People-Friendly Streets
Better places for everyone

# Cycleway 38 South Trial

## Pre-consultation monitoring report

ISLINGTON

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# Summary of key findings

Cycle volumes along Cycleway 38 have increased by 33%

Cycling increased by 96% on Tolpuddle Street

Lime bike-hire trips increased significantly on Cycleway 38

Motor traffic volumes along Cycleway 38 decreased by 2%

On average, across all streets monitored, vehicle speeds did not change

No significant impact on London Fire Brigade response times

Bus journey times have stayed the same or decreased along the route

No significant impact on anti-social behaviour and crime rates

The above figures reflect before and after comparisons between August/September 2020 - September 2021. The traffic figures have been normalised to account for the impacts of Covid-19 lockdowns. More information on this process is available in the main report.

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# Why are we doing this?

In response to the Covid-19 crisis the council decided to accelerate the delivery of a number of transport programmes to encourage local people to walk and cycle and to provide space for exercise, play and social distancing on local streets. This included the pop-up cycleway on Liverpool Road between Holloway Road and Pentonville Road, providing a safer route for people cycling at a time when people were looking for alternative means of getting around and freeing up space on public transport.

The council has always worked hard to make things better and has been planning initiatives to improve Islington's streets for some time but Covid-19 has had a big impact on the way we use our streets.

Nothing will ever be quite the same after the pandemic, which is why now is the time to make bold changes for a cleaner, greener and healthier Islington. Through the people-friendly streets programme the council wants to ensure that Islington's streets are more welcoming to all users, and give greater priority to walking, cycling, public transport and improve the public realm.

We want to deliver cycleways to ensure that more residents have close access to a comprehensive cycle network, allowing more people to choose to cycle within and beyond their local communities. We know that in Islington alone, there are thousands of trips which could be made by cycle each day, yet there remains a range of factors which deter people from cycling. Allocating space for cycling with physical separation from vehicles reduces traffic dominance and some of the fears people have of undertaking journeys by cycle.

People-friendly streets make it easier, safer and more pleasant for people to walk, cycle and use wheelchairs, buggies and scooters. Every local trip switched from a motor vehicle to another way of travelling means one fewer vehicle on the road, leaving the roads clearer for people who have no choice but to use cars.

The Cycleway 38 trial went live in September 2020, with swift implementation as part of the council's urgent Covid-19 response, to make walking and cycling easier and safer as alternatives to public transport and prevent a car-based recovery.

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# Objectives

As the project was implemented as a trial under an Experimental Traffic Order (ETO) it is very important to monitor the scheme 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 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 monitoring report reflects a before and after assessment of the trial using the following data: cycling counts, Lime cycle hire data, motorised traffic counts and speeds, motor traffic journey times, background air pollution data, London Fire Brigade, Metropolitan Police Service and London Ambulance Service response times and bus journey times.

Future decisions to keep, remove or amend the Cycleway 38 South trial are not dependent on any single metric, but a combination of them together with feedback from the formal consultation with residents and stakeholders.

# Results

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## Cycling

- Cycling has increased by 33% along the route
- The largest changes in cycling levels are as follows:
o Tolpuddle Street, +96%
o Liverpool Road (south of Barnsbury Street), +56% representing an increase of roughly 500 daily cycles counted.
- The only location where cycling volumes decreased was at Liverpool Road near Tolpuddle Street, which is not on Cycleway 38, where a -16% decrease was seen.

## Motorised traffic

•Motorised traffic has decreased slightly at sites along Cycleway 38, and has increased slightly at other sites in the vicinity. On average along the route there has been a less than 2% change in traffic volumes.
- The greatest difference in flows was observed at Liverpool Road near Furlong Road, where flows decreased by 17%, representing a decrease of roughly 2,000 daily vehicles.
- At the southern end of Liverpool Road at Tolpuddle Street, flows increased by 12% (the largest increase across all sites).
- The above figures have been normalised to account for the impacts of COVID-19 on motorised traffic levels in September 2020 and September 2021.
- More information on this process is available in the main report.
- On average across all sites along the route, vehicle speeds decreased by less than 2%.
- The proportion of vehicles speeding increased by less than 1%.

## Lime bike-hire data

- Data from Lime bike-hire shows that trips made along the route have increased significantly in the year since Cycleway 38 was implemented.

## Air quality

- Based on one air quality monitoring site on Liverpool Road at St. Mary Magdalene Academy, air pollution has remained below the annual objective level of 40µg/m3. This broadly reflects borough-wide trends, suggesting the Cycleway 38 South trial has not had an adverse impact on air quality.

## Emergency Service response times

- Comparing the 2019 average response time and the post-implementation period average, there was a slight increase in both the number of mobilisations and average attendance time for London Fire Brigade(LFB) vehicles. However, given the extent of variables that affect response times, these results are considered negligible by the LFB and the council. As such, it is the view of the LFB and the council that it is not possible to attribute any changes in the average attendance times to the Cycleway 38 South scheme.
- The London Ambulance Service and Metropolitan Police Service have not reported any delays related to the implementation of Cycleway 38.

## Bus journey times

- Compared to the average from before Covid-19, bus journey times on the two monitored routes, Liverpool Road and Penton Street, have either decreased or stayed the same.

# Contents

# Glossary

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

**AM peak** – In this report "AM peak" refers to the hours between 07h00 and 10h00.

**Automatic Traffic Counters** – "Automatic traffic counters" (ATCs) measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. They are considered to be approximately 98% reliable. (See Appendix 3 for more details).

**Cycleway 38 South** - Cycleway route between Holloway Road and Pentonville Road via Madras Place- Liverpool Road - Tolpuddle Street – Penton Street.

**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.

**Heavy Goods Vehicle (HGV)** – A heavy goods vehicle (HGV) is more commonly known as a "lorry", and is typically >7.5 tonnes in weight. The largest of these vehicles typically have separate cab and cargo sections, whilst some of the smaller ones have cab and cargo integrated into one unit.

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

Light Goods Vehicle (LGV) – A light goods vehicle (LGV), for the purposes of this study, represents vans or similar vehicles which are smaller than HGVs but larger than cars. These are typically thought of as delivery vans.

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

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

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

# Cycleway 38 South in context

In September 2020 a temporary pop-up cycle lane was implemented between Holloway Road and Pentonville Road, forming the southern section of the Palmers Green to Farringdon cycle route (Cycleway 38) and a key section of a network of cycle routes the council is developing and delivering across the borough as part of Islington Council's People Friendly Streets (PFS) programme and the need for an urgent transport response to Covid-19.

The current design comprises with-flow cycle lanes along the southern section of Cycleway 38 (C38), connecting with the northern section of the route east of Holloway Road. The route is comprised of 24-hour mandatory cycle lanes, except at sections where advisory lanes are in place due to narrow carriageway widths, the need for loading facilities and to allow the 812 bus service to operate hail and ride next to the footway. Most of the mandatory cycle lanes have light physical segregation in the form of traffic wands to provide added protection for people cycling, except at junctions, parking bays and crossing locations.

This monitoring report provides data and insights relating to the C38 South scheme trial specifically by comparing data from before implementation in August/September 2020 (referred to as "baseline traffic counts") to five months after implementation in February 2021 (referred to as "interim traffic counts") and the most recent counts taken in September 2021.

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

**Nearby Low Traffic Neighbourhoods and School Streets** – As can be seen in Map 2, Cycleway 38 is in close proximity to a number of low traffic neighbourhoods (LTNs). The southern section starts on the northern boundary of Amwell LTN, and runs parallel to the St Peter's, Canonbury East and West, and Highbury Fields LTNs. The northern section of Cycleway 38 runs through the Highbury West LTN. This may therefore have impacted traffic levels along the new section of Cycleway 38, both motor traffic and cycling. In addition, the eastern end of Bride Street meets Liverpool Road where Cycleway 38 is in place. The Bride Street and Lough Road School Street scheme for St Mary Magdalene Primary School was introduced on 3 September 2020, meaning there is no access to motorised vehicles, except local residents, at school drop-off and pick-up times.

**Weather** – Weather can have a significant impact on travel choices and air pollution. During the week the baseline traffic counts were taken in August to September 2020 the minimum temperature was 6°C and the maximum was 22°C. During the week the interim traffic

counts were taken in February 2021 the minimum temperature was -1°C and the maximum was 16°C. Relatively cold temperatures are likely to have reduced volumes of people cycling in February. In September 2021, the minimum temperature was 11°C and the maximum was 23°C, providing similar weather to the 'before' counts taken in August/September 2020.

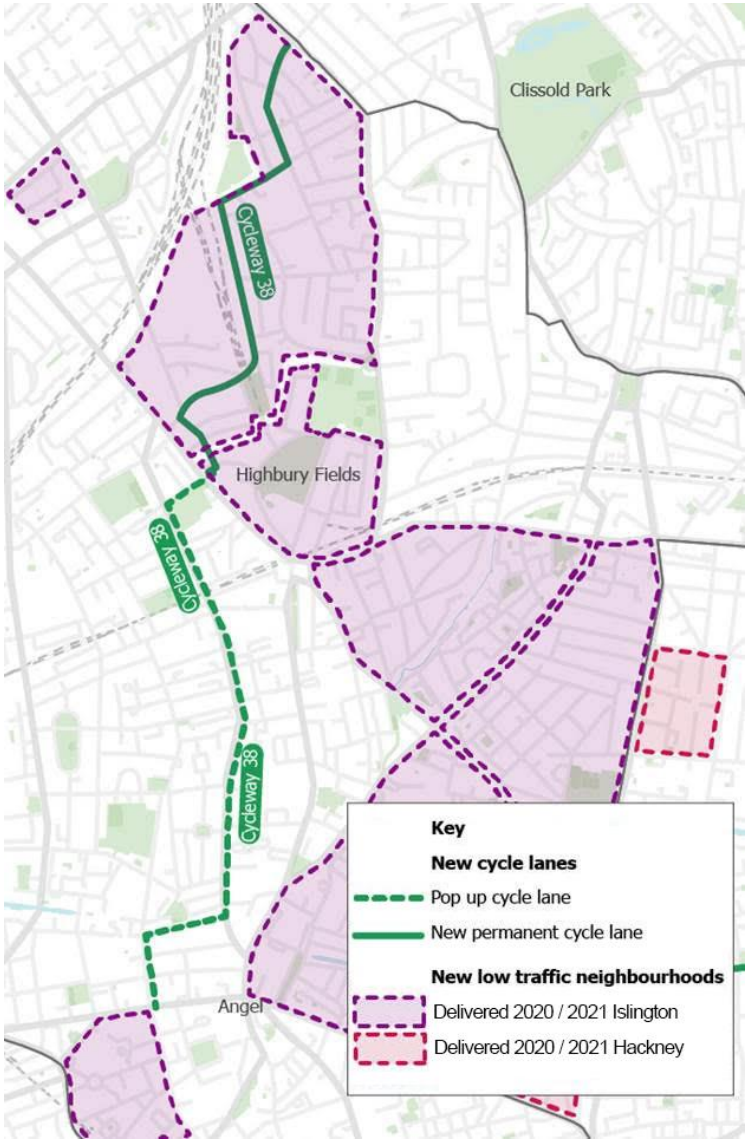
**National lockdowns –** as England has been going in and out of national lockdowns as a result of Covid-19, it is worth noting that the baseline counts in August/September 2020 took place after the first national lockdown was lifted. By contrast, February 2021 was during the third national lockdown, where the official advice was for people to stay at home, avoid public transport and work from home when possible. However, the final data collection took place in September 2021, when there were no national lockdowns or 'stay at home' orders, a comparable situation to when the baseline data was collected.

**Holidays** – the baseline traffic counts coincided with the end of the school summer holidays and incorporated the August Bank Holiday weekend. School holidays are generally associated with fewer journeys, although bank holiday weekends create additional leisure trips.

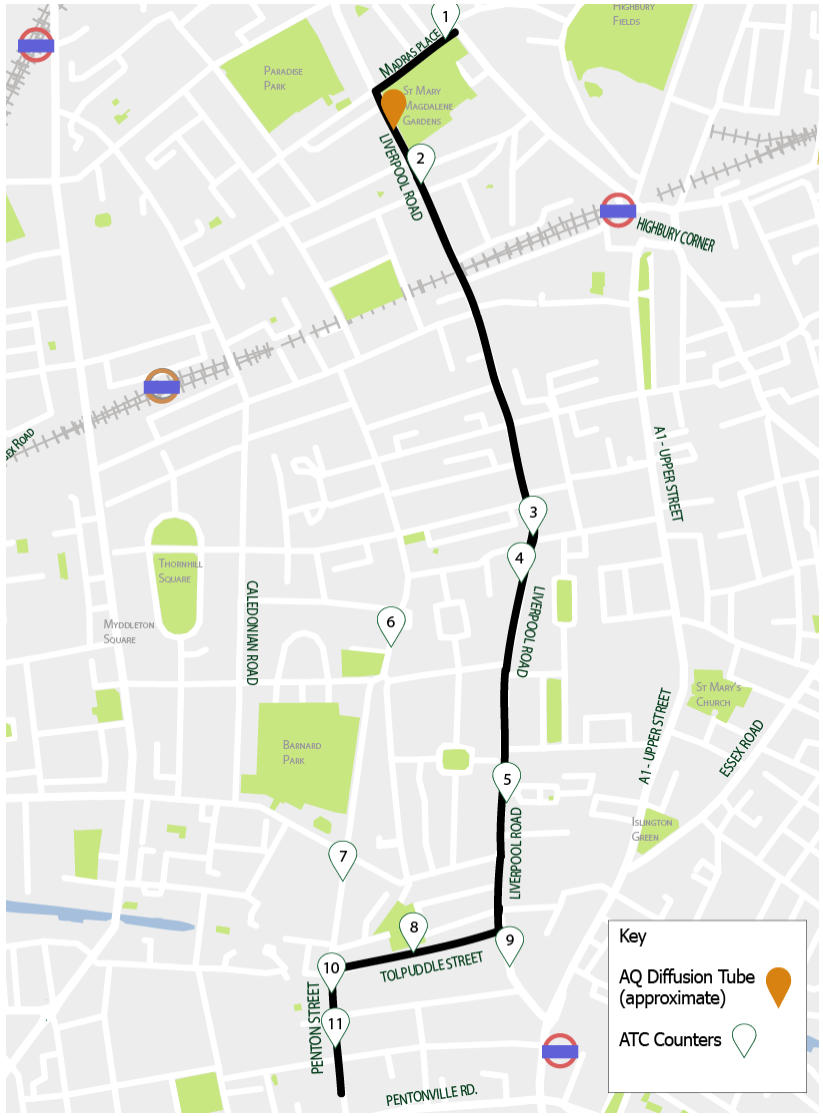
**Furlong Road and Digswell Street banned turns** - The council introduced banned right turns from Furlong Road and Digswell Street onto Holloway Road on 13 August 2021.

## Map 1: Cycleway 38 route from Holloway Road to Pentonville Road

## Map 2: Cycleway 38 in context



## Map 3: Cycleway 38 monitoring sites



# Traffic counts approach

## Traffic counts in the Cycleway 38 area

The count data presented in this report is not traffic modelling, but actual observed traffic, comparing traffic flows before the implementation Cycleway 38, to five and twelve months after the scheme went live, August/September 2020 compared to February 2021 and September 2021.

### Dates of traffic counts

**Baseline ("before") counts**: 26 August – 1 September 2020.

**Cycleway 38 implemented**: September 2020.

**Short-term interim ("after") counts**: 24 February – 2 March 2021, excluding site 9: Liverpool Road between Tolpuddle Street and Chapel Market and site 11: Penton Street between White Lion Street and Pentonville Road, for which monitoring took place between 1 and 7 March 2021.

**Medium-term interim ("after") counts:** 9 – 15 September 2021.

The council is using Automatic Traffic Counts (ATCs) to understand traffic volumes and speeds in the Cycleway 38 area to assess if the scheme is having the desired impact and respond (if required) with mitigating actions. A previous alignment of C38 had been proposed along Barnsbury Road and Thornhill Road, but discounted as it presented challenges in terms of meeting new cycle route quality criteria. Two count points along this previous alignment were included in the monitoring to understand any changes in cycling levels there following the introduction of the C38 scheme.

# Analysis and normalisation methodology overview

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

In order to calculate the normalisation figures in this report, daily volumes of motorised traffic have been drawn from a range of 12 permanent traffic counters managed by Transport for London (TfL) across Islington and used to establish monthly averages in 2019, 2020 and 2021.The locations of these counters are detailed in Appendix 3. The percentage difference between the same months across the two different years has been used to adjust the counts to normalise for Covid-19 disruption between the months in which counts have been taken. The methodology is set out in greater detail in Appendix 4 and has been independently peer reviewed (more information on the peer review is available on the St Peter's monitoring report page 9 and 105).

Analysis of the traffic counts taken in September 2020 reveals that motorised traffic across the permanent counters in Islington was approximately 6.9% lower than in September 2019. In February 2021, motorised traffic was approximately 25% lower than in February 2020, and September 2021 motorised traffic volumes were 4.2% lower than in September 2020.

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

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

| Month | Recorded traffic volumes against 2019 equivalents (%) |
|---|---|
| March 2020 | -27.97% |
| April 2020 | -49.87% |
| May 2020 | -38.34% |
| June 2020 | -22.10% |
| July 2020 | -13.46% |
| August 2020 | -6.55% |
| September 2020 | -6.90% |
| October 2020 | -10.48% |
| November 2020 | -22.13% |
| December 2020 | -16.11% |
| January 2021 | -25.7% |
| February 2021 | -24.8% |
| March 2021 | -31.3% |
| April 2021 | -22.5% |
| May 2021 | -18.7% |
| June 2021 | -8.9% |
| July 2021 | -6.2% |
| August 2021 | -2.6% |
| September 2021 | -4.2% |

# Interpreting count results

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

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

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

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

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

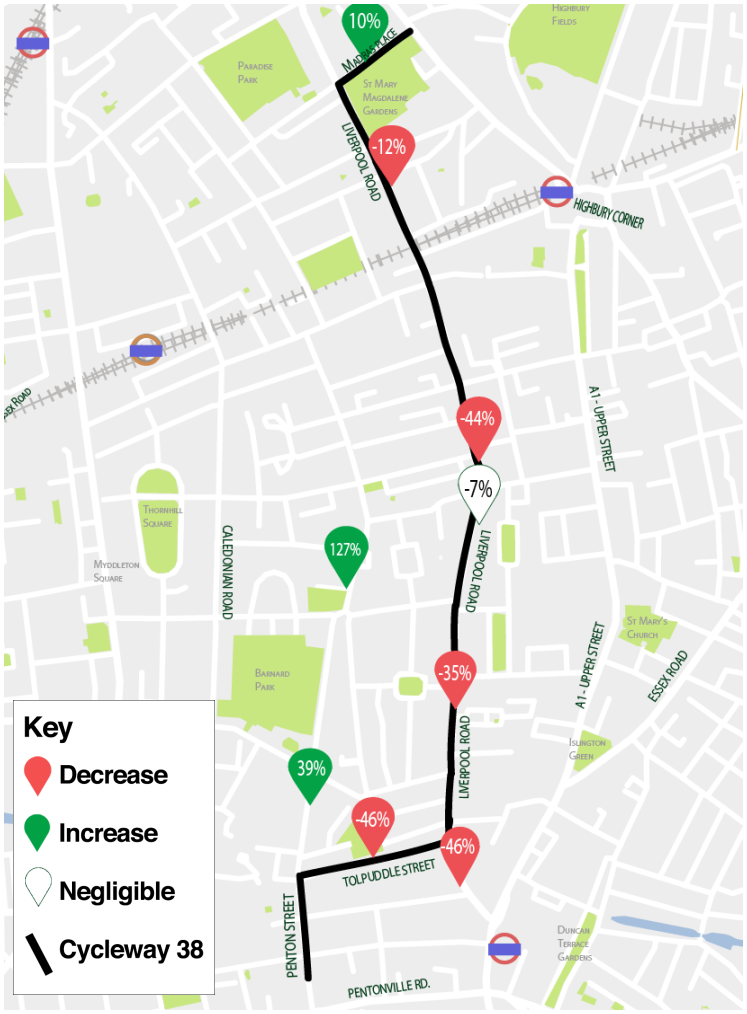
In addition, it must be noted that as vehicles travelling through the Cycleway 38 area are likely to go through multiple counter sites, it is almost certain that the number of vehicles counted in the area is higher than the actual number of trips.

# Cycling

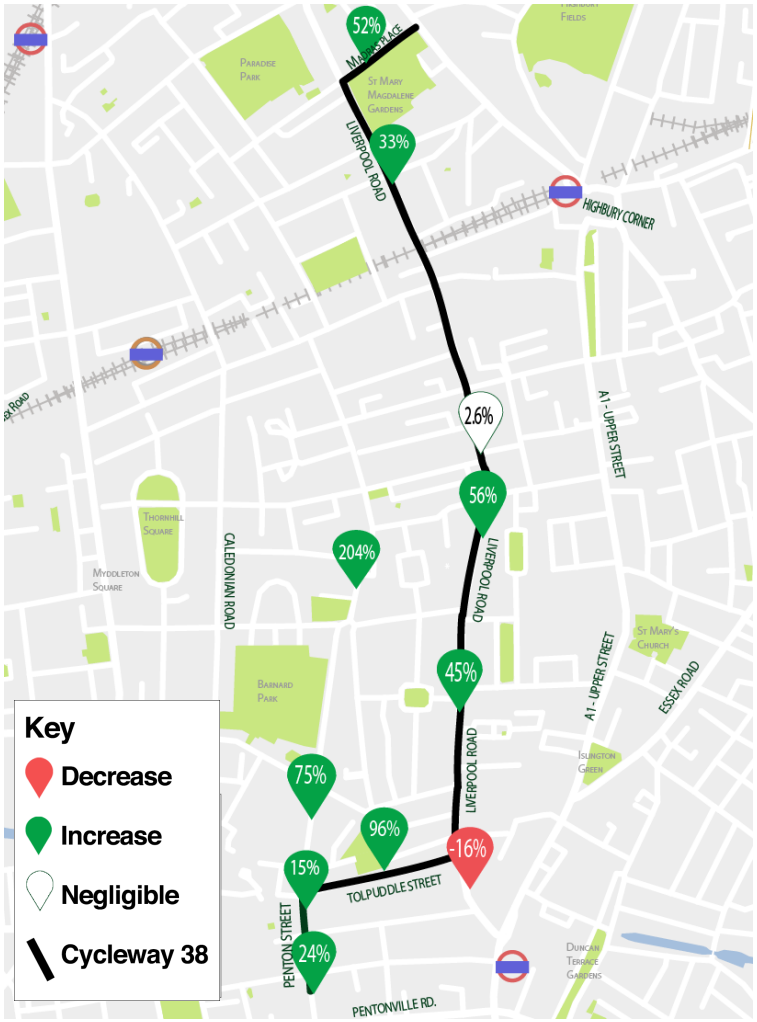
# Cycling volumes along the route

**Map 4: Percentage change in cycling volumes (seven-day daily averages) compared to baseline data:**

**Interim - February 2021**




**12-month - September 2021**



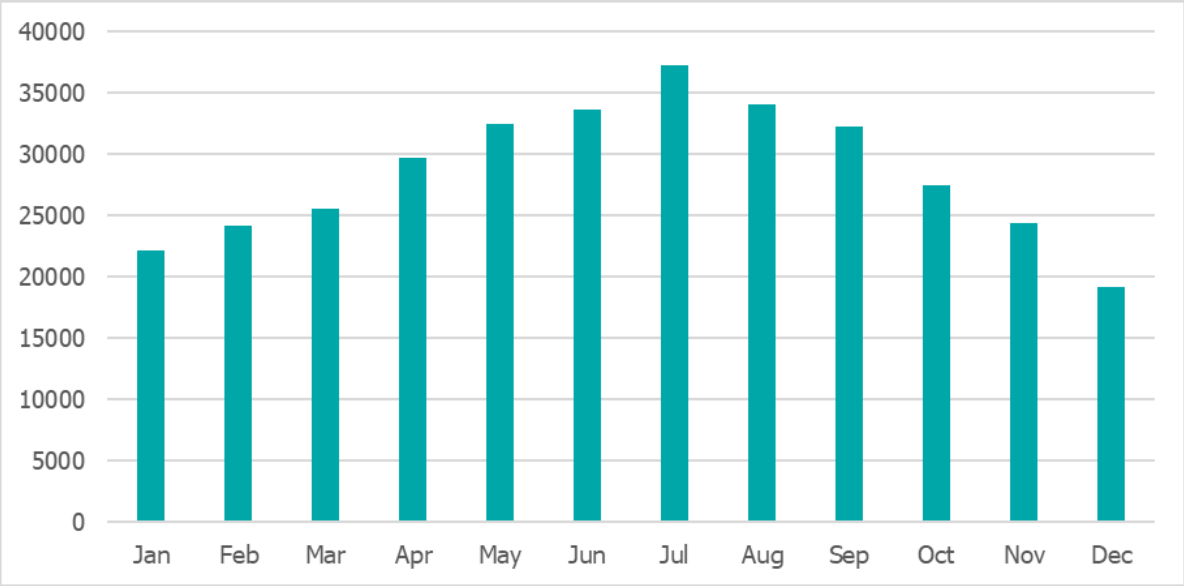
We have not normalised cycling figures for Covid-19 due to the lack of an available source that encompasses all cycle users, and because there are likely at least two key variables impacting these results: Covid-19 disruption, and seasonal variation. As such, the different contexts during which the two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

By September 2020 the first national lockdown had been released, whereas February 2021 was marked by the third national lockdown, during which people were advised to stay at home. The final data collection took place in September 2021, when there were no national lockdowns or 'stay at home' orders, a comparable situation to when the baseline data was collected. Cycleway 38 is a key commuter route, so the suppression of commuter travel in February 2021 could explain in part lower cycle numbers.

Cycling levels are also impacted by seasonal weather change including temperature and rainfall; for example, there is normally much more cycling in September than in February. During the week the baseline traffic counts were taken in August/September 2020 the minimum temperature was 6°C and the maximum was 22°C. During the week the interim traffic counts were taken in February 2021 the minimum temperature was -1°C and the maximum was 16°C. During the final data collection in September 2021, the minimum temperature was 11°C and the maximum was 23°C, providing similar weather to the 'before' counts taken in August/September 2020. As outlined in Graph 1 below, the variations in weather have a significant impact on levels of cycling: in 2019 the levels of Santander Cycle hires in February were around 33% lower than in September.

The combination of these factors mean we would expect cycling levels to be much lower in February 2021 than in September 2020 and September 2021.

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



## Results (seven-day daily averages)

**Table 2: Pedal cycles volumes - 7 day daily average**

| | August 2020 | February 2021 | Difference | Difference (%) | September 2021 | Difference | Difference (%) |
|---|---|---|---|---|---|---|---|
| Madras Place | 676 | 744 | 67 | 10% | 1,026 | 349 | 52% |
| Liverpool Road nr Furlong Road[1] | 946 | 837 | -109 | -12% | 1,259 | 313 | 33% |
| Liverpool Road north of Barnsbury St | 1,195 | 667 | -527 | -44% | 1,226 | 31 | 3% |
| Liverpool Road south of Barnsbury St | 918 | 855 | -62 | -7% | 1,431 | 513 | 56% |
| Liverpool Road nr Cloudesley Square | 991 | 649 | -343 | -35% | 1,436 | 445 | 45% |
| Tolpuddle Street nr Cloudesley Street | 277 | 151 | -126 | -46% | 544 | 267 | 96% |
| Penton Street nr Tolpuddle Street | 982 | 1,142 | 160 | 16% | 1,125 | 143 | 15% |
| Penton Street nr White Lion Street[2] | 1,315 | | | | 1,634 | 319 | 24% |
| **Average difference (Sites on Cycleway 38)** | | | | **-31%** | | | **33%** |
| Thornhill Road | 678 | 1,542 | 864 | 127% | 2,070 | 1,392 | 205% |
| Barnsbury Road[1] | 794 | 1,105 | 311 | 39% | 1,389 | 595 | 75% |
| Liverpool Road nr Tolpuddle Street | 1,324 | 720 | -604 | -46% | 1,110 | -214 | -16% |
| **Average difference (Other Sites)** | | | | **20%** | | | **63%** |

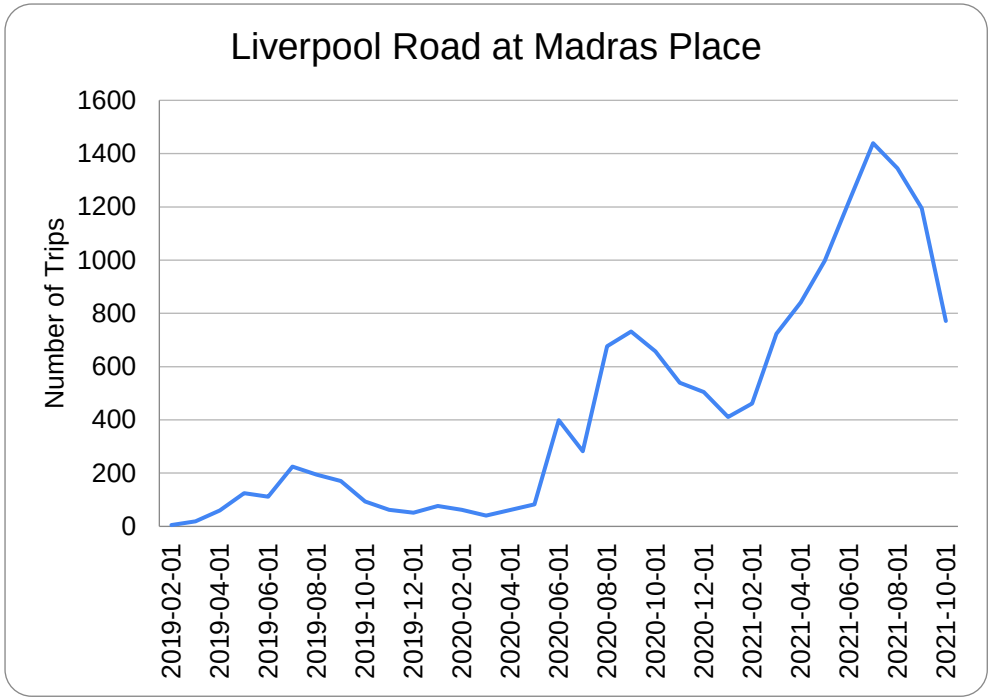
*[1] – Sites Liverpool Road nr Furlong Road, Barnsbury Road and Penton Street nr White Lion Street have missing data for a significant portion of the weekend period for September 2021, hence a 5 Day Average has been used at these sites only instead of a 7 Day Average.*

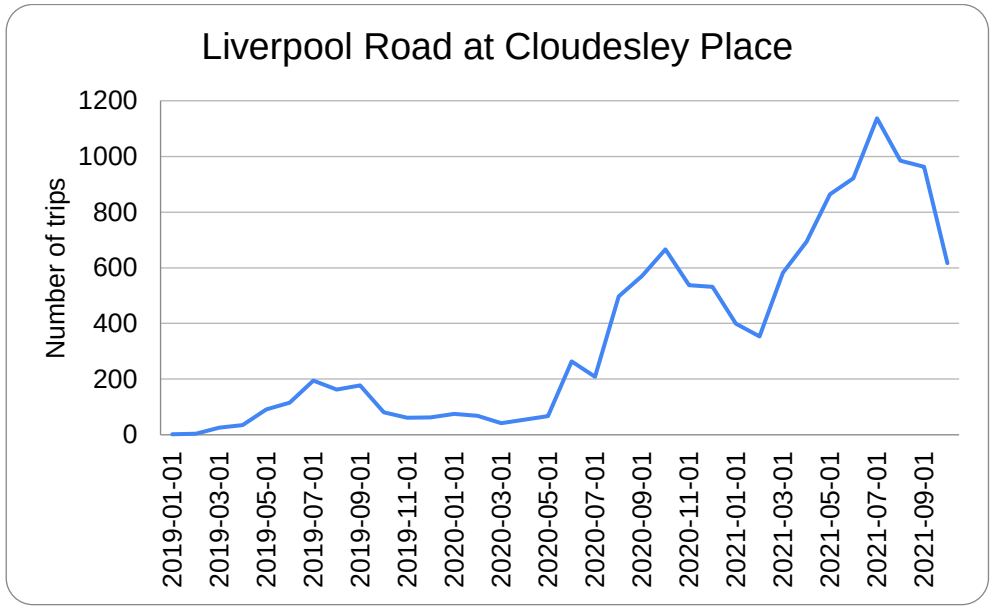
*[2] – Penton Street nr White Lion Street has missing data for a significant portion of February 2021, meaning only two days of data were collected. As a result, these have not been included in the results for February.*

# Cycle hire

**Lime e-bike usage**

Lime bikes are dockless electric bikes which can be unlocked by smartphone app and used in most places throughout LB Islington. Data on Lime e-bike trips in Islington has been provided for journeys starting or ending nearest to the following fixed points along Cycleway 38 South, with charts showing the number of trips taken for each section between January 2019 and September 2021 as set out below:





Liverpool Road at Cloudesley Place
Number of trips
1200
1000
800
600
400
200
0
2019-01-01
2019-03-01
2019-05-01
2019-07-01
2019-09-01
2019-11-01
2020-01-01
2020-03-01
2020-05-01
2020-07-01
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2020-11-01
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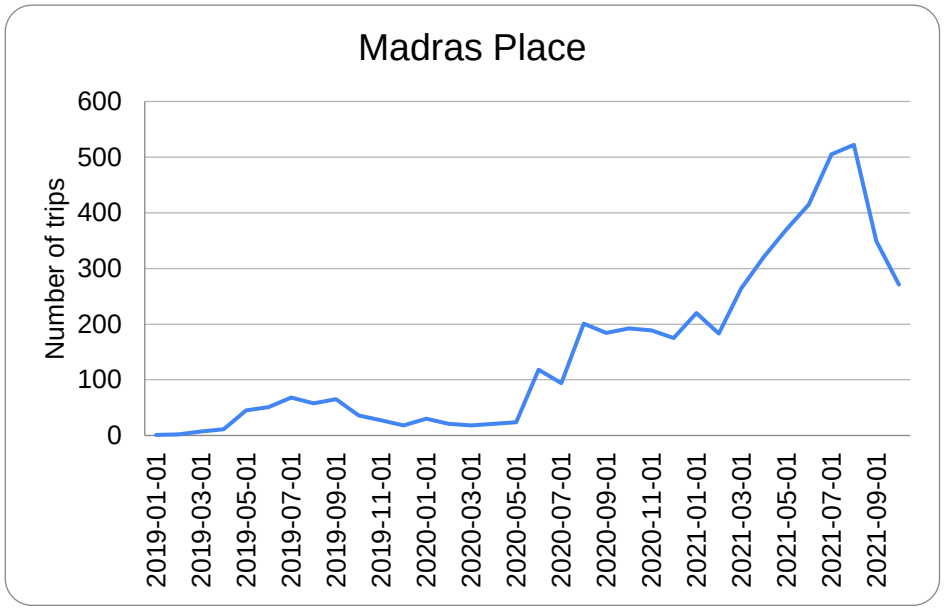
2021-05-01
2021-07-01
2021-09-01


Madras Place
Number of trips
600
500
400
300
200
100
0
2019-01-01
2019-03-01
2019-05-01
2019-07-01
2019-09-01
2019-11-01
2020-01-01
2020-03-01
2020-05-01
2020-07-01
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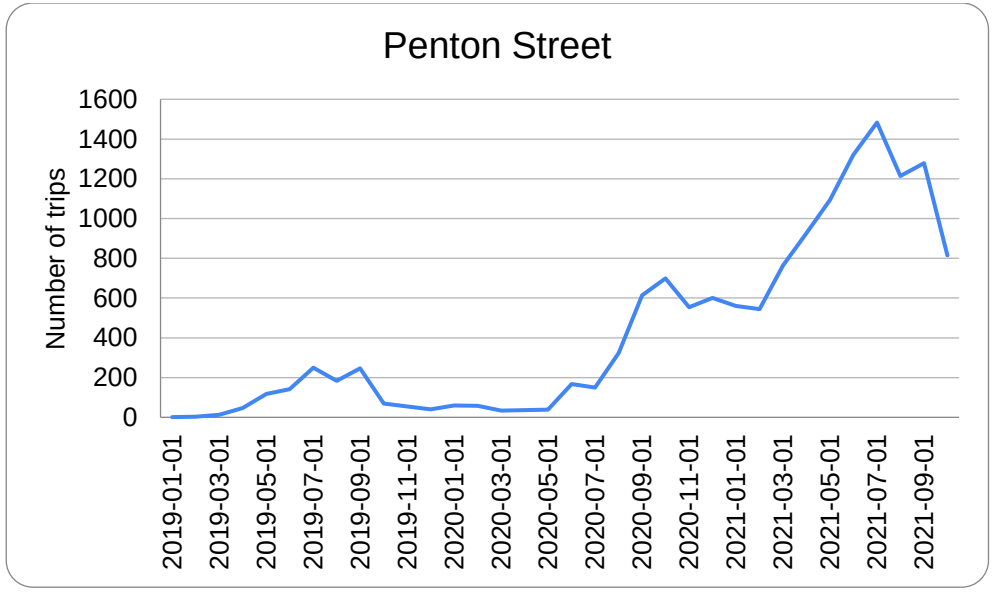
2021-07-01
2021-09-01


Penton Street
Number of trips
1600
1400
1200
1000
800
600
400
200
0
2019-01-01
2019-03-01
2019-05-01
2019-07-01
2019-09-01
2019-11-01
2020-01-01
2020-03-01
2020-05-01
2020-07-01
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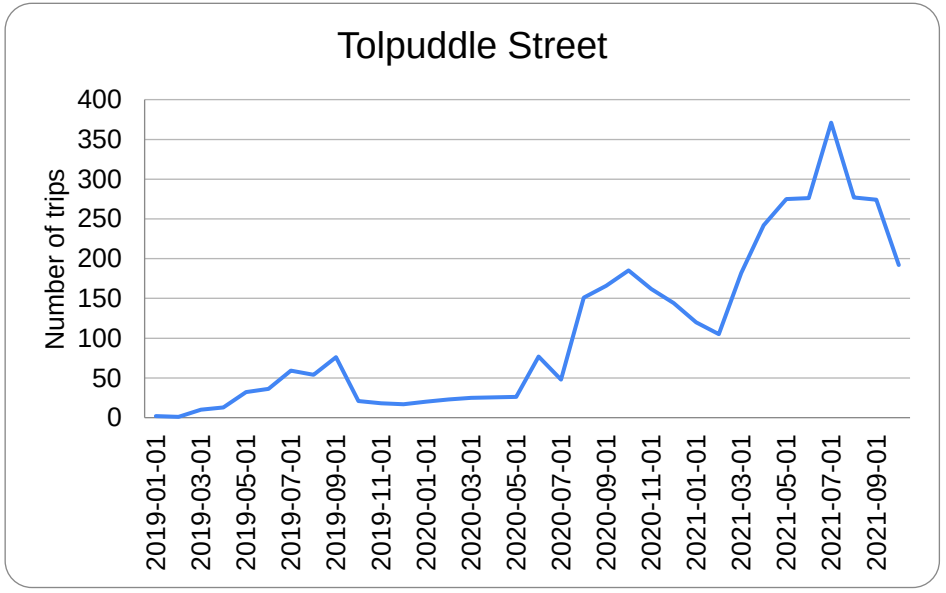
2020-11-01
2021-01-01
2021-03-01
2021-05-01
2021-07-01
2021-09-01


Tolpuddle Street
Number of trips
400
350
300
250
200
150
100
50
0
2019-01-01
2019-03-01
2019-05-01
2019-07-01
2019-09-01
2019-11-01
2020-01-01
2020-03-01
2020-05-01
2020-07-01
2020-09-01
2020-11-01
2021-01-01
2021-03-01
2021-05-01
2021-07-01
2021-09-01

All sites where data has been provided show roughly the same profile of trips taken, with relatively low numbers through 2019, substantial growth in the warmer months of 2020 (followed by a plateau or slight decline over winter), and then another large increase during spring and summer of 2021 (again, with some decline over September 2021).

## Insights: Cycling

On average across the route cycling has increased by **33%.** All sites on C38 showed increases in cycling, with the highest being 96% on Tolpuddle Street. Only Liverpool Road south of Tolpuddle Street, a count location just to the south of the C38 route, experienced a reduction in cycling volumes, with **-16%** between August/September 2020 and September 2021. This may be a result of people cycling changing route to follow C38 at this location. Total average increases in cycling in the area across all count sites are proportionally higher on sites not on C38, driven by large increases on Thornhill and Barnsbury Roads.

It is worth noting that, although ATCs are very accurate (as explained in Appendix 3), if a cycle, or multiple cycles pass the counter at the same time as a motorised vehicle, it is possible that there could be under-counting of cycles. This is likely to occur more on roads with more motorised traffic.

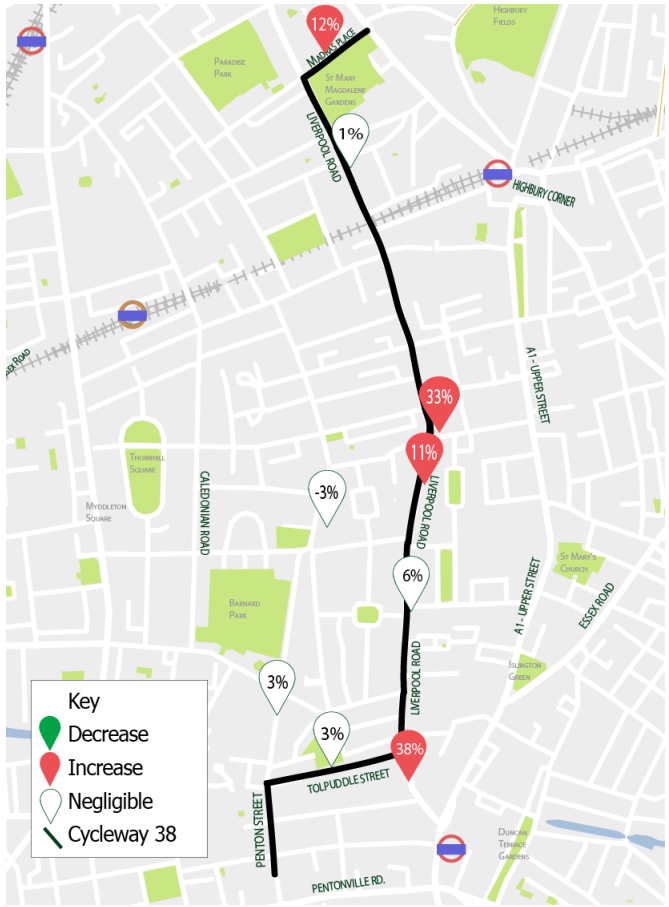
Cycling volumes had decreased overall at the interim February 2021 data collection point. It is important to note that this was during winter, in a period of national lockdown, so many fewer trips would have been taken overall, particularly commuting, and that the weather may have discouraged people from cycling.

Lime cycle hire trips showed strong growth and seasonal variation. This growth in trip numbers should be considered in the context of the number of e-bikes deployed in Islington reducing over the recorded period. In March 2020, Lime's fleet in Islington numbered 500 cycles, which has since dropped to 300 cycles, even with the acquisition by Lime of their competitor Jump bikes in the summer of 2020.

# Motorised traffic

## Results (seven-day daily averages)

**Map 5: Percentage change in motorised traffic volumes when compared to baseline data:**
**Interim - February 2021** **12-month - September 2021**



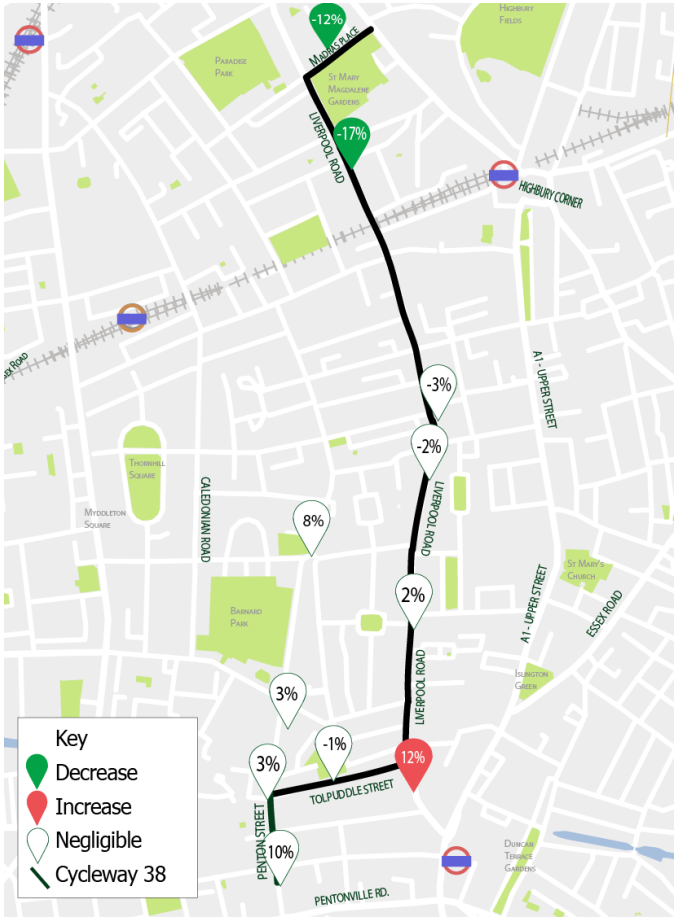



**Table 3: 7-day daily average motorised traffic volumes along the route**

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference | February 2021 Difference | Difference observed % | Difference normalised % | September 2021 observed | September 2021 normalised | Difference observed | Difference normalised | Difference observed % | Difference normalised % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Madras Place | 686 | 733 | 618 | 822 | -68 | 89 | -10% | 12% | 618 | 645 | -68 | -88 | -10% | -12% |
| Liverpool Road nr Furlong Road[1] | 11,258 | 12,046 | 9,115 | 12,127 | -2,143 | 81 | -19% | 1% | 9,596 | 10,016 | -1,662 | -2030 | -15% | -17% |
| Liverpool Road north of Barnsbury St | 11,472 | 12,257 | 12,261 | 16,314 | 789 | 4057 | 7% | 33% | 11,389 | 11,888 | -83 | -369 | -1% | -3% |
| Liverpool Road south of Barnsbury St | 8,501 | 9,094 | 7,634 | 10,158 | -867 | 1064 | -10% | 12% | 8,535 | 8,909 | 34 | -185 | 0% | -2% |
| Liverpool Road nr Cloudesley Square | 10,900 | 11,658 | 9,305 | 12,381 | -1,595 | 723 | -15% | 6% | 11,448 | 11,950 | 548 | 292 | 5% | 2% |
| Tolpuddle Street nr Cloudesley Street | 5,365 | 5,741 | 4,437 | 5,904 | -928 | 163 | -17% | 3% | 5,424 | 5,662 | 59 | -79 | 1% | -1% |
| Penton Street nr Tolpuddle Street | 8,895 | 9,511 | 7,565 | 10,066 | -1,330 | 555 | -15% | 6% | 9,359 | 9,769 | 464 | 258 | 5% | 3% |
| Penton Street nr White Lion Street[2] | 5,823 | 6,640 | | | | | | | 7,027 | 7,286 | 1,204 | 646 | 21% | 10% |
| **Average difference (Sites on C38)** | | | | | | | **-19%** | **10%** | | | | | **1%** | **-2%** |
| Thornhill Road | 2,337 | 2,500 | 1,809 | 2,407 | -528 | -93 | -23% | -4% | 2,577 | 2,690 | 240 | 190 | 10% | 8% |
| Barnsbury Road[1] | 8,117 | 8,686 | 6,696 | 8,910 | -1,421 | 224 | -18% | 3% | 8,594 | 8,971 | 477 | 285 | 6% | 3% |
| Liverpool Road nr Tolpuddle Street | 6,239 | 6,675 | 6,932 | 9,223 | 693 | 2548 | 11% | 38% | 7,181 | 7,496 | 942 | 821 | 15% | 12% |
| **Average difference (Other Sites)** | | | | | | | **-8%** | **15%** | | | | | **10%** | **7%** |

*[1] – The sites, Liverpool Road nr Furlong Road, Barnsbury Road and Penton Street nr White Lion Street have missing data for a significant portion if not all the weekend period for September 2021, hence a 5 Day Average has been used at these sites only instead of a 7 Day Average.*

*[2] –The Penton Street nr White Lion Street site has missing data for a significant portion of February 2021, meaning only two days of data were collected and as a result they have not been included in the table for February.*

## Insights: motorised traffic volumes along the route and in the area

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

There is a roughly even split between roads that have experienced increases in normalised motorised traffic, and those that have experienced decreases. Normalised results show traffic is slightly down on the sites on Cycleway 38, and slightly up on sites on other streets. The overall average reduction in normalised motorised traffic along the route in September 2021 is **-2%**, which suggests that Cycleway 38 has not had a significant impact on overall motorised traffic in the area.

The strongest reductions in motorised traffic volumes are seen at Madras Place and Liverpool Road near Furlong Road, both of which are on C38, with reductions of **-12% and -17%** respectively after normalisation. The strongest increases in motorised traffic volumes are seen on Liverpool Road near Tolpuddle Street and Penton Street near White Lion Street with increases of **12% and 10%** respectively after normalisation. The latter is on C38 and the former just to the south of where the route leaves Liverpool Road.

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

## Goods Vehicle volumes

**Table 4: 7-day daily average motorised traffic volumes along the route – Class 5 – 7 (LGV)**

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|---|---|---|
| Madras Place | 55 | 99 | 44 | 79% | 105 | 50 | 90% |
| Liverpool Road nr Furlong Road[1] | 956 | 1,010 | 54 | 6% | 1,089 | 133 | 14% |
| Liverpool Road north of Barnsbury St | 867 | 1,013 | 146 | 17% | 1,277 | 410 | 47% |
| Liverpool Road south of Barnsbury St | 617 | 705 | 88 | 14% | 825 | 208 | 34% |
| Liverpool Road nr Cloudesley Square | 736 | 973 | 237 | 32% | 814 | 78 | 11% |
| Tolpuddle Street nr Cloudesley Street | 610 | 715 | 105 | 17% | 622 | 12 | 2% |
| Penton Street nr Tolpuddle Street | 658 | 447 | -211 | -32% | 937 | 279 | 42% |
| Penton Street nr White Lion Street[2] | 576 | | | | 844 | 268 | 47% |
| **Average difference (Sites on Cycleway 38 route)** | | | | **-2%** | | | **28%** |
| Thornhill Road | 178 | 180 | 2 | 1% | 308 | 130 | 73% |
| Barnsbury Road[1] | 881 | 777 | -104 | -12% | 1,280 | 399 | 45% |
| Liverpool Road nr Tolpuddle Street | 533 | 528 | -5 | -1% | 902 | 369 | 69% |
| **Average difference (Other Sites in the area)** | | | | **-7%** | | | **56%** |

**Table 5: 7-day daily average motorised traffic volumes along the route – Class 8 - 14 (HGV) Only**

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | Difference observed | Difference observed (%) |
|---|---|---|---|---|---|---|---|
| Madras Place | 5 | 6 | 1 | 11% | 11 | 6 | 114% |
| Liverpool Road nr Furlong Road[1] | 55 | 48 | -7 | -14% | 140 | 85 | 153% |
| Liverpool Road north of Barnsbury St | 108 | 88 | -20 | -18% | 90 | -18 | -16% |
| Liverpool Road south of Barnsbury St | 47 | 63 | 16 | 32% | 45 | -2 | -5% |
| Liverpool Road nr Cloudesley Square | 51 | 41 | -10 | -21% | 63 | 12 | 23% |
| Tolpuddle Street nr Cloudesley Street | 16 | 28 | 12 | 75% | 28 | 12 | 70% |
| Penton Street nr Tolpuddle Street | 51 | 42 | -9 | -18% | 67 | 16 | 31% |
| Penton Street nr White Lion Street[2] | 49 | | | | 87 | 38 | 78% |
| **Average difference (Sites on Cycleway 38 route)** | | | | **-5%** | | | **39%** |
| Thornhill Road | 8 | 14 | 6 | 75% | 27 | 19 | 238% |
| Barnsbury Road[1] | 36 | 28 | -8 | -22% | 77 | 41 | 114% |
| Liverpool Road nr Tolpuddle Street | 36 | 46 | 10 | 28% | 63 | 27 | 75% |
| **Average difference (Other Sites in the area)** | | | | **10%** | | | **109%** |

*[1] – The sites Liverpool Road nr Furlong Road, Barnsbury Road and Penton Street nr White Lion Street have missing data for a significant portion of the weekend period for September 2021, hence a 5 Day Average has been used at these sites only instead of a 7 Day Average.*

*[2] – The Penton Street nr White Lion Street site has missing data for a significant portion of February 2021, meaning only two days of data were collected and as a result they have not been included in the table for February.*

## Insights: goods vehicle volumes

Raw data has been analysed and compared to give 'observed' results of changes in LGV and HGV volumes. These have not been normalised as trends in these vehicle types have not followed those of overall motor traffic since the onset of the Covid-19 pandemic.

According to the Department for Transport, in September 2021 volumes of both LGVs and HGVs were over 100% of the equivalent time period in 2020, potentially reflecting changed retail behaviour related to Covid-19.

The volume of LGVs has increased at all sites at the 12 months data collection compared to the baseline. These increases vary from 2% - 90%, although the latter is from a low base of 55 LGVs per day at Madras Place. The largest observed increase was of 410 LGVs on Liverpool Road north of Barnsbury Street.

The volume of HGVs has increased at all but two sites, Liverpool Road north of Barnsbury Street and Liverpool Road south of Barnsbury Street. Many of these percentage changes are large, although at all sites except Liverpool Road north of Barnsbury Street the baseline was fewer than 100 HGVs per day.

# Motorised traffic speeds and speeding

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

Traffic counters measure motorised traffic speeds as well as volumes. Details about the dates and locations of the traffic volume and speed monitoring are in Appendix 2. The speed limit is 20mph on all borough 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. Consequently, changes in the proportion of vehicles speeding have been included, but changes in volumes have not. The results presented here are seven-day averages. The 85th percentile is used in transport monitoring to gauge changes in speeds and speeding behaviour. It is the speed at which 85% of traffic will be travelling at, or below, along a street (and therefore 15% of traffic will be travelling faster than this speed).

# Results

**Table 6: Speeds and changes at count sites (7-day), August/September 2020 Baseline – February 2021**

| Speeds | Average speed before (mph) | Average Speed after (mph) | Difference in average speed (%) | Difference in 85th percentile speed (mph) | Difference in 85th percentile speed (%) | Volume over Posted Speed Limit before | Volume over Posted Speed Limit after | % Over Posted Speed Limit before | % Over Posted Speed Limit after | Difference in proportion of vehicles speeding (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Madras Place | 9.2 | 15.1 | 63.9% | 7.2 | 57.5% | 0 | 84 | 0.0% | 13.5% | 13.5% |
| Liverpool Road nr Furlong Road [1] | 17.7 | 17.3 | -2.3% | 0.1 | 0.5% | 2,294 | 1,822 | 21.3% | 21.0% | -0.4% |
| Liverpool Road north of Barnsbury St | 17.8 | 17.5 | -1.7% | -0.2 | -1.0% | 2,482 | 2,507 | 21.6% | 20.4% | -1.2% |
| Liverpool Road south of Barnsbury St | 18.4 | 19.9 | 8.2% | 1.2 | 5.3% | 2,421 | 3,422 | 28.5% | 44.8% | 16.3% |
| Liverpool Road nr Cloudesley Square | 18.6 | 18.9 | 1.6% | 0.3 | 1.4% | 3,356 | 3,026 | 30.8% | 32.5% | 1.7% |
| Tolpuddle Street nr Cloudesley Street | 14.1 | 16.2 | 14.9% | 2.7 | 16.1% | 181 | 536 | 3.4% | 12.1% | 8.7% |
| Penton Street nr Tolpuddle Street | 16.3 | 15.2 | -6.7% | -1.8 | -9.0% | 1,375 | 546 | 15.5% | 7.2% | -8.2% |
| Penton Street nr White Lion Street [2] | 16.8 | | | | | 1,034 | | 16.6% | | |
| **Overall average (sites on C38)** | **16.1** | **17.2** | **6.5%** | **1.4** | **10%** | | | **17.2%** | **21.7%** | **4.4%** |
| Thornhill Road | 16.5 | 15.0 | -9.1% | -1.6 | -8.2% | 302 | 125 | 13.0% | 6.9% | -6.0% |
| Barnsbury Road [1] | 16.4 | 16.1 | -2.0% | -0.5 | -2.5% | 1,459 | 1,024 | 19.5% | 16.2% | -3.3% |
| Liverpool Road nr Tolpuddle Street | 11.4 | 12.6 | 10.5% | 2.1 | 14.7% | 37 | 229 | 0.6% | 3.3% | 2.7% |
| **Overall average (other sites)** | **14.8** | **14.6** | **-1.4%** | **-0.0** | **1.4%** | | | **11.0%** | **8.8%** | **-2.2%** |

**Table 7: Speeds and changes at count sites (7-day), August/September 2020 Baseline – September 2021**

| Speeds | Average speed before (mph) | Average Speed after (mph) | Difference in average speed (%) | Difference in 85th percentile speed (mph) | Difference in 85th percentile speed (%) | Volume over Posted Speed Limit before | Volume over Posted Speed Limit after | % Over Posted Speed Limit before | % Over Posted Speed Limit after | Difference in proportion of vehicles speeding (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Madras Place | 9.2 | 11.7 | 26.6% | 1.9 | 15.4% | 0 | 12 | 0.0% | 1.9% | 1.9% |
| Liverpool Road nr Furlong Road [1] | 17.7 | 14.4 | -18.6% | -2.6 | -12.5% | 2,294 | 388 | 21.3% | 7.1% | -14.2% |
| Liverpool Road north of Barnsbury St | 17.8 | 18.9 | 6.2% | 1.7 | 8.1% | 2,482 | 3,987 | 21.6% | 35.0% | 13.4% |
| Liverpool Road south of Barnsbury St | 18.4 | 20.4 | 10.9% | 1.5 | 6.6% | 2,421 | 4,111 | 28.5% | 48.2% | 19.7% |
| Liverpool Road nr Cloudesley Square | 18.6 | 16.7 | -10.2% | -2.3 | -10.4% | 3,356 | 1,579 | 30.8% | 13.8% | -17.0% |
| Tolpuddle Street nr Cloudesley Street | 14.1 | 13.3 | -5.7% | -0.8 | -4.8% | 181 | 148 | 3.4% | 2.7% | -0.6% |
| Penton Street nr Tolpuddle Street | 16.3 | 15.8 | -3.1% | -0.5 | -2.5% | 1,375 | 1,215 | 15.5% | 13.0% | -2.5% |
| Penton Street nr White Lion Street [2] | 16.8 | | | | | 1,034 | | 16.6% | | |
| **Overall average (sites on C38)** | **16.1** | **15.9** | **-1.5%** | **-0.2** | **0.0%** | | | **17.2%** | **17.4%** | **0.2%** |
| Thornhill Road | 16.5 | 15.9 | -3.6% | -0.7 | -3.6% | 303 | 251 | 13.0% | 9.7% | -3.2% |
| Barnsbury Road [1] | 16.4 | 18.0 | 9.4% | 1.9 | 9.3% | 1,460 | 2,203 | 19.5% | 33.8% | 14.4% |
| Liverpool Road nr Tolpuddle Street | 11.4 | 14.3 | 25.4% | 4.2 | 29.4% | 37 | 584 | 0.6% | 8.1% | 7.5% |
| **Overall average (other sites)** | **14.8** | **16.1** | **8.0%** | **1.8** | **11.7%** | | | **11.0%** | **17.2%** | **6.2%** |

*[1] – The sites Liverpool Road nr Furlong Road, Barnsbury Road and Penton Street nr White Lion Street have missing data for a significant portion of the weekend period for September 2021, hence a 5 Day Average has been used at these sites only instead of a 7 Day Average.*

*[2] – The Penton Street nr White Lion Street site has missing data for a significant portion of February 2021, meaning only two days of data were collected and as a result they have not been included in the table for February.*

## Insights: motorised traffic speeds and speeding

On average along the route, average speeds have negligibly changed (+6.5% by February 2021 and -1.5% by September 2021), and 85$^{th}$ percentile speeds demonstrate very similar negligible change. The proportion of vehicles speeding does not show a significant change, although there are some significant changes at individual sites.

Two sites along the route saw a significant increase in the proportion of vehicles speeding: Liverpool Road north of Barnsbury Street and Liverpool Road south of Barnsbury Street. Further monitoring may be required to understand why these particular locations have seen this rise, and whether these are related to short term factors such as the temporary roadworks in the area at the time, or if they are part of a long term trend.

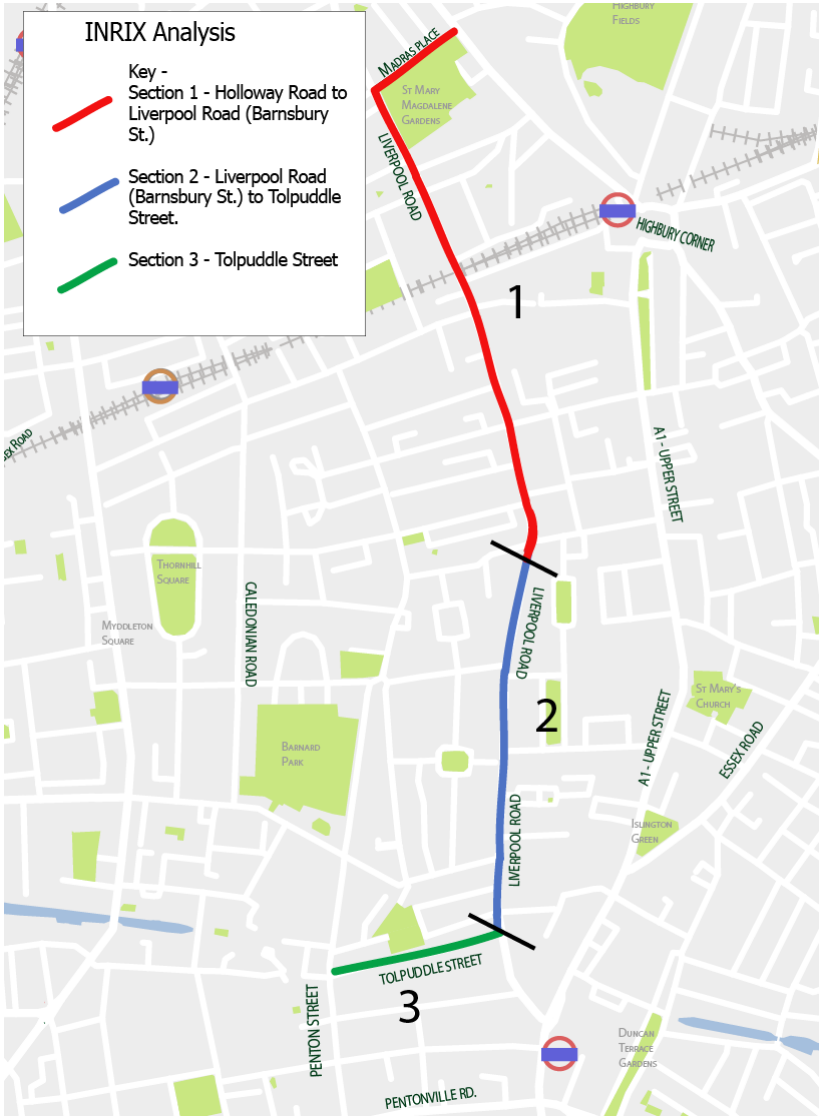
Liverpool Road saw a mixture of both increased and reduced volumes of vehicles speeding. Whilst average speed has dropped near Furlong Road and Cloudesley Square with over 1,700 fewer vehicles speeding over seven days, in contrast, near Barnsbury Street average speeds increased with over 1,500 more vehicles speeding at these points. This results in overall average speeds increasing on sites not on Cycleway 38, but decreasing at those on the Cycleway 38 route.

The observed number and proportion of vehicles recorded travelling above the posted speed limit both before and after implementation indicates a persistent issue with compliance by a significant minority of drivers in the area. Other measures may need to be considered in order to improve compliance with the posted speed limit.

# Motorised traffic travel times along the route

Islington Council has procured a smart traffic analysis system called INRIX (refer to glossary for fuller definition) that provides more continuous monitoring of motorised traffic speed data to measure average travel times. These results have not been normalised as they are not considered to have been impacted by Covid-19 in the same way and to the same extent as motorised traffic volumes, though speeds may settle into new patterns post-Covid-19. The INRIX capture areas for the roads can be seen in Map 6. The results are presented in minutes and seconds (mm:ss).

## Map 6: Area of roads included in INRIX analysis, divided into three sections



## Results

A note on interpreting the results: table 8 shows that in September 2020 during the AM peak hours (7am – 10am), it took an average of two minutes and fifty-nine seconds to travel along Section 1. In February 2021, it took an average of two minutes and forty-four seconds to travel the same distance. That is, it took on average 15 seconds fewer.

It must be noted that the changes in traffic speeds will be strongly correlated to overall traffic levels, which as discussed above varied significantly in relation to the lockdowns associated to the pandemic. In particular, traffic in February 2021 was lower than the two Septembers due to the national lockdown that was underway. This is likely to explain the decrease in traffic times during February 2021.

**Table 8: Section 1 both directions**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 02:59 | 02:44 | -00:15 | 03:16 | 00:17 |
| **Weekday PM peak average (1600 – 1900)** | 02:56 | 02:58 | 00:02 | 03:18 | 00:22 |
| **7 day 0700 - 1900 average** | 02:58 | 02:52 | -00:06 | 03:17 | 00:20 |

**Table 9: Section 1 Northbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 02:49 | 02:41 | -00:08 | 03:10 | 00:21 |
| **Weekday PM peak average (1600 – 1900)** | 02:52 | 02:54 | 00:02 | 03:16 | 00:23 |
| **7 day 0700 - 1900 average** | 02:51 | 02:50 | -00:02 | 03:14 | 00:23 |

**Table 10: Section 1 Southbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 03:09 | 02:46 | -00:22 | 03:22 | 00:13 |
| **Weekday PM peak average (1600 – 1900)** | 03:00 | 03:02 | 00:02 | 03:21 | 00:21 |
| **7 day 0700 - 1900 average** | 03:04 | 02:54 | -00:10 | 03:21 | 00:17 |

**Table 11: Section 2 both directions**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:45 | 01:44 | -00:01 | 01:51 | 00:06 |
| **Weekday PM peak average (1600 – 1900)** | 01:46 | 01:46 | 00:00 | 01:48 | 00:02 |
| **7 day 0700 - 1900 average** | 01:47 | 01:46 | -00:00 | 01:51 | 00:04 |

**Table 12: Section 2 Northbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:44 | 01:39 | -00:05 | 01:46 | 00:02 |
| **Weekday PM peak average (1600 – 1900)** | 01:46 | 01:44 | -00:02 | 01:48 | 00:02 |
| **7 day 0700 - 1900 average** | 01:46 | 01:43 | -00:03 | 01:49 | 00:03 |

**Table 13: Section 2 Southbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:46 | 01:49 | 00:04 | 01:56 | 00:10 |
| **Weekday PM peak average (1600 – 1900)** | 01:46 | 01:49 | 00:03 | 01:48 | 00:02 |
| **7 day 0700 - 1900 average** | 01:47 | 01:50 | 00:03 | 01:52 | 00:05 |

**Table 14: Section 3 (both directions)**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 01:31 | 01:47 | 00:16 | 01:37 | 00:06 |
| **Weekday PM peak average (1600 – 1900)** | 01:38 | 02:00 | 00:22 | 01:41 | 00:03 |
| **7 day 0700 - 1900 average** | 01:37 | 01:58 | 00:20 | 01:41 | 00:04 |

**Table 15: Section 3 Northbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 00:54 | 01:42 | 00:48 | 00:57 | 00:03 |
| **Weekday PM peak average (1600 – 1900)** | 01:06 | 01:57 | 00:50 | 01:07 | 00:00 |
| **7 day 0700 - 1900 average** | 01:03 | 01:52 | 00:49 | 01:04 | 00:02 |

**Table 16: Section 3 Southbound**

| | Sep-20 (mm:ss) | Feb-21 (mm:ss) | Sep 2020 - Feb 2021 difference (mm:ss) | Sep-21 (mm:ss) | Sep 2020 - Sep 2021 difference (mm:ss) |
|---|---|---|---|---|---|
| **Weekday AM peak average (0700-1000)** | 02:07 | 02:46 | 00:40 | 02:16 | 00:09 |
| **Weekday PM peak average (1600 – 1900)** | 02:09 | 03:02 | 00:53 | 02:15 | 00:06 |
| **7 day 0700 - 1900 average** | 02:12 | 02:54 | 00:43 | 02:18 | 00:07 |

## Insights: motorised traffic travel times along the route

Most sites have seen a small increase in traffic journey times between the baseline and September 2021. These vary in scale, but are generally less than 20 seconds. Changes are fairly consistent across time periods. Section 1 northbound has the consistently greatest change at between 21 – 23 seconds, although it should be noted that roadworks necessitating a temporary signal on Liverpool Road in this section were in place for thirteen days in September 2021.

# Bus journey times

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 along the Cycleway 38 South route have been monitored. Bus journey time monitoring focussed on two main roads, described as bi-directional corridors, which include journey times for multiple routes. The main roads and bus route numbers are listed below:

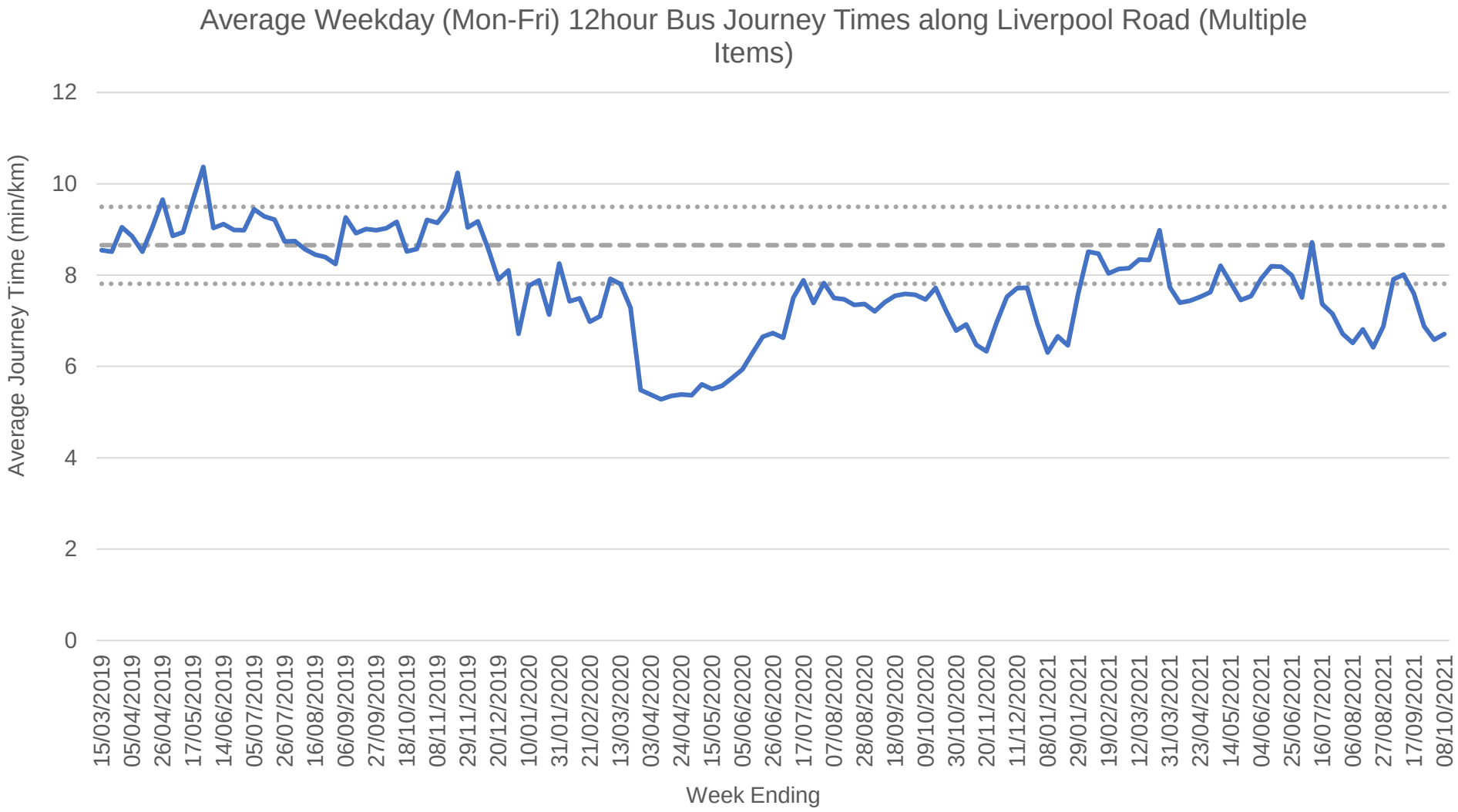
- Liverpool Road (153)
- Penton Street (153, 274)

It should be noted that the bus route on Liverpool Road operates on the section just to the south of Tolpuddle Street where the cycleway route leaves Liverpool Road.

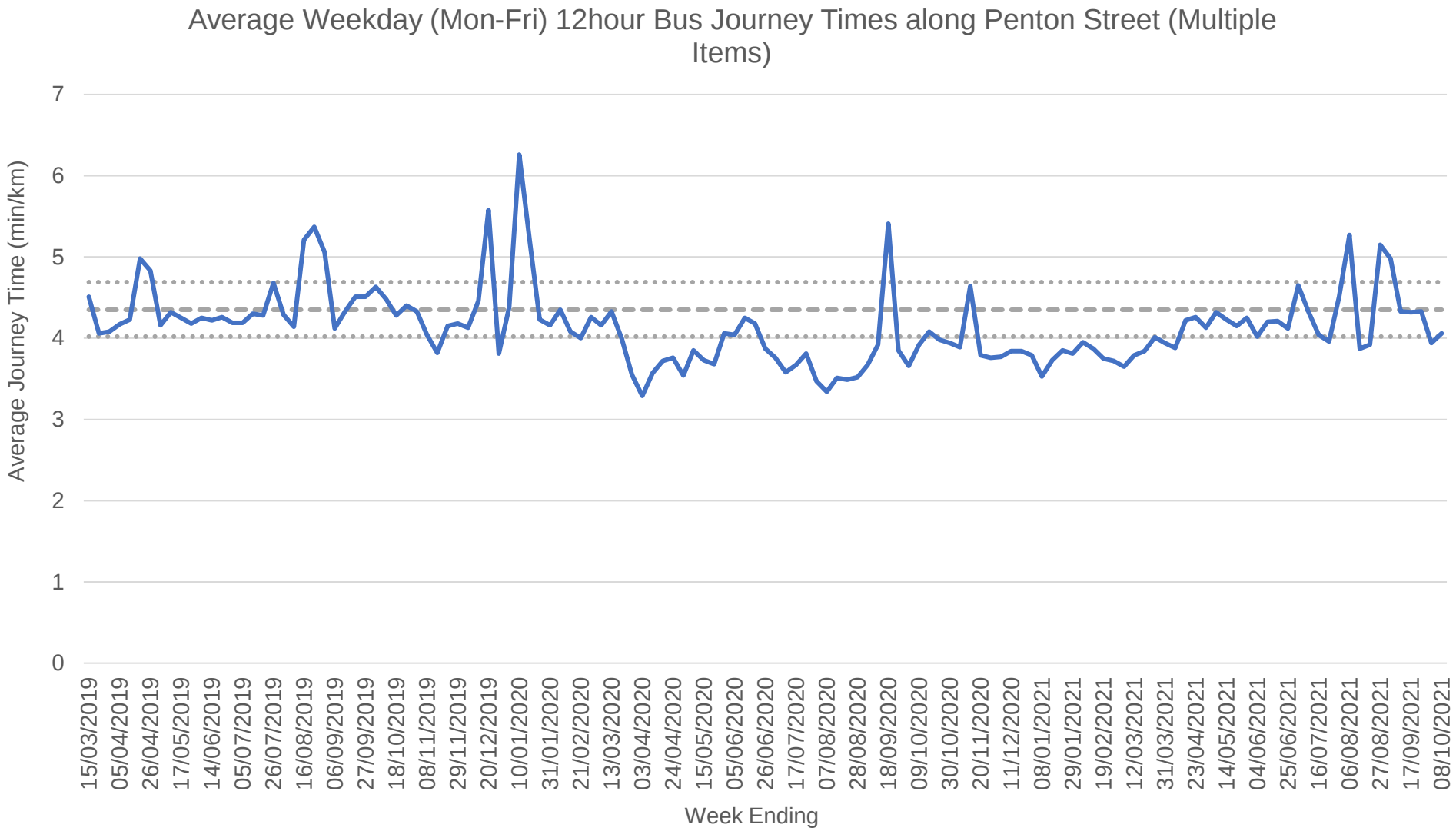
Weekly iBus data has been used for this analysis. This gives weekday (Monday to Friday, excluding bank holidays) average journey times by route, stop-to-stop link and peak periods. The AM peak is 7am-10am, Inter-peak 10am-4pm and PM peak 4pm-7pm. The data also provides 12hour 7am-7pm timings. These journey 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 and Graph 3 below. The dashed lines indicate the baseline threshold and the blue line indicates the average journey times, on a three-week basis.

**Graph 2: Liverpool Road**



**Graph 3: Penton Street**



# Insights: bus journey times

Compared to the average from before Covid-19, bus journey times on the two monitored sections of Liverpool Road and Penton Street, have either decreased or stayed the same.

**Liverpool Road – Bus Journey Times**

Between March and June 2020, bus journey times fell to more than 3 minutes below the pre-Covid average, and remained below the lower standard deviation for much of 2021 as well (generally around 1-1.5 minutes below the pre-Covid average) except for a few weeks in January and February. Patterns for northbound and southbound buses are broadly similar. Reduced traffic along Liverpool Road may have played a small role in the reduction of bus journey times there.

**Penton Street – Bus Journey Times**

Between March 2020 and April 2021, bus journey times on Penton Street were generally below the pre-Covid average, except for two weekly spikes. Since April 2021, journey times have slightly increased back to roughly the average of 4.3 mins/km.

# Air Quality

**Map 7: Average levels of $NO_2$ (µg/m3) September 2020 to July 2021**

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

- Particulate matter of 10µm or less in size ($PM_{10}$) – tiny bits of solid material made of a range of substances suspended in the air.
- Nitrogen dioxide ($NO_2$) – one of a group of gases called nitrogen oxides.

Diffusion tubes are used to monitor air quality. These provide monthly readings of $NO_2$. Whilst not as accurate as 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.

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

The diffusion tube in the Cycleway 38 area was deployed in January 2019 on Liverpool Road near St. Mary Magdalene Academy.

# Methodology

### Time period of study

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

Every month, our diffusion tube monitors are collected and sent to a laboratory for analysis, meaning results are not immediate and it can take a few months to get results. We therefore only have data up to July 2021.

## Results: air quality diffusion tubes

Table 17 shows the results since the Cycleway has been in place compared to the same period in the previous year (2019-2020). The pollution levels in these periods, are likely to have been impacted by Covid-19. Studies into the impacts of lockdown on air pollution, for example by Defra show lower than average levels of the pollutant $NO_2$ with the first lockdown.

Please note, the values in table 17 show the average results for all monitors in each category, with figures rounded to the nearest whole number.

This table includes 18 monitoring locations for the whole borough long-term sites for each time period, and one monitoring location on Liverpool Road, alongside Cycleway 38 outside St. Mary Magdalene Academy. It should be noted that various diffusion tubes are missing data for several months, including the diffusion tube on Liverpool Road, which is missing data for February 2020 and November 2020. Where data is missing, it has been excluded from calculations of averages.

**Table 17: Overall $NO_2$ levels (rounded to nearest whole number) on Liverpool Road and borough long-term diffusion tube sites**

| | **$NO_2$ (µg/m3) in Sept 2019-Jul 2020** | **$NO_2$ (µg/m3) in Sept 2020 - Jul 2021** | **2019/20 compared to 2020/21 (µg/m3)** | **2019/20 compared to 2020/21 (% change)** |
|---|---|---|---|---|
| **Liverpool Road** | 27 | 32 | 4 | +15% |
| **Whole borough long term sites** | 26 | 27 | 1 | +5% |

**Graph 4: Average $NO_2$ levels measured on Liverpool Road (S74) compared to long term borough-wide sites from diffusion tubes**

## Insights: air quality

The results in table 17 show that there has been an increase in pollution at the location outside St Mary Magdalene School on Liverpool Road when the post-implementation period is compared to the same period the year before. These results are likely impacted by the national lockdown that occurred from March 2020. $NO_2$ levels at the Liverpool Road site increased by 15% post-implementation compared to the same period the year before, whereas only a 5% average increase was seen across the rest of the borough. However, the data for the cycleway is based on just one monitoring site which increases uncertainty and is being compared to a range of different monitoring types across the wider borough e.g. roadside and background sites. We will continue to monitor the Liverpool Road site (S74) and other sites in the area to improve our understanding of air quality impacts in the future.

For site S74 on Liverpool Road, graph 4 shows that $NO_2$ dropped to a low between May and June 2020 before rising to a post-scheme peak in January/February 2021 and dropping thereafter. This aligns to a period of national lockdown measures, which started in March 2020 and were eased by July 2020, as well as potential seasonal variations, whereby $NO_2$ levels can often be lower in summer months.

In the post-implementation period of Cycleway 38 (September 2020 – July 2021), average levels of $NO_2$ at the Liverpool Road site have been below the annual objective level of 40µg/$m^3$. The post-implementation trends follow a similar trajectory to the borough-wide patterns, although at higher than average levels when compared to all sites. From the available data, it is not possible to conclusively attribute specific impacts of the Cycleway 38 scheme on air quality levels given that the trend is similar to the borough-wide average. Post-implementation levels of $NO_2$ were generally below the levels of the comparable months up to February 2020, after which time the effect of the first national lockdown indicates a substantial impact.

# Emergency vehicle response time

## 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 the LAS continues to monitor schemes and provide feedback to the council's traffic officers should any delays occur to emergency responses.

As of 5 October 2021, there have not been any reported delays in LAS response times as a result of Cycleway 38 being implemented in Islington. The LAS will continue to monitor this closely in the future.

## Metropolitan Police Service

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

Analysis of call data for the past 12 months, up to the end of July 2021, shows there has been no difference in average response times across the London Borough of Islington when compared to the previous 12 months (2019/2020) for both immediate and standard graded calls. There is no specific data available for Cycleway 38. Of note, over the past 12 months there has been a considerable reduction in call demand due to the effects of the coronavirus pandemic, c.2,800 fewer calls than the 12 months between August 2019 to end of July 2020 and a 19% reduction in offences. As we come out of the pandemic restrictions, the MPS will continue to monitor call data to see if changes in road layouts across the borough affect their response times.

## London Fire Brigade

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

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

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

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

Feedback from the LFB indicates that although the number of incidents and attendance time has increased between 2020 and 2021, this could have resulted from a combination of factors including low traffic levels during 2020 as well as the new traffic schemes, and that it is not possible to pinpoint the cause of any changes. The table below outlines the changes across Islington between 2019-2021:

**Table 18: Average attendance times across Islington, 2019 – 2021**

| | **No. of mobilisations** | **Average Attendance 1st Appliance (mm:ss)** | **Average Attendance 2nd Appliance (mm:ss)** |
|---|---|---|---|
| **Islington 2019 (baseline)** | 2,076 | 04:36 | 06:17 |
| **Islington 2020** | 2,046 | 04:29 | 06:02 |
| **Islington October 2020-October 2021** | 2,152 | 04:50 | 06:20 |

The LFB notes that attendance times across the Borough continue to be within the target times of 6 and 8 minutes for the first and second appliances to arrive at an incident, and that in the future they will continue to monitor times and investigate causes of delay in any area where a notable increase is identified.

# Anti-social behaviour and crime patterns

Data about anti-social behaviour (ASB) calls, including the location that is being referred to along the C38 route, has been gathered by the council's Community Safety team. This data has been analysed to monitor for changes in the volume of calls in the C38 route area. The nature of the issue being reported has also been taken into consideration. Data has been drawn from the C38 route as well as the whole of Islington, and results from the two areas have been compared month by month to monitor for Covid-19 disruption.

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

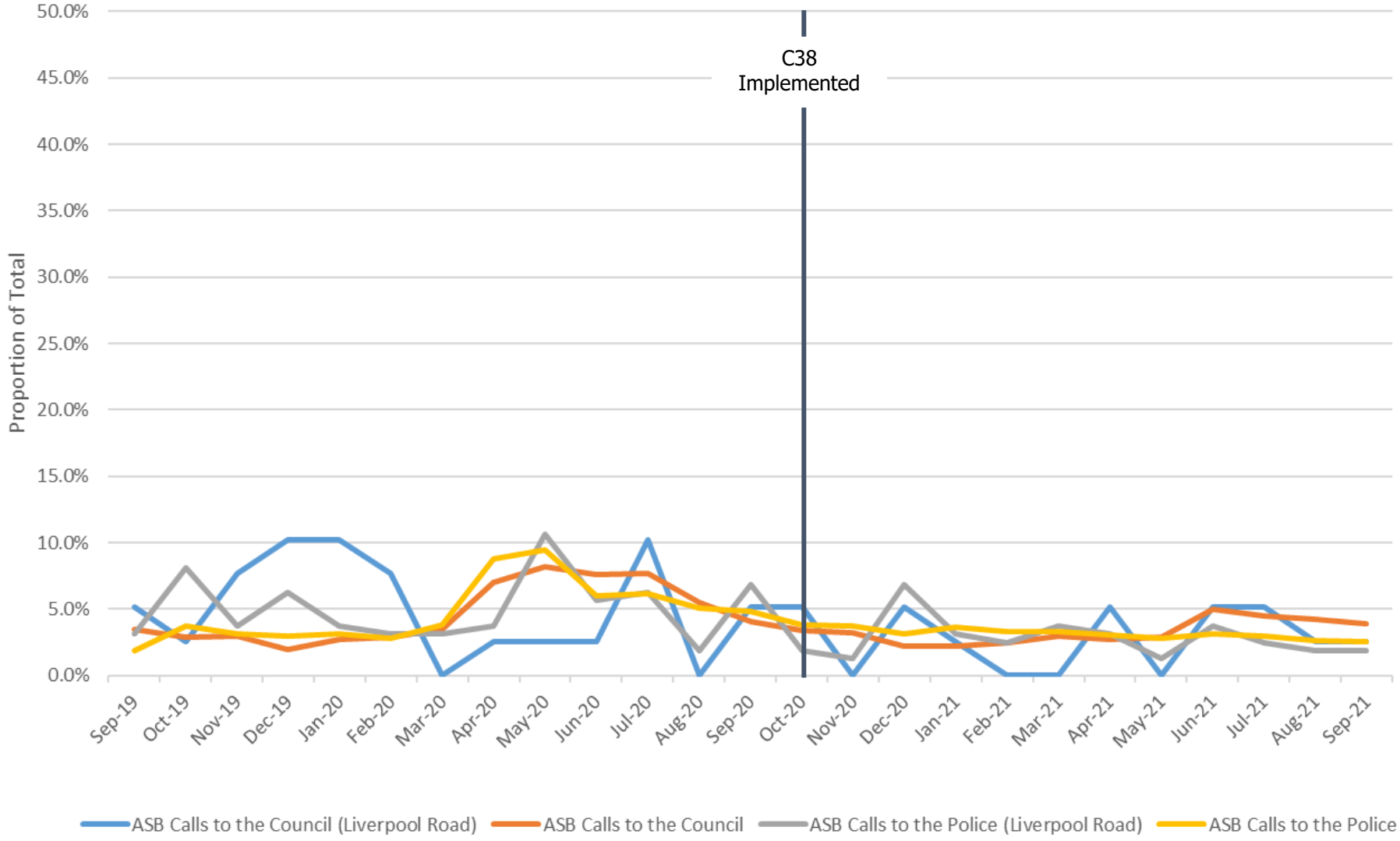
**Table 19: Calls and crimes in the C38 area and Islington over time**

| Month | ASB Calls to the council Liverpool Road | ASB Calls to the council | ASB Calls to the Police Liverpool Road | ASB Calls to the Police | Street-based Criminal Offences Liverpool Road | Street-based Criminal Offences |
|---|---|---|---|---|---|---|
| **Sep-19** | 5.1% | 3.5% | 3.1% | 1.9% | 5.4% | 4.9% |
| **Oct-19** | 2.6% | 2.8% | 8.1% | 3.8% | 4.8% | 5.6% |
| **Nov-19** | 7.7% | 3.0% | 3.8% | 3.1% | 8.8% | 4.9% |
| **Dec-19** | 10.3% | 2.0% | 6.3% | 2.9% | 8.8% | 4.3% |
| **Jan-20** | 10.3% | 2.7% | 3.8% | 3.1% | 2.7% | 5.1% |
| **Feb-20** | 7.7% | 2.9% | 3.1% | 2.8% | 3.4% | 5.2% |
| **Mar-20** | 0.0% | 3.5% | 3.1% | 3.8% | 2.7% | 3.9% |
| **Apr-20** | 2.6% | 7.0% | 3.8% | 8.8% | 2.7% | 2.8% |
| **May-20** | 2.6% | 8.2% | 10.6% | 9.4% | 4.1% | 3.5% |
| **Jun-20** | 2.6% | 7.6% | 5.6% | 6.0% | 4.1% | 3.5% |
| **Jul-20** | 10.3% | 7.7% | 6.3% | 6.2% | 5.4% | 4.0% |
| **Aug-20** | 0.0% | 5.5% | 1.9% | 5.1% | 2.7% | 4.5% |
| **Sep-20** | 5.1% | 4.0% | 6.9% | 4.8% | 3.4% | 4.3% |
| **Oct-20 (C38 Implemented)** | 5.1% | 3.4% | 1.9% | 3.8% | 2.7% | 4.0% |
| **Nov-20** | 0.0% | 3.2% | 1.3% | 3.7% | 0.7% | 3.9% |
| **Dec-20** | 5.1% | 2.2% | 6.9% | 3.1% | 4.8% | 3.4% |
| **Jan-21** | 2.6% | 2.2% | 3.1% | 3.6% | 2.7% | 3.0% |
| **Feb-21** | 0.0% | 2.4% | 2.5% | 3.3% | 3.4% | 2.6% |
| **Mar-21** | 0.0% | 3.0% | 3.8% | 3.3% | 3.4% | 3.5% |
| **Apr-21** | 5.1% | 2.8% | 3.1% | 3.1% | 4.1% | 3.6% |
| **May-21** | 0.0% | 2.9% | 1.3% | 2.8% | 6.8% | 3.9% |
| **Jun-21** | 5.1% | 5.0% | 3.8% | 3.2% | 2.7% | 3.5% |
| **Jul-21** | 5.1% | 4.5% | 2.5% | 3.0% | 2.7% | 3.8% |
| **Aug-21** | 2.6% | 4.2% | 1.9% | 2.6% | 3.4% | 4.2% |
| **Sep-21** | 2.6% | 3.9% | 1.9% | 2.5% | 3.4% | 4.2% |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

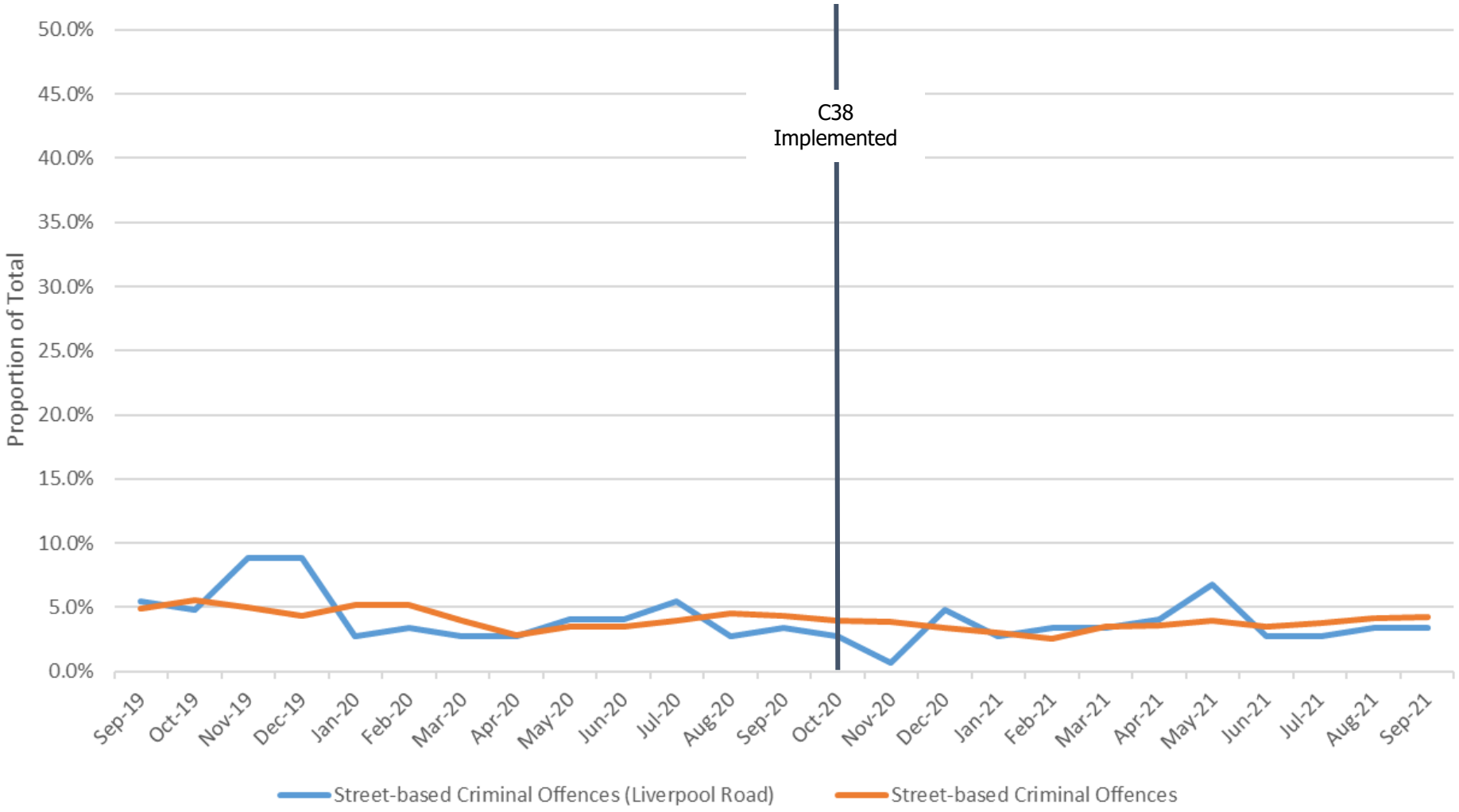
**Table 20: Volume of calls and crimes in the C38 area and Islington over time**

| Month | Liverpool Road ASB Calls to the council | Islington ASB Calls to the council | Liverpool Road ASB Calls to the Police | Islington ASB Calls to the Police | Liverpool Road Street-based Criminal Offences | Islington Street-based Criminal Offences |
|---|---|---|---|---|---|---|
| **Sep-19** | 2 | 341 | 5 | 351 | 8 | 851 |
| **Oct-19** | 1 | 281 | 13 | 688 | 7 | 972 |
| **Nov-19** | 3 | 296 | 6 | 577 | 13 | 860 |
| **Dec-19** | 4 | 193 | 10 | 539 | 13 | 750 |
| **Jan-20** | 4 | 266 | 6 | 573 | 4 | 893 |
| **Feb-20** | 3 | 284 | 5 | 521 | 5 | 905 |
| **Mar-20** | 0 | 343 | 5 | 699 | 4 | 684 |
| **Apr-20** | 1 | 693 | 6 | 1612 | 4 | 486 |
| **May-20** | 1 | 805 | 17 | 1732 | 6 | 606 |
| **Jun-20** | 1 | 749 | 9 | 1108 | 6 | 612 |
| **Jul-20** | 4 | 756 | 10 | 1135 | 8 | 694 |
| **Aug-20** | 0 | 545 | 3 | 935 | 4 | 790 |
| **Sep-20** | 2 | 399 | 11 | 880 | 5 | 748 |
| **Oct-20 (C38 Implemented)** | 2 | 335 | 3 | 703 | 4 | 695 |
| **Nov-20** | 0 | 317 | 2 | 685 | 1 | 671 |
| **Dec-20** | 2 | 216 | 11 | 573 | 7 | 586 |
| **Jan-21** | 1 | 216 | 5 | 665 | 4 | 517 |
| **Feb-21** | 0 | 240 | 4 | 614 | 5 | 449 |
| **Mar-21** | 0 | 295 | 6 | 604 | 5 | 607 |
| **Apr-21** | 2 | 272 | 5 | 562 | 6 | 620 |
| **May-21** | 0 | 284 | 2 | 518 | 10 | 683 |
| **Jun-21** | 2 | 497 | 6 | 579 | 4 | 607 |
| **Jul-21** | 2 | 445 | 4 | 546 | 4 | 653 |
| **Aug-21** | 1 | 417 | 3 | 485 | 5 | 723 |
| **Sep-21** | 1 | 387 | 3 | 460 | 5 | 736 |
| **Total** | **39** | **9,872** | **160** | **18,344** | **147** | **17,398** |

**Graph 5: ASB calls to the council and Police along the C38 route and Islington as a percentage of the total over one year**



**Graph 6: Street crimes along the C38 route and Islington as a percentage of the total over one year**



## Insights: anti-social behaviour and crime patterns

In terms of volumes of crime and ASB, the C38 route showed similar trends to that of Islington as a whole during the past 17 months. Across the various analyses of the volume of ASB calls and crimes along the C38 route and Islington, the monthly volume of calls and crimes as a proportion of the total over the year period has remained approximately consistent between C38 and Islington. Overall, crime levels along C38 have been in line with borough trends during the 17-month period.

Tables 19 and 20 and graphs 5 and 6 show increases in anti-social behaviour during the first lockdown last year. Contributing to this will have been reporting of people breaching the rules set out by Central Government. Similarly related to Covid-19, we have seen large decreases in crime due to lockdown, which has been evident in both Islington and along the C38 route.

# Concluding remarks

This monitoring report shows that at this point in the Cycleway 38 trial, cycling along the route has significantly increased by 33% along the Cycleway 38 route, from a base that already included a substantial number of cycle trips in the area.

There has been no significant change in overall motor traffic volumes, although LGV and HGV volumes have notably increased. The increased level of cycling and yet overall minimal change in motorised traffic volumes suggests that further understanding of vehicle movements through the area may be necessary in order to reduce through traffic.

Vehicle speeds have shown a mixture of trends, although at points along the route there appear to have been significant increases in the numbers of vehicles travelling above the speed limit. Small increases in average vehicle journey times have been recorded along the length of the route. Further monitoring of area-wide vehicle traffic and speed patterns would be required to understand how much of this traffic is accessing the area or only passing through.

None of the Metropolitan Police Service, London Ambulance Service or London Fire Brigade have reported increased delays as a result of Cycleway 38 being implemented. Results from the air quality monitoring are inconclusive in terms of the impact of the scheme, with $NO_2$ levels at the single monitoring site on Liverpool Road following a similar trend to - but at a higher level than - the borough average. Further monitoring is being undertaken at this site and elsewhere in the area to gain a fuller understanding of local changes in air quality.

People-friendly streets areas are being introduced on a trial basis, with a full public consultation after twelve months into each scheme to give residents the chance to give their views. This pre-consultation monitoring report has been published to coincide with the formal consultation on the Cycleway 38 scheme. Residents and other stakeholders can participate in the consultation through the council's people-friendly streets webpages. The council has longer term ambitions to improve Barnsbury and St. Mary's by creating a local environment that is greener and more pleasant, and will bring forward plans in due course.

Future decisions to keep, remove or amend the Cycleway 38 South trial are not dependent on any single metric, but a combination of them together with feedback from the formal consultation with residents and stakeholders.

# Appendices

# Appendix 1: All Roads Vehicle Counts

## Site 1 – Madras Place between Ringcroft Street and Morgan Road

### Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 4,803 | 5,134 | 4,327 | 5,757 | -476 | 623 | -10% | 12% | 4,324 | 4,514 | -479 | -621 | -10% | -12% |
| **7 day daily average** | 686 | 733 | 618 | 822 | -68 | 89 | -10% | 12% | 618 | 645 | -68 | -89 | -10% | -12% |
| **5 day total** | 3,785 | 4,050 | 3,059 | 4,070 | -726 | 20 | -19% | 0% | 3,433 | 3,584 | -352 | -467 | -9% | -12% |
| **5 day daily average** | 757 | 810 | 612 | 814 | -145 | 4 | -19% | 0% | 687 | 717 | -70 | -93 | -9% | -12% |
| **AM peak hourly average (weekdays)** | 32 | 34 | 31 | 42 | 0 | 8 | -1% | 24% | 46 | 48 | 14 | 14 | 44% | 41% |
| **PM peak hourly average (weekdays)** | 72 | 77 | 48 | 64 | -24 | -13 | -33% | -17% | 51 | 53 | -22 | -25 | -30% | -32% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 4,735 | 5,207 | 472 | 10% | 7,179 | 2,444 | 52% |
| **7 day daily average** | 676 | 744 | 67 | 10% | 1,026 | 349 | 52% |
| **5 day total** | 3,738 | 3,914 | 176 | 5% | 6,040 | 2,302 | 62% |
| **5 day daily average** | 748 | 783 | 35 | 5% | 1,208 | 460 | 62% |
| **AM peak hourly average (weekdays)** | 54 | 61 | 7 | 13% | 93 | 38 | 70% |
| **PM peak hourly average (weekdays)** | 68 | 73 | 6 | 8% | 115 | 48 | 70% |

# Site 2 – Liverpool Road between Furlong Road and Orleston Road

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5 day total** | 56,288 | 60,231 | 45,573 | 60,636 | -10,715 | 406 | -19% | 1% | 47,979 | 50,082 | -8,309 | -10,148 | -15% | -17% |
| **5 day daily average** | 11,258 | 12,046 | 9,115 | 12,127 | -2,143 | 81 | -19% | 1% | 9,596 | 10,016 | -1,662 | -2,030 | -15% | -17% |
| **AM peak hourly average (weekdays)** | 557 | 596 | 561 | 747 | 5 | 151 | 1% | 25% | 524 | 546 | -33 | -49 | -6% | -8% |
| **PM peak hourly average (weekdays)** | 773 | 827 | 624 | 830 | -149 | 3 | -19% | 0% | 629 | 657 | -143 | -170 | -19% | -21% |

***No 7 Day Total or Daily Average provided, because September 2021 ATC data has missing records for Saturday and Sunday***

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **5 day total** | 4,731 | 4,186 | -545 | -12% | 6,294 | 1,563 | 33% |
| **5 day daily average** | 946 | 837 | -109 | -12% | 1,259 | 313 | 33% |
| **AM peak hourly average (weekdays)** | 37 | 43 | 6 | 16% | 105 | 68 | 183% |
| **PM peak hourly average (weekdays)** | 90 | 72 | -18 | -20% | 89 | -1 | -2% |

***No 7 Day Total or Daily Average provided, because September 2021 ATC data has missing records for Saturday and Sunday***

# Site 3 – Liverpool Road, north of Barnsbury Street

**Motorised traffic**

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 80,305 | 85,800 | 85,827 | 114,196 | 5,522 | 28,396 | 7% | 33% | 79,724 | 83,219 | -581 | -2,580 | -1% | -3% |
| **7 day daily average** | 11,472 | 12,257 | 12,261 | 16,314 | 789 | 4,057 | 7% | 33% | 11,389 | 11,888 | -83 | -369 | -1% | -3% |
| **5 day total** | 59,656 | 63,835 | 65,750 | 87,483 | 6,094 | 23,648 | 10% | 37% | 58,974 | 61,559 | -682 | -2,275 | -1% | -4% |
| **5 day daily average** | 11,931 | 12,767 | 13,150 | 17,497 | 1,219 | 4,730 | 10% | 37% | 11,795 | 12,312 | -136 | -455 | -1% | -4% |
| **AM peak hourly average (weekdays)** | 550 | 589 | 856 | 1,139 | 306 | 550 | 56% | 93% | 660 | 689 | 110 | 100 | 20% | 17% |
| **PM peak hourly average (weekdays)** | 817 | 875 | 892 | 1,187 | 75 | 313 | 9% | 36% | 804 | 839 | -13 | -35 | -2% | -4% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 8,364 | 4,672 | -3,692 | -44% | 8,583 | 219 | 3% |
| **7 day daily average** | 1,195 | 667 | -527 | -44% | 1,226 | 31 | 3% |
| **5 day total** | 6,583 | 3,227 | -3,356 | -51% | 6,500 | -83 | -1% |
| **5 day daily average** | 1,317 | 645 | -671 | -51% | 1,300 | -17 | -1% |
| **AM peak hourly average (weekdays)** | 93 | 56 | -38 | -40% | 109 | 16 | 17% |
| **PM peak hourly average (weekdays)** | 98 | 38 | -60 | -62% | 106 | 8 | 9% |

# Site 4 – Liverpool Road, south of Barnsbury Street

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 59,509 | 63,655 | 53,441 | 71,105 | -6,068 | 7,450 | -10% | 12% | 59,743 | 62,362 | 234 | -1,293 | 0% | -2% |
| **7 day daily average** | 8,501 | 9,094 | 7,634 | 10,158 | -867 | 1,064 | -10% | 12% | 8,535 | 8,909 | 33 | -185 | 0% | -2% |
| **5 day total** | 44,370 | 47,478 | 40,121 | 53,382 | -4,249 | 5,904 | -10% | 12% | 43,719 | 45,636 | -651 | -1,842 | -1% | -4% |
| **5 day daily average** | 8,874 | 9,496 | 8,024 | 10,676 | -850 | 1,181 | -10% | 12% | 8,744 | 9,127 | -130 | -368 | -1% | -4% |
| **AM peak hourly average (weekdays)** | 405 | 433 | 483 | 643 | 79 | 210 | 19% | 48% | 467 | 488 | 63 | 55 | 15% | 13% |
| **PM peak hourly average (weekdays)** | 587 | 628 | 546 | 726 | -42 | 97 | -7% | 16% | 576 | 601 | -11 | -27 | -2% | -4% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 6,424 | 5,987 | -437 | -7% | 10,016 | 3,592 | 56% |
| **7 day daily average** | 918 | 855 | -62 | -7% | 1,431 | 513 | 56% |
| **5 day total** | 5,105 | 4,196 | -909 | -18% | 7,770 | 2,665 | 52% |
| **5 day daily average** | 1,021 | 839 | -182 | -18% | 1,554 | 533 | 52% |
| **AM peak hourly average (weekdays)** | 43 | 48 | 5 | 12% | 116 | 73 | 168% |
| **PM peak hourly average (weekdays)** | 101 | 75 | -26 | -25% | 138 | 37 | 37% |

# Site 5 – Liverpool Road between Cloudesley Square and Old Royal Free Place

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 76,301 | 81,607 | 65,135 | 86,664 | -11,166 | 5,057 | -15% | 6% | 80,134 | 83,647 | 3,833 | 2,040 | 5% | 2% |
| **7 day daily average** | 10,900 | 11,658 | 9,305 | 12,381 | -1,595 | 722 | -15% | 6% | 11,448 | 11,950 | 548 | 291 | 5% | 2% |
| **5 day total** | 57,303 | 61,317 | 48,838 | 64,981 | -8,465 | 3,664 | -15% | 6% | 59,199 | 61,794 | 1,896 | 477 | 3% | 1% |
| **5 day daily average** | 11,461 | 12,263 | 9,768 | 12,996 | -1,693 | 733 | -15% | 6% | 11,840 | 12,359 | 379 | 95 | 3% | 1% |
| **AM peak hourly average (weekdays)** | 486 | 520 | 533 | 709 | 46 | 188 | 10% | 36% | 590 | 616 | 104 | 96 | 21% | 18% |
| **PM peak hourly average (weekdays)** | 838 | 897 | 695 | 925 | -143 | 28 | -17% | 3% | 828 | 864 | -11 | -33 | -1% | -4% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 6,938 | 4,540 | -2,398 | -35% | 10,054 | 3,116 | 45% |
| **7 day daily average** | 991 | 649 | -343 | -35% | 1,436 | 445 | 45% |
| **5 day total** | 5,535 | 3,240 | -2,295 | -41% | 7,700 | 2,165 | 39% |
| **5 day daily average** | 1,107 | 648 | -459 | -41% | 1,540 | 433 | 39% |
| **AM peak hourly average (weekdays)** | 74 | 53 | -21 | -28% | 110 | 36 | 48% |
| **PM peak hourly average (weekdays)** | 89 | 43 | -46 | -52% | 123 | 34 | 39% |

# Site 6 – Thornhill Road between Ripplevale Road and Malvern Terrace

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 16,360 | 17,502 | 12,664 | 16,850 | -3,696 | -652 | -23% | -4% | 18,036 | 18,827 | 1,676 | 1,325 | 10% | 8% |
| **7 day daily average** | 2,337 | 2,500 | 1,809 | 2,407 | -528 | -93 | -23% | -4% | 2,577 | 2,690 | 239 | 189 | 10% | 8% |
| **5 day total** | 12,842 | 13,742 | 9,213 | 12,258 | -3,629 | -1,483 | -28% | -11% | 13,773 | 14,377 | 931 | 635 | 7% | 5% |
| **5 day daily average** | 2,568 | 2,748 | 1,843 | 2,452 | -726 | -297 | -28% | -11% | 2,755 | 2,875 | 186 | 127 | 7% | 5% |
| **AM peak hourly average (weekdays)** | 93 | 100 | 96 | 127 | 2 | 27 | 2% | 27% | 146 | 152 | 53 | 52 | 56% | 52% |
| **PM peak hourly average (weekdays)** | 244 | 261 | 169 | 224 | -76 | -37 | -31% | -14% | 259 | 271 | 15 | 9 | 6% | 4% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 4,746 | 10,792 | 6,046 | 127% | 14,492 | 9,746 | 205% |
| **7 day daily average** | 678 | 1,542 | 864 | 127% | 2,070 | 1,392 | 205% |
| **5 day total** | 3,873 | 7,932 | 4,059 | 105% | 11,752 | 7,879 | 203% |
| **5 day daily average** | 775 | 1,586 | 812 | 105% | 2,350 | 1,576 | 203% |
| **AM peak hourly average (weekdays)** | 29 | 131 | 102 | 352% | 217 | 188 | 646% |
| **PM peak hourly average (weekdays)** | 86 | 140 | 54 | 62% | 197 | 111 | 129% |

# Site 7 – Barnsbury Road between Copenhagen Street and Maygood Street

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5 day total** | 40,587 | 43,430 | 33,482 | 44,549 | -7,105 | 1,119 | -18% | 3% | 42,972 | 44,855 | 2,385 | 1,425 | 6% | 3% |
| **5 day daily average** | 8,117 | 8,686 | 6,696 | 8,910 | -1,421 | 224 | -18% | 3% | 8,594 | 8,971 | 477 | 285 | 6% | 3% |
| **AM peak hourly average (weekdays)** | 406 | 435 | 398 | 529 | -9 | 94 | -2% | 22% | 469 | 490 | 63 | 55 | 15% | 13% |
| **PM peak hourly average (weekdays)** | 641 | 686 | 499 | 664 | -142 | -22 | -22% | -3% | 669 | 698 | 27 | 12 | 4% | 2% |

***No 7 Day Total or Daily Average provided, because September 2021 ATC data has missing records for Saturday and Sunday***

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **5 day total** | 3,970 | 5,525 | 1,555 | 39% | 6,947 | 2,977 | 75% |
| **5 day daily average** | 794 | 1,105 | 311 | 39% | 1,389 | 595 | 75% |
| **AM peak hourly average (weekdays)** | 87 | 96 | 8 | 10% | 96 | 8 | 9% |
| **PM peak hourly average (weekdays)** | 45 | 77 | 31 | 69% | 118 | 73 | 161% |

***No 7 Day Total or Daily Average provided, because September 2021 ATC data has missing records for Saturday and Sunday***

# Site 8 – Tolpuddle Street, west of Cloudesly Street

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 37,556 | 40,184 | 31,059 | 41,325 | -6,497 | 1,142 | -17% | 3% | 37,967 | 39,632 | 411 | -552 | 1% | -1% |
| **7 day daily average** | 5,365 | 5,741 | 4,437 | 5,904 | -928 | 163 | -17% | 3% | 5,424 | 5,662 | 59 | -79 | 1% | -1% |
| **5 day total** | 27,989 | 29,950 | 23,115 | 30,755 | -4,874 | 806 | -17% | 3% | 28,367 | 29,611 | 378 | -339 | 1% | -1% |
| **5 day daily average** | 5,598 | 5,990 | 4,623 | 6,151 | -975 | 161 | -17% | 3% | 5,673 | 5,922 | 76 | -68 | 1% | -1% |
| **AM peak hourly average (weekdays)** | 279 | 298 | 284 | 378 | 5 | 80 | 2% | 27% | 304 | 318 | 26 | 20 | 9% | 7% |
| **PM peak hourly average (weekdays)** | 382 | 409 | 317 | 422 | -65 | 13 | -17% | 3% | 374 | 390 | -8 | -19 | -2% | -5% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 1,942 | 1,057 | -885 | -46% | 3,809 | 1,867 | 96% |
| **7 day daily average** | 277 | 151 | -126 | -46% | 544 | 267 | 96% |
| **5 day total** | 1,394 | 764 | -630 | -45% | 2,908 | 1,514 | 109% |
| **5 day daily average** | 279 | 153 | -126 | -45% | 582 | 303 | 109% |
| **AM peak hourly average (weekdays)** | 24 | 8 | -16 | -66% | 46 | 21 | 88% |
| **PM peak hourly average (weekdays)** | 16 | 16 | 1 | 4% | 44 | 29 | 180% |

# Site 9 – Liverpool Road between Tolpuddle Street and Chapel Market

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 43,676 | 46,722 | 48,521 | 64,559 | 4,845 | 17,837 | 11% | 38% | 50,267 | 52,471 | 6,591 | 5,749 | 15% | 12% |
| **7 day daily average** | 6,239 | 6,675 | 6,932 | 9,223 | 692 | 2,548 | 11% | 38% | 7,181 | 7,496 | 942 | 821 | 15% | 12% |
| **5 day total** | 31,787 | 34,014 | 35,541 | 47,288 | 3,754 | 13,275 | 12% | 39% | 35,835 | 37,406 | 4,048 | 3,392 | 13% | 10% |
| **5 day daily average** | 6,357 | 6,803 | 7,108 | 9,458 | 751 | 2,655 | 12% | 39% | 7,167 | 7,481 | 810 | 678 | 13% | 10% |
| **AM peak hourly average (weekdays)** | 296 | 317 | 399 | 531 | 103 | 214 | 35% | 67% | 378 | 395 | 82 | 77 | 28% | 24% |
| **PM peak hourly average (weekdays)** | 391 | 419 | 469 | 624 | 78 | 206 | 20% | 49% | 440 | 459 | 49 | 40 | 12% | 10% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 9,269 | 5,039 | -4,230 | -46% | 7,768 | -1,501 | -16% |
| **7 day daily average** | 1,324 | 720 | -604 | -46% | 1,110 | -214 | -16% |
| **5 day total** | 7,048 | 3,678 | -3,370 | -48% | 5,991 | -1,057 | -15% |
| **5 day daily average** | 1,410 | 736 | -674 | -48% | 1,198 | -211 | -15% |
| **AM peak hourly average (weekdays)** | 68 | 44 | -24 | -35% | 82 | 14 | 21% |
| **PM peak hourly average (weekdays)** | 119 | 60 | -58 | -49% | 101 | -17 | -15% |

# Site 10 – Penton Street between Tolpuddle Street and Risinghill Street

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7 day total** | 62,262 | 66,575 | 52,958 | 70,462 | -9,304 | 3,887 | -15% | 6% | 65,514 | 68,386 | 3,252 | 1,811 | 5% | 3% |
| **7 day daily average** | 8,895 | 9,511 | 7,565 | 10,066 | -1,329 | 555 | -15% | 6% | 9,359 | 9,769 | 465 | 259 | 5% | 3% |
| **5 day total** | 48,294 | 51,677 | 40,422 | 53,783 | -7,872 | 2,106 | -16% | 4% | 49,550 | 51,722 | 1,256 | 45 | 3% | 0% |
| **5 day daily average** | 9,659 | 10,335 | 8,084 | 10,757 | -1,574 | 421 | -16% | 4% | 9,910 | 10,344 | 251 | 9 | 3% | 0% |
| **AM peak hourly average (weekdays)** | 438 | 469 | 490 | 652 | 52 | 183 | 12% | 39% | 506 | 528 | 68 | 59 | 15% | 13% |
| **PM peak hourly average (weekdays)** | 797 | 853 | 624 | 830 | -173 | -23 | -22% | -3% | 767 | 801 | -30 | -52 | -4% | -6% |

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **7 day total** | 6,872 | 7,993 | 1,121 | 16% | 7,874 | 1,002 | 15% |
| **7 day daily average** | 982 | 1,142 | 160 | 16% | 1,125 | 143 | 15% |
| **5 day total** | 5,387 | 5,640 | 253 | 5% | 6,063 | 676 | 13% |
| **5 day daily average** | 1,077 | 1,128 | 51 | 5% | 1,213 | 135 | 13% |
| **AM peak hourly average (weekdays)** | 93 | 101 | 8 | 9% | 57 | -36 | -39% |
| **PM peak hourly average (weekdays)** | 71 | 63 | -8 | -12% | 110 | 39 | 54% |

# Site 11 – Penton Street between White Lion Street and Pentonville Road

## Motorised traffic

| | August 2020 observed | August 2020 normalised | February 2021 observed | February 2021 normalised | February 2021 Difference observed | February 2021 Difference normalised | February 2021 Difference observed (%) | February 2021 Difference normalised (%) | September 2021 observed | September 2021 normalised | September 2021 Difference observed | September 2021 Difference normalised | September 2021 Difference observed (%) | September 2021 Difference normalised (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2 day total** | 11,646 | 12,462 | 9,543 | 12,697 | -2,103 | 235 | -18% | 2% | 14,053 | 18,698 | 2,407 | 6,236 | 21% | 50% |
| **2 day daily average** | 5,823 | 6,231 | 4,772 | 6,349 | -1,052 | 118 | -18% | 2% | 7,027 | 9,349 | 1,204 | 3,118 | 21% | 50% |
| **AM peak hourly average (weekdays)** | 104 | 111 | 298 | 396 | 194 | 285 | 186% | 256% | 388 | 516 | 284 | 405 | 273% | 364% |
| **PM peak hourly average (weekdays)** | 394 | 422 | 369 | 491 | -26 | 69 | -7% | 16% | 512 | 681 | 118 | 259 | 30% | 61% |

***No 7 Day Total or Daily Average provided, because February 2021 ATC data has missing records for Saturday and Sunday. Data is inconsistent from Wednesday onwards, so a 2-day average of Monday and Tuesday is taken for all months in the interest of consistency.***

## Cycling

| | August 2020 observed | February 2021 observed | February 2021 Difference observed | February 2021 Difference observed (%) | September 2021 observed | September 2021 Difference observed | September 2021 Difference observed (%) |
|---|---|---|---|---|---|---|---|
| **5 day total** | 2,629 | 1,687 | -942 | -36% | 3,267 | 638 | 24% |
| **5 day daily average** | 1,315 | 844 | -471 | -36% | 1,634 | 319 | 24% |
| **AM peak hourly average (weekdays)** | 37 | 27 | -10 | -27% | 145 | 108 | 289% |
| **PM peak hourly average (weekdays)** | 79 | 83 | 4 | 5% | 172 | 93 | 117% |

***No 7 Day Total or Daily Average provided, because September 2021 ATC data has missing records for Saturday and Sunday***

# Appendix 2: Speed results

**Speeds at count sites (seven-day totals), Baseline (August/September 2020) – February 2021**

| Speeds | Average speed before (mph) | Average Speed after (mph) | 85th percentile speed before (mph) | 85th percentile speed after (mph) | Volume over Posted Speed Limit before | Volume over Posted Speed Limit after | % Over Posted Speed Limit before | % Over Posted Speed Limit after |
|---|---|---|---|---|---|---|---|---|
| **Madras Place** | 9.2 | 15.1 | 12.5 | 19.7 | 0 | 84 | 0.0% | 13.5% |
| **Liverpool Road nr Furlong Road 1** | 17.7 | 17.3 | 20.8 | 20.9 | 2,294 | 1,822 | 21.3% | 21.0% |
| **Liverpool Road north of Barnsbury St** | 17.8 | 17.5 | 21.0 | 20.8 | 2,482 | 2,507 | 21.6% | 20.4% |
| **Liverpool Road south of Barnsbury St** | 18.4 | 19.9 | 22.7 | 23.9 | 2,421 | 3,422 | 28.5% | 44.8% |
| **Liverpool Road nr Cloudesley Square** | 18.6 | 18.9 | 22.1 | 22.4 | 3,356 | 3,026 | 30.8% | 32.5% |
| **Thornhill Road** | 16.5 | 15.0 | 19.6 | 18.0 | 303 | 126 | 13.0% | 6.9% |
| **Barnsbury Road 1** | 16.4 | 16.1 | 20.5 | 20.0 | 1,460 | 1,025 | 19.5% | 16.2% |
| **Tolpuddle Street nr Cloudesley Street** | 14.1 | 16.2 | 16.8 | 19.5 | 181 | 536 | 3.4% | 12.1% |
| **Liverpool Road nr Tolpuddle Street** | 11.4 | 12.6 | 14.3 | 16.4 | 37 | 229 | 0.6% | 3.3% |
| **Penton Street nr Tolpuddle Street** | 16.3 | 15.2 | 20.1 | 18.3 | 1,375 | 546 | 15.5% | 7.2% |
| **Penton Street nr White Lion Street 2** | 16.8 | | 20.4 | | 1,034 | | 16.6% | |
| **Overall average** | **15.7** | **16.4** | **19.2** | **20.0** | | | **15.5%** | **17.8%** |
| **Overall total / %** | | | | | **14,943** | **13,322** | | |

## Speeds at count sites (seven-day totals), Baseline (August/September 2020) – September 2021

| Speeds | Average speed before (mph) | Average Speed after (mph) | 85th percentile speed before (mph) | 85th percentile speed after (mph) | Volume over Posted Speed Limit before | Volume over Posted Speed Limit after | % Over Posted Speed Limit before | % Over Posted Speed Limit after |
|---|---|---|---|---|---|---|---|---|
| **Madras Place** | 9.2 | 11.7 | 12.5 | 14.4 | 0 | 12 | 0.0% | 1.9% |
| **Liverpool Road nr Furlong Road 1** | 17.7 | 14.4 | 20.8 | 18.2 | 2,294 | 388 | 21.3% | 7.1% |
| **Liverpool Road north of Barnsbury St** | 17.8 | 18.9 | 21.0 | 22.7 | 2,482 | 3,987 | 21.6% | 35.0% |
| **Liverpool Road south of Barnsbury St** | 18.4 | 20.4 | 22.7 | 24.2 | 2,421 | 4,111 | 28.5% | 48.2% |
| **Liverpool Road nr Cloudesley Square** | 18.6 | 16.7 | 22.1 | 19.8 | 3,356 | 1,579 | 30.8% | 13.8% |
| **Thornhill Road** | 16.5 | 15.9 | 19.6 | 18.9 | 303 | 251 | 13.0% | 9.7% |
| **Barnsbury Road 1** | 16.4 | 18.0 | 20.5 | 22.4 | 1,460 | 2,203 | 19.5% | 33.8% |
| **Tolpuddle Street nr Cloudesley Street** | 14.1 | 13.3 | 16.8 | 16.0 | 181 | 148 | 3.4% | 2.7% |
| **Liverpool Road nr Tolpuddle Street** | 11.4 | 14.3 | 14.3 | 18.5 | 37 | 584 | 0.6% | 8.1% |
| **Penton Street nr Tolpuddle Street** | 16.3 | 15.8 | 20.1 | 19.6 | 1,375 | 1,215 | 15.5% | 13.0% |
| **Penton Street nr White Lion Street 2** | 16.8 | 16.1 | 20.4 | 19.9 | 1,034 | 984 | 16.6% | 14.1% |
| **Overall average** | **15.7** | **15.9** | **19.2** | **19.5** | | | **15.5%** | **17.0%** |
| **Overall total / %** | | | | | **14,943** | **15,462** | | |

# Appendix 3: Cycleway 38 traffic count locations and type

**Table 7.1: Islington-commissioned traffic count sites and type**

| Site Name | Type |
|---|---|
| Madras Place, between Ringcroft Street and Morgan Road | ATC |
| Liverpool Road, between Furlong Road and Orleston Road | ATC |
| Liverpool Road, north of Barnsbury Street | ATC |
| Liverpool Road, south of Barnsbury Street | ATC |
| Liverpool Road, between Cloudesley Square and Old Royal Free Place | ATC |
| Thornhill Road, between Ripplevale Road and Malvern Terrace | ATC |
| Barnsbury Road, between Copenhagen Street and Maygood Street | ATC |
| Tolpuddle Street, west of Cloudesley Street | ATC |
| Liverpool Road, between Tolpuddle Street and Chapel Market | ATC |
| Penton Street, between Tolpuddle Street and Risinghill Street | ATC |
| Penton Street, between White Lion Street and Pentonville Road | ATC |

ATCs measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. They are considered to be approximately 98% reliable. Inaccuracies can arise when, for example, two vehicles pass at the same time they may be counted as one, or if a car and bicycle pass at the same time, it may be read as one car. However, the same method is used for 'before' and 'after' counts so any of these inconsistencies would be similar and comparable over both sets of counts. These types of counters are considered a good industry standard throughout the UK.

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

TfL permanent traffic sites and coordinates (all ATCs)

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

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

ATCs measure traffic volumes and speeds using two thin tubes that run across the street and are connected to a sensor. When wheels pass over the tubes, the pressure impact is interpreted by the sensor to identify the type of vehicle passing over, and the speed with which it passed. They are considered to be approximately 98% reliable. Inaccuracies can arise when, for example, two vehicles pass at the same time they may be counted as one, or if a car and bicycle pass at the same time, it may be read as one car. However, the same method is used before and after and the method is considered a good industry standard. They are used as a standard in monitoring transport schemes.

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

# Appendix 4: Traffic count normalisation methodologies

## Traffic counts

In order to calculate the normalisation figures in this report, daily volumes of motorised traffic have been drawn from a range of 12 permanent traffic counters managed by Transport for London (TfL) across Islington and used to establish monthly averages in 2019, 2020 and 2021.The locations of these counters are detailed in Appendix 3. The percentage difference between the same months across the two different years has been used to adjust the counts to normalise for Covid-19 disruption between the months in which counts have been taken. The methodology has been independently peer reviewed (more information on the peer review is available on the St Peter's monitoring report page 9 and 105).

Drawing the baseline from TfL count locations outside of Islington and from additional years was considered and tested but resulted in only small differences and therefore was not taken forward.

To calculate the normalised percentage differences, the August motorised traffic count volumes have been divided by 0.9345, the February 2021 motorised traffic counts by 0.7515, and the September 2021 motorised traffic counts by 0.958 to give normalised volumes. In other words, in order to account for the fact that there was less traffic on Islington streets from March 2020 onwards we have provided adjusted figures that provide an estimate for what the traffic would have been if there was no Covid-19 disruption. This allows us to analyse the impacts of the PFS area scheme rather than the impacts of Covid-19 on the traffic volumes.

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

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

# Appendix 5: Air quality monitoring

The council has been monitoring air quality since 2000 and has 21 long term monitoring sites across the borough, 19 of which have been used in the analysis for this report. 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.

The air quality monitoring sites used to calculate the borough averages as part of this report are summarised below:

The 19 long-term air quality monitoring sites across Islington used in this report are listed below, with details about their type and classification.

**Table 9.1: Islington air quality monitoring sites type and period of installation**

| **Locations** | **Monitoring type** | **Installation** | **Site Type by DEFRA classification*** |
|---|---|---|---|
| **Caledonian Road** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Rosebery Avenue** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **City Road** | Diffusion tube | Pre-existing (since 2000) | Roadside |

| | | | |
|---|---|---|---|
| **Old Street** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Highbury Corner** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Balls Pond Road** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Holloway Road** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Junction Road** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Archway Close** | Diffusion tube | Pre-existing (since 2000) | Roadside |
| **Percy Circus** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Myddleton Square** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Arran Walk** | Diffusion tube | Pre-existing (since 2000) | Urban background |

| | | | |
|---|---|---|---|
| **Sotheby Road** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Lady Margaret Road** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Upper Street/Bouton Place** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Highbury Fields** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Zoffany Park** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Elthorne Park** | Diffusion tube | Pre-existing (since 2000) | Urban background |
| **Turle Road** | Diffusion tube | Pre-existing (since 2000) | Urban background |

# Methodology

## Data quality control

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

The data used in this analysis will follow these rules as much as possible, especially in regard to the deployment of monitors. However it will not have fully gone through this process, especially in regard to normal end of year analysis processes for 2020, and should therefore be treated as provisional. This is even more the case with the sensor data, which is not an approved monitoring type for official reports and where the uncertainties are less known.

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

## Insights background

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

Pollution also varies 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 $NO_2$ levels but no consistent change in PM due to weather impacts. Since the introduction of Cycleway 38 there has been one further lockdown.

# Appendix 6: 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.