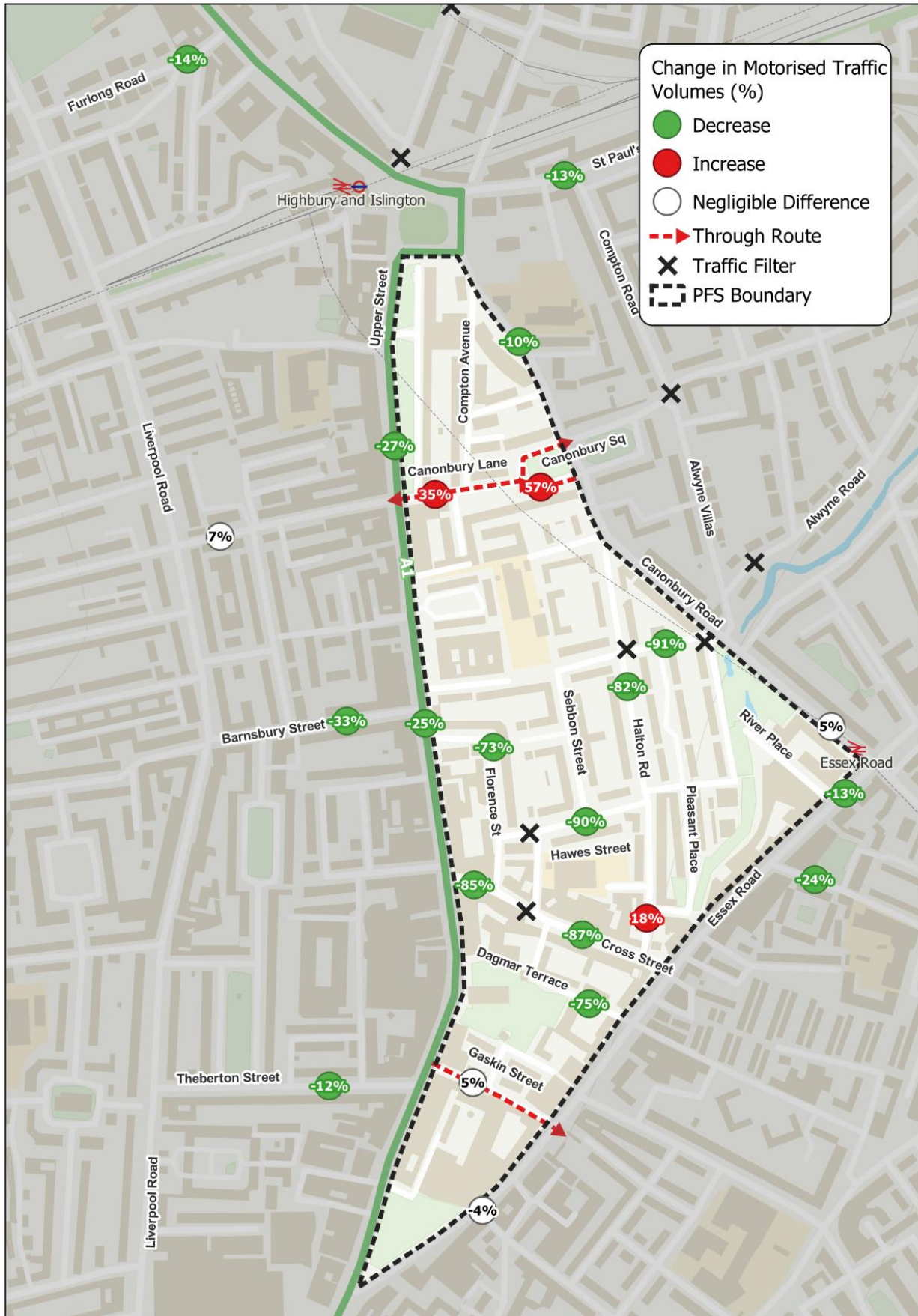
## All Motorised Vehicle Volumes (7-Day Daily Average)

This section outlines the changes in observed and normalised traffic volumes for all motorised vehicles, including cars (both private cars and taxis/company-owned cars) and goods vehicles ranging from delivery vans to large articulated lorries. The total number of such motorised vehicles counted in the monitored week has been summed and divided by seven to create a daily average. The numbers presented have been rounded to the nearest whole number and raw/percentage changes calculated accordingly. It is noted that the number of cycles counted is not included in this analysis.

Map 3 on the following page presents the percentage change in motorised vehicle volumes between the baseline data (November 2021) and pre-consultation data (January 2023). It is important that percentage change figures are considered in the context of raw changes, as presented in Table 2, as a large percentage change could indicate a relatively minor change in actual vehicles counted on a particularly quiet road. Conversely, a busy road could see a small percentage change even if there the number of vehicles counted is quite different between the two monitored periods.

Further context for each site can be found in Appendix 5, which outlines the observed and normalised figures for all periods, as well as average flow profiles across the day.

**Map 3: Percentage Change in Motorised Vehicle Volumes**





**Table 2: Motorised Traffic Volumes on Internal Roads**

	<b>Baseline Observed: Nov-21</b>	<b>Baseline Normalised: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Pre-Consultation Normalised: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>Difference Pre-Consultation vs. Baseline (Normalised)</b>	<b>% Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>% Difference Pre-Consultation vs. Baseline (Normalised)</b>
<b>Canonbury Square</b>	2,097	2,228	3,305	3,494	1,208	1,266	<b>58%</b>	<b>57%</b>
<b>Braes Street</b>	1,485	1,577	138	146	-1,347	-1,431	<b>-91%</b>	<b>-91%</b>
<b>Canonbury Lane</b>	5,074	5,389	6,901	7,296	1,827	1,907	<b>36%</b>	<b>35%</b>
<b>Cross Street (West)</b>	5,005	5,317	763	808	-4,242	-4,509	<b>-85%</b>	<b>-85%</b>
<b>Gaskin Street</b>	2,656	2,821	2,807	2,969	151	148	6%	5%
<b>Dagmar Terrace</b>	512	544	130	137	-382	-407	<b>-75%</b>	<b>-75%</b>
<b>Florence Street</b>	1,919	2,039	517	546	-1,402	-1,493	<b>-73%</b>	<b>-73%</b>
<b>Hawes Street</b>	2,634	2,798	269	285	-2,365	-2,513	<b>-90%</b>	<b>-90%</b>
<b>Cross Street (East)</b>	3,906	4,147	491	520	-3,415	-3,627	<b>-87%</b>	<b>-87%</b>
<b>Halton Road (North)</b>	1,994	2,119	364	385	-1,630	-1,734	<b>-82%</b>	<b>-82%</b>
<b>Halton Road (South)</b>	918	974	1,085	1,146	167	172	<b>18%</b>	<b>18%</b>
<b>Total Internal</b>	<b>28,200</b>	<b>29,953</b>	<b>16,770</b>	<b>17,732</b>	<b>-11,430</b>	<b>-12,221</b>	<b>-41%</b>	<b>-41%</b>

**Table 3: Motorised Traffic Volumes on Boundary Roads**

	<b>Baseline Observed: Nov-21</b>	<b>Baseline Normalised: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Pre-Consultation Normalised: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>Difference Pre-Consultation vs. Baseline (Normalised)</b>	<b>% Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>% Difference Pre-Consultation vs. Baseline (Normalised)</b>
<b>Canonbury Road (North)</b>	9,241	9,816	8,314	8,791	-927	-1,025	<b>-10%</b>	<b>-10%</b>
<b>Canonbury Road (South)</b>	12,588	13,370	13,259	14,019	671	649	5%	5%
<b>Essex Road (East)</b>	16,898	17,948	14,705	15,549	-2,193	-2,399	<b>-13%</b>	<b>-13%</b>
<b>Essex Road (West)</b>	14,755	15,673	14,192	15,007	-563	-666	-4%	-4%
<b>Upper Street (near Barnsbury Street)</b>	14,400	15,295	10,815	11,434	-3,585	-3,861	<b>-25%</b>	<b>-25%</b>

<b>Upper Street (near Canonbury Lane)</b>	10,394	11,041	7,587	8,022	-2,807	-3,019	<b>-27%</b>	<b>-27%</b>
<b>Total Boundary</b>	<b>78,276</b>	<b>83,143</b>	<b>68,872</b>	<b>72,822</b>	<b>-9,404</b>	<b>-10,321</b>	<b>-12%</b>	<b>-12%</b>

**Table 4: Motorised Traffic Volumes on Local Roads Outside of St. Mary's Church PFS Area**

	<b>Baseline Observed: Nov-21</b>	<b>Baseline Normalised: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Pre-Consultation Normalised: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>Difference Pre-Consultation vs. Baseline (Normalised)</b>	<b>% Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>% Difference Pre-Consultation vs. Baseline (Normalised)</b>
<b>Islington Park Street</b>	6,531	6,936	7,025	7,427	494	491	8%	7%
<b>Palmer Place</b>	3,879	4,120	3,552	3,757	-327	-363	-8%	-9%
<b>Furlong Road</b>	1,982	2,104	1,718	1,815	-264	-289	<b>-13%</b>	<b>-14%</b>
<b>Barnsbury Street</b>	4,233	4,496	2,850	3,015	-1,383	-1,481	<b>-33%</b>	<b>-33%</b>
<b>Greenman Street</b>	1,827	1,940	1,394	1,474	-433	-466	<b>-24%</b>	<b>-24%</b>
<b>Theberton Street</b>	5,551	5,896	4,901	5,181	-650	-715	<b>-12%</b>	<b>-12%</b>
<b>White Lion Street</b>	3,105	3,298	3,192	3,374	87	76	3%	2%

**Table 5: Motorised Traffic Volumes on Main Roads Outside of St. Mary's Church PFS Area**

	<b>Baseline Observed: Nov-21</b>	<b>Baseline Normalised: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Pre-Consultation Normalised: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>Difference Pre-Consultation vs. Baseline (Normalised)</b>	<b>% Difference Pre-Consultation vs. Baseline (Observed)</b>	<b>% Difference Pre-Consultation vs. Baseline (Normalised)</b>
<b>Liverpool Road (North)</b>	8,780	9,326	8,831	9,337	51	11	1%	0%
<b>Liverpool Road (South)</b>	7,331	7,785	7,066	7,471	-265	-314	-4%	-4%
<b>St. Paul's Road</b>	21,642	22,986	18,984	20,073	-2,658	-2,913	<b>-12%</b>	<b>-13%</b>

## Insights: All Motorised Vehicle Volumes

Comparing the normalised flows between the November 2021 baseline and January 2023 pre-consultation surveys, the total motorised vehicle volumes have declined for most internal and boundary roads within the St. Mary's Church LTN area. Overall, around 12,200 fewer vehicles were counted on the total internal roads, equating to an overall drop of 41% in such volumes, whilst the number of vehicles counted on boundary roads fell by over 10,000, a 12% reduction from the 2021 baseline counts.

On internal roads, Cross Street saw the largest difference in normalised traffic flows, with reductions of around 4,500 daily vehicles at the western site and around 3,600 vehicles at the eastern site (-85% and -87%, respectively). This indicates that a considerable amount of through traffic previously passing along this street between Essex Road and Upper Street is no longer making this movement. Braes Street saw the most significant percentage change – of 91%, which equates to around 1,400 fewer daily vehicles when normalised. Many other internal roads also saw decreases of at least 70%.

In contrast, traffic increased on Canonbury Square and Canonbury Lane between November 2021 and January 2023. Both of these roads are still open to through traffic between Canonbury Road and Upper Street due to banned movements between Upper Street and Canonbury Road at Highbury Corner. Canonbury Square saw an increase of around 1,250 daily vehicles (+57%) and Canonbury Lane saw an increase of around 1,900 daily vehicles (+35%).

The council will continue to monitor the traffic volumes at these locations. Neighbouring areas to the west of the St Mary's Church area currently permit east-west through traffic movements, which may contribute to the flows on Canonbury Lane and Canonbury Square. Future potential measures to reduce cut through traffic in these neighbouring areas to the west of Upper Street, if implemented, may reduce the flow of east-west traffic which may benefit these streets by reducing cut through traffic via Canonbury Lane and Canonbury Square.

Though it is recognised that there are differences with how constraints of junctions and roads affect different areas, this potential effect is exemplified by the evident impact on Canonbury Lane of the implementation of the neighbouring Canonbury West LTN to the northeast of Canonbury Road (which curtailed an east-west route through the wider area between St Paul's Road and Upper Street). Whilst there were no count sites to the west of Canonbury Lane in the St. Mary's Church area as part of the monitoring of the Canonbury West LTN, Table 6 provides a comparison of counts taken in October 2019 (following the implementation of the Highbury Corner roundabout transformation scheme and prior to the pandemic and implementation of the Canonbury West LTN in November 2020) against the baseline and pre-consultation counts for the St. Mary's Church LTN taken in November 2021 and January 2023 respectively. Table 6 shows data from counts that were collected in common in terms of times and location for both the Highbury Corner project and

the St Mary’s Church LTN schemes, namely midweek peak hour counts (Tuesday-Thursday, 7-10am and 4-7pm) for Canonbury Lane. The Highbury Corner scheme counts (non-normalised as they were pre-COVID) were compared to the baseline and pre-consultation counts during the same time periods, with average hourly flows presented in Table 6 below:

**Table 6: Average Hourly Flow on Canonbury Lane, By Stage (Tuesday-Thursday, 7-10am & 4-7pm only)**

<b>Motorised Vehicles: Oct-19 (Pre-Canonbury West LTN)</b>	<b>Motorised Vehicles: Nov-21 (Post-Canonbury W/ Pre-St Mary’s Church LTNs)</b>	<b>Motorised Vehicles: Jan-23 (Post St Mary’s Church LTN)</b>	<b>Motorised Vehicles: % change Oct-19 to Nov-21</b>	<b>Motorised Vehicles: % change Nov-21 to Jan-23</b>	<b>Motorised Vehicles: % change Oct-19 to Jan-23 (Canonbury West and St. Mary’s Church LTNs combined impact)</b>
639	345	570	-46%	65%	-11%

Table 6 indicates that between October 2019 and the November 2021 (the month of St Mary’s Church baseline counts), during which time the Canonbury West LTN scheme was implemented, there was a 46% drop in vehicle flows, followed by a rebalancing to the 570 average hourly vehicles seen in January 2023, 11 months after the implementation of the St. Mary’s Church LTN. Overall, though, this equates to an 11% drop between October 2019 and January 2023, demonstrating that traffic volumes on Canonbury Lane remain lower than pre-pandemic levels when considering the combined impacts of the Canonbury West LTN and the St. Mary’s Church LTN, despite an increase between St. Mary’s Church baseline and pre-consultation counts.

Otherwise, the small increase on Halton Road’s southern site (of 172 daily vehicles) is considered comparatively minor, as it is on one of the quietest streets monitored and also equates to one of the smallest changes in magnitude across all internal roads. Gaskin Street, which is one-way eastbound, still allows through traffic between Upper Street and Essex Road, did not see a significant change (+5% or ~150 daily vehicles).

For boundary roads, there has been a moderate decrease in traffic flows (-12%), driven largely by reductions on Upper Street (between 3,000-4,000 fewer daily vehicles across two sites, or a 25-27% reduction) and Essex Road (~2,400 fewer daily vehicles at the eastern site, a 13% reduction). Canonbury Road’s northern site also saw a moderate decrease in traffic (around 1,000 fewer daily vehicles, a 10% reduction) and its southern site saw a negligible increase of around 650 daily vehicles (a 5% increase).

On other monitored roads, including other local roads in the area and other main roads further removed from the scheme area, there have been either reductions in motorised traffic volumes or negligible changes. The largest changes were on St. Paul’s Road (close to

Highbury Corner), where ~3,000 fewer daily vehicles were counted (-13%) and on Barnsbury Street (~1,481 fewer vehicles, -33%).

These findings generally indicate that the total volume of traffic on internal roads has decreased considerably without a negative impact on boundary roads – although with larger volumes of traffic on Canonbury Lane and Canonbury Square since the baseline for this report.

# Goods Vehicles Volumes (5-Day Daily Average)

This section outlines the changes in normalised traffic volumes for Light Goods Vehicles and Heavy Goods Vehicles.

LGV stands for Light Goods Vehicle. This is defined, for the purposes of this report (which may differ from other traffic monitoring reports) as a rigid two-axle van, such as the type of van commonly used for deliveries. HGV stands for Heavy Goods Vehicle, which is a goods vehicle larger than the type of van described above.

The results shown are for 5-day average weekday volumes, excluding weekends. This is because goods vehicle traffic is generally lower at weekends, therefore the weekday data gives a better impression of the effects on goods vehicle traffic. Similarly, the % numbers given are percentages of total motorised traffic, rather than all vehicles counted. Changes in the proportion of LGV/HGV compared to total motorised traffic (or "prevalence" of such vehicles) is presented as a percentage point difference.

**Table 7: Normalised Goods Vehicle Volumes on Internal Roads**

	<b>LGV Volume: Nov-21</b>	<b>LGV Prop: Nov-21</b>	<b>LGV Volume: Jan-23</b>	<b>LGV Prop: Jan-23</b>	<b>LGV Change in Proportion</b>	<b>HGV Volume: Nov-21</b>	<b>HGV Prop: Nov-21</b>	<b>HGV Volume: Jan-23</b>	<b>HGV Prop: Jan-23</b>	<b>HGV Change in Proportion</b>
<b>Canonbury Square</b>	367	15%	475	13%	-2%	14	1%	45	1%	0%
<b>Braes Street</b>	187	11%	18	12%	1%	25	1%	11	7%	6%
<b>Canonbury Lane</b>	616	11%	813	10%	-1%	113	2%	97	1%	-1%
<b>Cross Street (West)</b>	395	7%	78	10%	3%	109	2%	32	4%	2%
<b>Gaskin Street</b>	224	8%	325	11%	3%	21	1%	17	1%	0%
<b>Dagmar Terrace</b>	14	3%	12	9%	6%	12	2%	0	0%	-2%
<b>Florence Street</b>	44	2%	63	11%	9%	157	7%	4	1%	-6%
<b>Hawes Street</b>	135	4%	36	12%	8%	12	0%	4	1%	1%
<b>Cross Street (East)</b>	468	11%	80	16%	5%	30	1%	11	2%	1%
<b>Halton Road (North)</b>	276	12%	50	13%	1%	21	1%	8	2%	1%
<b>Halton Road (South)</b>	100	10%	87	7%	-3%	17	2%	22	2%	0%
<b>Total/Average Internal</b>	<b>2,826</b>	<b>10%</b>	<b>2,037</b>	<b>11%</b>	<b>1%</b>	<b>531</b>	<b>3%</b>	<b>251</b>	<b>2%</b>	<b>-1%</b>

**Table 8: Normalised Goods Vehicle Volumes on Boundary Roads**

	<b>LGV Volume: Nov-21</b>	<b>LGV Prop: Nov-21</b>	<b>LGV Volume: Jan-23</b>	<b>LGV Prop: Jan-23</b>	<b>LGV Change in Proportion</b>	<b>HGV Volume: Nov-21</b>	<b>HGV Prop: Nov-21</b>	<b>HGV Volume: Jan-23</b>	<b>HGV Prop: Jan-23</b>	<b>HGV Change in Proportion</b>
<b>Canonbury Road (North)</b>	687	7%	1,221	14%	7%	480	5%	233	3%	-2%
<b>Canonbury Road (South)</b>	535	4%	1,012	7%	3%	409	3%	314	2%	-1%
<b>Essex Road (East)</b>	755	4%	1,883	12%	8%	1,149	6%	499	3%	-3%
<b>Essex Road (West)</b>	788	5%	1,952	13%	8%	778	5%	292	2%	-3%
<b>Upper Street (near Barnsbury Street)</b>	1,105	7%	1,678	15%	8%	1,653	11%	1,478	13%	2%
<b>Upper Street (near Canonbury Lane)</b>	797	7%	1,645	21%	14%	1,089	9%	1,564	20%	11%
<b>Total/Average Boundary</b>	<b>4,667</b>	<b>6%</b>	<b>9,391</b>	<b>14%</b>	<b>8%</b>	<b>5,558</b>	<b>8%</b>	<b>4,380</b>	<b>12%</b>	<b>4%</b>



**Table 9: Normalised Goods Vehicle Volumes on Local Roads Outside of St. Mary's Church PFS Area**

	<b>LGV Volume: Nov-21</b>	<b>LGV Prop: Nov-21</b>	<b>LGV Volume: Jan-23</b>	<b>LGV Prop: Jan-23</b>	<b>LGV Change in Proportion</b>	<b>HGV Volume: Nov-21</b>	<b>HGV Prop: Nov-21</b>	<b>HGV Volume: Jan-23</b>	<b>HGV Prop: Jan-23</b>	<b>HGV Change in Proportion</b>
<b>Islington Park Street</b>	208	3%	497	6%	3%	241	3%	206	3%	0%
<b>Palmer Place</b>	406	10%	424	11%	1%	156	4%	119	3%	-1%
<b>Furlong Road</b>	59	3%	195	10%	7%	214	10%	74	4%	-6%
<b>Barnsbury Street</b>	430	9%	302	10%	1%	56	1%	32	1%	0%
<b>Greenman Street</b>	220	11%	122	8%	-3%	12	1%	29	2%	1%
<b>Theberton Street</b>	346	6%	88	2%	-4%	220	4%	98	2%	-2%
<b>White Lion Street</b>	45	1%	59	2%	1%	148	4%	174	5%	1%

**Table 10: Normalised Goods Vehicle Volumes on Main Roads Outside of St. Mary's Church PFS Area**

	<b>LGV Volume: Nov-21</b>	<b>LGV Prop: Nov-21</b>	<b>LGV Volume: Jan-23</b>	<b>LGV Prop: Jan-23</b>	<b>LGV Change in Proportion</b>	<b>HGV Volume: Nov-21</b>	<b>HGV Prop: Nov-21</b>	<b>HGV Volume: Jan-23</b>	<b>HGV Prop: Jan-23</b>	<b>HGV Change in Proportion</b>
<b>Liverpool Road (North)</b>	867	9%	794	8%	-1%	270	3%	370	4%	1%
<b>Liverpool Road (South)</b>	651	8%	918	12%	4%	383	5%	227	3%	-2%
<b>St. Paul's Road</b>	876	4%	988	5%	1%	879	4%	670	3%	-1%

## Insights: Goods Vehicles Volumes

For goods vehicles, there has been limited change in the proportion of such vehicles (compared to total traffic) between the November 2021 baseline and January 2023 pre-consultation survey periods.

On internal roads, the proportion of total LGVs compared to total traffic increased by 1 percentage point, whilst the HGV proportion dropped by 1 percentage point. The volume of both LGVs and HGVs generally fell on monitored roads, in line with changes in overall vehicle numbers. The biggest deviations in terms of goods vehicle proportions were on Florence Street and Hawes Street for LGVs (+9 and +8 percentage points, respectively), and on Braes Street and Florence Street for HGVs (+6 and -6 percentage points, respectively).

On boundary roads, there has been a larger shift towards particularly LGV traffic, with an 8 percentage point increase in the proportion of such vehicles in line with an increase from 4,667 to 9,391 such vehicles counted on a daily basis (a doubling) – LGVs increased on all monitored boundary roads, but the biggest changes were on Upper Street (near Canonbury Lane) and Essex Road (both sites). For HGVs, there was a 4 percentage point increase, although HGV numbers fell somewhat, from 5,558 to 4,380 (a 21% drop) – the picture here was more mixed than for LGVs, with some roads seeing decreases and others increased.

Most other streets monitored saw limited changes in terms of goods vehicle proportions, but there were some instances where volumes of such vehicles changed quite significantly, generally on local roads.

Overall goods vehicle volumes have decreased on internal roads, and HGV volumes have decreased across both internal and boundary roads, but LGV volumes have increased on boundary roads.

## Motorcycle Volumes (7-Day Daily Average)

Motorcycle volumes are considered separately from other vehicles as they are occasionally able to travel through neighbourhood blocks using filters and streets in manners that cars and lorries cannot (for example by illegally using cycle filters). Similarly, on average, they create more noise than general traffic and are therefore of particular concern during the overnight period, especially as a result of the significant increase in their prevalence following COVID-19 and the spike in deliveries made by motorcycle in London.

Motorcycles are distinguished from pedal cycles in ATC counters by the weight and spacing of the vehicle tyres.

**Table 11: Normalised Motorcycle Volumes on Internal Roads**

	<b>Motorcycle Volume: Nov-21</b>	<b>Motorcycle Prop: Nov-21</b>	<b>Motorcycle Volume: Jan-23</b>	<b>Motorcycle Prop: Jan- 23</b>	<b>Motorcycle Change in Proportion</b>
<b>Canonbury Square</b>	126	6%	220	6%	0%
<b>Braes Street</b>	149	9%	25	17%	8%
<b>Canonbury Lane</b>	329	6%	398	5%	-1%
<b>Cross Street (West)</b>	633	12%	140	17%	5%
<b>Gaskin Street</b>	362	13%	346	12%	-1%
<b>Dagmar Terrace</b>	133	24%	22	16%	-8%
<b>Florence Street</b>	183	9%	56	10%	1%
<b>Hawes Street</b>	245	9%	54	19%	10%
<b>Cross Street (East)</b>	476	11%	81	16%	5%
<b>Halton Road (North)</b>	236	11%	67	17%	6%
<b>Halton Road (South)</b>	118	12%	116	10%	-2%
<b>Total/Average Internal</b>	<b>2,989</b>	<b>11%</b>	<b>1,524</b>	<b>10%</b>	<b>-1%</b>

**Table 12: Normalised Motorcycle Volumes on Boundary Roads**

	<b>Motorcycle Volume: Nov-21</b>	<b>Motorcycle Prop: Nov-21</b>	<b>Motorcycle Volume: Jan-23</b>	<b>Motorcycle Prop: Jan- 23</b>	<b>Motorcycle Change in Proportion</b>
<b>Canonbury Road (North)</b>	513	5%	520	6%	1%
<b>Canonbury Road (South)</b>	431	3%	498	4%	1%
<b>Essex Road (East)</b>	616	3%	688	4%	1%
<b>Essex Road (West)</b>	875	6%	774	5%	-1%
<b>Upper Street (near Barnsbury Street)</b>	Radar Site – No Motorcycle Data				
<b>Upper Street (near Canonbury Lane)</b>	Radar Site – No Motorcycle Data				
<b>Total/Average Boundary</b>	<b>2,434</b>	<b>5%</b>	<b>2,480</b>	<b>5%</b>	<b>0%</b>

**Table 13: Normalised Motorcycle Volumes on Local Roads Outside of St. Mary's Church PFS Area**

	<b>Motorcycle Volume: Nov-21</b>	<b>Motorcycle Prop: Nov-21</b>	<b>Motorcycle Volume: Jan-23</b>	<b>Motorcycle Prop: Jan- 23</b>	<b>Motorcycle Change in Proportion</b>
<b>Islington Park Street</b>	289	4%	305	4%	0%
<b>Palmer Place</b>	313	8%	308	8%	0%
<b>Furlong Road</b>	264	13%	206	11%	-2%
<b>Barnsbury Street</b>	449	10%	467	16%	6%
<b>Greenman Street</b>	235	12%	140	10%	-2%
<b>Theberton Street</b>	701	12%	383	7%	-5%
<b>White Lion Street</b>	337	10%	390	12%	2%

**Table 14: Normalised Motorcycle Volumes on Main Roads Outside of St. Mary's Church PFS Area**

	<b>Motorcycle #: Nov-21</b>	<b>Motorcycle Prop: Nov-21</b>	<b>Motorcycle #: Jan-23</b>	<b>Motorcycle Prop: Jan- 23</b>	<b>Motorcycle Change in Proportion</b>
<b>Liverpool Road (North)</b>	646	7%	825	9%	2%
<b>Liverpool Road (South)</b>	544	7%	460	6%	-1%
<b>St. Paul's Road</b>	1,109	5%	1,084	5%	0%

## Insights: Motorcycle Volumes

For motorcycles, there have been only minor changes in the proportions between the November 2021 baseline and January 2023 pre-consultation survey periods.

On internal roads, the change in proportion of motorcycles has decreased by 1 percentage point in normalised flow terms, which also reflects the overall decrease in vehicle volumes of such roads, in that the total number of motorcycles counted decreased by around 1,500 per day. Canonbury Square and Canonbury Lane were the only sites where there were increases in motorcycles reported, and whilst Hawes Street saw the most significant increase in motorcycle proportion (rounded to +10 percentage points), nearly 200 fewer daily vehicles were counted at this site.

On boundary roads, the change in proportion of motorcycles in normalised flows remain generally unchanged with little to report on individual roads.

Across other roads, motorcycle volumes have remained fairly similar between the two surveyed periods, generally with limited changes in their proportional representation. The only site registering an increase of more than 100 daily motorcycles was Liverpool Road (North).

Overall, the number of motorcycles has dropped on most streets, except on Canonbury Square and Canonbury Lane – however, proportions of such vehicles across all roads have remained broadly similar between survey periods.

# Cycle Volumes (7-Day Daily Average)

We have not normalised cycling figures for COVID-19 due to the lack of an available source that provides continuous month-to-month cycling levels encompassing all types of cycling trips (commute and leisure), and is at a sufficiently local geographic scale to form a meaningful and robust benchmark.

Unlike motorised traffic trends, cycling levels are significantly impacted by seasonal weather change including temperature and rainfall; for example, there is normally much more cycling participation in July than in January, and there are similarly significantly more cycle trips completed in July than January. There are several interlinked factors when it comes to the impact seasonal weather variation has on cycling levels, while weather can still vary within a season, a month or even a day. As an indication of the impact weather can have, one 2011 study found a doubling in temperature could lead up to a 50% increase in cycling levels, before having a negative impact if too high (Study by [Miranda-Moreno and Nosal, 2011](#)).

Between baseline and pre-consultation data collection periods (taken in November 2021 and January 2023 respectively), average climate data indicates that January 2023 weather was slightly colder, with an average temperature of 6.5°C vs. 8.9°C in November 2021.

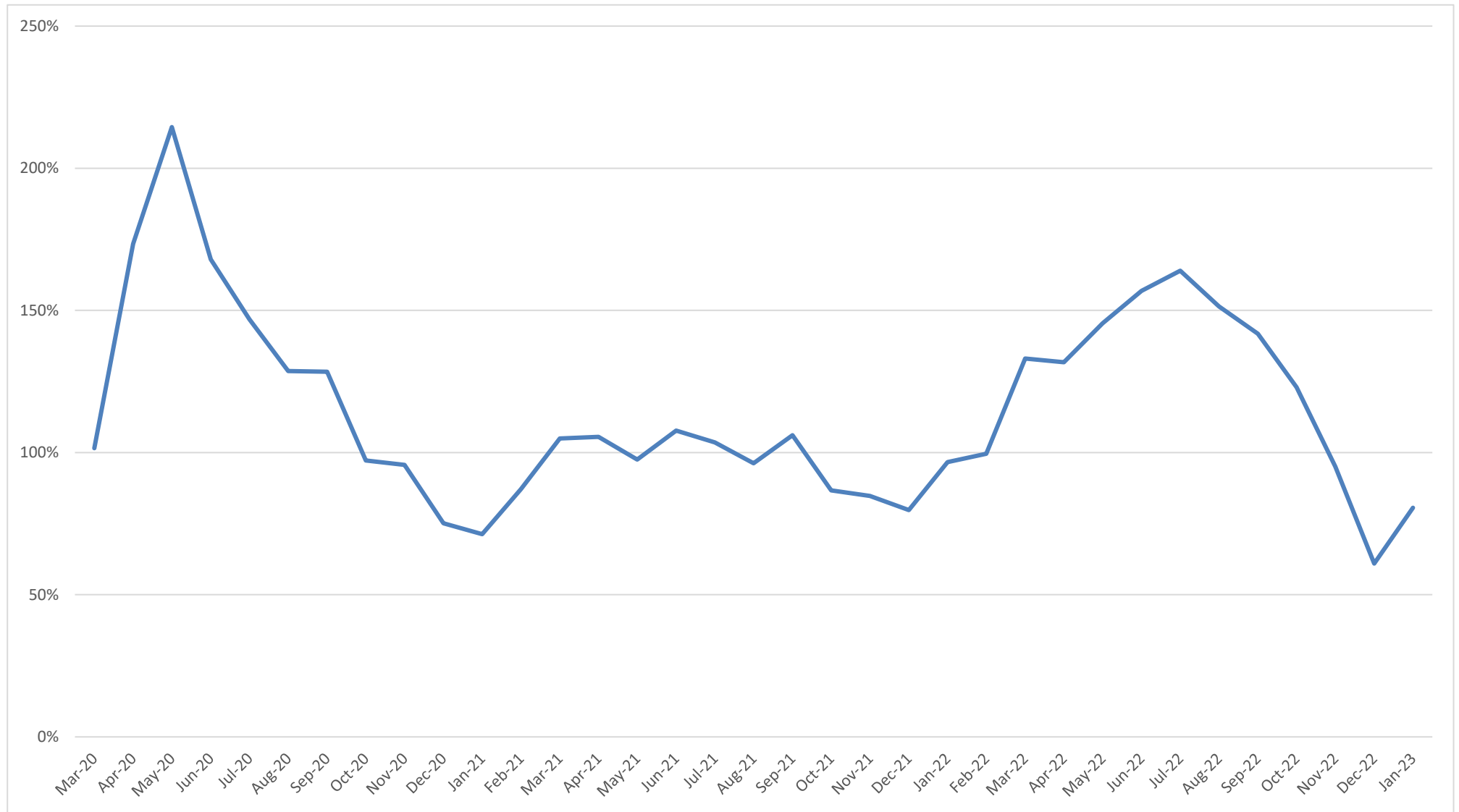
Considering these caveats, it is also important to note that government regulations and guidance surrounding COVID-19, as well as the impact of the cost-of-living crisis in 2022/2023, have significantly impacted wider cycling trends since March 2020 (data from [DfT's Official Statistics](#)). Graph 1 on the next page shows, on a national basis, the number of cycle trips completed as compared to the same month pre-pandemic (i.e. June 2021 compared to June 2019), indicating that whilst the first few months of the pandemic (i.e. early summer 2020) saw very high levels of cycling, levels since then have been driven by a range of factors (for example, higher flows during the summer of 2022 and low flows over the winter spanning 2022/2023).

Route choices made by people cycling will also be impacted by the availability of nearby protected cycle infrastructure and Low Traffic Neighbourhoods, with a range of new cycleways opening in the vicinity of the scheme since March 2020.

Following Graph 1 outlining nationwide cycling trends, the St. Mary's Church map and table outline changes in cycling volumes across the scheme area between the baseline and pre-consultation data collection periods.

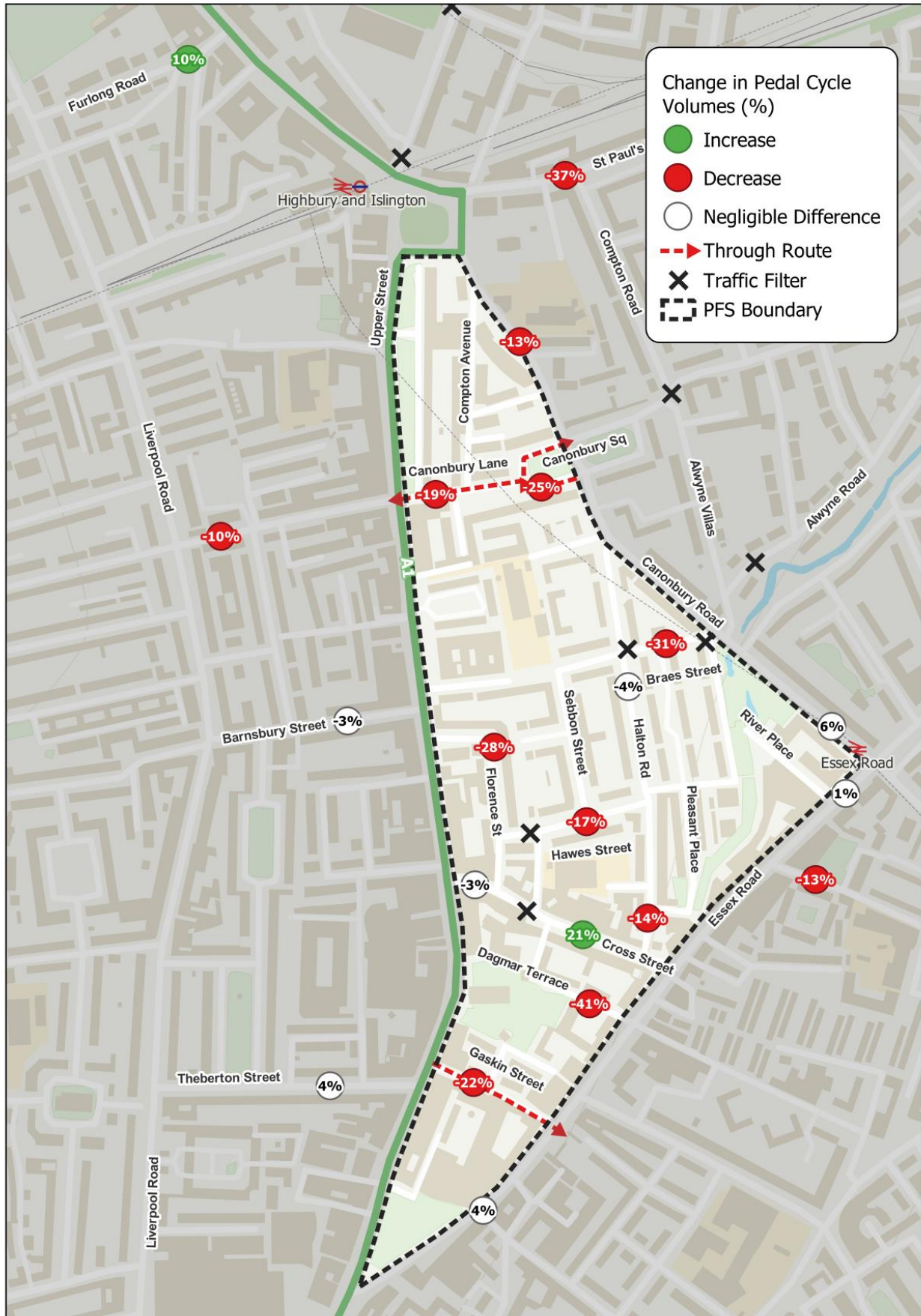


**Graph 1: National Cycling Levels - % of Comparison Month in Pre-Covid 2019/2020\***



\*For example, January 2023 cycling levels are 81% of the January 2020 average.

**Map 4: Percentage Change in Cycle Volumes**



**Table 15: Cycling volumes on Internal Roads**

	<b>Baseline Observed: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline</b>	<b>% Difference Pre-Consultation vs. Baseline</b>
<b>Canonbury Square</b>	207	156	-51	<b>-25%</b>
<b>Braes Street</b>	543	373	-170	<b>-31%</b>
<b>Canonbury Lane</b>	858	696	-163	<b>-19%</b>
<b>Cross Street (West)</b>	406	394	-12	-3%
<b>Gaskin Street</b>	303	237	-66	<b>-22%</b>
<b>Dagmar Terrace</b>	107	63	-44	<b>-41%</b>
<b>Florence Street</b>	134	97	-37	<b>-27%</b>
<b>Hawes Street</b>	137	114	-23	<b>-17%</b>
<b>Cross Street (East)</b>	336	405	69	<b>21%</b>
<b>Halton Road (North)</b>	411	395	-16	-4%
<b>Halton Road (South)</b>	446	385	-61	<b>-14%</b>
<b>Total Internal</b>	<b>3,889</b>	<b>3,314</b>	<b>-575</b>	<b>-15%</b>

**Table 16: Cycling volumes on Boundary Roads**

	<b>Baseline Observed: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline</b>	<b>% Difference Pre-Consultation vs. Baseline</b>
<b>Canonbury Road (North)</b>	1,290	1,119	-171	<b>-13%</b>
<b>Canonbury Road (South)</b>	717	762	45	6%
<b>Essex Road (East)</b>	980	985	5	1%
<b>Essex Road (West)</b>	1,063	1,103	40	4%
<b>Upper Street (near Barnsbury Street)</b>	Radar Site – No Cycle Data			
<b>Upper Street (near Canonbury Lane)</b>	Radar Site – No Cycle Data			
<b>Total Boundary</b>	<b>4,050</b>	<b>3,970</b>	<b>-80</b>	<b>-2%</b>

**Table 17: Cycling volumes on Local Roads Outside of St. Mary's Church PFS Area**

	<b>Baseline Observed: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline</b>	<b>% Difference Pre-Consultation vs. Baseline</b>
<b>Islington Park Street</b>	499	447	-52	<b>-10%</b>
<b>Palmer Place</b>	1,092	883	-210	<b>-19%</b>
<b>Furlong Road</b>	167	184	17	<b>10%</b>
<b>Barnsbury Street</b>	587	567	-21	-4%
<b>Greenman Street</b>	151	132	-19	<b>-13%</b>
<b>Theberton Street</b>	611	635	24	4%
<b>White Lion Street</b>	245	338	93	<b>38%</b>

**Table 18: Cycling volumes on Main Roads Outside of St. Mary's Church PFS Area**

	<b>Baseline Observed: Nov-21</b>	<b>Pre-Consultation Observed: Jan-23</b>	<b>Difference Pre-Consultation vs. Baseline</b>	<b>% Difference Pre-Consultation vs. Baseline</b>
<b>Liverpool Road (North)</b>	721	699	-21	<b>-3%</b>
<b>Liverpool Road (South)</b>	1,337	1,121	-216	<b>-16%</b>
<b>St. Paul's Road</b>	867	550	-317	<b>-37%</b>

## Insights: Cycling Volumes

For cycling, around 600 fewer daily cyclists were counted on internal roads, but the change on boundary roads (where cycle data was collected) was less than 100 cyclists per day.

The largest drop in internal road cycling numbers was on Braes Street, with a drop of 170 daily cyclists (-31%), which was similar to the difference seen on Canonbury Lane (-163 daily cyclists, or -19%). Despite this, Cross Street's eastern site saw an increase of 69 cyclists per day, or of 21%.

For boundary roads, there was a 13% drop on Canonbury Road's northern site (-171 daily cyclists), which was somewhat offset by minor increases at the remainder of the sites that provided cycling data.

For other sites, cycling trends were mixed, although generally with fairly moderate percentage changes. The most significant drop in cycling numbers was on St. Paul's Road, where 317 fewer cyclists were counted (-37%), whilst White Lion Street saw an increase of nearly 100 daily cyclists (+38%).

Ultimately, the number of cycling trips on surveyed roads has slightly decreased between the surveyed periods.. It is considered that this is an expected outcome, given that the weather during the pre-consultation survey period was colder than that of the baseline period, and that cycling levels during the winter months are generally fairly low due to poor weather conditions and shorter daylight hours.

# Analysis of Vehicle Speeds

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

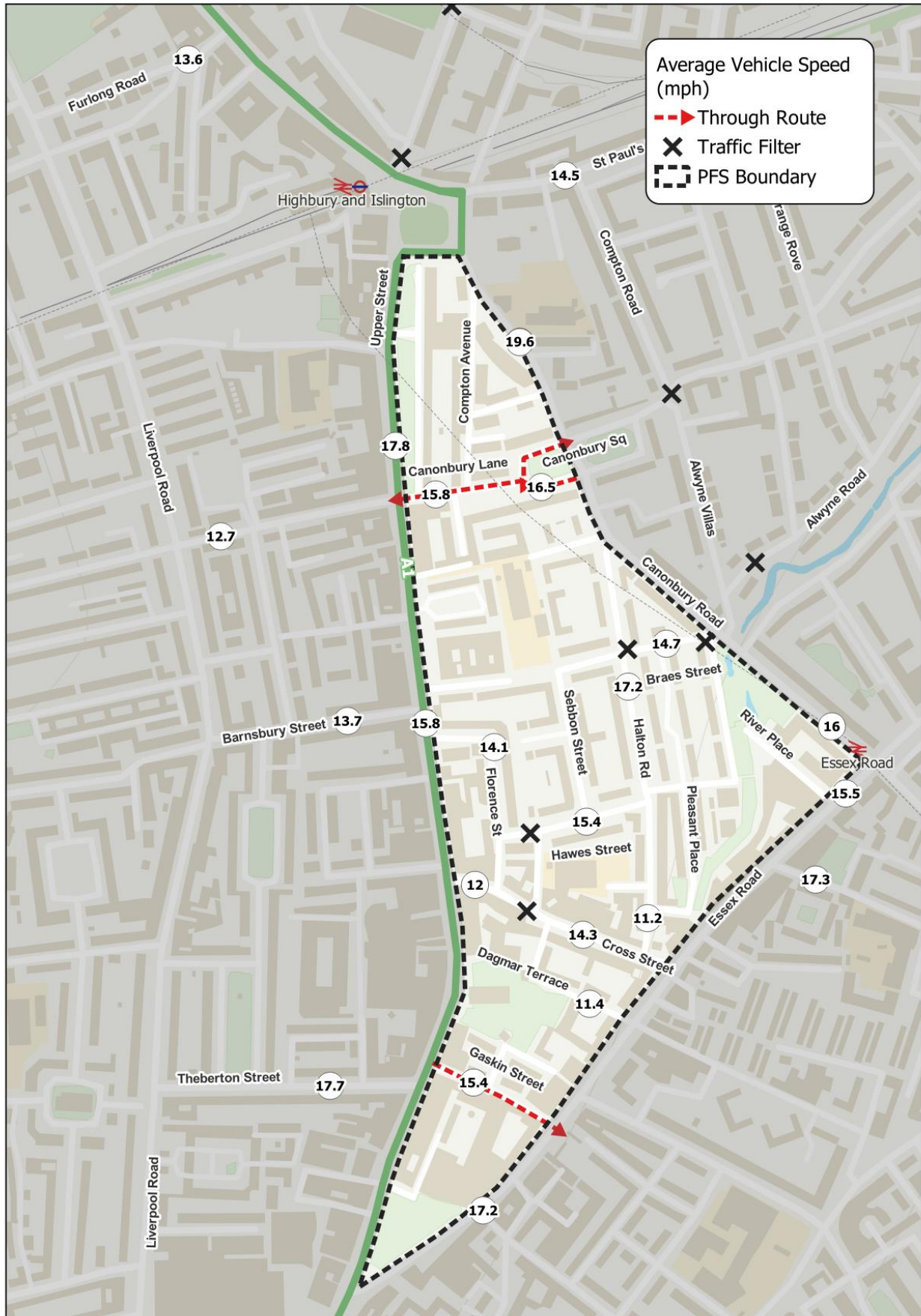
Traffic counters measure motorised traffic speeds as well as volumes. Details about the dates and locations of the traffic volume and speed monitoring are in Appendix 5. The speed limit is 20mph on all monitored roads.

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<sup>th</sup> percentile is used in transport monitoring to gauge changes in speeds and speeding behaviour. It is the speed at or below which 85% of traffic will be travelling along a street (and therefore 15% of traffic will be travelling faster than this speed).

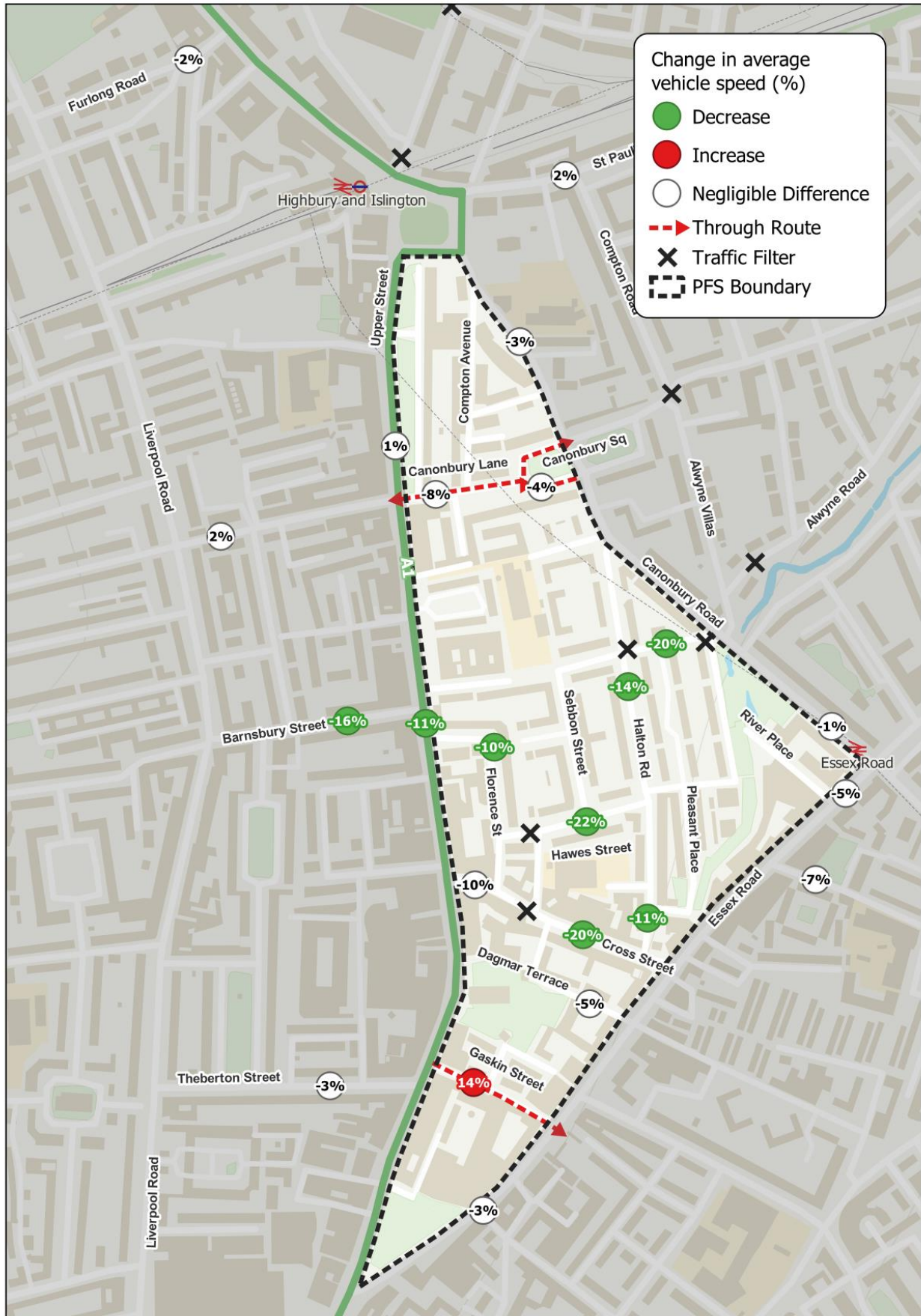
Cycles and their speeds have been removed from calculations relating to vehicle speeds as including such counts would skew averages down.



**Map 5: Average Vehicle Speed in mph (seven-day daily averages)**



**Map 6: Percentage Change in Motorised Vehicle Average Speed (seven-day daily averages)**





**Table 19: Speeds of Motorised Vehicles on Internal Roads**

	Pre-Con Average Speed (mph)	Average Speed Diff. vs. Baseline (mph)	Average Speed Diff. vs. Baseline (%)	85th Pct. Speed Pre-Con (mph)	85th Pct. Diff. vs. Baseline (mph)	85th Pct. Diff. vs. Baseline (%)	% Speeding Pre-Con	% Speeding Diff vs. Baseline (% pt.)
Canonbury Square	16.5	-0.6	-4%	19.2	-0.7	-4%	10%	-4%
Braes Street	14.7	-3.7	-20%	18.8	-3.8	-17%	10%	-23%
Canonbury Lane	15.8	-1.3	-8%	20.2	-1.5	-7%	16%	-9%
Cross Street (West)	12.0	-1.3	-10%	15.0	-1.2	-7%	2%	0%
Gaskin Street	15.4	1.9	14%	18.9	2.7	17%	9%	7%
Dagmar Terrace	11.4	-0.6	-5%	14.3	-0.7	-5%	1%	-1%
Florence Street	14.1	-1.6	-10%	17.6	-1.3	-7%	5%	-4%
Hawes Street	15.4	-4.3	-22%	19.9	-4.4	-18%	14%	-29%
Cross Street (East)	14.3	-3.5	-20%	18.5	-3.4	-16%	10%	-16%
Halton Road (North)	17.2	-2.8	-14%	21.5	-2.9	-12%	23%	-23%
Halton Road (South)	11.2	-1.4	-11%	13.5	-1.8	-12%	0%	-1%
<b>Weighted Average</b>	<b>15.3</b>	<b>-1.1</b>	<b>-7%</b>	<b>19.0</b>	<b>-1.1</b>	<b>-6%</b>	<b>11%</b>	<b>-8%</b>

**Table 20: Speeds of Motorised Vehicles on Boundary Roads**

	Pre-Con Average Speed (mph)	Average Speed Diff. vs. Baseline (mph)	Average Speed Diff. vs. Baseline (%)	85th Pct. Speed Pre-Con (mph)	85th Pct. Diff. vs. Baseline (mph)	85th Pct. Diff. vs. Baseline (%)	% Speeding Pre-Con	% Speeding Diff vs. Baseline (% pt.)
Canonbury Road (North)	19.6	-0.7	-3%	24.0	-0.7	-3%	43%	-8%
Canonbury Road (South)	16.0	-0.1	-1%	20.6	-0.5	-2%	18%	-3%
Essex Road (East)	15.5	-0.9	-5%	20.6	-1.0	-5%	17%	-5%
Essex Road (West)	17.2	-0.6	-3%	22.0	-0.8	-4%	26%	-5%
Upper Street (near Barnsbury Street)	15.8	-2.0	-11%	20.3	-1.8	-8%	17%	-9%
Upper Street (near Canonbury Lane)	17.8	0.1	1%	22.8	0.8	4%	29%	3%
<b>Weighted Average</b>	<b>16.7</b>	<b>-0.8</b>	<b>-4%</b>	<b>21.5</b>	<b>-0.8</b>	<b>-3%</b>	<b>24%</b>	<b>-5%</b>

**Table 21: Speeds of Motorised Vehicles on Local Roads Outside of St. Mary’s Church PFS Area**

	<b>Pre-Con Average Speed (mph)</b>	<b>Average Speed Diff. vs. Baseline (mph)</b>	<b>Average Speed Diff. vs. Baseline (%)</b>	<b>85th Pct. Speed Pre-Con (mph)</b>	<b>85th Pct. Diff. vs. Baseline (mph)</b>	<b>85th Pct. Diff. vs. Baseline (%)</b>	<b>% Speeding Pre-Con</b>	<b>% Speeding Diff vs. Baseline (% pt.)</b>
<b>Islington Park Street</b>	12.7	0.2	2%	15.9	-0.3	-2%	3%	-1%
<b>Palmer Place</b>	14.2	-0.3	-2%	17.9	-0.4	-2%	6%	-1%
<b>Furlong Road</b>	13.6	-0.3	-2%	17.0	-0.1	-1%	4%	0%
<b>Barnsbury Street</b>	13.7	-2.6	<b>-16%</b>	16.8	-3.2	<b>-16%</b>	4%	<b>-11%</b>
<b>Greenman Street</b>	17.3	-1.3	-7%	21.5	-1.5	-7%	24%	-9%
<b>Theberton Street</b>	17.7	-0.6	-3%	21.1	-1.6	-7%	22%	-9%
<b>White Lion Street</b>	10.8	-0.3	-3%	13.3	-0.1	-1%	0%	-3%

**Table 22: Speeds of Motorised Vehicles on Local Roads Outside of St. Mary’s Church PFS Area**

	<b>Pre-Con Average Speed (mph)</b>	<b>Average Speed Diff. vs. Baseline (mph)</b>	<b>Average Speed Diff. vs. Baseline (%)</b>	<b>85th Pct. Speed Pre-Con (mph)</b>	<b>85th Pct. Diff. vs. Baseline (mph)</b>	<b>85th Pct. Diff. vs. Baseline (%)</b>	<b>% Speeding Pre-Con</b>	<b>% Speeding Diff vs. Baseline (% pt.)</b>
<b>Liverpool Road (North)</b>	16.9	-0.4	-2%	20.9	-0.6	-3%	20%	-4%
<b>Liverpool Road (South)</b>	12.6	-0.6	-5%	16.3	-0.8	-5%	3%	-2%
<b>St. Paul's Road</b>	14.5	0.3	2%	19.1	0.2	1%	12%	1%

## Insights: Vehicle Speeds

In general, vehicle speeds across internal and boundary roads have decreased slightly across key metrics between the November 2021 baseline and January 2023 pre-consultation survey periods.

On internal roads, the difference in average speeds for comparable roads has seen a negligible drop of 7%, based on the change in weighted averages (change in speed multiplied by motorised traffic volume), which is largely driven by the busiest remaining roads (Canonbury Square and Canonbury Lane). Vehicle speeds generally dropped, most notably on Hawes Street (-4.3mph), Braes Street (3.7mph) and Cross Street (East) (-3.5mph), which had similar drops in 85<sup>th</sup> percentile speeds. However, speeds increased on Gaskin Street (by 1.9mph for average speeds and by 2.7mph for 85<sup>th</sup> percentile speeds). Overall, 8% fewer vehicles were counted speeding across these roads.

On boundary roads, the difference in average speeds for comparable roads has seen a slight drop of 4%, based on the weighted averages. This is mostly due to the significant change in average speed as seen on Upper Street near Barnsbury Street (-2.0mph), which has decreased by 11% since the baseline. However, Canonbury Road (north) showed 43% of vehicles speeding, where the average speed was 19.6mph, so speeds should be monitored here. Overall, there was a 5 percentage point drop in the number of vehicles speeding on boundary roads.

On other roads, the only two locations seeing a change of more than 1mph in average speeds were Barnsbury Street (-2.6mph, -16%) and Greenman Street (-1.3mph, -7%).

Across all roads, average speeds were all under the speed limit of 20mph, and in most cases 85th percentile speeds were as well (particularly on internal/local roads).

## 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 St. Mary's Church LTN area have been monitored.

Bus journey time monitoring focussed on the three main boundary roads, described as bi-directional corridors, which include journey times for multiple routes. The main roads and bus route numbers are listed below:

Upper Street (4, 19, 30, 43, N19, N41, N277)

Essex Road (38, 56, 73, 341, 476)

Canonbury Road (21, 271)

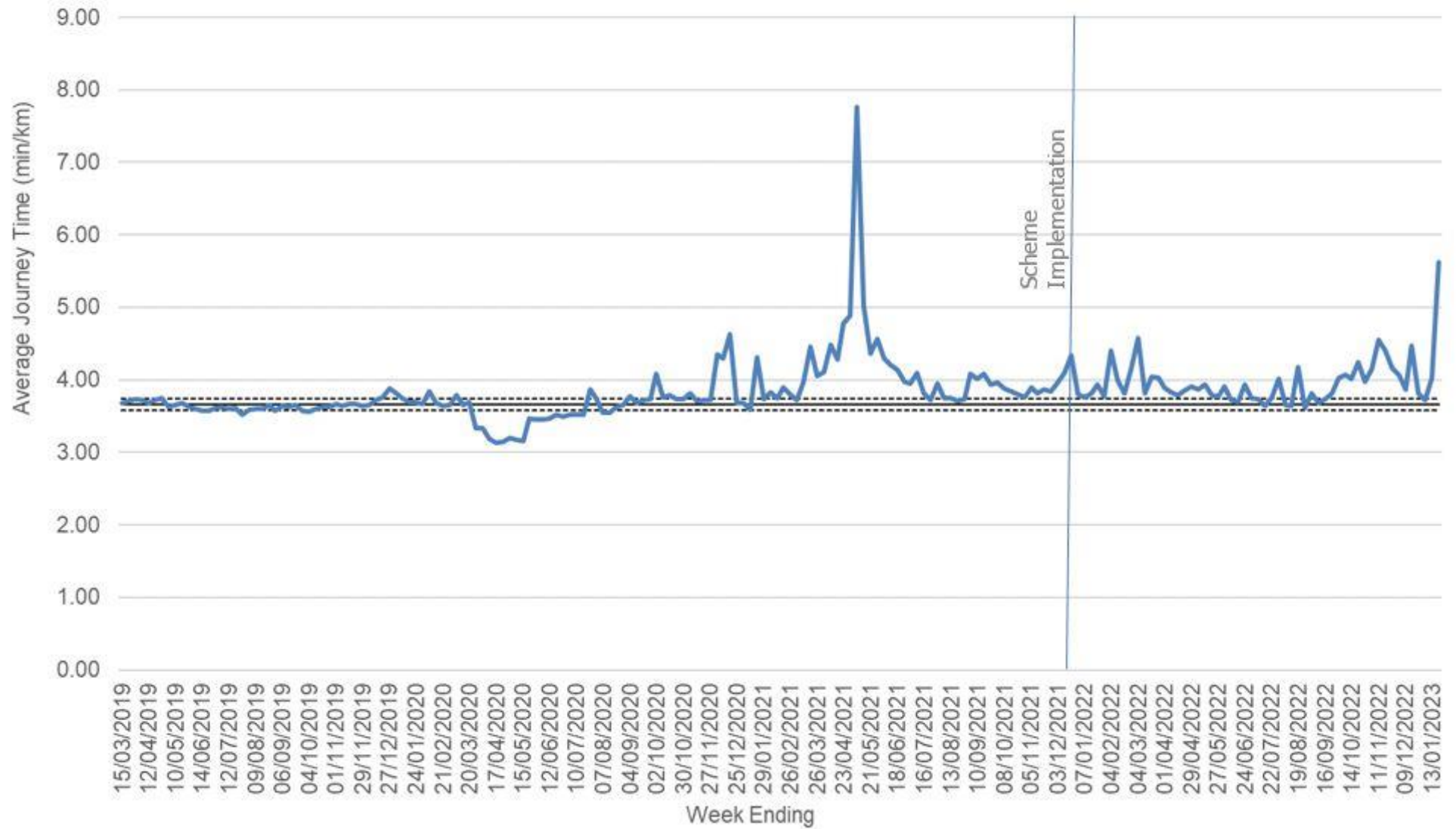
Weekly iBus data has been used for this analysis. This gives weekday (Monday to Friday, excluding bank holidays) average journey times by route, stop-to-stop link and peak periods. The AM peak is 7am-10am, Inter-peak 10am-4pm and PM peak 4pm-7pm. The data also provides 12hour 7am-7pm timings. These journey times exclude dwell times at stops.

TfL's methodology has been used to analyse the results of the iBus data. Journey time results have first been summarised by route, by taking the total journey time across stop-to-stop links along the corridor and dividing by the length of these links, to give a minutes per kilometre figure. Corridor level figures have been found by taking a weighted average across the route level figures, weighted by the route frequency. The data shows the corridor averages each week but also shows thresholds ('Baseline Upper' & 'Baseline Lower'). These thresholds have been found by taking the mean journey time plus or minus one standard deviation during the pre-COVID-19 baseline period (11 March 2019 – 13 March 2020). This allows for a reasonable amount of week-to-week variation but gives a threshold above which minutes per km figures would be deemed above "normal".

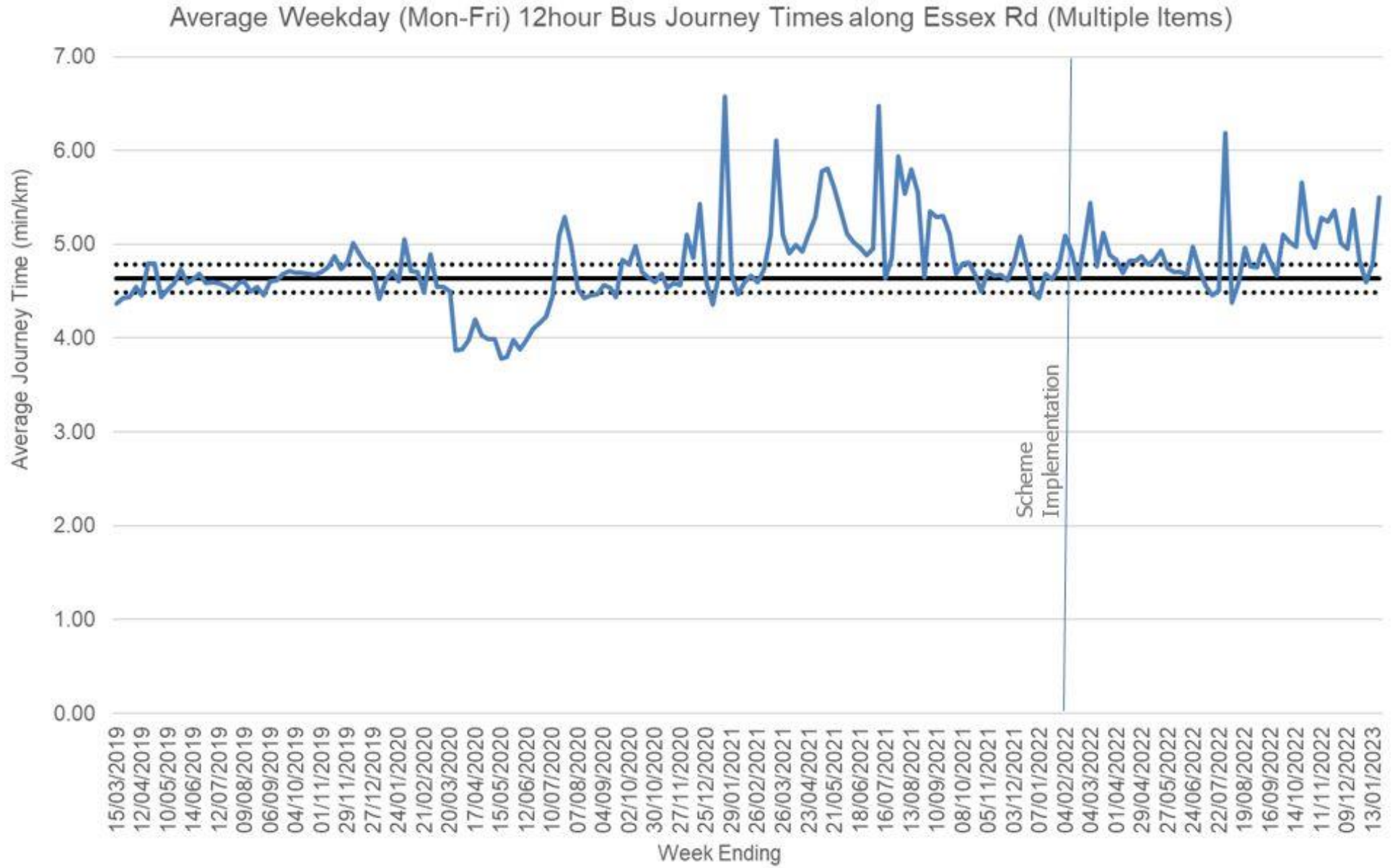
The results are shown in Graph 2 to Graph 4 below. The black lines indicate the baseline threshold and the blue line indicates the average journey times, on a three-week basis.

**Graph 2: Upper Street**

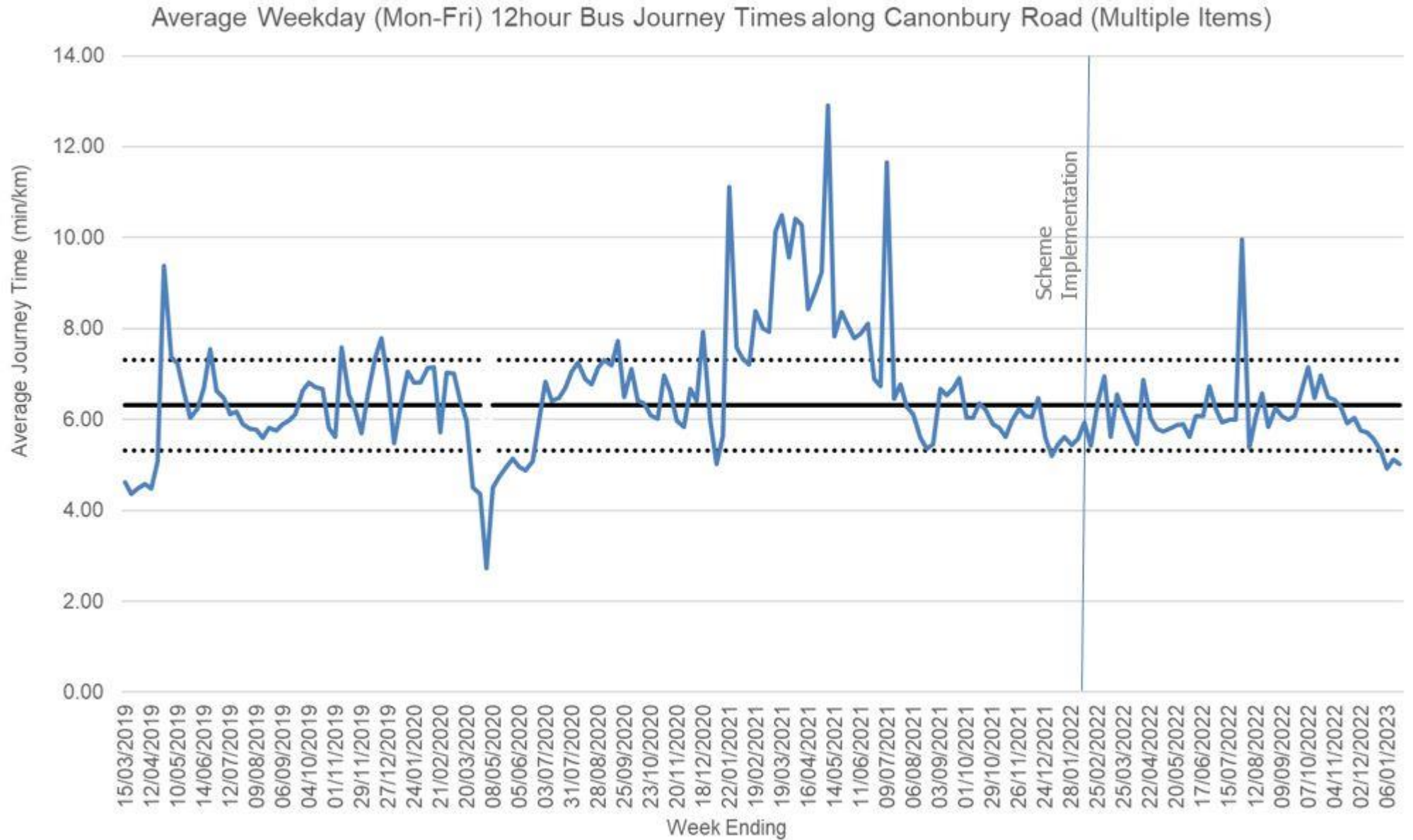
Average Weekday (Mon-Fri) 12hour Bus Journey Times along A1 Upper Street (Multiple Items)



**Graph 3: Essex Road**



**Graph 4: Canonbury Road**





# Insights: Bus Journey Times on Boundary Roads

## **Upper Street – Bus Journey Times**

On Upper Street, pre-COVID journey times were very stable with buses traveling at around 3.75 minutes per kilometre throughout 2019. Following the COVID-19 Pandemic, and particularly in the spring of 2021, there were several increases in bus journey times, up to almost 8 minutes per kilometre in late April of that year. Bus journey times following the introduction of the St. Mary's Church LTN scheme have remained higher than their pre-COVID averages, although it is noted that there is no clear change in bus speeds before and after scheme introduction (although the council is working with TfL to monitor the most recent increase in bus journey times as seen in January 2023).

## **Essex Road – Bus Journey Times**

On Essex Road, bus journey times were typically at around 4.5 minutes per kilometre during 2019, speeding up during the height of the COVID-19 Pandemic, but then slowing down for much of 2021. As with Upper Street, bus journey times following scheme introduction have remained higher than pre-COVID averages, but there does not appear to be any direct impact from the scheme itself.

Outside of this report, the council has also worked with TfL to analyse bus journey times data for Essex Road, and the above increase has been noted during this work. The council's transport strategy is committed to working with Transport for London to improve bus reliability and achieve and increase in bus speeds – the council will therefore work to improve bus journey times on Essex Road by exploring prioritisation measures such as the removal or relocation of existing parking, additional double yellow lines, bus lane expansion, and bus lane time review. The council will begin the feasibility study for this project in financial year 23/24.

## **Canonbury Road – Bus Journey Times**

Bus journey times on Canonbury Road averaged slightly above 6 minutes per kilometre during 2019, with a considerable decrease in performance through much of 2021. However, from the last quarter of 2021 until present, journey times on Canonbury Road have remained largely at (or most recently, below) pre-COVID levels, except for one anomalous week in July 2022.



# Air Quality

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<sub>10</sub>)** – tiny pieces of solid material made of a range of substances suspended in the air.
- **Nitrogen dioxide (NO<sub>2</sub>)** – 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<sub>2</sub> and PM<sub>10</sub> 24 hours a day at two locations in the borough. These are our most accurate monitors.
- **Diffusion tubes:** provide monthly readings of NO<sub>2</sub>. Whilst 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. These tubes measure the air's concentration of nitrogen dioxide (NO<sub>2</sub>), a toxic gas that can be very harmful to health. The tubes are replaced and analysed on a monthly basis. Research suggests that at urban roadside locations in the UK up to 80 per cent of the nitrogen dioxide measured comes from road transport.
- **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. There are also limited numbers of these monitors in the borough.

Islington's air quality sites are classified based on their location using [Defra guidance](#), but are referred to in these LTN monitoring reports using LTN 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 LTN 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 LTN monitoring we have further split the urban background results into sites on internal roadsides and sites away from roads (non-street).

These categorisations apply to the LTN and borough wide.

The long-term sites in Islington consist of eight roadside diffusion tubes, nine background urban diffusion tubes, one automatic main road site and one automatic background urban site. One of the main road diffusion tubes was moved in 2019 and is therefore not being included in LTN monitoring using this time period. More details of these sites can be viewed in our annual report.

The air quality monitoring sites for the St. Mary's Church LTN are listed in Appendix 3, with details about type and location. The long-term sites that are being used for comparison work in this report consist of eight boundary road diffusion tubes, six internal road diffusion tubes and four non-street diffusion tubes.

## Methodology

### Time period of study

Air quality varies naturally over time due to a variety of factors, including seasonal variations, weather and other non-transport factors. It is therefore important to look at trends over a longer period of time, for at least a year, to identify real changes in air quality due to this scheme. However, as there has not been a full year's worth of data between the pre-consultation report and final report (data is only available to October 2022 due to a lag in the review time for this), data from the nine month period between February 2022 and October 2022 has been compared against data from the same nine month period from the previous year (i.e. February 2021 and October 2021), after the scheme was implemented but before the final counts were taken. The pollution levels in these periods, particularly the baseline, are likely to have been impacted by COVID-19. [Studies](#) into the impacts of lockdown on air pollution, by Defra, for example, show lower than average levels of the pollutant NO<sub>2</sub> during the first lockdown.

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

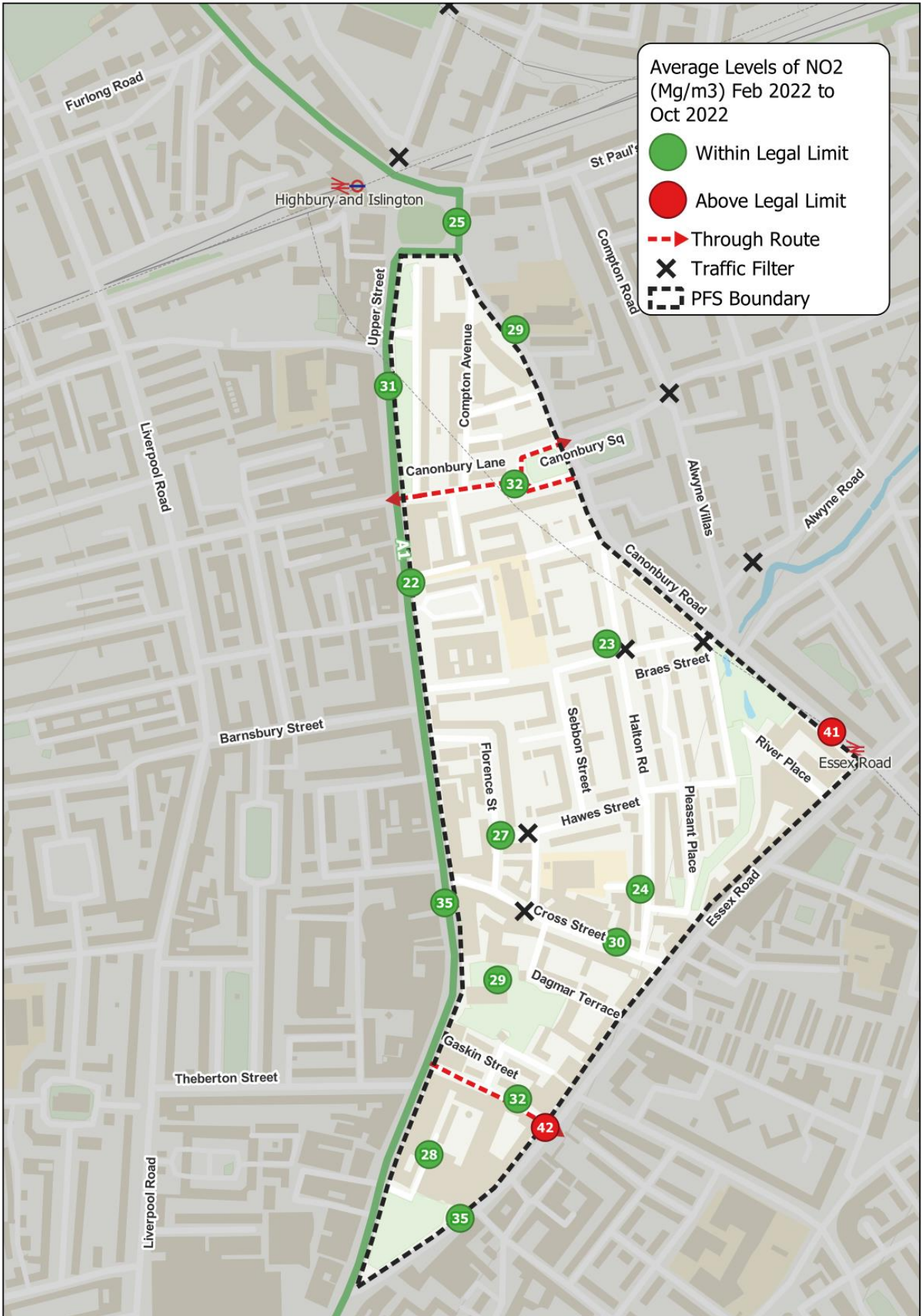
The results shown in this section use NO<sub>2</sub> data from diffusion tubes only. It was therefore not possible to provide results for PM<sub>10</sub> for the St. Mary's Church LTN area.

Please note, the values in this section show the average results for all monitors in each category where the data is available, with figures rounded to the nearest whole number, so the differences may look different to what is expected from the NO<sub>2</sub> values given.

To improve accuracy levels of diffusion tubes it is necessary to bias correct the results based upon local or national collocation studies with the more accurate reference monitors. It is also necessary to calculate the data capture, and if this is less than 75%, the results should be annualised. More information on this process can be found in the council's annual air quality report. The results from 2022 have yet to be published as they require a full years' data, so the 2022 data presented here is in "raw" format and may change once the bias adjustment values are made available.

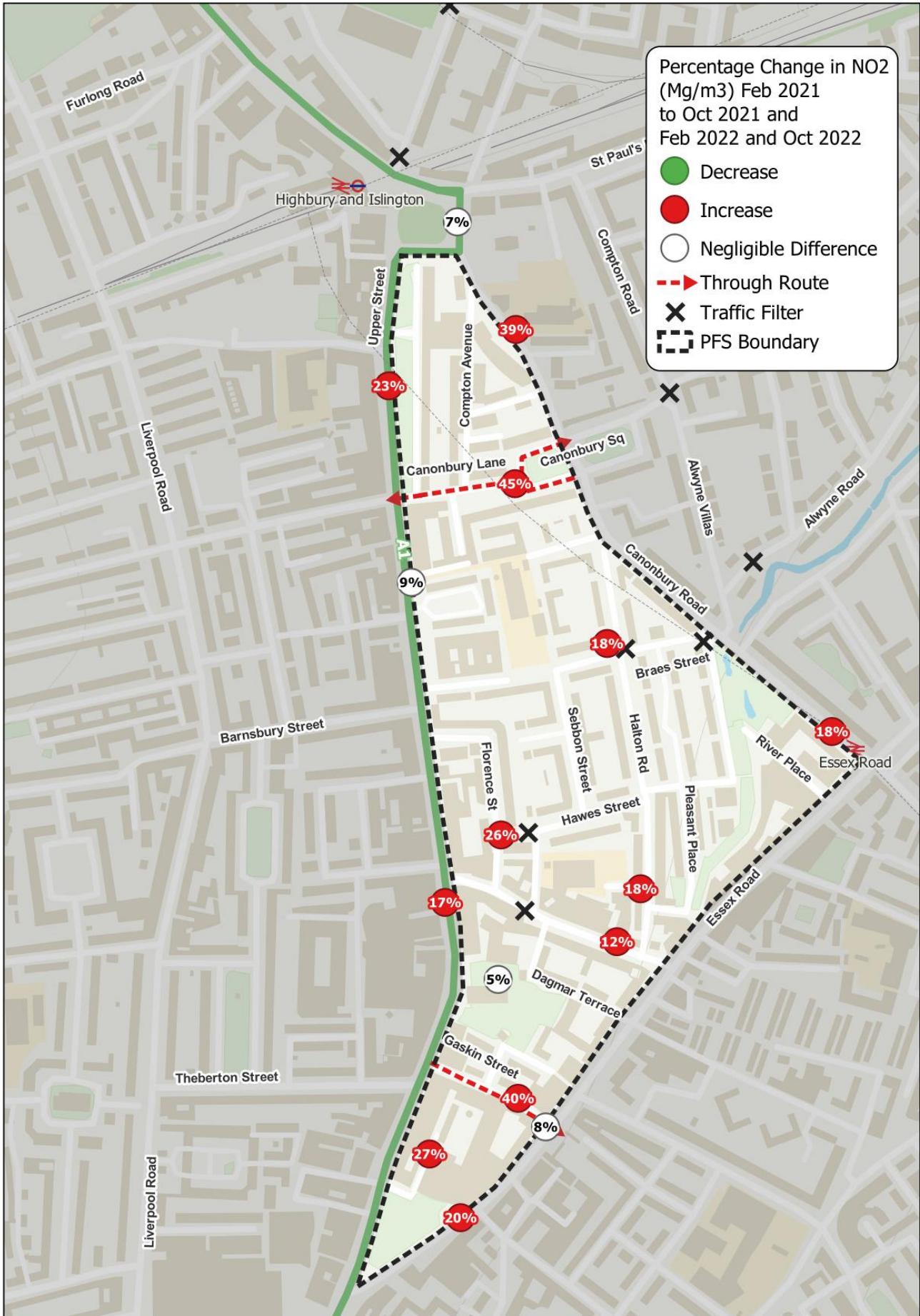
It is important to note that the monitoring site on Canonbury Road (opposite Essex Road station) recorded an anomalous reading in May 2022 that would have brought the average value of NO<sub>2</sub> particles at this site to 44. This reading was not used to calculate the final average as it was abnormally high compared to any of the readings within the surveyed period, particularly considering that in summer months, NO<sub>2</sub> levels tend to be relatively low as compared to the rest of the year. The council will continue to closely monitor the site.

**Map 7: Average levels of NO<sub>2</sub> (µg/m<sup>3</sup>) February 2022- October 2022**





**Map 8: Percentage change in NO<sub>2</sub> (µg/m<sup>3</sup>) between February 2021-October 2022 & February 2022- October 2022**



**Table 23: (Boundary roads) NO<sub>2</sub> levels in St. Mary's Church and borough long-term diffusion tube sites**

	<b>Feb '21 – Oct '21 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Feb '22 – Oct '22 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (% change)</b>
<b>St. Mary's Church</b>	28	32	+4	<b>+14%</b>
<b>Whole borough long term sites</b>	28	32	+4	<b>+16%</b>

Table 23 provides average NO<sub>2</sub> levels for the eight boundary road sites for the St. Mary's Church LTN as well as seven boundary roads spread across the remainder of the borough. For the overall borough, there was a 14% increase in NO<sub>2</sub> levels between the compared periods, whilst in the scheme area there was a 16% increase for this metric. Note that changes in NO<sub>2</sub> levels are based on rounded numbers and % changes are not.

It is worth noting that boundary road sites including Highbury Corner, Canonbury Road and Essex Road sit in direct proximity to more than one low traffic neighbourhood or PFS scheme, so it is not possible to independently assign the impact of the St. Mary's Church LTN , particularly to monitors on these boundary roads.

**Table 24: (Internal roads) NO<sub>2</sub> levels in St. Mary's Church and borough long term diffusion tube sites**

	<b>Feb '21 – Oct '21 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Feb '22 – Oct '22 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (% change)</b>
<b>St. Mary's Church</b>	22	28	+6	<b>+26%</b>
<b>Whole borough long term sites</b>	18	22	+4	<b>+25%</b>

For internal roads, seven from St. Mary's Church and six from the wider borough have been included in the averages in Table 24. Both sets of monitors saw increases in NO<sub>2</sub> levels, of roughly the same magnitude, between the compared periods area (+26% for the scheme area vs. +25% for the wider borough). Note that changes in NO<sub>2</sub> levels are based on rounded numbers and % changes are not.

**Table 25: (Non-street-based sites) NO<sub>2</sub> levels in St. Mary's Church and borough long term diffusion tube sites**

	<b>Feb '21 – Oct '21 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Feb '22 – Oct '22 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (% change)</b>
<b>St. Mary's Church</b>	27	29	+2	+5%
<b>Whole borough long term sites</b>	17	21	+4	<b>+24%</b>

For non-street locations, there is only one such site for St. Mary's Church compared to four sites across the borough. Table 25 therefore only shows a single site's data for St. Mary's Church compared to an average for the rest of the borough – this can also be seen in Graph 5 on the following page, where there are a number of data gaps. At this single site, there was a 5% increase in NO<sub>2</sub> levels, whilst for an average across the wider borough locations the increase was of 24%. Note that changes in NO<sub>2</sub> levels are based on rounded numbers and % changes are not.

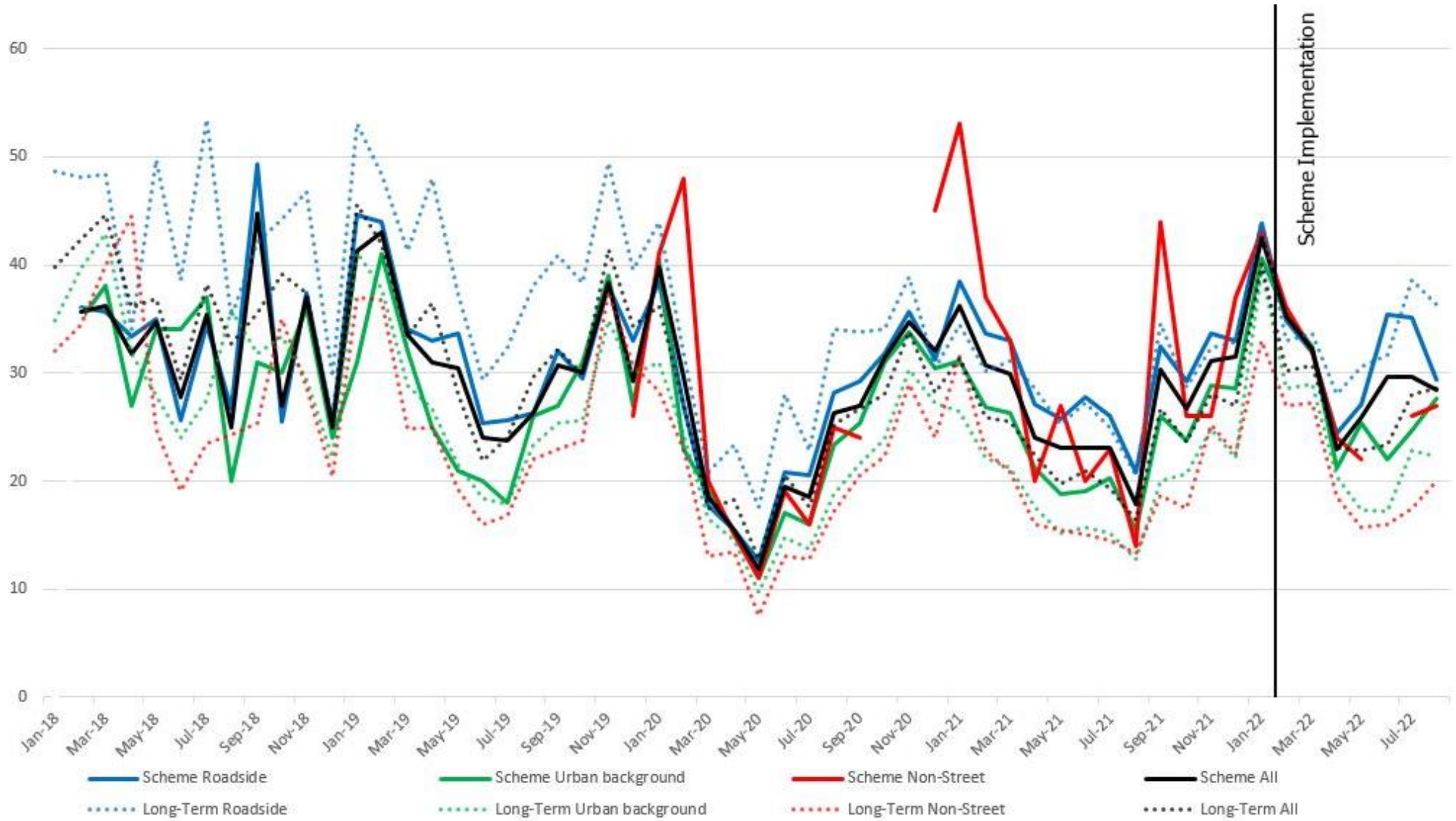
**Table 26: (Overall) NO<sub>2</sub> levels in St. Mary's Church and borough long term diffusion tube sites**

	<b>Feb '21 – Oct '21 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Feb '22 – Oct '22 NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (µg/m<sup>3</sup>)</b>	<b>Change in NO<sub>2</sub> (% change)</b>
<b>St. Mary's Church</b>	25	30	+5	<b>+19%</b>
<b>Whole borough long term sites</b>	22	27	+5	<b>+19%</b>

Taking the average of all sites for St. Mary's Church and the wider borough, there have been increases of a similar magnitude – of 19% for both. The raw change in NO<sub>2</sub> in µg/m<sup>3</sup> is +5 for both groups of monitors as well. Note that changes in NO<sub>2</sub> levels are based on rounded numbers and % changes are not.

Graph 5 on the following page compares the trends in NO<sub>2</sub> levels in the St. Mary's Church LTN across Boundary roads, Internal roads and Non-Street sites from January 2018 through to August 2022.

**Graph 5: Average NO<sub>2</sub> levels in St. Mary's Church LTN compared to long-term borough-wide sites from diffusion tubes**





## Insights: Air Quality

The results in Tables 23 to 26 and Graph 5 show that there has generally been a moderate increase in the concentration of NO<sub>2</sub> between the two periods assessed, both within the St. Mary's Church LTN scheme area and across the borough at large – this follows after several years when both metrics were showing improvements in air quality.

In summary these results show:

- Overall changes in levels of NO<sub>2</sub> in the St. Mary's Church area are on par with those across the wider borough across most comparisons made (boundary, internal, all), and slightly lower for the non-street site.
- NO<sub>2</sub> levels in the scheme area have generally been within the annual objective level of 40µg/m<sup>3</sup>, although levels are above this limit at the Canonbury Road and Essex Road sites, which the council will continue to monitor.
- These results generally suggest that the scheme itself has not had a significant impact on air quality to date, although air quality across both geographic scopes has seen some worsening in 2022 following the relaxation of COVID-19 measures. However, results for 2022 are provisional and for part of the year only.
- It is noted that air quality has been gradually improving over the longer term, with a particularly large decrease in 2020. We continue to monitor air quality in the borough and will publish a report later in 2023 looking at results from 2022, comparing these to lower results in 2020 and 2021, as well as longer term pollution trends.

# Emergency vehicles access

## London Ambulance Service

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

As of December 2022, there have been no delays reported by LAS crews in the St. Mary's Church PFS area. The LAS continues to monitor traffic schemes across London and feeds back any incident of delay to local authority responsible for the scheme

## Metropolitan Police Service

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

However, at this time MPS has "no specific data available for low traffic neighbourhoods/People-friendly streets."

## 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 uses 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% of occasions.

## PFS monitoring analysis methodology

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

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

Please note that data from LFB is only available by ward. St. Mary's and St. James' ward also contains the St. Peter's LTN area, so it is not possible to isolate the impacts of St. Mary's Church LTN. However, as shown below, there does not appear to be a significant impact of LFB response times in the scheme areas.

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

## London Fire Brigade Response Time Results

**Table 27: Average attendance times of the London Fire Brigade – St. Mary’s & St. James’**

<b>Period</b>	<b>No. of mobilisations – St. Mary’s &amp; St. James’</b>	<b>Average Attendance 1st Appliance (minutes)</b>
<b>2019 (Baseline)</b>	276	4:04
<b>2020</b>	256	3:53
<b>2021</b>	303	3:53
<b>Post-Implementation (Feb 2022- Nov 2022)</b>	336	4:12
<b>Change against 2019 data</b>	n/a	+00:06

### Insights: London Fire Brigade response times

Given the extent of variables that affect response times, the differences between the 2019 baseline and following periods are considered limited by the LFB and the council. As such, it is the view of the LFB and the council that the St. Mary’s Church LTN has not significantly 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 by 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 activities being reported has also been taken into consideration.

Data has been drawn from the St. Mary's Church LTN area and the whole of Islington, with results from both areas being compared to understand trends around crime rates.

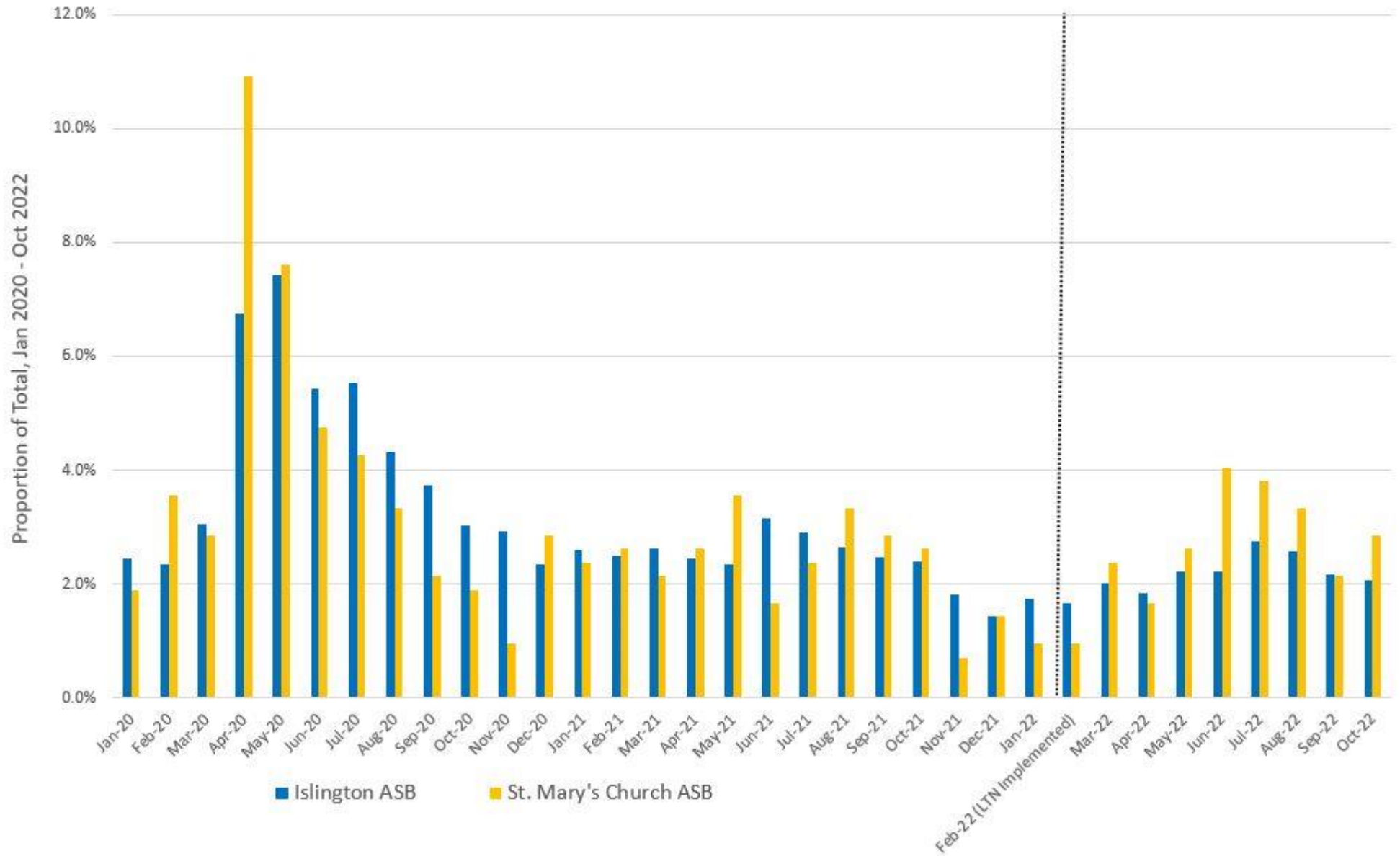
**Table 28: Proportional Breakdown of Calls and Crimes in St. Mary’s Church LTN and Islington, Jan 2020-Oct 2022**

Month	ASB Calls to the Council & Police (Islington)	ASB Calls to Council & Police (St. Mary’s Church LTN)	Street-Based Crime Calls to the Council & Police (Islington)	Street-Based Crime Calls to the Council & Police (St. Mary’s Church LTN)
Jan-20	2.5%	1.9%	3.9%	3.2%
Feb-20	2.4%	3.6%	4.0%	3.2%
Mar-20	3.0%	2.9%	3.0%	3.2%
Apr-20	6.7%	10.9%	2.1%	0.9%
May-20	7.4%	7.6%	2.7%	2.8%
Jun-20	5.4%	4.8%	2.7%	0.7%
Jul-20	5.5%	4.3%	3.0%	3.0%
Aug-20	4.3%	3.3%	3.4%	3.7%
Sep-20	3.7%	2.1%	3.3%	1.4%
Oct-20	3.0%	1.9%	3.2%	3.4%
Nov-20	2.9%	1.0%	3.0%	3.0%
Dec-20	2.4%	2.9%	2.7%	2.1%
Jan-21	2.6%	2.4%	2.2%	2.1%
Feb-21	2.5%	2.6%	1.9%	2.3%
Mar-21	2.6%	2.1%	2.5%	3.2%
Apr-21	2.4%	2.6%	2.6%	3.7%
May-21	2.3%	3.6%	2.8%	4.4%
Jun-21	3.1%	1.7%	2.5%	3.0%
Jul-21	2.9%	2.4%	2.7%	4.6%
Aug-21	2.6%	3.3%	3.0%	4.8%
Sep-21	2.5%	2.9%	3.1%	4.6%
Oct-21	2.4%	2.6%	3.2%	4.6%
Nov-21	1.8%	0.7%	3.3%	3.7%
Dec-21	1.4%	1.4%	2.7%	2.3%
Jan-22	1.7%	1.0%	3.3%	3.0%
Feb-22	1.7%	1.0%	2.9%	2.3%
Mar-22	2.0%	2.4%	3.0%	2.8%
Apr-22	1.8%	1.7%	2.8%	2.3%
May-22	2.2%	2.6%	3.4%	3.9%
Jun-22	2.2%	4.0%	2.9%	1.8%
Jul-22	2.8%	3.8%	3.1%	2.8%
Aug-22	2.6%	3.3%	3.1%	3.4%
Sep-22	2.2%	2.1%	2.7%	2.3%
Oct-22	2.1%	2.9%	3.0%	1.8%
<b>Total</b>	<b>100.0%</b>	<b>100%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 29: Volume of Calls and crimes in St. Mary's Church LTN and Islington, Jan 2020-Oct 2022**

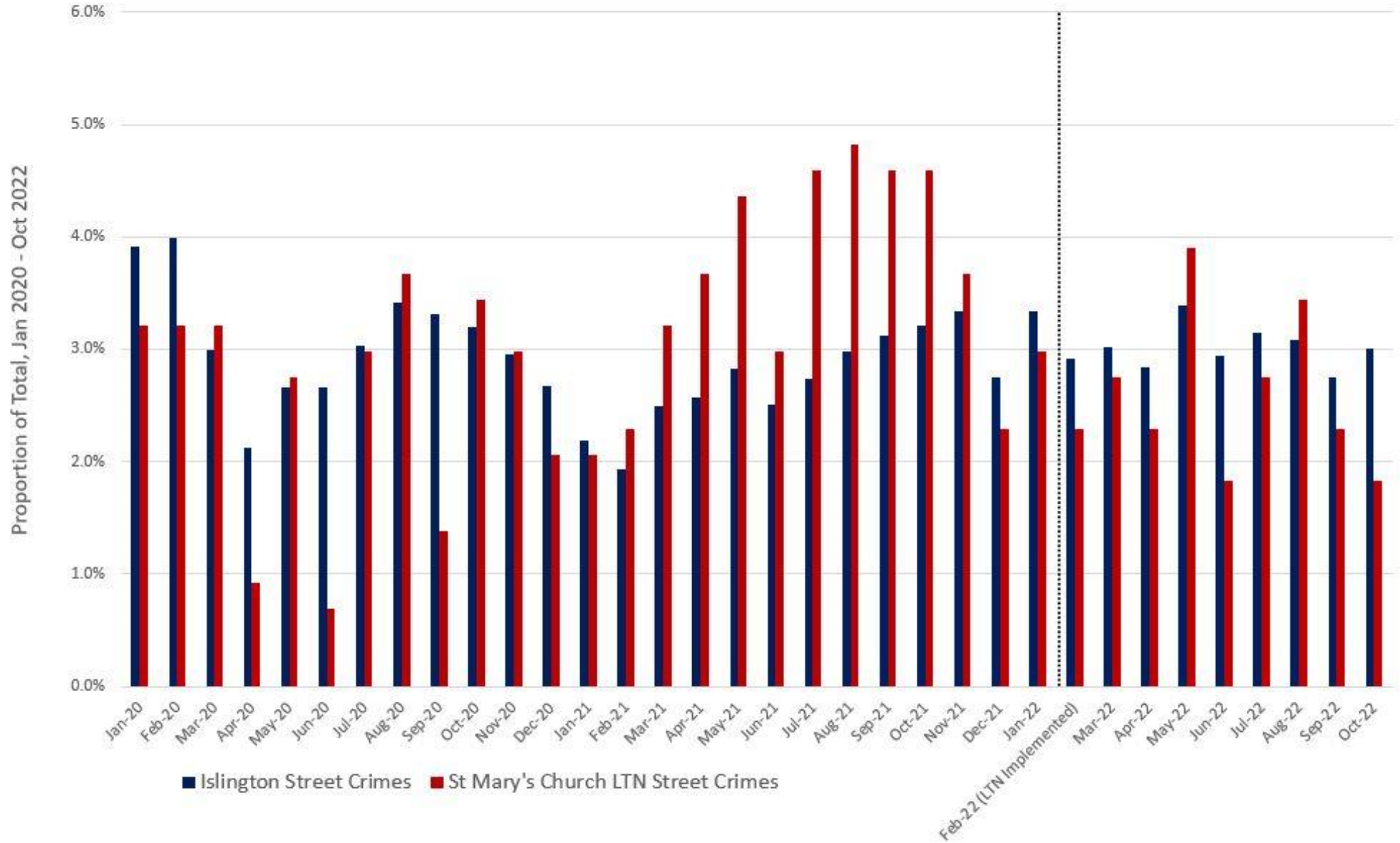
Month	ASB Calls to the Council & Police (Islington)	ASB Calls to Council & Police (St. Mary's Church LTN)	Street-Based Crime Calls to the Council & Police (Islington)	Street-Based Crime Calls to the Council & Police (St. Mary's Church LTN)
Jan-20	838	8	878	14
Feb-20	805	15	895	14
Mar-20	1,042	12	670	14
Apr-20	2,305	46	476	<5
May-20	2,537	32	597	12
Jun-20	1,857	20	595	<5
Jul-20	1,891	18	678	13
Aug-20	1,479	14	765	16
Sep-20	1,279	9	741	6
Oct-20	1,038	8	716	15
Nov-20	1,002	<5	663	13
Dec-20	806	12	599	9
Jan-21	891	10	489	9
Feb-21	854	11	432	10
Mar-21	899	9	559	14
Apr-21	834	11	576	16
May-21	802	15	634	19
Jun-21	1,076	7	562	13
Jul-21	991	10	613	20
Aug-21	902	14	669	21
Sep-21	847	12	698	20
Oct-21	819	11	720	20
Nov-21	624	<5	747	16
Dec-21	487	6	615	10
Jan-22	594	<5	748	13
Feb-22	566	<5	654	10
Mar-22	691	10	675	12
Apr-22	628	7	636	10
May-22	762	11	758	17
Jun-22	759	17	660	8
Jul-22	941	16	705	12
Aug-22	879	14	692	15
Sep-22	740	9	615	10
Oct-22	710	12	674	8
<b>Total</b>	<b>34,175</b>	<b>421</b>	<b>22,404</b>	<b>436</b>

**Graph 6: Proportion by Month of ASB Calls to the Council and Police, Jan 2020 – Oct 2022**





**Graph 7: Proportion by Month of Street Crime Calls to the Council and Police, Jan 2020 – Oct 2022**



## Insights: Anti-Social Behaviour and Crime Patterns

In terms of overall levels of crime since the start of 2020, those reported in St. Mary's Church LTN has remained broadly in line with borough-wide trends. Anti-social behaviour (ASB) peaked across both geographies in the Spring of 2020, likely in response to COVID lockdowns and calls being made with regards to others breaching lockdown rules; in comparison, street-based crime was particularly low during 2020 as compared to the wider borough but was higher-than average in 2021 before falling again in 2022.

The council's ASB team have found no evidence to suggest that the rate increased following the implementation of the PFS area.

# Concluding Remarks

In summary, the purpose of this report has been to assess how the St. Mary's Church LTN has impacted a range of indicators in the area by comparing the 2021 baseline traffic counts (before implementation of the LTN) and the pre-consultation traffic counts collected in January 2023, and supplemented by other data types.

Based on the analysis in this pre-consultation report, it appears that the St. Mary's Church LTN has delivered its goal of reducing traffic levels on internal roads, by a total of 41%, without an adverse impact on boundary roads (where traffic also dropped by 12% overall).

However, when considering individual roads in detail, it is apparent that the increases in traffic on Canonbury Square and Canonbury Lane (+57% and +35%, respectively) likely relate to the scheme as they offer the only remaining through route crossing through the scheme area. However, more detailed analysis shows that the baseline results for these sites reflect a drop in the volume of traffic when compared to counts taken prior to the implementation of the neighbouring Canonbury West LTN (located to the north east of Canonbury Road), which removed a route through the wider area via Canonbury Park North, Canonbury Place, Canonbury Square and Canonbury Lane. Comparing the data from before any schemes were implemented to the pre-consultation data, it shows that there has been a slight overall decrease in traffic on Canonbury Lane – and likely for Canonbury Square as well, for which comparable midweek peak-hour data was not available. The council will continue to monitor traffic volumes at these locations. Future potential measures in neighbouring areas to the west of Upper Street, if implemented, may reduce the flow of east-west traffic. This may benefit these streets by reducing cut through traffic. Counts in the wider area, on local, and other main roads indicate a generally positive picture of minor to moderate traffic reduction.

For goods vehicles and motorcycles, there is little to note for internal roads as in most cases such vehicle volumes followed the general trend of motorised vehicles – largely of significant reductions. Across all boundary roads, LGVs increased in volume by quite some margin (4,667 to 9,391 per day, +101%), mostly on Upper Street and Essex Road, whilst HGV numbers dropped by around 1,200 per day. Canonbury Square and Canonbury Lane both saw considerable increases in HGV numbers and motorcycle counts.

Cycling levels across the scheme area appear to have been impacted by the colder weather during the pre-consultation counts). Cyclists counted on internal roads were 15% fewer in the pre-consultation counts, vs. 2% fewer on boundary roads.

In terms of vehicle speeds, the average and 85th percentile speeds have generally seen relatively low to moderate reductions on all internal

and most boundary roads. This is similar for speeding of motorised vehicles on all internal and most boundary roads, which have moderately decreased in most cases. The only road with a significant increase in vehicle speeds was Gaskin Street, where average speeds increased by 1.9mph or by 14%, however, the average speed at pre-consultation stage was 15.4mph, which is similar to the weighted average pre-consultation speed for internal roads (15.3 mph).

Considering air quality, there has generally been a moderate increase in the concentration of NO<sub>2</sub> levels between the two periods assessed across all metrics, although it is noted that such increases have generally been on-par or slightly less significant than those of the wider borough, and it is considered that most increases in NO<sub>2</sub> levels outlined in the report are related to the post-COVID increase in activity (especially considering longer term improvements in air quality ). Still, there are two locations for which NO<sub>2</sub> levels have exceeded the legal limit, on Essex Road and Canonbury Road, and the council will continue to monitor these sites as part of ongoing air quality monitoring in the borough. We will publish a report later in the year looking at results for 2022, comparing these to lower results in 2020 and 2021, as well as longer term pollution trends.

In terms of other metrics considered including emergency response times, crime reports and bus journey times, it does not appear that the scheme has had an appreciable impact on any of them.

Future decisions to keep, remove or amend the St. Mary's Church LTN trial are not dependent on any single metric, but a combination of them together with feedback from the online survey and upcoming consultation with residents and stakeholders.

The public consultation for the St. Mary's Church PFS trial will take place between Wednesday 29 March and Wednesday 26 April 2023. More information is available at <https://www.islington.gov.uk/roads/people-friendly-streets/st-marys-church>

# Appendices

## Appendix 1: St. Mary's Church Traffic Count Locations and Type

### Islington-commissioned traffic count sites and type

<b>Street name</b>	<b>Detailed Location</b>	<b>Northing</b>	<b>Easting</b>	<b>Count Type</b>
Canonbury Road	North of junction with Colebeck Mews, opp. Canonbury Primary	531756	184573	ATC
Canonbury Road	North of junction with Essex Road	532109	184170	ATC
Essex Road	Opp No164	532086	184069	ATC
Essex Road	on left hand side of entrance to cycle path going past Waterstones.	531722	183632	ATC
Upper Street	TfL light column on west side of Upper Street, o/s 'The only place for pictures'	531628	184469	Radar
Gaskin Street	O/s 1-17 Hepworth Court	531739	183780	ATC
Dagmar Terrace	O/s 30/32	531822	183951	ATC
Cross Street	O/s 12/13	531825	183884	ATC
Florence Street	O/s 5	531719	184152	ATC
Hawes Street	Opp Hume Court	531824	184062	ATC
Halton Road (north?)	Side of 14 Cross Street	531913	183936	ATC
Halton Road (south?)	Opp R/o 1/16	531884	184204	ATC
Braes Street	Opp S/o 97-112 Halton Mansions	531940	184260	ATC
Canonbury Lane	O/s 19/21	531671	184406	ATC
Greenman Street	R/o 148-150 Essex Road	532090	184008	ATC
Cross Street	O/s 66 Pub	531726	183996	ATC
Theberton Street	Lamp column; Opposite 21	531571	183768	ATC
Barnsbury Street	Lamp column; J/w Upper Street	531653	184175	ATC
Islington Park Street	Lamp column; J/w Liverpool Road	531411	184351	ATC
St. Paul's Road	West of junction with Compton Road, o/s Sainsbury's	531798	184753	ATC
Upper Street	Between junctions with Barnsbury Street and Florence Street	531669	184167	Radar
Palmer Place	Near junction with Holloway Road	531174	185184	ATC
Liverpool Road	Near junction with Holloway Road	531128	185237	ATC

White Lion Street	Near Donegal Street	531108	183216	ATC
Liverpool Road	Near junction with Upper Street	531447	183303	ATC
Furlong Road	Between junctions with Orlestone Rd and Crane Grove (Opp 4/6 Furlong Road)	531402	184865	ATC
Canonbury Square	Opp 4	531777	184420	ATC

### TfL permanent traffic sites and coordinates (all ATCs)

<b>Street name</b>	<b>Northing</b>	<b>Easting</b>
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 extremely accurate. 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 was used before and after and the method is considered a good industry standard. They are used as a standard in monitoring transport schemes.

## Appendix 2: Traffic Count Normalisation Methodologies

To calculate the normalised percentage differences, the November 2021 traffic count volumes have been divided by 0.9415 and the January 2023 traffic counts by 0.9458 to give normalised volumes. In other words, in order to account for the fact that there was (generally) less traffic on Islington streets from January 2020 onwards, we have provided adjusted figures that provide an estimate for what the traffic would have been if there had not been disruptions from broad events such as COVID-19 or the cost-of-living crisis. This allows us to analyse the impacts of the LTN scheme rather than the impacts of current events / central government policy.

To calculate the percentage change, the difference between the two has been taken 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 daily average percentage difference between the 'baseline' month (pre-COVID-19 impact) and the corresponding 'impacted' month (i.e. November 2021 and January 2023) across all the permanent TfL counter sites around Islington, and taking an average difference for the whole month.



## Appendix 3: 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 St. Mary's Church LTN 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 St. Mary's Church LTN area are listed below, with details about type and if they have been added as part of the PFS programme or were pre-existing.

### St. Mary's Church LTN air quality monitoring sites type and period of installation (all diffusion tubes)

<b>Location</b>	<b>Easting</b>	<b>Northing</b>	<b>PFS road type</b>	<b>Monitoring type</b>	<b>Date of Installation</b>	<b>Site Type by DEFRA classification*</b>
Upper Street	531700	183973	Boundary Road	Diffusion tube	May-21	Roadside
Upper Street	531619	184528	Boundary Road	Diffusion tube	Apr-20	Roadside
Essex Road	531722	183636	Boundary Road	Diffusion tube	May-21	Roadside
Essex Road	531838	183739	Boundary Road	Diffusion tube	Apr-21	Roadside
Canonbury Road	532186	184150	Boundary Road	Diffusion tube	Jul-20	Roadside
Canonbury Road	531735	184594	Boundary Road	Diffusion tube	Feb-18	Roadside
Highbury Corner/Dixon Clark Court	531699	184703	Boundary Road	Diffusion tube	Jan-16	Roadside
Tyndale Lane	531651	184313	Boundary Road	Diffusion tube	Feb-18	Roadside
Halton Road	531877	184251	Internal Road	Diffusion tube	May-21	Urban background
Hawes Street	531790	184052	Internal Road	Diffusion tube	May-21	Urban background
Gaskin Street	531783	183760	Internal Road	Diffusion tube	Sep-20	Urban background
Cross Street	531949	183943	Internal Road	Diffusion tube	Aug-20	Urban background
Canonbury Lane	531763	184427	Internal Road	Diffusion tube	Sep-20	Urban background
Fowler Road	531933	183995	Internal Road	Diffusion tube	Feb-18	Urban background
Collins Yard	531686	183708	Internal Road	Diffusion tube	Dec-19	Urban background
St Mary's Pre School	531737	183917	Non-Street	Diffusion tube	Dec-19	Urban background

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.

## 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 with regards to monitor deployment. However, it will not have fully gone through this process, especially with regards to normal end of year analysis processes for 2022, and should therefore be treated as provisional.

The 2018-2021 data in this report has been adjusted using a correction factor. Adjusting data in this way is standard practice in making air quality data as accurate as possible, more information on this process can be found in our annual air quality reports. The data for 2022 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. It is noted that since the data being compared in this report is not for full calendar years, instead of a strict 12-month annualisation process being used, the underlying principles have been used to infill individual months where air quality data was not available – with period averages based on the months being compared (in this case February to October 2021 and the same months in 2022).

## 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 NO<sub>2</sub> emissions came from inside Islington. Therefore, it can be very hard to pick up on local changes caused by schemes such as the LTNs.

Pollution also varies significantly over time due to a range of external factors (such as weather) for which this study has not corrected. Therefore, ideally, a longer period of study would be required to analyse these results more fully. This would also allow further quality control of data that has not been possible with these results. There is also further uncertainty in recent results and whether these will represent longer term trends due to COVID-19. Studies of the first lockdown in March, for example by the [Greater London Authority](#), show a decrease in overall motorised traffic and NO<sub>2</sub> levels but no consistent change in PM due to weather impacts.

## Appendix 4: SYSTRA Statement

SYSTRA has been commissioned to prepare this report in partnership with the London Borough of Islington.

SYSTRA is a global leader in mass transportation and mobility, employing over 7,000 global employees across 80 countries. SYSTRA has the unique advantage of being not only a Transport Consultancy, but also Social and Market Research Consultancy. Their team members have an in-depth understanding of both the transport sector and of social and market research techniques, providing expert support in monitoring and evaluation both direct to clients and also in a peer review capacity. They provide a wealth of experience in conducting both qualitative and quantitative transport research with stakeholders to help understand their priorities and to inform options for future investment and policy development.

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

## Appendix 5: Individual Site Volumes & Speeds

The following section provides detail for each monitored site including a breakdown of flows and speeds by monitoring period and by vehicle class.

As noted in the main report, data was processed using SYSTRA's proprietary automated data processing tools, which draw together raw data from all reporting periods and apply formulae-based calculations to produce the charts and tables shown in the following pages and appendices. However, as it is not uncommon for there to be problems with data surveys (broken equipment, cars parked on ATC bands etc.) as well as anomalous readings from surveys resulting from one-off events (waterworks, gas leaks, accidents etc.), all data has been thoroughly checked by hand and "patched" (i.e. blank data or significantly anomalous data has been substituted by more representative data from the site/wave in question), which is a necessary task in order to maintain comparable data.

For St. Mary's Church, it appears from the data that one of the waves of raw data has been shifted by one hour, and so for a range of roads the AM/PM peaks do not line up perfectly – however, as it cannot be fully confirmed that this is a result of data capture and not actual user behaviour, this has not been altered in the charts or analysis. It is confirmed that a full week's data has still been used, although it is possible that one hour of weekday data has instead been allocated to weekend data and vice versa.

It is also noted that data for goods vehicles is presented as seven-day averages in the appendix (vs. weekday averages in the report).