HIGHBURY PEOPLE-FRIENDLY STREETS INTERIM REPORT AUDIT STATEMENT





1. AUDIT PROCESS

- 1.1.1 SYSTRA Ltd. has been appointed by the London Borough of Islington (LBI) to complete an audit of the Highbury People Friendly Streets (PFS) Interim Report published in October 2021.
- 1.1.2 SYSTRA is a global leader in mass transportation and mobility, employing over 7,000 global employees across 80 countries. Our team members have been heavily involved with the creation of monitoring reports for Low-Traffic Neighbourhoods (LTNs) and similar schemes across the city since mid-2020, when such schemes were first installed under Streetspace for London and the Emergency Active Travel Fund.
- 1.1.3 More specifically to Islington, SYSTRA completed the Pre-Consultation reports for the Canonbury West and Highbury PFS schemes, which were published in December 2021 and February 2022, respectively. The latter of these was a follow up to the Highbury PFS Interim report and required independent processing of the same baseline dataset to be used for comparison.
- 1.1.4 The audit of the Highbury PFS Interim report has been completed systematically, according to the following steps:
 - Cataloguing issues raised by local community groups and issues noted during SYSTRA's own work completing the pre-consultation report for Highbury;
 - Categorising each item on a RAG (red-amber-green) scale in terms of its impact on report accuracy and subsequent likelihood to affect policy decisions taken;
 - O Thorough investigation of "red" and "amber"-rated items, with amendments, correction and updates agreed with LBI and noted; and
 - Review of any findings, considering wider implications for Borough decision-making.
- 1.1.5 This audit statement will review key findings and recommended amendments, with a statement following to outline any implications for LBI and its decision-making process regarding the scheme.

2. KEY FINDINGS & AMENDMENTS

2.1.1 The following sections outline key findings during the audit process, as well as any recommended amendments to be made.

2.2 **Data Patching:**

2.2.1 Upon review of the raw traffic counts feeing the interim report, it was found that several instances of anomalous data required infill "patching" to ensure data inputs were representative of general trends at each site and not impacted by erroneous events unrelated to the scheme (such as a problem with the survey equipment). This was done according to standard industry practice and the results did not materially change the narrative for any individual road or the scheme at-large.

2.3 **Holloway Road Data Quality:**

2.3.1 Interim data for Holloway Road was found to be of unacceptably poor quality to use for analysis, and it is therefore recommended that any conclusions related to this site are revoked. It is noted that pre-consultation counts for this location are of good quality and indicate little-to-no change in vehicle flows when compared to baseline counts.

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2.4 Blackstock Road Swapped Data:

2.4.1 Reported interim flows for Blackstock Road North and South were swapped in analysis and reporting. The correct values using patched data are +65% for the northern site and +17% for the southern site. Detail is provided in Table 1 and Table 2, noting that data for Blackstock Road South required some patching for the Interim data:

Table 1. Blackstock Road North – Reported & Corrected Flows

	AVERAGE NORMALISED BASELINE FLOWS	AVERAGE NORMALISED INTERIM FLOWS	DIFFERENCE NORMALISED (%)
Reported	11,933	13,805	+16%
Corrected	11,933	19,656	+65%

Table 2. Blackstock Road South - Reported & Corrected Flows

	AVERAGE NORMALISED BASELINE FLOWS	AVERAGE NORMALISED INTERIM FLOWS	DIFFERENCE NORMALISED (%)
Reported	13,182	19,653	+49%
Corrected	13,182	15,459	+17%

2.5 **Total Percentage Changes:**

2.5.1 All percentage changes for "total change" in the interim report were calculated as "averages of averages" on individual roads, rather than the change in total vehicles/cycles in the interim vs. baseline. The updated percentage changes are -67% for internal and +10% for external road motorised vehicles, and +50% for internal and -17% for external road cycles.

Table 3. Review of Percentage Changes – Internal Roads

METHOD	AVG FLOW BASELINE	AVG FLOW INTERIM	PERCENTAGE CHANGE
Average of average changes		n/a	-43%
Percentage change interim vs. baseline	54,579	18,450	-66%
Percentage change interim vs. baseline (amended)	54,358	18,165	-67%

Table 4. Review of Percentage Changes - Boundary Roads*

METHOD	AVG FLOW BASELINE	AVG FLOW INTERIM	PERCENTAGE CHANGE
Average of average changes*		n/a	+1%
Percentage change interim vs. baseline*	125,057	124,776	0%
Percentage change interim vs. baseline (amended, not including Holloway Road)	105,566	116,133	+10%

Table 5. Review of Percentage Changes – Cycles on Internal Roads

METHOD	AVG FLOW BASELINE	AVG FLOW INTERIM	PERCENTAGE CHANGE
Average of average changes		n/a	+66%
Percentage change interim vs. baseline	5,513	8,265	+50%
Percentage change interim vs. baseline (amended)	5,525	8,261	+50%

Table 6. Review of Percentage Changes – Cycles on Boundary Roads*

METHOD	AVG FLOW BASELINE	AVG FLOW INTERIM	PERCENTAGE CHANGE
Average of average changes*		n/a	-47%
Percentage change interim vs. baseline*	3,083	2,580	-16%
Percentage change interim vs. baseline (amended)	3,097	2,580	-17%

^{*}Note that the total figure was not presented in the interim report for boundary roads.

2.6 **Normalising Cycle Counts:**

2.6.1 SYSTRA's view is that cycle counts should not be normalised. Given the wide range of highly sensitive and hyper-local factors affecting propensity to cycle in any given area, there is no industry standard method by which such levels can be normalised, since any approach would invariably ignore other key factors. Instead, we support the approach taken in the interim

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report of providing actual counts set against a context of how various factors can impact cycling levels.

2.7 **Speed Data:**

- 2.7.1 It is unclear how some figures in the report related to speeding have been calculated. SYSTRA has therefore re-calculated the following, assuming "speeding" to mean "travelling above the posted speed limit":
 - O Difference in the number of avg. daily vehicles counted speeding on internal roads: -8,042 daily vehicles
 - O Difference in average vehicle speeds on internal roads: -0.9mph
 - O Difference in the percentage of vehicles speeding on internal roads: -6 percentage points (13% interim 19% baseline)
- 2.7.2 Some comments also noted that reductions in speeding vehicles were calculated as larger than the baseline flows. Using the following formula, SYSTRA has recalculated the average daily reduction in speeding vehicles for the roads mentioned, again assuming "speeding" to mean travelling above the posted speed limit:

[(interim avg. daily flow) * (% over posted speed limit)] – [(baseline avg. daily flow) * (% over posted speed limit)]

- O Auburt Park: -1,365 daily vehicles, -92%
- O Drayton Park: -2,963 daily vehicles, -70%
- O Highbury Hill: -2,235 daily vehicles, -91%
- St. Thomas's Road: -466 daily vehicles, -76%

2.8 Discrepancy in Reporting on Air Quality Figures:

2.8.1 SYSTRA notes that the interim report's executive summary stated that air quality had improved at all sites, whilst the report's main body states that there had generally been an increase in NO₂ levels. SYSTRA supports the findings that NO₂ levels have increased, per the report body, but would add that such levels have increased broadly in line with those across the Borough at-large and are therefore representative of wider trends, rather than directly correlated with changes brought about by the scheme.

2.9 Data on Bus Journey Times, Police Response Times:

2.9.1 Data on bus journey times is presented in the pre-consultation report, whilst data on police response times has not been made available in itself – but are likely affected in a similar manner to London Fire Brigade response times, which are reviewed in the report.

3. IMPLICATIONS FOR DECISION-MAKING ON THE HIGHBURY PFS SCHEME

3.1.1 Through the audit of the Highbury PFS Interim Report, SYSTRA has noted several instances of incorrect data handling or miscalculation, as well as some examples of inaccurate text descriptions. However, in considering all issues noted and amending any mistakes, we have found that the data collected for the interim report *generally* presents a stronger case for the PFS scheme's implementation than was actually reported, and aligns well with conclusions made in the pre-consultation report. Some examples of this are presented below.

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- 3.1.2 For internal roads, whilst the interim report indicates a 43% reduction of motorised vehicle counts on internal roads, updated data indicates a 67% reduction of such traffic, presenting stronger evidence that the scheme is reducing traffic levels on internal roads. This updated data considers a need for light patching across a range of sites, although patching did not change the magnitude and direction of change to a notable degree at any site.
- 3.1.3 On external roads, the corrected data shows a more mixed picture than was presented in the interim report. Blackstock Road North, slightly south of the junction at Finsbury Park, showed a notably larger increase in motorised traffic than was reported (+65% vs. +16%), which is consistent with pre-consultation counts. Conversely, the picture for Blackstock Road South is less severe than initially presented, with a 17% increase in motorised traffic instead of a 49% increase. This increase was more moderate still in the pre-consultation data.
- 3.1.4 Similarly, after determining that interim data for Holloway Road was not of acceptable quality for use, a reduction in traffic flows here can no longer be claimed at the interim stage. However, given that the pre-consultation counts indicate a change of less than 1% for motorised vehicle volumes, it can be tentatively concluded that the scheme's impact on this road is limited. Overall, the removal of this road from the analysis of external roads increases the total change across such roads to +10%, although again it is noted that this figure shows a net reduction at pre-consultation stage.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

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Highbury West and Highbury Fields people-friendly streets trials

Results from the interim monitoring report







Summary of key findings

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



Since through traffic has been prevented in the Highbury PFS trial neighbourhoods, traffic has **fallen overall by 43%.**



Traffic on Benwell Road has decreased from 11,774 vehicles a day to 932 vehicles, (92% decrease).



Air quality data from within the Highbury neighbourhood, shows that **nitrogen dioxide levels have decreased at all sites**.



On local streets within the neighbourhood, numbers of vehicles speeding **fell by 45%**



No significant impact on London Fire Brigade response times



No significant impact on anti-social behaviour and crime rates



Cycling increased at 80% of sites. Highbury Place has seen an 80% increase in cyclists, from 650 to 1,171 cyclists a day. That is an increase of 521 cyclists.



Cycling has **increased by 66%** on the internal roads.



There is a mixed picture in terms of the change in motorised traffic volumes on boundary roads. On average, motorised traffic volumes have changed on **Hornsey Road by -28%**, **Holloway Road by -42%**, **Highbury Grove by -10%**, **Seven Sisters Road by +7%**, **St Paul's Road by +15%**, **Blackstock Road (north) by +16% and Blackstock Road (south) by +49%**. The increase of traffic on Blackstock Road compared with the decrease on Holloway Road, indicates that traffic patterns may still be balancing and adjusting to the changes. The council will continue to monitor the situation and make adjustments or implement mitigating schemes if necessary.

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



Why are we doing this?

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

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

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

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

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

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

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





Objectives

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

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

Objective One: Healthy

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

Objective Two: Safe

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

Objective Three: Cleaner and greener

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

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

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

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

In addition to this, the council is monitoring:

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

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

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

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





Interim results



Motorised traffic on internal roads

- Motorised traffic has decreased on most internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the trial.
- Overall, motorised traffic volumes on internal roads have decreased by an average of 43%. The greatest decrease has been on Benwell Road, where there was an 92% decrease.
- Across internal roads, the proportion of vehicles speeding has decreased by 45%.
- The above figures have been normalised to account for the impacts of COVID-19 on motorised traffic levels in September 2020 and in May 2021. More information on this process is available in the main report.



Motorised traffic on boundary roads

- There is a mixed picture in terms of the change in motorised traffic volumes on boundary roads. On average, motorised traffic volumes have changed on:
 - Holloway Road by -42%
 - Hornsey Road by -28%
 - Highbury Grove by -10%
 - Seven Sisters Road by +7%
 - St Paul's Road by +15%
 - Blackstock Road (north) by +16%
 - Blackstock Road (south) by +49%



Cycling on internal roads

- Overall cycling has increased by 66% on internal roads.
- Highbury Place has seen an 80% increase in cyclists, from 650 to 1,171 cyclists a day.



Anti-social behaviour and crime

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



Air quality

■ NO₂ levels in Highbury have been below the annual objective level of 40µg/m³ at all monitoring sites post-implementation, including the main roads (November 2020 to May 2021). Levels of NO2 in Highbury have decreased at all sites since the start of the trials, however they are higher than the previous year (2020). This is consistent with the impacts of Covid-19 and wider borough trends. The council will continue to monitor air pollution to gain a better long term understanding.



London Fire Brigade response times

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

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

Until then, residents in the Highbury area can also fill in our survey at www.islington.gov.uk/roads/peoplefriendly-streets/highbury

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Glossary

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

85th Percentile Speed – The 85th percentile is used in transport monitoring to gauge changes in speeds and speeding behaviour. It is the speed at which 85% of traffic will be travelling at, or below, along a street (15% of traffic will be travelling faster than this speed). For example, if the 85th percentile speed is 20mph, then 85% of vehicles will be travelling at 20mph or less.

AM peak – In this report "AM peak" refers to the hours between 07:00 and 10:00.

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 5 for more details).

Boundary roads – For the purpose of this report, the "boundary roads" of the Highbury trial area are Blackstock Road (A1201) to the Northeast, Hornsey Road (A103) to the West, Holloway Road (A1) to the Southwest and Seven Sisters Road (A503) to the Northwest.

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

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

Roads beyond the boundary – These are local roads which fall outside of the trial scheme "boundary roads", which have been monitored to gauge any residual impact on nearby areas. For the purpose of this report, "roads beyond the boundary" are local roads outside of the Highbury trial area and data gathered from these sites is presented separately to those roads which do fall within the Highbury trial area.

Low traffic neighbourhood – A "low traffic neighbourhood" (LTN) is an area where a number of traffic filters are strategically placed to make it impossible or very difficult to cut through an area by motor vehicle. This stops drivers using local streets as shortcuts and makes it safer and easier to walk and cycle. In this report the Highbury people-friendly streets (PFS) trial refers to a low traffic neighbourhood implemented in Islington under an experimental traffic order. The position of the traffic filters means that drivers (including residents, deliveries and emergency services) will still be able to reach their homes.

Normalised – In this report "normalising" means to adjust traffic count figures to take into account the impact of Covid-19 on traffic patterns. This methodology is explained below in more detail, but in simple terms it means that the traffic count figures have been increased to project what the 2020 and 2021 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.

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

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

PM peak – In this report "PM peak" refers to the hours between 16:00 and 19:00.

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

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

Independent production of the report by Project Centre Ltd

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

The methodologies and analyses in this report are set out in greater detail in Appendix 6 and have been independently peer reviewed. Drafting the baseline from TfL count locations outside of Islington and from additional years was considered and tested in the peer review but resulted in only small differences and therefore was not taken forward as the chosen methodology.

Highbury PFS area in context

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

PFS Scheme – The traffic filters in the Highbury PFS areas have been installed at ten locations. Eight new camera-enforced traffic filters were installed on: Aubert Park, Benwell Road, Gillespie Road, Highbury Hill, Monsell Road, St. Thomas's Road and two filters at Highbury Place, one at the junction with Calabria Road and the other at the junction with Holloway Road. Two further filters, physically enforced by bollards, were installed at Avenell Road and Plimsoll Road.

The Experimental Traffic Order (ETO) for the scheme came into force on 11 December 2020 and the scheme went officially live on the 11 January 2021. Two of the filters make use of existing traffic control infrastructure: the existing width restriction on Benwell Road was converted into a traffic filter and the point no entry on Gillespie Road, preventing traffic travelling west, was converted to prevent traffic flow from both directions of travel. Both of the bollard-enforced traffic filters feature a removable central bollard allowing access for fire service vehicles, if required.

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

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

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

Nearby major traffic projects and utility works – The redevelopment of Highbury Corner was completed by Transport for London (TfL) in 2019 as part of a London-wide Safer Junctions programme to reduce road danger at a number of intersections including roundabouts, which the council supports. This project represents a major change to the local transport network and may take time for traffic patterns to settle and adjust to the new layout.

Major Thames Water works to reline a water main started in early February 2021 and extended until early May 2021, affecting Seven Sisters Road and Holloway Road. These works ran parallel to the PFS scheme and involved the road width being reduced to a single lane, controlled by multi-way traffic signals, in phased increments. During this period, Blackstock Road was reported to experience significant tailbacks, as traffic flow was limited in joining Seven Sisters Road. Holloway Road also experienced significant congestion while works were underway.

Vandalism - Numerous instances of vandalism were experienced early on during after the scheme was put in place. This included damage to the traffic filter enforcement camera equipment and the removal of bollards from traffic filters.

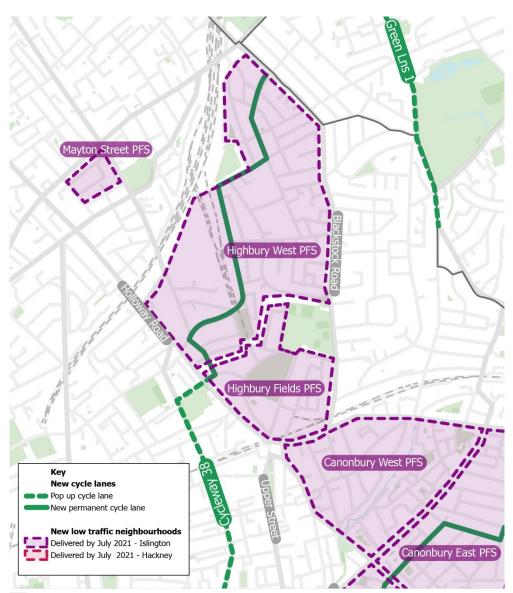
The traffic monitoring equipment has been damaged on a regular basis, mainly on sites located to the north of the scheme boundary area. This was accounted for in the monitoring process by "patching" the data appropriately. Specific instances of vandalism are noted in the Appendices, along with the patching required to ensure a full set of data was recorded.

Weather – Weather can have a significant impact on travel choices, especially cycling, and air pollution. During the second week of November 2020, when the baseline traffic counts were taken, the minimum temperature for the south-eastern region of England was 5.9°C and the maximum was 16°C. Weather was mild, wet and windy.

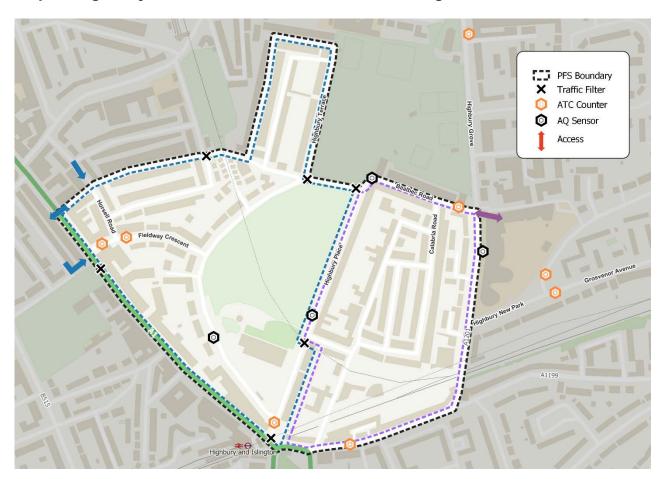
During the month the interim traffic counts were taken in May 2021, the minimum temperature was 6°C and the maximum was 19.2°C. Rainfall was higher than usual.

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 November 2020 took place as restrictions were being eased across the country, including the reopening of pubs, bars and restaurants. Local lockdowns were brought into place, but this did not affect the scheme areas at the time that the baseline traffic counts were taken. When the interim counts were taken in May 2021, COVID-19 related restrictions had been lifted across the country.

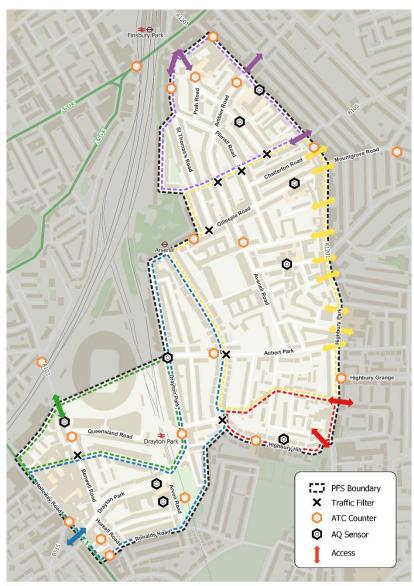
Map 1: Highbury PFS area in wider context of nearby LTN areas and cycle lanes



Map 2: Highbury Fields PFS measures and monitoring sites



Map 3: Highbury West PFS measures and monitoring sites



Traffic counts approach

Traffic counts in the Highbury PFS area

The count data presented in this report is not traffic modelling, but actual observed traffic. The data compares traffic flows in November 2020, before the implementation of the Highbury PFS area, with May 2021, approximately five months after the scheme went live.

Ad-Hoc Ambler Road monitoring – these counts were carried out at four previously measured locations, in response to reports that drivers were using Ambler Road as a short-cut. This is a previously identified a cut-through route within the PFS area, however the route would not offer much advantage to drivers under normal conditions. As such, when designing the scheme, the decision was made not to add further filters in this area. Doing this would have created a far more complex and restrictive travel route for residents.

The Ambler Road monitoring exercise was carried out to compare data against both of the main sets of counts, to determine whether motorists are likely to use the short-cut in future or whether they were using the short-cut to avoid disruptive Thames Water works on Seven Sisters Road that took place from the start of the year until early May 2021.

Implementation of the Highbury Low Traffic Neighbourhood first commenced on 30 November 2020. However, due to a number of instances of vandalism, the completion of the scheme was significantly delayed, and work on delivery was suspended. The scheme finally went live during the week commencing 11 January 2021.

Completed and anticipated dates of traffic counts

Baseline ("before") counts: 9 – 15 November 2020

Highbury trial goes live: 11 January 2021

Ad-Hoc Ambler Road monitoring (4 sites): 1 – 21 March 2021 (3 weeks)

Interim ("after") counts: 24 – 30 May 2021 (some count sites were extended due to damaged or vandalised count equipment)

Interim ("after") counts for St. Paul's Road: 14 – 20 June 2021

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

Automatic Traffic Counts (ATCs) are used at the majority of sites in the Highbury PFS area. ATCs measure motorised and cycle traffic volumes and motorised traffic speeds, classifying the traffic by type. Transport for London (TfL) use radar counts on the Transport for London Road Network (TLRN), which measure motorised traffic volumes and speeds. More information about the different types of counts and which type was used at each site is detailed in Appendix 5.

Analysis and normalisation methodology overview

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

Daily volumes of motorised traffic have been drawn from 12 permanent traffic counters managed by Transport for London across Islington and used to establish monthly averages in 2019 and 2020. The locations of these counters are detailed in Appendix 5. The percentage difference between the same month across the two different years has been used to adjust each set of counts to normalise for Covid-19 disruption in the months in which counts have been taken. The methodology is set out in greater detail in Appendix 6 and has been independently peer reviewed. Determining the baseline from TfL count locations outside of Islington and from additional years was considered and tested but resulted in only small differences and was therefore not taken forward as the chosen methodology.

Considering the months in which the Highbury counts took place, in November 2020 (baseline counts), motorised traffic across the permanent counters in Islington was approximately 22% lower than in November 2019. In May 2021 (interim counts), motorised traffic was approximately 18% lower than in May 2019. As such, the baseline and interim motorised traffic counts have been increased by 22% and 18% respectively, to bring the figures in line with those expected under more normal circumstances.

Data for the Ad-Hoc Ambler Road monitoring was collected in March 2021, when traffic volumes were approximately 31% below those for March 2019 and the data was adjusted accordingly.

For the interim counts, some of the data needed to be patched with counts that extended into June 2021, when traffic volumes were approximately 9% below the 2019 equivalent. The June 2021 normalisation factor was applied to the surveys at Ambler Road, Blackstock Road and Hornsey Road.

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

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

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

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

Interpreting count results

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

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

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

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

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).

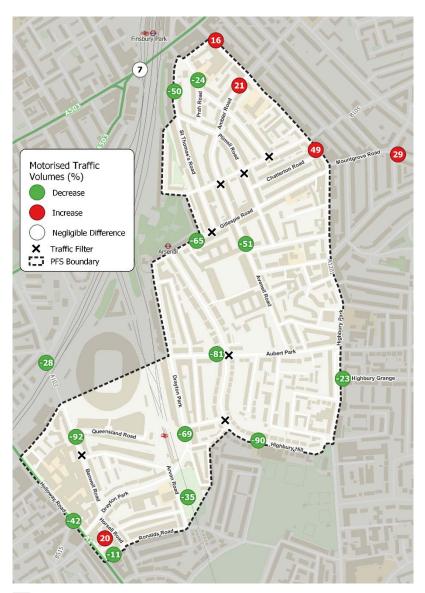
As vehicles travelling through the PFS area are likely to go through multiple counter sites, the number of vehicles counted in the area will be higher than the actual number of trips made. The number of vehicles counted should not be conflated with the number of trips or number of vehicles present within the area, as a vehicle could be counted multiple times.

Bus journey times

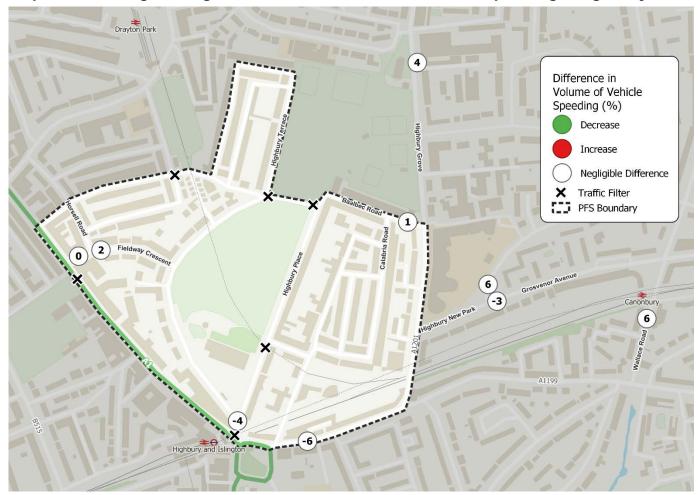
TfL monitors bus journey times across its network, which can add an additional layer of understanding about the impacts of transport schemes. Bus journey times around the Highbury PFS area are therefore being monitored. The council will look to include an analysis of this data in the pre-consultation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

Map 4: Percentage change in motorised traffic volumes - Highbury Fields (seven-day daily averages) Motorised Traffic Volumes (%) Decrease Increase Negligible Difference X Traffic Filter PFS Boundary

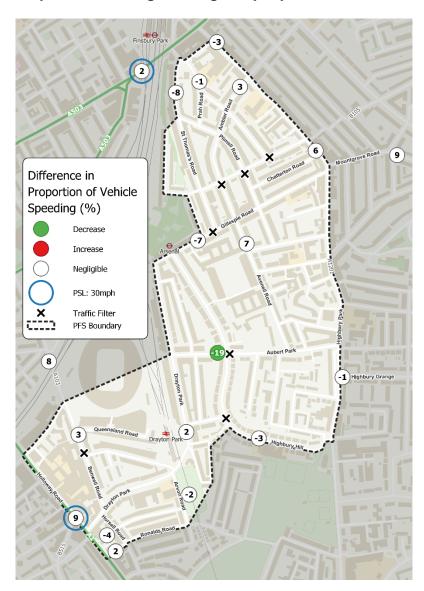
Map 5: Percentage change in motorised traffic volumes - Highbury West (seven-day daily averages)



Map 6: Percentage change in volume of motorised vehicles speeding - Highbury Fields (seven-day daily averages)



Map 7: Percentage change in proportion of motorised vehicles speeding - Highbury West (seven-day daily averages)



Indicators

Motorised traffic on internal roads

The motorised traffic count results for the internal roads (roads within the Highbury PFS area) are summarised in Tables 2 and 3.

The motorised traffic count results for roads external to the Highbury PFS area are summarised in Table 4.

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

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

Ambler Road – This site has been removed from the November 2020 to May 2021 analysis. During the November 2020 survey period, emergency road works were in place at the junction of Blackstock Road and Ambler Road, limiting vehicles to local access only. The closure was in place for the duration of the monitoring count period. Consequently, the traffic volumes shown in the data was significantly lower than usual.

Ad-Hoc Ambler Road monitoring analysis – the March counts shown in Table 3 were carried out at four previously measured locations, in response to reports that short-cutting vehicles had been identified in the cell. Data was gathered across all four sites, over a three-week period from 1 March 2021 – 21 March 2021. However, there was data loss at the Blackstock Road site, so ATC data was taken for only the week 8 – 14 March 2021.

Motorised traffic volumes on internal roads

Results (seven-day daily averages)

Table 2: Motorised traffic volumes on internal roads

November 2020 vs May 2021	Baseline Observed - Nov 2020	Baseline normalised – Nov 2020	Observed – May 2021	Normalised - May 2021	Difference Observed	Difference Normalised	Difference Observed (%)	Difference (Normalised)
Benwell Road	9,169	11,774	758	932	-8,411	-10,842	-92%	-92%
Highbury Hill	5,288	6,791	543	667	-4,745	-6,123	-90%	-90%
Aubert Park	3,611	4,636	732	900	-2,878	-3,736	-80%	-81%
Drayton Park	11,175	14,350	3,595	4,420	-7,580	-9,930	-68%	-69%
Gillespie Road	2,028	2,604	731	899	-1,297	-1,705	-64%	-65%
Avenell Road	1,234	1,584	634	780	-599	-804	-49%	-51%
St. Thomas's Road	1,871	2,403	970	1,193	-901	-1,210	-48%	-50%
Highbury Place	632	811	336	413	-296	-398	-47%	-49%
Arvon Road	338	433	229	282	-109	-152	-32%	-35%
Prah Road	1,021	1,311	805	990	-216	-321	-21%	-24%
Fieldway Crescent	1,518	1,950	1,242	1,527	-277	-423	-18%	-22%
Fieldway Crescent West	988	1,268	847	1,042	-141	-227	-14%	-18%
Baalbec Road	1,881	2,415	1,723	2,118	-158	-297	-8%	-12%
Ronalds Road	1,029	1,321	955	1,175	-74	-147	-7%	-11%
Horsell Road	723	928	904	1,112	181	184	25%	20%
Overall Internal	42,506	54,579	15,004	18,450	-27,501	-36,131	-41%	-43%

Table 3: Motorised traffic volumes recorded for Ad-Hoc Ambler Road monitoring

March 2021 vs May 2021	Observed - Mar 2021	Normalised - Mar 2021	Observed – May 2021	Normalised - May 2021	Difference Observed	Difference Normalised	Difference Observed (%)	Difference (Normalised)
Blackstock Road**	15,065	21,921	15,982	19,653	917	-2,268	6%	-10%
St. Thomas's Road*	851	1,238	970	1,193	119	-45	14%	-4%
Prah Road*	630	917	805	990	175	73	28%	8%
Ambler Road*	966	1,406	1,385	1,703	419	297	43%	21%

Table 4: Motorised traffic volumes on roads beyond the boundary

November 2020 vs May 2021	Baseline Observed - Nov 2020	Baseline normalised - Nov 2020	Observed – May 2021	Normalised - May 2021	Difference Observed	Difference Normalised	Difference Observed (%)	Difference (Normalised)
Grosvenor Avenue***	6,593	8,466	5,262	6,470	-1,331	-1,996	-20%	-24%
Highbury Grange***	2,511	3,224	2,030	2,496	-481	-728	-19%	-23%
Highbury New Park***	3,008	3,863	3,262	4,011	254	149	8%	4%
Wallace Road***	2,695	3,460	3,527	4,337	832	877	31%	25%
Mountgrove Road***	3,039	3,902	4,088	5,027	1,049	1,125	35%	29%

^{*} Ambler Road, St Thomas's Road and Prah Road – For the March values, these show the average of three weeks' recorded data from 1 to 21 March 2021. The May 2021 results are for one week of recorded data.

^{**} Blackstock Road – Due to data loss, the Blackstock Road March values shows the 7-day daily average for one week of recorded data, from 8 March 2021 to 14 March 2021. The May 2021 results are for one week of recorded data.

^{***} These roads are local roads located outside of the Highbury PFS.

Insights: motorised traffic on internal roads

Motorised traffic has decreased on the majority of internal roads in both observed and normalised results, which is a positive interim outcome in line with the objectives of the scheme. This demonstrates that a significant amount of through-traffic travelled through the area prior to the implementation of the Highbury PFS trial. Overall, normalised motorised traffic on internal roads has decreased by 32%. The greatest decrease has been on Benwell Road where there was a 92% decrease: representing a fall in traffic by 10,842 vehicles per average day.

Horsell Road has shown a 20% normalised increase in motor traffic, a rise from 928 to 1,112 vehicles per average day. This increase was anticipated as the road previously featured an historic bollard closure at the junction with Ronalds Road. The bollard was removed as part of the PFS trial to facilitate access for Highbury Fields residents from Holloway Road. In consideration of this fact this is a relatively small increase in terms of the numbers of vehicles and motorised traffic volumes have fallen on the connecting roads (Ronalds Road, Arvon Road and Drayton Park). The council will continue to monitor this situation and identify if there is an ongoing issue in the pre-consultation report.

Wallace Road and Mountgrove Road are both outside of the Highbury PFS. Motorised traffic volumes have risen by 25% on Wallace Road and 29% on Mountgrove Road. Mountgrove Road is located on the boundary of the London Borough of Hackney, within Brownswood ward. The area features an historic LTN to the north. The issues on this road are known and the council will be exploring possible solutions in the near future as part of the wider people-friendly streets programme. In contrast, motorised traffic volumes have fallen on Highbury Grange by 23%, and on Grosvenor Avenue by 24% with a numerical decrease of 1,996 vehicles. Highbury New Park has shown a negligible rise of 4%.

On Ambler Road, normalised motor traffic volumes have risen by 21% between March 2021 and May 2021. Both of these counts were taken after the PFS was implemented in January 2021, so the difference in traffic would not be down to the introduction of the scheme. St Thomas's Road and Prah Road showed a decrease between November 2020 and May 2021, but a negligible change (less than 10%) from March 2021 to May 2021. The number of vehicles using Ambler Road has increased by approximately 300 between March and May 2021. This suggests that some vehicles are continuing to make use of the Ambler Road cut-through. The council will continue to monitor this location to identify if this trend continues and requires intervention.

Motorised traffic speeds and speeding on internal roads

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

Traffic counters measure motorised traffic speeds as well as volumes. Full speed monitoring results are available in Appendix 4 (absolute speeds from baseline and interim results). Details about the dates and locations of the traffic volume and speed monitoring are in Appendix 5.

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

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

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

Table 5: Changes in speeds on internal roads (November 2020 to May 2021)

November 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Aubert Park	-3.61	-20%	-3.14	-14%	-9,476	-92%	-19%
St. Thomas's Road	-1.36	-8%	-1.74	-8%	-2,431	-71%	-8%
Gillespie Road	-1.71	-11%	-2.6	-14%	-1,774	-85%	-7%
Highbury Place	-1.25	-10%	-2.43	-15%	-259	-99%	-4%
Horsell Road	-0.58	-4%	-1.23	-7%	-213	-44%	-4%
Highbury Hill	-1.11	-6%	1.21	5%	-14,983	-91%	-3%
Arvon Road	-0.44	-3%	-0.25	-1%	-243	-41%	-2%
Prah Road	-0.74	-6%	-0.92	-6%	-81	-45%	-1%
Fieldway Crescent West	0.67	6%	0.68	5%	7	17%	0%
Baalbec Road	-0.16	-1%	0.06	0%	58	16%	1%
Drayton Park	-0.44	-2%	0.56	3%	-18,995	-67%	2%
Ronalds Road	0.44	3%	0.66	4%	49	7%	2%
Fieldway Crescent	0.45	3%	0.77	5%	78	13%	2%
Benwell Road	1.3	10%	1.93	13%	-2,740	-86%	3%
Avenell Road	0.46	3%	1.52	8%	-74	-8%	7%
Overall	-0.54	-3%	-0.33	-2%	-51,077	-45%	-2%

Table 6: Changes in speeds on roads beyond the boundary (November 2020 to May 2021)

November 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Grosvenor Avenue*	-0.56	-3%	-0.48	-2%	-6,765	-28%	-3%
Highbury Grange	-0.26	-2%	-0.02	0%	-754	-27%	-1%
Highbury New Park*	0.79	5%	1.01	5%	1,806	55%	6%
Wallace Road*	1.15	7%	1.19	6%	2,629	72%	6%
Mountgrove Road*	2.72	20%	2.88	17%	3,754	214%	9%

^{*} These roads are local roads located outside of the Highbury PFS.

Table 7: Changes in speeds for Ad-Hoc Ambler Road monitoring

March 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
St. Thomas's Road*	-0.34	-2%	-0.76	-4%	-38	-20%	-3%
Prah Road *	-1.08	-8%	-1.68	-10%	-23	-64%	-3%
Blackstock Road**	0.37	2%	0.51	3%	501	15%	2%
Ambler Road *	2.29	20%	2.43	17%	40	280%	3%

^{*} Ambler Road, St Thomas's Road and Prah Road – For the March values, these show the average of three weeks' recorded data from 1 to 21 March 2021. The May 2021 results are for one week of recorded data.

^{**} Blackstock Road – Due to data loss, the Blackstock Road March values shows the 7-day daily average for one week of recorded data, from 8 March 2021 to 14 March 2021. The May 2021 results are for one week of recorded data.

Insights: motorised traffic speeds and speeding on internal roads

General insights

Across the internal road sites, there has been a negligible difference in speeds. 85th percentile speeds and the proportion of vehicles speeding have both fallen by 2%. Average speeds have fallen by 3%.

However the difference in volume of speeding traffic shows a dramatic decline on the majority of monitored roads. The three streets which show the greatest decline in the difference in volume of speeding vehicles are Highbury Place (99% decrease), Aubert Park (92% decrease) and Highbury Hill (91% decrease).

Some sites (such as Wallace Road and Mountgrove Road) have seen an increase in the number of vehicles exceeding the speed limit, however in proportion to the overall traffic volumes these changes are negligible (i.e. less than 10%).

For the four sites monitored under the Ad-Hoc Ambler Road monitoring, the proportion of vehicles exceeding the speed limit was also negligible. All of these counts were taken after the PFS was implemented. There was a 280% increase in the volume of vehicles speeding on Ambler Road, but this was due to the increase in traffic volumes between March 2021 and May 2021.

Motorised traffic on boundary roads

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

This monitoring report provides data and insights relating to the Highbury PFS trial specifically by comparing data from before implementation in November 2020 to five months after implementation in May 2021.

ATC surveys – These were carried out on Highbury Grove, Blackstock Road, Hornsey Road and St Paul's Road.

The data for St Paul's Road was collected separately as part of the Canonbury West PFS data monitoring scheme. The baseline data was collected in July 2020 and the interim data in July 2021.

Radar surveys – These were carried out on Seven Sisters Road and Holloway Road. Radar counts monitor speeds and vehicle volumes to a less specific categorisation than ATC surveys; they exclude cycle counts.

Motorised traffic volumes on boundary roads

Results (seven-day daily averages)

Table 8: Motorised traffic volumes on boundary roads

November 2020 vs May 2021	Baseline Observed - Nov 2020	Baseline normalised - Nov 2020	Observed – May 2021	Normalised - May 2021	Difference Observed	Difference Normalised	Difference Observed (%)	Difference Normalised (%)
Hornsey Road South**	11,034	14,170	9,288	10,195	-1,746	-3,974	-16%	-28%
Holloway Road*	16,130	20,713	9,745	11,984	-6,385	-8,730	-40%	-42%
Highbury Grove North**	9,132	11,727	8,589	10,562	-543	-1,165	-6%	-10%
Seven Sisters Road*	24,989	32,089	27,827	34,220	2,838	2,130	11%	7%
St Paul's Road*** (Western Site)	18,382	21243	22189	24357	3807	3114	21%	15%
Blackstock Road North**	9,292	11,933	12,576	13,805	3,284	1,872	35%	16%
Blackstock Road South**	10,266	13,182	15,982	19,653	5,717	6,471	56%	49%

^{*} These roads were measured using ATC counts.

^{**} These roads were measured using Radar counts.

^{***} St Paul's Road (Western Site) data was collected for the Canonbury West scheme between the July 2020 and July 2021, rather than November 2020 and May 2021.

Bus journey times on boundary roads

As mentioned in the Traffic Counts approach section, Transport for London (TfL) monitors bus journey times across its network, which can add an additional layer of understanding about the impacts of transport schemes. Bus journey times around the Highbury PFS area are therefore being monitored. The council will look to include an analysis of this data in the pre-consultation monitoring report in order to include a full year of data.

Journey time data on boundary roads

It is important to the council that the data presented in this monitoring report is highly accurate and has been subject to scrutiny. For this reason, this version of the Highbury interim monitoring report does not include INRIX data. 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.

It was originally intended that this report include data from our smart journey time monitoring system (INRIX), as used in previously published PFS monitoring reports. Adjustment factors are applied to the INRIX data at source, however an inadvertent error from INRIX occurred in the adjustment for data between April 2021 and June 2021. This error in the adjustment led to the data overstating journey times between April and June 2021 by 10-15%.

This impacts the Highbury interim monitoring report, as the analysis uses data from May 2021. The INRIX data therefore cannot be used at this time until the error is rectified and the solution has been validated. Accurate data will be published in the Highbury preconsultation monitoring report.

Insights: motorised traffic on boundary roads (combined monitoring)

General insights

Note, raw motorised traffic count data has been analysed and compared to give the 'observed' results in the traffic volume results tables. The observed results have been through the normalisation process described in the introductory section to give the 'normalised' results. Throughout this section the figures referred to are normalised volumes for motor traffic only (excluding cycles).

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

Changes in travel times on boundary roads could be influenced by factors other than the Highbury PFS trial detailed in the section 'Highbury PFS area in context'.

Across the boundary roads, there is a mixed picture. Traffic volumes have risen sharply on some roads but fallen on others. Hornsey Road, Holloway Road and St. Paul's Road have all seen falls in motor traffic volumes, but Blackstock Road has seen a rise in traffic volumes.

It is the aim of the people-friendly streets programme that in the longer term, travel behaviour is expected to adjust, resulting in lower motorised traffic levels overall, though essential trips will continue.

St Paul's Road

It is likely that the Highbury Corner redevelopment has had a significant impact on traffic on St Paul's Road. Motorised traffic volumes have risen by 15% at the count location on St Paul's Road, which was measured as part of the Canonbury West PFS interim monitoring report. This is likely to be due to traffic joining and leaving from the A1201 Highbury Grove / Blackstock Road.

Blackstock Road

Blackstock Road has seen an increase in traffic volumes, two monitoring sites were selected on this road to gauge traffic origins. The northernmost site is located to the south of the junction with Rock Street, and the southernmost site is between the junctions of Mountgrove Road and Brownswood Road. The monitoring data concludes that there was a 49% increase in traffic volumes at the southern site and a 16% increase at the northern site. Looking at observed traffic volumes, the southern site recorded approximately 1,000 more vehicles in the November baseline than the northern site; in May, the difference had increased to around 3,000 vehicles. The southern site increased from 10,266 observed to 15,982. This suggests that between the two sites, 3,000 vehicles are distributing around the network. This is unlikely to be into the Highbury PFS as traffic volumes have fallen here; however, there has been an increase in traffic on Mountgrove Road. Looking at the wider network, it would appear that some traffic may be using Riversdale Road and Mountgrove Road as a cut-through between A105 Green Lanes and Blackstock Road.

There may be other factors that have led to the traffic increase on Blackstock Road. It is notable that traffic volumes are slightly higher in the PM period than the AM and significantly higher volumes of traffic have been recorded at the southern monitoring site (49% increase) when compared to the northern site (16% increase), which supports the theory that drivers may be using Riversdale Road and Mountgrove Road as an alternative route. The council will continue to monitor the situation in the pre-consultation report, to understand whether the increase in traffic on Blackstock Road is a long-term trend or if the volumes will even out across the network in time. The increase of traffic on Blackstock Road compared with the decrease on Holloway Road, indicates that there is scope for adjustment in the medium to long term and that traffic patterns may still be adjusting to the changes.

Bus journey times and INRIX data will be included in the upcoming Highbury PFS pre-consultation report, which will provide a more informed view on the changes observed on Blackstock Road. The council is in the process of designing and delivering School Streets on main roads, and will include Ambler Road Primary School within this scope of works. School Streets have also been identified as ideal candidates to target increased greening opportunities and it is intended to introduce a green wall near the school site to further mitigate airborne pollutants. Further detail on these plans can be found in People Friendly Street programme update linked here.

Seven Sisters Road

Seven Sisters Road has seen a slight increase in traffic volumes, although not significant at the time of monitoring. The council will continue to monitor traffic volumes in this area, with a view to developing mitigating measures if required. Examples of mitigating measure include adjusted traffic signal timings, bus priority measures, footway widening and greening measures (such as trees or green walls).

Motorised traffic speeds and speeding on boundary roads

The traffic counts carried out also measure motorised traffic speeds. These are the same counts that have been analysed for their volume results. The details about the dates and locations of these counts are in Appendix 5. Full speed monitoring results are available in Appendix 4 (absolute speeds from baseline and interim results).

The speed limit is 20mph on all roads where counts were taken, except for Seven Sisters Road and Holloway Road, which are TfL roads and have a 30mph Posted Speed Limit (PSL). Speed monitoring results have not been normalised. The results presented here are seven-day averages.

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

Table 9: changes in speeds on boundary roads

November 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
St Paul's Road (Western Site)*	-1.52	-10%	-1.68	-8%	-806	-4%	-6%
Blackstock Road North	-0.62	-4%	-0.6	-3%	-51	-2%	-3%
Seven Sisters Road (30mph PSL)	1.43	8%	3	13%	548	120%	2%
Highbury Grove North	0.3	2%	0.28	1%	-70	-2%	4%
Blackstock Road South	2.25	17%	2.03	11%	1,814	161%	6%
Hornsey Road South	0.66	3%	1.29	5%	-1,306	-17%	8%
Holloway Road (30mph PSL)	5.84	36%	6	27%	914	306%	9%

^{*} St Paul's Road (Western Site) data was collected for the Canonbury West scheme, between the dates of July 2020 and July 2021, rather than November 2020 and May 2021.

Insights: motorised traffic speeds and speeding on boundary roads

General insights

In general across the boundary road sites, average speeds and the 85th percentile speed have changed negligibly, however there have been increases on Blackstock Road South and Holloway Road. There has also been an increase in the 85th percentile speed on Seven Sisters Road. The difference in proportion of vehicles speeding has changed negligibly at all sites.

Blackstock Road

The volume of vehicles breaking the posted 20mph speed limit has increased by 161% at Blackstock Road (South), while the proportion of vehicles speeding has changed negligibly (+6%). This could suggest that the increase in volume of vehicles speeding is linked to the overall increase in volume of traffic on Blackstock Road, documented in the 'Motorised traffic on boundary roads' section. However, at the northern site, there has been a negligible decrease in the volume and proportions of vehicles speeding.

The council will continue to monitor the situation on Blackstock Road and consider mitigation options if deemed necessary.

Holloway Road

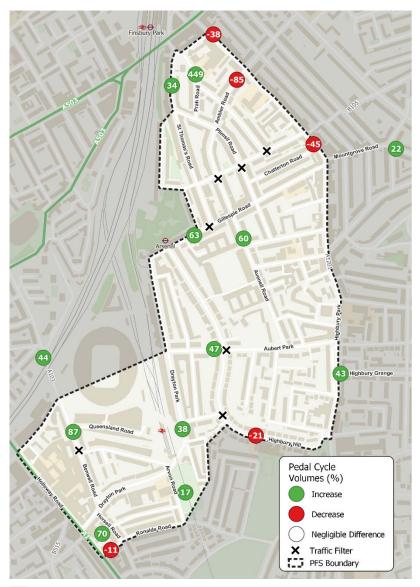
There has been a substantial increase in vehicle speeds on Holloway Road, with the 85th percentile speed rising from 22mph to 28mph. There has been a negligible (+9%) increase in the proportion of vehicles exceeding the speed limit. Traffic volumes have increased on Holloway Road, but not by a sufficient quantity to explain the rise in the number of motorists exceeding the speed limit. It is not clear if this rise in speeds is related to the introduction of the Highbury PFS as there may be other factors that have affected vehicle speeds on this road.

Cycling volumes on internal and boundary roads

Map 8: Percentage change in cycling volumes (seven-day daily averages) - Highbury Fields



Map 9: Percentage change in cycling volumes (seven-day daily averages) - Highbury West



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

In November 2020, when the baseline counts were taken, Covid-19 related lockdown restrictions were being lifted across the country, with local lockdowns occurring in some areas. When the interim counts were taken in May 2021, the government's lockdown restrictions were being lifted altogether, with all restrictions removed completely by 19 July 2021. Despite this, the effect of lockdowns may have resulted in slightly less cyclists on the road during both the baseline and interim periods.

Cycling levels are also impacted by seasonal weather change including temperature¹ and rainfall; for example, there is normally much more cycling participation in May than in November. However it is notable that while the weather was characteristically wet and windy in November 2020², it was unusually mild, sharing an almost identical minimum temperature with May 2021 and averaging 1.5° above the long term average. This suggests that inclement weather may not have made as great an impact on cycling levels than would usually be expected in November.

Conversely, May 2021 was unseasonably wetter than usual³, along with the average temperature falling 1.3° lower than normal. This suggests that cycling participation may have been lower than would usually be expected.

There are several interlinked factors when it comes to the impact seasonal weather variation has on cycling levels, while weather can still vary within a season. As an indication of the impact weather can have, one 2011 study found a doubling in temperature could lead to a 43% – 50% increase in cycling levels, before having a negative impact if too high (Study by Miranda-Moreno and Nosal, 2011).

¹ South-east England regional temperature data is sourced from the UK and regional series - Met Office

² NCIC Monthly Summary (metoffice.gov.uk) – Nov 2020

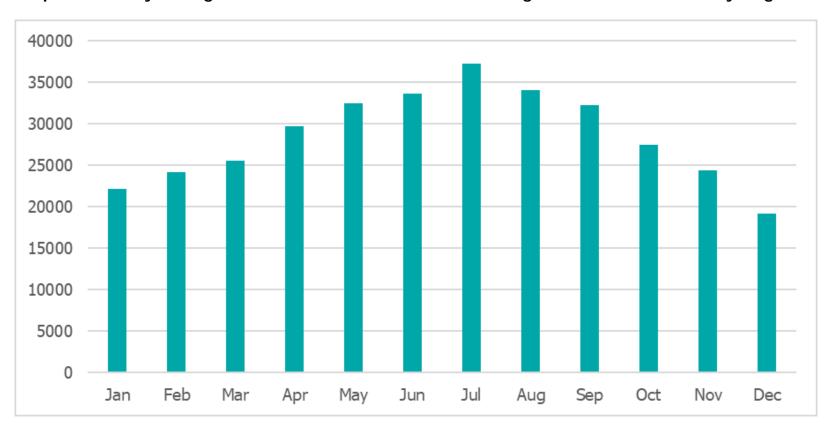
³ NCIC Monthly Summary (metoffice.gov.uk) – May 2021

During the month the baseline traffic counts were taken in November 2020 the minimum temperature was 5.9°C and the maximum was 12.3°C. England-wide weather data shows that November 2020 was mild, wet and windy. During the month the interim traffic counts were taken in May 2021, the minimum temperature was 6°C and the maximum was 19.2°C. UK-wide data shows that May 2021 saw well over double the average rainfall in parts of England, which may have reduced the numbers of cyclists on the roads.

It is not possible to separate out or control for the impact of weather on the results in this report.

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

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



Cycling volumes on internal roads

Results (seven-day daily averages)

Table 10: Pedal cycles volumes on internal roads (November 2020 to May 2021)

November 2020 vs May 2021	November 2020 May 2021		Difference Nov. 2020 - May 2021	Difference Nov. 2020 - May 2021 (%)
Prah Road	17	93	76	449%
Benwell Road	584	1,090	506	87%
Highbury Place	650	1,171	521	80%
Horsell Road	548	933	385	70%
Gillespie Road	797	1,300	503	63%
Avenell Road	118	188	70	60%
Aubert Park	188	278	89	47%
Drayton Park*	573	794	221	38%
Fieldway Crescent	412	566	154	37%
Baalbec Road	212	291	79	37%
St. Thomas's Road	453	608	155	34%
Arvon Road	133	156	23	17%
Fieldway Crescent West	551	571	20	4%
Ronalds Road	66	59	-7	-11%
Highbury Hill	211	167	-44	-21%
Overall Internal	5,513	8,265	2,751	66%

^{*}The Cycleway 38 route along Drayton Park was built between the period that the November 2020 baseline monitoring counts and May 2021 interim counts were gathered. The monitors were not able to detect cycle volumes using the segregated cycle lane. It is likely that pedal cycle volumes were actually higher in May 2021 than is indicated by the data.

Table 11: Pedal cycles volumes on roads beyond the boundary (November 2020 to May 2021)

November 2020 vs May 2021	November 2020	May 2021	Difference Nov. 2020 - May 2021	Difference Nov. 2020 - May 2021 (%)
Wallace Road*	40	461	421	1041%
Highbury Grange*	203	291	88	43%
Highbury New Park*	223	307	84	38%
Mountgrove Road*	691	842	151	22%
Grosvenor Avenue*	308	336	28	9%

^{*} These roads are local roads located outside of the Highbury PFS.

Table 12: Pedal cycles volumes for Ad-Hoc Ambler Road monitoring

March 2021 vs May 2021	March 2021	May 2021	Difference Mar. 2021 May 2021	Difference Mar. 2021 May 2021 (%)
Ambler Road	197	29	-167	-85%
St. Thomas's Road	490	205	-285	-58%
Prah Road	87	93	6	7%
Blackstock Road*	632	314	-318	-50%

Cycling volumes on boundary roads

Results (seven-day daily averages)

Table 13: Pedal cycles volumes on boundary roads*

November 2020 vs May 2021	November 2021	May 2021	Difference Nov. 2020 May 2021	Difference Nov. 2020 May 2021 (%)
Highbury Grove North	237	358	121	51%
Hornsey Road South	696	1,002	306	44%
Blackstock Road North	510	318	-193	-38%
Blackstock Road South	736	403	-333	-45%
St Paul's Road (Western Site)**	904	499	-405	-45%

^{*} Pedal cycle volumes for Holloway Road and Seven sisters Road are not available due to limitations in the radar counts used for those sites.

^{**} St Paul's Road (Western Site) data was collected for the Canonbury West scheme between July 2020 and July 2021, rather than November 2020 and May 2021.

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

On average across internal roads, cycling has increased by 66%, although a significant decrease was recorded at Highbury Hill. The greatest increase occurred on Highbury Place, where an additional 521 cyclists were recorded on an average day. By proportion the greatest change occurred on Wallace Road, where cycle volumes increased to 421 from 40, giving a proportional increase of 1,041%.

A possible explanation for this increase in cycle volumes on Wallace Road can be drawn using recent monitoring results from the Canonbury West people-friendly streets trial. These results report an increase in cycle volumes on Canonbury Square and Canonbury Park North. This suggests that cyclists are travelling east from Cycleway 38 on Holloway Road and using these quieter roads rather than using main roads.

The four local roads that were monitored outside of the PFS (Highbury New Park, Grosvenor Avenue, Wallace Road and Mountgrove Road) all recorded an increase in cycling, noteworthy as Wallace Road and Mountgrove Road also recorded increases in motor vehicle traffic volumes and speeds. In most cases, a rise in motor vehicle traffic is associated with a fall in cycle traffic. This may be due to a spill-over effect from the PFS schemes, with cyclists extending their trips locally.

Where cycle volumes are available on boundary roads, they have decreased by a negligible 5% overall, however cycling has substantially decreased on Blackstock Road (-45% and -38% at the two sites) while increasing on Highbury Grove North (+51%) and Hornsey Road South (+44%). On St Paul's Road, cycling fell by 45%. Typically, a fall in cycle traffic on the boundary roads can be expected, as cyclists prefer to use the quieter roads within the PFS. This is reflected in the numbers of cyclists observed. So, on Blackstock Road South, the 45% fall in cycle traffic represents 333 less cycle trips per average day. Some of the local roads within the PFS have seen increases of over 500 cycle trips per average day. Looking at the overall totals, cycle traffic has fallen by 99 counts per average day on the boundary roads, while it has risen by 3,522 on the internal roads.

The increase in cycling is in line with the programme's intended objectives. The indicator will continue to be monitored, and preconsultation monitoring is expected to be more accurate due to similarities in weather.

Air Quality

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

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

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

- Automatic monitors: monitor NO₂ and PM₁₀ 24 hours a day at two locations in the borough. These are our most accurate monitors.
- Diffusion tubes: provide monthly readings of NO₂. While not as accurate as the automatic monitors they can be more widely deployed to provide trends over a larger area and time period and are a nationally approved monitoring technique. These tubes measure the air's concentration of nitrogen dioxide (NO2), a toxic gas that can be very harmful to health. The tubes are replaced and analysed on a monthly basis. Research suggests that at urban roadside locations in the UK up to 80 per cent of the nitrogen dioxide measured comes from road transport.
- Sensors: these sensors can monitor a range of pollutants in a continuous manner like the automatic monitors, however they can have more uncertainty with regard to accuracy and these monitors have not gone through the same quality control process as our other monitors.

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

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

The air quality monitoring sites in the Highbury area are listed in Appendix 7, with details about type and if they have been added as part of the PFS programme or were pre-existing. The long-term sites that are being used for comparison work in this interim Highbury report consist of seven main road diffusion tubes and nine background urban diffusion tubes, as the sensor data we have for this area does not have enough data to be meaningfully analysed at this stage.

Methodology

Time period of study

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

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

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

Results: air quality diffusion tubes

Tables 14 to Table 17 and Graph 2 in this section use NO₂ data from diffusion tubes only, as the sensors in Highbury do not have any before-scheme monitoring. There are therefore no results for PM₁₀ for Highbury.

Tables 14 to 17 show the results since the PFS scheme broken down as follows:

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

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

Please note, the values in Tables 14 to 17 show the average results for all monitors in each category, with figures rounded to the nearest whole number, so the differences may look different to what is expected from the NO₂ values given for time periods.

Table 14: (Boundary roads) NO₂ levels in Highbury and borough long term diffusion tube sites

	Post Scheme NO ₂ (μg/m³)	Comparable pre-scheme NO ₂ (µg/m³)	All pre- scheme NO ₂ (μg/m³)	Post Scheme against Comparable pre-scheme NO ₂ (µg/m ³)	Post Scheme against Comparable pre-scheme (%)	Post Scheme against All pre-scheme (µg/m3)	Post Scheme against All pre-scheme (%)
Highbury	35	28	28	+7	+25%	+7	+26%
Whole borough long term sites	35	31	30	+4	+14	+5	+16%

This includes six monitoring locations for the whole borough long term sites for each time period. In Highbury this is seven monitoring sites for Comparable pre-scheme and eight monitoring sites for All pre-scheme and Post scheme, with values adjusted to account for periods of missing data (see Appendix 7 for further explanation).

It is worth noting both of the boundary road sites in Highbury are likely to have been impacted by factors other than the Highbury PFS trial. Please refer to "Nearby major traffic projects" under the "Highbury PFS area in context" section for details.

Table 15: (Internal roads) NO₂ levels in Highbury and borough long term diffusion tube sites

	Post Scheme NO ₂ (μg/m³)	Comparable pre-scheme NO ₂ (µg/m³)	All pre- scheme NO ₂ (μg/m³)	Post Scheme against Comparable pre-scheme NO ₂ (µg/m³)	Post Scheme against Comparable pre-scheme (%)	Post Scheme against All pre-scheme (µg/m3)	Post Scheme against All pre-scheme (%)
Highbury	26	21	22	+5	+21%	+4	+20%
Whole borough long term sites	25	22	21	+3	+15%	+4	+21%

This includes twelve monitoring sites in Highbury for Comparable pre-scheme and seventeen sites for All pre-scheme and Post scheme, with values adjusted for periods of missing data (see Appendix 7 for further explanation). There are six monitoring locations for the whole borough long term sites for each time period.

Table 16: (Non-street-based sites) NO₂ levels in Highbury and borough long term diffusion tube sites

	Post Scheme NO ₂ (μg/m³)	Comparable pre-scheme NO ₂ (µg/m³)	All pre- scheme NO ₂ (μg/m³)	Post Scheme against Comparable pre-scheme NO ₂ (µg/m ³)	Post Scheme against Comparable pre-scheme (%)	Post Scheme against All pre-scheme (µg/m3)	Post Scheme against All pre-scheme (%)
Highbury	23	20	19	+4	+18%	+4	+23%
Whole borough long term sites	24	19	19	+4	+21%	+5	+27%

There is one non-street monitoring site in Highbury for all time periods. There are three non-street monitoring locations for the whole borough long term sites for each time period.

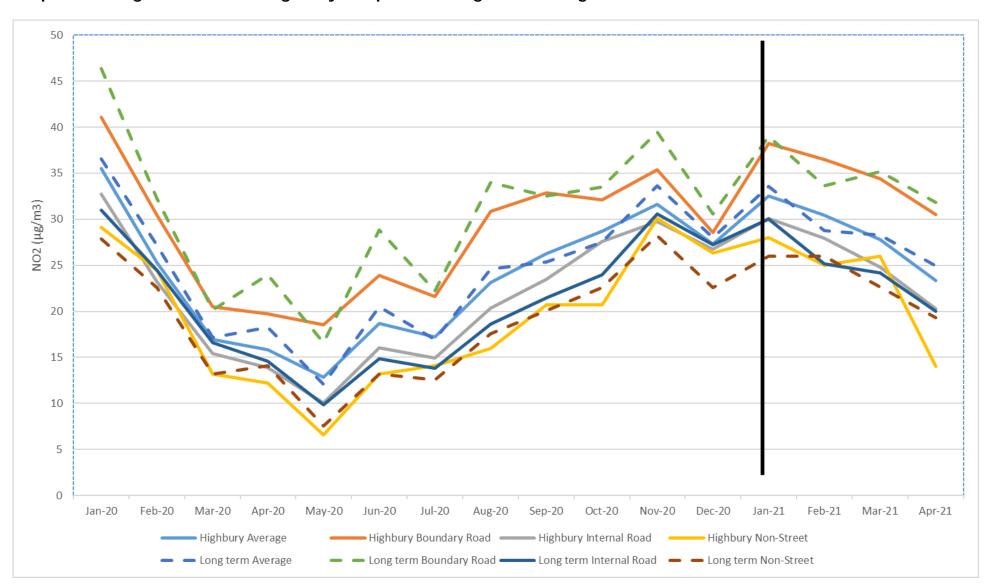
Table 17: (Overall) NO₂ levels in Highbury and borough long term diffusion tube sites

	Post Scheme NO ₂ (μg/m³)	Comparable pre-scheme NO ₂ (µg/m³)	All pre- scheme NO ₂ (μg/m³)	Post Scheme against Comparable pre-scheme NO ₂ (µg/m³)	Post Scheme against Comparable pre-scheme (%)	Post Scheme against All pre-scheme (µg/m3)	Post Scheme against All pre-scheme (%)
Highbury	29	23	23	+5	+22%	+6	+26%
Whole borough long term sites	29	25	24	+4	+17%	+5	+20%

This includes 15 total long term monitoring sites for the whole borough for each time period. In Highbury there are 20 total monitoring locations for Comparable pre-scheme and 26 monitoring sites for periods All pre-scheme and Post scheme, with values adjusted to account for periods of missing data (see Appendix 7 for further explanation).

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

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



Insights: air quality

The results in Tables 14 to 17 show higher pollution levels in Highbury since the low traffic neighbourhood has been introduced (January-April 2021) compared to the year before and the same time period the year before. However, this is also the case for the monitoring sites across the borough which are not in the Highbury area.

Increases in Highbury are similar to the changes in the borough more widely, with potentially slightly larger increases at boundary road sites, which will need further observation.

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

In summary these results show:

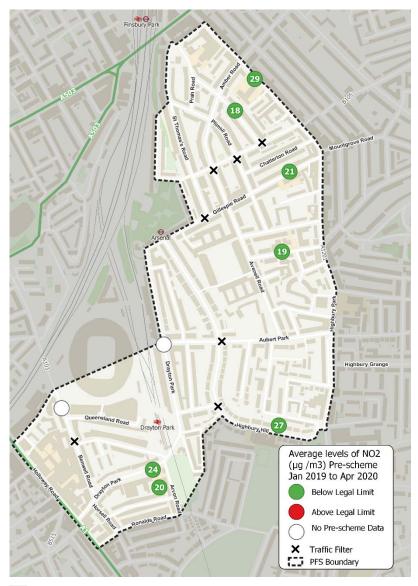
- In the post-implementation period, average NO₂ levels in Highbury have been within or at the annual objective level of 40μg/m³ at all sites.
- Levels of NO₂ in Highbury since people-friendly streets started (January-April 2021) are higher than the previous year (January-December 2020) at all but two sites where comparable data for the same months is available. This is also the case for long term monitoring sites.
- Levels of NO₂ in Highbury since people-friendly streets started (January-April 2021) are higher than the same time period the previous year (January-April 2020) at all but two sites where comparable data for the same months is available. This is also the case for long term monitoring sites.
- Changes in levels of NO₂ in Highbury reflect those in the borough more widely, except for perhaps boundary road sites showing slightly larger increases in pollution than wider borough changes since people friendly streets started.
- However, this is from only four months of data, therefore further observation is required.

• The Air Quality Team are satisfied that the interim results show no discernible impacts on air quality in the cell but they will continue to monitor air pollution over a longer time period to get a better understanding of any changes.

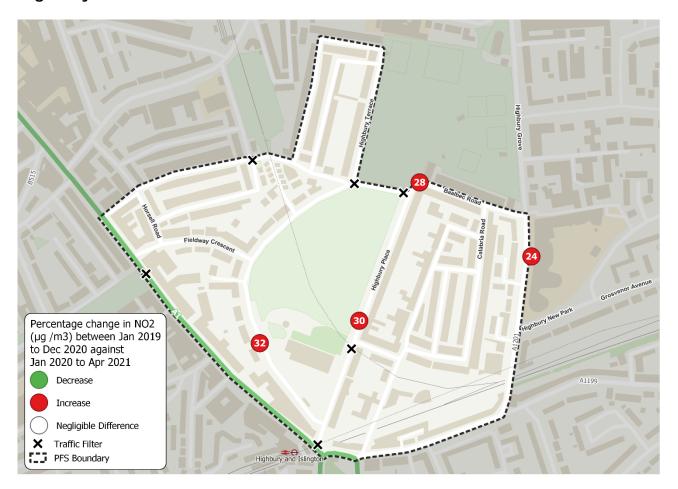
Map 10: Average levels of NO2 (µg/m3) Pre-Scheme Comparable January 2019 to April 2020-Highbury Fields



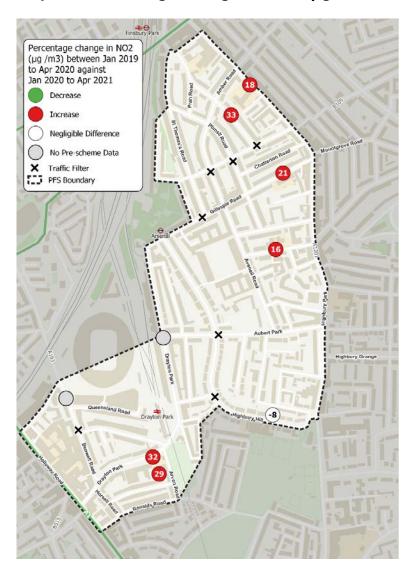
Map 11: Average levels of NO2 (µg/m3) Pre-Scheme Comparable January 2019 to April 2020-Highbury West



Map 12: Percentage change in NO_2 ($\mu g/m3$) between January 2019 to December 2020 and January 2020 to April 2021-Highbury Fields



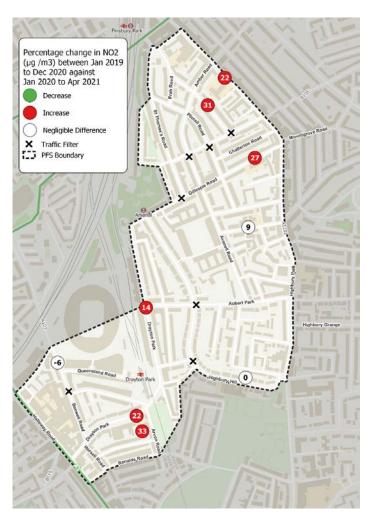
Map 13: Percentage change in NO2 (µg/m3) between Jan 2019 to Dec 2020 and Jan 2020 to Apr 2021-Highbury West



Map 14: Percentage change in NO_2 ($\mu g/m3$) between January 2019 to April 2020 and January 2020 to April 2021-Highbury Fields



Map 15: Percentage change in NO₂ (μg/m3) between Jan 2019 to Apr 2020 and Jan 2020 to Apr 2021-Highbury West



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

Emergency vehicles access

London Ambulance Service

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

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

A single report was made to council officers that an ambulance crew had to navigate around the Ambler Road and Plimsoll Road area on 31 January 2021, however the report did not detail this causing a delayed response.

Metropolitan Police Service

The council continues to engage and consult with the Metropolitan Police Service (MPS) as part of the implementation of its PFS programme. The council and MPS are currently exploring ways in which the impact of the PFS schemes can be accurately assessed using response time data in future monitoring reports. At the time of writing no reports of delays or concerns with the scheme have been raised with the council by the MPS since the scheme was implemented.

London Fire Brigade

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

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

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

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

PFS monitoring analysis methodology

For the purposes of monitoring LFB response times an average has been sought by combining average attendance times for Highbury West and Highbury East wards. This combined figure is referred to in this section as 'Highbury wards'.

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

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

Please note that data from LFB is only available by ward. However, as shown in Table 18 and Table 19, there have been negligible changes to response times in the Highbury wards.

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

Results

Table 18: Average attendance times of the London Fire Brigade – Islington-Wide Data

Period	No. of mobilisations - Islington	Average Attendance 1st Appliance (minutes)	Average Attendance 2nd Appliance (minutes)
2019 (baseline)	2,076	04:36	06:17
2020 (full year)	2,046	04:29	06:02
01/2021 to 06/2021	931	04:53	06:13
Change against 2019 data	n/a	00:17	00:04

Table 19: Average attendance times of the London Fire Brigade – Highbury wards Data

Period	No. of mobilisations – Highbury wards	Average Attendance 1st Appliance (minutes)	Average Attendance 2nd Appliance (minutes)
2019 (baseline)	208	04:51	06:15
2020 (full year)	211	04:46	06:49
01/2021 to 06/2021	102	05:13	06:21
Change against 2019 data	n/a	00:22	00:06

Insights: London Fire Brigade response times

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

Anti-social behaviour and Crime patterns

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

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

Results

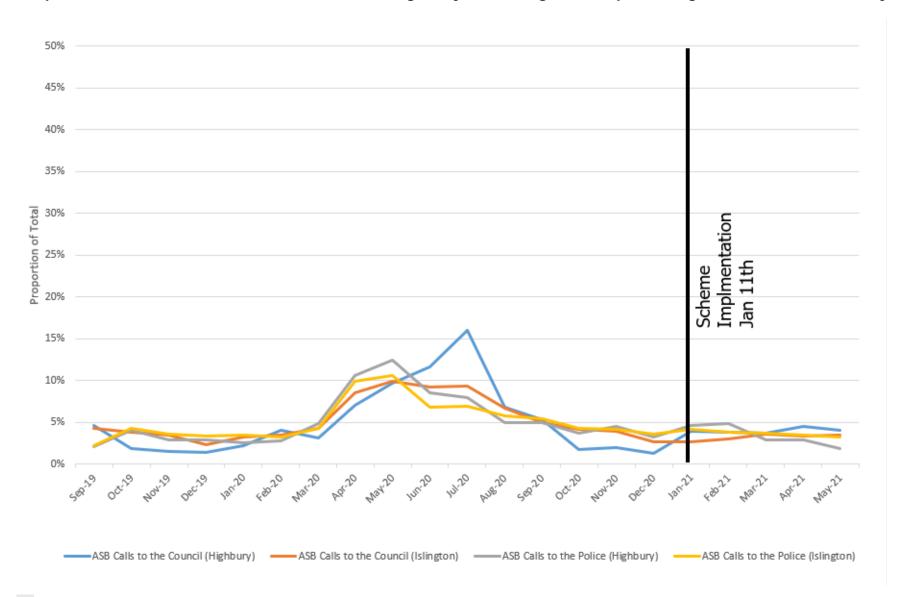
Table 20: Calls and crimes in Highbury and Islington (proportion as a percentage of Sep 2019 – May 2021)

Month	ASB Calls to the council (Highbury)	ASB Calls to the council	ASB Calls to the Police (Highbury)	ASB Calls to the Police	Street-based Criminal Offences (Highbury)	Street-based Criminal Offences
Sep-19	4.6%	4.3%	2.1%	2.2%	6.4%	5.6%
Oct-19	1.9%	3.7%	4.0%	4.3%	6.9%	6.1%
Nov-19	1.5%	3.5%	2.9%	3.5%	6.2%	6.7%
Dec-19	1.4%	2.3%	2.9%	3.3%	4.8%	5.8%
Jan-20	2.2%	3.3%	2.5%	3.5%	6.4%	6.0%
Feb-20	4.0%	3.5%	2.8%	3.2%	5.7%	6.1%
Mar-20	3.1%	4.2%	4.9%	4.3%	5.1%	4.5%
Apr-20	7.0%	8.5%	10.6%	9.9%	3.7%	3.3%
May-20	9.6%	9.9%	12.5%	10.6%	4.7%	4.0%
Jun-20	11.6%	9.2%	8.5%	6.8%	4.4%	4.1%
Jul-20	16.0%	9.3%	7.9%	7.0%	4.8%	4.7%
Aug-20	6.8%	6.7%	5.0%	5.7%	4.3%	5.4%
Sep-20	5.3%	4.9%	5.0%	5.4%	4.4%	5.1%
Oct-20	1.7%	4.1%	3.7%	4.3%	4.0%	4.9%
Nov-20	2.0%	3.9%	4.5%	4.2%	4.7%	4.5%
Dec-20	1.3%	2.7%	3.2%	3.6%	4.3%	4.1%
Jan-21	3.9%	2.7%	4.6%	4.1%	4.4%	3.5%
Feb-21	3.8%	2.9%	4.9%	3.8%	3.4%	3.1%
Mar-21	3.7%	3.6%	2.9%	3.7%	3.9%	4.0%
Apr-21	4.5%	3.3%	2.9%	3.4%	4.0%	4.1%
May-21	4.1%	3.5%	1.9%	3.2%	3.4%	4.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

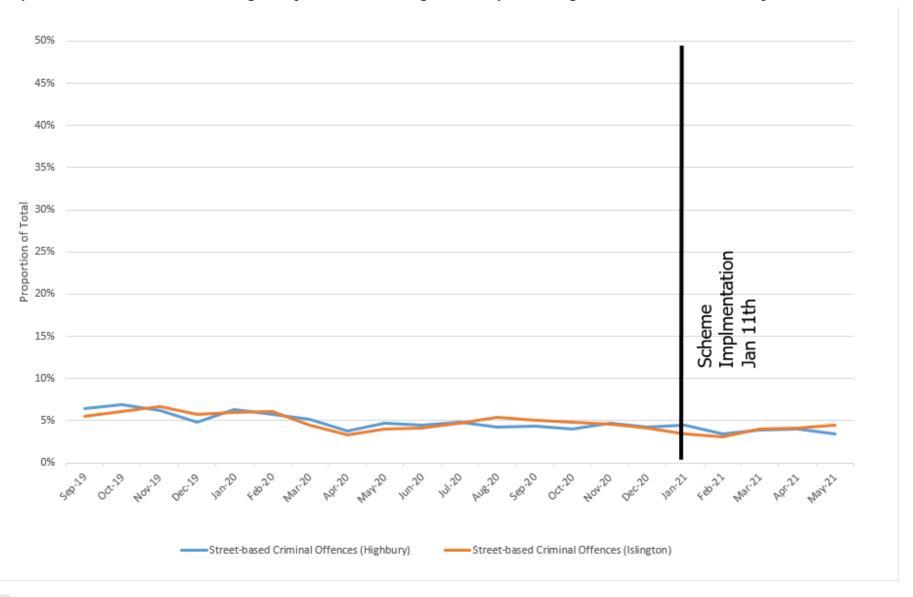
Table 21: Volume of calls and crimes in the Highbury area and Islington

Month	Highbury ASB Calls to the council	Islington ASB Calls to the council	Highbury ASB Calls to the Police	Islington ASB Calls to the Police	Highbury Street- based Criminal Offences	Islington Street- based Criminal Offences
Sep-19	44	347	26	359	74	853
Oct-19	18	305	49	705	79	929
Nov-19	14	285	36	577	71	1026
Dec-19	13	187	35	539	55	885
Jan-20	21	265	31	573	73	919
Feb-20	38	284	34	521	66	932
Mar-20	30	343	60	699	59	694
Apr-20	67	693	130	1612	43	502
May-20	92	805	153	1732	54	620
Jun-20	111	749	104	1108	51	636
Jul-20	153	756	97	1135	55	726
Aug-20	65	544	61	935	49	822
Sep-20	51	399	61	880	50	781
Oct-20	16	335	45	703	46	745
Nov-20	19	317	55	685	54	697
Dec-20	12	218	39	588	49	635
Jan-21	37	217	57	674	51	530
Feb-21	36	240	60	614	39	470
Mar-21	35	295	36	604	45	621
Apr-21	43	272	35	562	46	635
May-21	39	284	23	518	39	694
Total	954	8,140	1,227	16,323	1,148	15,352

Graph 3: ASB calls to the council and Police in Highbury and Islington as a percentage of the total over one year



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



Insights: anti-social behaviour and crime patterns

In terms of volumes of crime and ASB, during the past 18 months, the Highbury PFS area showed similar trends to those of Islington as a whole. On average, calls in the Highbury area are low, as can be seen in Table 20.

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

Table 20 and Table 21, along with Graph 3 and Graph 4 show increases in anti-social behaviour calls during the first lockdown last year in both Highbury and Islington. Contributing to this will have been reporting of people breaching the rules set out by Central Government.

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

Concluding remarks

This interim monitoring report shows that, at this point in the Highbury people-friendly streets (PFS) trials, the project is generally having the intended impacts in the area of reducing motorised traffic across internal roads, thereby making the area's roads greener, cleaner and healthier for residents. There have been no adverse impacts on anti-social behaviour levels or emergency service response times. The trial has shown no discernible impacts on air quality to date, as nitrogen dioxide has fallen in line with borough trends.

Within the PFS, it is necessary to continue to monitor Horsell Road as this street has seen an increase in traffic volumes, although only by low numbers. The council will continue to monitor Wallace Road and Mountgrove Road. Both of these locations are outside of the Highbury PFS but have seen increases in traffic. There will also need to be close monitoring of Blackstock Road, particularly on the southern section, as there has been a significant increase in traffic volumes here. However, there has been a corresponding fall in traffic volumes on the other boundary roads, such as Hornsey Road. The pre-consultation report will take into account INRIX journey-time data to establish if these changes in traffic volumes are leading to delays.

Speeding levels have seen negligible changes on internal and boundary roads, with the exception of Holloway Road, which has seen an increase in the proportion of vehicles exceeding the speed limit.

Cycle volumes have risen throughout the internal roads of the PFS. Although cycling has decreased on some of the boundary roads, there was a substantial increase in the overall number of cycle trips. It will be possible to better judge the impact on cycling levels when the next set of counts are taken in late 2021, as this data will be more comparable to the baseline counts taken in November 2020 due to similar weather conditions.

It has been noted that the northern ATC monitor on Blackstock Road shows a lesser increase in traffic volumes (16%) than the southern filter (49%). This suggests that traffic is diverting via Brownswood Road and Mountgrove Road.

Roads lying outside the trial scheme area such as Wallace Road, also show increased traffic volumes. These will require close monitoring and further investigation into potential mitigation measures.

Furthermore, the council intends to introduce greening measures at locations which are known to feature higher traffic volumes, such as the northern section of Blackstock Road and the junction of Highbury Grove and St. Paul's Road.

The council has longer term ambitions to improve Highbury by creating a local environment that is greener and more pleasant; and there are aspirations to improve the public realm in future.

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

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

Until then, residents in the Highbury area can also fill in our survey through the council's people friendly streets webpage.

Appendices

Appendix 1: Internal Roads counts

Benwell Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	64180	82419	5306	6525	-58874	-75895	-92%	-92%
7 day daily average	9169	11774	758	932	-8411	-10842	-92%	-92%
5 day total	49540	63619	3867	4755	-45673	-58864	-92%	-93%
5 day daily average	9908	12724	773	951	-9135	-11773	-92%	-93%
AM peak hourly average (weekdays)	648	832	41	50	-607	-782	-94%	-94%
PM peak hourly average (weekdays)	728	935	60	73	-668	-862	-92%	-92%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	4091	7632	3541	87%
7 day daily average	584	1090	506	87%
5 day total	3420	6112	2692	79%
5 day daily average	684	1222	538	79%
AM peak hourly average (weekdays)	54	98	44	81%
PM peak hourly average (weekdays)	49	101	52	106%

Benwell Road, site #1 – Baseline data patched with data gathered on 7th November 2021

Drayton Park South

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	78224	100455	25164	30944	-53060	-69510	-68%	-69%
7 day daily average	11175	14351	3595	4421	-7580	-9930	-68%	-69%
5 day total	60926	78241	18553	22815	-42373	-55426	-70%	-71%
5 day daily average	12185	15648	3711	4563	-8475	-11085	-70%	-71%
AM peak hourly average (weekdays)	833	1069	191	235	-641	-834	-77%	-78%
PM peak hourly average (weekdays)	929	1193	249	306	-681	-888	-73%	-74%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	4012	5556	1544	38%
7 day daily average	573	794	221	38%
5 day total	3325	4394	1069	32%
5 day daily average	665	879	214	32%
AM peak hourly average (weekdays)	36	113	77	212%
PM peak hourly average (weekdays)	71	51	-21	-29%

Highbury Hill

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	37016	47536	3799	4672	-33217	-42864	-90%	-90%
7 day daily average	5288	6791	543	667	-4745	-6123	-90%	-90%
5 day total	28951	37179	2895	3560	-26056	-33619	-90%	-90%
5 day daily average	5790	7436	579	712	-5211	-6724	-90%	-90%
AM peak hourly average (weekdays)	417	536	33	40	-385	-496	-92%	-93%
PM peak hourly average (weekdays)	418	537	38	47	-380	-490	-91%	-91%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1479	1170	-309	-21%
7 day daily average	211	167	-44	-21%
5 day total	1161	891	-270	-23%
5 day daily average	232	178	-54	-23%
AM peak hourly average (weekdays)	17	12	-5	-29%
PM peak hourly average (weekdays)	20	16	-3	-17%

Aubert Park West

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	25274	32457	5125	6302	-20149	-26154	-80%	-81%
7 day daily average	3611	4637	732	900	-2878	-3736	-80%	-81%
5 day total	19690	25286	3833	4713	-15857	-20572	-81%	-81%
5 day daily average	3938	5057	767	943	-3171	-4114	-81%	-81%
AM peak hourly average (weekdays)	280	360	38	46	-243	-314	-87%	-87%
PM peak hourly average (weekdays)	284	364	60	74	-224	-290	-79%	-80%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1318	1943	625	47%
7 day daily average	188	278	89	47%
5 day total	1045	1510	465	44%
5 day daily average	209	302	93	44%
AM peak hourly average (weekdays)	19	27	9	46%
PM peak hourly average (weekdays)	16	23	7	47%

Aubert Park, site #4 – Baseline data patched with data gathered on 08/11/2021.

Avenell Road North

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	8304	10664	4441	5461	-3863	-5203	-47%	-49%
7 day daily average	1234	1584	634	780	-599	-804	-49%	-51%
5 day total	6108	7844	3319	4081	-2789	-3762	-46%	-48%
5 day daily average	1291	1658	664	816	-627	-842	-49%	-51%
AM peak hourly average (weekdays)	85	109	34	42	-51	-67	-60%	-62%
PM peak hourly average (weekdays)	93	120	47	58	-46	-61	-49%	-51%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	794	1316	522	66%
7 day daily average	118	188	70	60%
5 day total	613	1005	392	64%
5 day daily average	129	201	72	56%
AM peak hourly average (weekdays)	11	11	0	-2%
PM peak hourly average (weekdays)	9	17	7	79%

Gillespie Road East

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	14193	18227	5117	6292	-9076	-11934	-64%	-65%
7 day daily average	2028	2604	731	899	-1297	-1705	-64%	-65%
5 day total	10817	13891	3823	4701	-6994	-9190	-65%	-66%
5 day daily average	2163	2778	765	940	-1399	-1838	-65%	-66%
AM peak hourly average (weekdays)	102	131	30	37	-72	-94	-70%	-72%
PM peak hourly average (weekdays)	206	264	69	85	-137	-179	-66%	-68%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	5576	9100	3524	63%
7 day daily average	797	1300	503	63%
5 day total	4772	7171	2399	50%
5 day daily average	954	1434	480	50%
AM peak hourly average (weekdays)	88	117	29	33%
PM peak hourly average (weekdays)	84	126	42	50%

Ambler Road

Motorised traffic

	March 2021 observed	March 2021 normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	6751	9824	9694	11921	2943	2097	44%	21%
7 day daily average	966	1406	1385	1703	419	297	43%	21%
5 day total	4889	7114	6870	8448	1981	1334	41%	19%
5 day daily average	980	1426	1374	1690	394	264	40%	19%
AM peak hourly average (weekdays)	49	72	58	71	8	-1	17%	-1%
PM peak hourly average (weekdays)	72	105	90	111	18	6	26%	6%

Cycling

	March 2021 observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1376	1436	60	4%
7 day daily average	197	205	8	4%
5 day total	1006	1156	150	15%
5 day daily average	201	231	30	15%
AM peak hourly average (weekdays)	17	21	4	27%
PM peak hourly average (weekdays)	18	21	3	14%

Ambler Road, site #7 – Baseline data is from the Ad-Hoc surveys carried out in March 2021. The November counts were compromised due to emergency road works on Blackstock Road. In addition, Interim survey data was patched with data gathered

between 31st May 2021 – 11th June 2021. This was due to vandalism of the monitoring equipment. As data was collected over two months, the normalisation figure for the later month (June) was used.

St Thomas's Road South

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	13100	16823	6793	8353	-6307	-8469	-48%	-50%
7 day daily average	1871	2403	970	1193	-901	-1210	-48%	-50%
5 day total	10058	12916	4760	5853	-5298	-7063	-53%	-55%
5 day daily average	2012	2583	952	1171	-1060	-1413	-53%	-55%
AM peak hourly average (weekdays)	122	157	44	54	-79	-103	-64%	-66%
PM peak hourly average (weekdays)	151	194	60	73	-92	-121	-61%	-62%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	3170	4256	1086	34%
7 day daily average	453	608	155	34%
5 day total	2677	3333	656	25%
5 day daily average	535	667	131	25%
AM peak hourly average (weekdays)	43	50	8	18%
PM peak hourly average (weekdays)	53	62	9	16%

Prah Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	7145	9176	5634	6928	-1511	-2247	-21%	-24%
7 day daily average	1021	1311	805	990	-216	-321	-21%	-24%
5 day total	5512	7078	3899	4795	-1613	-2284	-29%	-32%
5 day daily average	1102	1416	780	959	-323	-457	-29%	-32%
AM peak hourly average (weekdays)	65	84	34	41	-32	-43	-48%	-51%
PM peak hourly average (weekdays)	92	118	50	62	-42	-57	-45%	-48%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	118	648	530	449%
7 day daily average	17	93	76	449%
5 day total	102	518	416	408%
5 day daily average	20	104	83	408%
AM peak hourly average (weekdays)	1	7	6	836%
PM peak hourly average (weekdays)	2	8	6	263%

Ronalds Road East

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	7202	9249	6687	8223	-515	-1026	-7%	-11%
7 day daily average	1029	1321	955	1175	-74	-147	-7%	-11%
5 day total	5522	7091	4882	6003	-2320	-3245	-32%	-35%
5 day daily average	1104	1418	976	1201	-128	-218	-12%	-15%
AM peak hourly average (weekdays)	93	119	51	63	-42	-56	-45%	-47%
PM peak hourly average (weekdays)	69	88.00993	58	71	-11	-17	-16%	-19%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	462	412	-50	-11%
7 day daily average	66	59	-7	-11%
5 day total	376	333	-129	-28%
5 day daily average	75	67	59	825%
AM peak hourly average (weekdays)	7	6	-1	-12%
PM peak hourly average (weekdays)	5	4	-1	-18%

Fieldway Crescent West (Site 17)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	6881	8837	5882	7233	-999	-1603	-15%	-18%
7 day daily average	988	1268	847	1042	-141	-227	-14%	-18%
5 day total	5348	6868	4152	5106	-1196	-1762	-22%	-26%
5 day daily average	1070	1374	838	1031	-231	-343	-22%	-25%
AM peak hourly average (weekdays)	71	91	52	64	-19	-28	-27%	-30%
PM peak hourly average (weekdays)	84	108	57	70	-28	-39	-33%	-36%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	3840	3976	136	4%
7 day daily average	551	571	20	4%
5 day total	3357	3102	-255	-8%
5 day daily average	671	625	-46	-7%
AM peak hourly average (weekdays)	55	39	-15	-28%
PM peak hourly average (weekdays)	59	59	0	0%

Fieldway Crescent (Site 18)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	10337	13275	8691	10687	-1646	-2587	-16%	-19%
7 day daily average	1518	1950	1242	1527	-277	-423	-18%	-22%
5 day total	8338	10708	6168	7585	-2170	-3123	-26%	-29%
5 day daily average	1668	2142	1234	1517	-434	-625	-26%	-29%
AM peak hourly average (weekdays)	155	198	70	86	-84	-112	-55%	-57%
PM peak hourly average (weekdays)	107	138	81	99	-26	-38	-25%	-28%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	2810	3961	1151	41%
7 day daily average	412	566	154	37%
5 day total	2225	3086	861	39%
5 day daily average	445	617	172	39%
AM peak hourly average (weekdays)	40	51	11	28%
PM peak hourly average (weekdays)	38	54	16	41%

Fieldway Crescent, **site** #18 – Baseline patched with data gathered from 16th November 2020 – 26th November 2020. Data compromised due to parked vehicles.

Highbury Place South

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	4422	5679	2352	2892	-2070	-2786	-47%	-49%
7 day daily average	632	811	336	413	-296	-398	-47%	-49%
5 day total	3160	4058	1696	2086	-1464	-1972	-46%	-49%
5 day daily average	632	812	339	417	-293	-394	-46%	-49%
AM peak hourly average (weekdays)	48	62	18	22	-30	-40	-62%	-64%
PM peak hourly average (weekdays)	47	60	32	39	-15	-21	-32%	-35%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	4548	8194	3646	80%
7 day daily average	650	1171	521	80%
5 day total	4036	6306	2270	56%
5 day daily average	807	1261	454	56%
AM peak hourly average (weekdays)	67	91	24	36%
PM peak hourly average (weekdays)	69	108	39	56%

Baalbec Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	12485	16033	11865	14591	-620	-1443	-5%	-9%
7 day daily average	1881	2415	1723	2118	-158	-297	-8%	-12%
5 day total	9557	12273	8531	10491	-1026	-1782	-11%	-15%
5 day daily average	2013	2585	1740	2140	-273	-445	-14%	-17%
AM peak hourly average (weekdays)	182	234	109	134	-73	-100	-40%	-43%
PM peak hourly average (weekdays)	133	170	117	144	-16	-27	-12%	-16%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1416	2010	594	42%
7 day daily average	212	291	79	37%
5 day total	1186	1525	339	29%
5 day daily average	248	311	63	26%
AM peak hourly average (weekdays)	17	26	9	54%
PM peak hourly average (weekdays)	23	27	4	18%

Baalbec Road, site #20 – Interim survey counts patched with data gathered on 31st May 2021 and 23rd May 2021.

Arvon Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	2363	3035	1603	1971	-760	-1063	-32%	-35%
7 day daily average	338	434	229	282	-109	-152	-32%	-35%
5 day total	1711	2197	1181	1452	-530	-745	-31%	-34%
5 day daily average	342	439	236	290	-106	-149	-31%	-34%
AM peak hourly average (weekdays)	16	21	10	12	-7	-9	-41%	-44%
PM peak hourly average (weekdays)	22	28	15	18	-7	-10	-33%	-36%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	932	1092	160	17%
7 day daily average	133	156	23	17%
5 day total	797	830	33	4%
5 day daily average	159	166	7	4%
AM peak hourly average (weekdays)	12	11	-1	-8%
PM peak hourly average (weekdays)	15	15	0	1%

Horsell Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	5061	6499	6331	7785	1270	1286	25%	20%
7 day daily average	723	928	904	1112	181	184	25%	20%
5 day total	3799	4879	4854	5969	1055	1090	28%	22%
5 day daily average	760	976	971	1194	211	218	28%	22%
AM peak hourly average (weekdays)	46	59	62	76	16	18	36%	30%
PM peak hourly average (weekdays)	54	70	63	77	9	8	16%	11%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	3838	6530	2692	70%
7 day daily average	548	933	385	70%
5 day total	3326	5347	2021	61%
5 day daily average	665	1069	404	61%
AM peak hourly average (weekdays)	63	97	34	54%
PM peak hourly average (weekdays)	55	88	33	60%

Highbury Grove

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	17574	22568	14210	17474	-3364	-5094	-19%	-23%
7 day daily average	2511	3224	2030	2496	-481	-728	-19%	-23%
5 day total	13849	17785	11217	13794	-2632	-3991	-19%	-22%
5 day daily average	2770	3557	2243	2759	-526	-798	-19%	-22%
AM peak hourly average (weekdays)	219	281	148	182	-71	-99	-32%	-35%
PM peak hourly average (weekdays)	191	245	163	201	-27	-44	-14%	-18%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1421	2037	616	43%
7 day daily average	203	291	88	43%
5 day total	1167	1596	429	37%
5 day daily average	233	319	86	37%
AM peak hourly average (weekdays)	17	23	6	37%
PM peak hourly average (weekdays)	21	27	5	26%

Grosvenor Avenue East

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	46149	59264	36831	45290	-9318	-13974	-20%	-24%
7 day daily average	6593	8466	5262	6470	-1331	-1996	-20%	-24%
5 day total	35092	45065	25458	31305	-9634	-13760	-27%	-31%
5 day daily average	7018	9013	5092	6261	-1927	-2752	-27%	-31%
AM peak hourly average (weekdays)	485	622	251	309	-234	-314	-48%	-50%
PM peak hourly average (weekdays)	438	563	332	409	-106	-154	-24%	-27%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	2154	2350	196	9%
7 day daily average	308	336	28	9%
5 day total	1791	1861	70	4%
5 day daily average	358	372	14	4%
AM peak hourly average (weekdays)	20	29	9	45%
PM peak hourly average (weekdays)	38	29	-10	-25%

Grosvenor Avenue, site #24 – Baseline patched with data gathered from 18th November 2020 – 19th November 2020

Highbury New Park

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	21055	27039	22833	28078	1778	1039	8%	4%
7 day daily average	3008	3863	3262	4011	254	148	8%	4%
5 day total	16486	21171	17272	21240	786	68	5%	0%
5 day daily average	3297	4234	3454	4248	157	14	5%	0%
AM peak hourly average (weekdays)	219	281	184	227	-35	-55	-16%	-20%
PM peak hourly average (weekdays)	251	322	250	308	-1	-14	0%	-4%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1562	2151	589	38%
7 day daily average	223	307	84	38%
5 day total	1310	1702	392	30%
5 day daily average	262	340	78	30%
AM peak hourly average (weekdays)	19	27	8	40%
PM peak hourly average (weekdays)	25	29	4	15%

Wallace Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	18863	24224	24690	30362	5827	6138	31%	25%
7 day daily average	2695	3461	3527	4337	832	877	31%	25%
5 day total	14674	18844	18290	22491	3616	3647	25%	19%
5 day daily average	2935	3769	3658	4498	723	729	25%	19%
AM peak hourly average (weekdays)	240	308	275	338	35	30	15%	10%
PM peak hourly average (weekdays)	194	249	238	292	44	44	23%	18%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	283	3230	2947	1041%
7 day daily average	40	461	421	1041%
5 day total	243	2542	2299	946%
5 day daily average	49	508	460	946%
AM peak hourly average (weekdays)	6	55	49	873%
PM peak hourly average (weekdays)	3	33	29	842%

Wallace Road, site #26 – Baseline patched with data gathered on 21st November 2020. Interim survey data patched with data gathered between 21st May 2021 and 31st May 2021.

Mountgrove Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	20361	26147	28617	35191	8256	9043	41%	35%
7 day daily average	3039	3902	4088	5027	1049	1125	35%	29%
5 day total	15061	19341	20873	25668	5812	6327	39%	33%
5 day daily average	3190	4097	4175	5134	984	1037	31%	25%
AM peak hourly average (weekdays)	219	282	264	324	45	43	20%	15%
PM peak hourly average (weekdays)	218	280	270	332	52	51	24%	18%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	4697	5896	1199	26%
7 day daily average	691	842	151	22%
5 day total	3677	4471	794	22%
5 day daily average	768	894	126	16%
AM peak hourly average (weekdays)	64	71	7	11%
PM peak hourly average (weekdays)	68	77	10	15%

Mountgrove Road, site #27 – Baseline patched with data gathered on 8th November 2020.

Appendix 2: Boundary roads counts

Highbury Grove North

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	63926	82093	60125	73936	-3801	-8157	-6%	-10%
7 day daily average	9132	11728	8589	10562	-543	-1165	-6%	-10%
5 day total	48225	61930	43301	53248	-4924	-8682	-10%	-14%
5 day daily average	9645	12386	8660	10650	-985	-1736	-10%	-14%
AM peak hourly average (weekdays)	579	744	388	477	-191	-267	-33%	-36%
PM peak hourly average (weekdays)	655	842	531	653	-124	-188	-19%	-22%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	1659	2506	847	51%
7 day daily average	237	358	121	51%
5 day total	1307	1834	527	40%
5 day daily average	261	367	105	40%
AM peak hourly average (weekdays)	17	27	11	63%
PM peak hourly average (weekdays)	22	24	2	9%

Blackstock Road North (Site 11)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	71859	92281	111657	137306	39798	45025	55%	49%
7 day daily average	10266	13183	15982	19654	5717	6471	56%	49%
5 day total	51861	66599	81114	99747	29253	33147	56%	50%
5 day daily average	10372	13320	16223	19949	5851	6629	56%	50%
AM peak hourly average								
(weekdays)	628	806	983	1209	356	403	57%	50%
PM peak hourly average								
(weekdays)	659	846	950	1168	291	322	44%	38%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	5149	2815	-2334	-45%
7 day daily average	736	403	-333	-45%
5 day total	3723	2012	-1711	-46%
5 day daily average	745	402	-342	-46%
AM peak hourly average (weekdays)	49	24	-26	-52%
PM peak hourly average (weekdays)	43	28	-15	-35%

Blackstock Road, **site** #11 – Baseline counts patched with data gathered between 20th November 2020 – 24th November 2020. There was data loss at this site. Interim survey data was patched with data gathered between 6th June 2021 – 20th June 2021. This was due to

vandalism of the monitoring equipment on two separate occasions. As data was collected over two months, the normalisation figure for the later month (June) was used.

Blackstock Road South (Site 12)

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	65046	83532	87161	107183	22115	23651	34%	28%
7 day daily average	9292	11933	12576	15465	3284	3532	35%	30%
5 day total	48315	62046	62752	77167	14437	15121	30%	24%
5 day daily average	9663	12409	12727	15651	3064	3242	32%	26%
AM peak hourly average								
(weekdays)	588	755	702	864	114	108	19%	14%
PM peak hourly average								
(weekdays)	607	780	780	959	172	179	28%	23%

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	3572	2199	-1373	-38%
7 day daily average	510	318	-193	-38%
5 day total	2815	1518	-1297	-46%
5 day daily average	563	309	-254	-45%
AM peak hourly average (weekdays)	34	14	-20	-58%
PM peak hourly average (weekdays)	44	19	-25	-58%

Hornsey Road South

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	77240	99191	65016	79951	-12224	-19240	-16%	-19%
7 day daily average	11034	14170	9288	11422	-1746	-2749	-16%	-19%
5 day total	58747	75442	47540	58460	-11207	-16982	-19%	-23%
5 day daily average	11749	15088	9508	11692	-2241	-3396	-19%	-23%
AM peak hourly average								
(weekdays)	779	1001	573	705	-206	-295	-26%	-30%
PM peak hourly average	000	1020	E 4 4	404	245	245	200/	220/
(weekdays)	809	1039	564	694	-245	-345	-30%	-33%

Cycling

	Baseline observed	Interim observed	Difference observed	Difference observed (%)
7 day total	4872	7014	2142	44%
7 day daily average	696	1002	306	44%
5 day total	4045	5434	1389	34%
5 day daily average	809	1087	278	34%
AM peak hourly average (weekdays)	69	93	24	35%
PM peak hourly average (weekdays)	57	76	19	34%

Hornsey Road, **site** #13 – Interim survey data was patched with data gathered between 31 May 2021 – 11 June 2021. As data was collected over two months, the normalisation figure for the later month (June) was used.

St Pauls Road West

Motorised traffic

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

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

Holloway Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	112908	144989	68217	83887	-44691	-61102	-40%	-42%
7 day daily average	16130	20713	9745	11984	-6385	-8730	-40%	-42%
5 day total	83301	106970	43476	53463	-39825	-53507	-48%	-50%
5 day daily average	16660	21394	8695	10692	-7965	-10701	-48%	-50%
AM peak hourly average (weekdays)	932	1197	387	476	-545	-721	-58%	-60%
PM peak hourly average (weekdays)	950	1220	307	378	-643	-842	-68%	-69%

Cycling

No cycling data (Radar site)

Seven Sisters Road

Motorised traffic

	Baseline observed	Baseline normalised	Interim observed	Interim normalised	Difference observed	Difference normalised	Difference observed (%)	Difference normalised (%)
7 day total	174920	224621	194792	239538	19872	14916	11%	7%
7 day daily average	24989	32089	27827	34219	2838	2130	11%	7%
5 day total	130921	168121	130303	160235	-618	-7886	0%	-5%
5 day daily average	26184	33624	26061	32047	-123	-1576	0%	-5%
AM peak hourly average (weekdays)	1642	2109	1285	1580	-357	-528	-22%	-25%
PM peak hourly average (weekdays)	1415	1817	1203	1479	-212	-338	-15%	-19%

Cycling

No cycling data (radar site)

Appendix 3: Ambler Road Ad-Hoc Monitoring Counts

Ambler Road

Motorised traffic

	W/C 1 st March 2021	W/C 1st March 2021	W/C 8 th March 2021	W/C 8 th March 2021	W/C 15 th March 2021	W/C 15 th March 2021	3-week average	3-week average
	observed	normalised	observed	normalised	observed	normalised	observed	normalised
7 day total	6436	9365	6859	9980	6959	10126	6751	9824
7 day daily average	919	1338	985	1433	994	1447	966	1406
5 day total	4581	6666	4958	7214	5128	7462	4889	7114
5 day daily average	916	1333	998	1452	1026	1492	980	1426
AM peak hourly	42	61	52	76	55	80	49	72
average (weekdays)								
PM peak hourly	71	104	68	99	76	111	72	105
average (weekdays)								

	W/C 1 st March 2021 observed	W/C 8 th March 2021 observed	W/C 15 th March 2021 observed	3-week average observed
7 day total	1280	1294	1554	1376
7 day daily average	183	186	222	197
5 day total	923	956	1140	1006
5 day daily average	185	192	228	201
AM peak hourly average (weekdays)	15	15	20	17
PM peak hourly average (weekdays)	17	18	19	18

St Thomas's Road

Motorised traffic

	W/C 1st March 2021 observed	W/C 1st March 2021 normalised	W/C 8 th March 2021 observed	W/C 8 th March 2021 normalised	W/C 15 th March 2021 observed	W/C 15 th March 2021 normalised	3-week average observed	3-week average normalised
7 day total	5532	8050	5945	8650	6170	8978	4412	6419
7 day daily average	790	1150	849	1236	881	1283	630	917
5 day total	3844	5593	4157	6049	4442	6463	3111	4526
5 day daily average	769	1119	831	1210	888	1293	622	905
AM peak hourly	32	46	38	56	38	56	27	39
average (weekdays)								
PM peak hourly average (weekdays)	58	84	58	84	60	87	44	64

	W/C 1st March 2021 observed	W/C 8 th March 2021 observed	W/C 15 th March 2021 observed	3-week average observed
7 day total	3189	3235	3868	3431
7 day daily average	456	462	553	490
5 day total	2323	2411	2878	2537
5 day daily average	465	482	576	507
AM peak hourly average (weekdays)	32	34	43	36
PM peak hourly average (weekdays)	44	47	56	49

Prah Road

Motorised traffic

	W/C 1st March 2021 observed	W/C 1st March 2021 normalised	W/C 8 th March 2021 observed	W/C 8 th March 2021 normalised	W/C 15 th March 2021 observed	W/C 15 th March 2021 normalised	3-week average observed	3-week average normalised
7 day total	4231	6156	4357	6340	4598	6690	3297	4797
7 day daily average	608	885	626	911	657	956	473	688
5 day total	2959	4306	3112	4528	3378	4915	2362	3437
5 day daily average	597	868	627	913	676	983	475	691
AM peak hourly	22	31	30	43	33	48	21	31
average (weekdays) PM peak hourly	44	64	48	69	52	76	36	52
average (weekdays)	44	04	40	09	32	/0	30	52

	W/C 1st March 2021 observed	W/C 8 th March 2021 observed	W/C 15 th March 2021 observed	3-week average observed
7 day total	532	582	705	606
7 day daily average	76	84	101	87
5 day total	392	435	526	451
5 day daily average	79	88	105	91
AM peak hourly average (weekdays)	5	6	7	6
PM peak hourly average (weekdays)	6	7	9	7

Blackstock Road North (Site 11)

Motorised traffic

	W/C 1st March 2021	W/C 1st March 2021	W/C 8 th March 2021	W/C 8 th March 2021	W/C 15 th March 2021	W/C 15 th March 2021	3-week average	3-week average
	observed	normalised	observed	normalised	observed	normalised	observed	normalised
7 day total	N/A	N/A	105131	152975	N/A	N/A	105131	152975
7 day daily average	N/A	N/A	15065	21921	N/A	N/A	15065	21921
5 day total	N/A	N/A	77453	112701	N/A	N/A	77453	112701
5 day daily average	N/A	N/A	15506	22563	N/A	N/A	15506	22563
AM peak hourly	N/A	N/A	957	1393	N/A	N/A	957	1393
average (weekdays)								
PM peak hourly average (weekdays)	N/A	N/A	1004	1461	N/A	N/A	1004	1461

Cycling

	W/C 1 st March 2021 observed	W/C 8 th March 2021 observed	W/C 15 th March 2021 observed	3-week average observed
7 day total	N/A	4411	N/A	4411
7 day daily average	N/A	632	N/A	632
5 day total	N/A	3127	N/A	3127
5 day daily average	N/A	627	N/A	627
AM peak hourly average (weekdays)	N/A	36	N/A	36
PM peak hourly average (weekdays)	N/A	44	N/A	44

Blackstock Road, site #4 – Data loss from period between 1st March 2021 – 3rd March 2021. This was due to vandalism of the equipment. Data loss also occurred on 21st March 2021, due to a parked vehicle.

Appendix 4: Speed results

Speeds on internal roads (seven-day daily averages)

November 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (%)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Benwell Road	1.30	10%	1.93	13%	-2740	-86%	3%
Drayton Park	-0.44	-2%	0.56	3%	-18995	-67%	2%
Highbury Hill	-1.11	-6%	1.21	5%	-14983	-91%	-3%
Aubert Park	-3.61	-20%	-3.14	-14%	-9476	-92%	-19%
Avenell Road	0.46	3%	1.52	8%	-74	-8%	7%
Gillespie Road	-1.71	-11%	-2.60	-14%	-1774	-85%	-7%
St. Thomas's Road	-1.36	-8%	-1.74	-8%	-2431	-71%	-8%
Prah Road	-0.74	-6%	-0.92	-6%	-81	-45%	-1%
Ronalds Road	0.44	3%	0.66	4%	49	7%	2%
Fieldway Crescent West	0.67	6%	0.68	5%	7	17%	0%
Fieldway Crescent	0.45	3%	0.77	5%	78	13%	2%
Highbury Place	-1.25	-10%	-2.43	-15%	-259	-99%	-4%
Baalbec Road	-0.16	-1%	0.06	0%	58	16%	1%
Arvon Road	-0.44	-3%	-0.25	-1%	-243	-41%	-2%
Horsell Road	-0.58	-4%	-1.23	-7%	-213	-44%	-4%
Highbury Grove	-0.26	-2%	-0.02	0%	-754	-27%	-1%
Grosvenor Avenue	-0.56	-3%	-0.48	-2%	-6765	-28%	-3%
Highbury New Park	0.79	5%	1.01	5%	1806	55%	6%
Wallace Road	1.15	7%	1.19	6%	2629	72%	6%
Mountgrove Road	2.72	20%	2.88	17%	3754	214%	9%
overall average	-0.21	-1%	-0.02	0%	-2520.35	-20%	-1%

Speed Data for Ambler Road Ad-hoc Leak (seven-day daily averages)

March 2021 vs May 2021	Difference in average speed (mph)	Difference in average speed (mph)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Ambler Road	2.29	20%	2.43	17%	40	280%	3%
St. Thomas's Road	-0.34	-2%	-0.76	-4%	-38	-20%	-3%
Prah Road	-1.08	-8%	-1.68	-10%	-23	-64%	-3%
Blackstock Road North	0.37	2%	0.51	3%	501	15%	2%

Speeds on Boundary Roads (seven-day daily averages)

November 2020 vs May 2021	Difference in average speed (mph)	Difference in average speed (mph)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
Highbury Grove North	0.30	2%	0.28	1%	-70	-2%	4%
Blackstock Road South	2.25	17%	2.03	11%	1814	161%	6%
Blackstock Road North*	-0.62	-4%	-0.60	-3%	-51	-2%	-3%
Hornsey Road South*	0.66	3%	1.29	5%	-1306	-17%	8%
ATC average	0.65	5%	0.75	4%	97	35%	4%
Holloway Road	5.84	36%	6.00	27%	914	306%	9%
Seven Sisters Road	1.43	8%	3.00	13%	548	120%	2%
Radar average	3.63	22%	4.50	20%	731	213%	5%
Overall average ATC and Radar Sites	1.64	11%	2.00	9%	308	95%	4%

July 2020 vs June 2	Difference in average speed (mph)	Difference in average speed (mph)	Difference in 85th percentile (mph)	Difference in 85th percentile (%)	Difference in volume of vehicle speeding	Difference in volume of vehicle speeding (%)	Difference in proportion of vehicle speeding (%)
St Pauls Road West	-1.52	-10%	-1.68	-8%	-806	-4%	-6%

Appendix 5: Highbury traffic count locations and type

Islington-commissioned ATC traffic count sites

Internal	Baseline Count Start	Interim Count Start Date
	Date (7 day survey)	(7 day survey)
Benwell Road	02/11/2020	24/05/2021
Drayton Park	02/11/2020	24/05/2021
Highbury Hill	02/11/2020	24/05/2021
Aubert Park	02/11/2020	24/05/2021
Avenell Road	02/11/2020	24/05/2021
Gillespie Road	02/11/2020	24/05/2021
Ronalds Road	02/11/2020	24/05/2021
Fieldway Crescent	02/11/2020	24/05/2021
Fieldway Crescent	02/11/2020	24/05/2021
Highbury Place	02/11/2020	24/05/2021
Baalbec Road	02/11/2020	24/05/2021
Arvon Road	02/11/2020	24/05/2021
Horsell Road	02/11/2020	24/05/2021
Highbury Grange	02/11/2020	24/05/2021
Grosvenor Avenue	02/11/2020	24/05/2021
Highbury New Park	02/11/2020	24/05/2021
Wallace Road	02/11/2020	24/05/2021
Mountgrove Road	02/11/2020	24/05/2021

Boundary	Baseline Count Start Date (7 day survey)	Interim Count Start Date (7 day survey)
Highbury Grove	02/11/2020	24/05/2021
Blackstock Road North	02/11/2020	24/05/2021
Hornsey Road	02/11/2020	24/05/2021
St Paul's Road West	27/07/2020	14/06/2021

Ambler Road Monitoring	Baseline Count Start	Interim Count Start Date
	Date (21 day survey)	(7 day survey)
Ambler Road	01/03/2021	24/05/2021
St. Thomas's Road	01/03/2021	24/05/2021
Prah Road	01/03/2021	24/05/2021
Blackstock Road South	01/03/2021	24/05/2021

ATC sites and coordinates

Street Name	Eastings	Northings
Benwell Road	51.553257	-0.109855
Drayton Park	51.553334	-0.104984
Highbury Hill	51.553154	-0.101713
Aubert Park	51.555555	-0.103574
Avenell Road	51.558618	-0.102264
Gillespie Road	51.558706	-0.104462
Ambler Road	51.562642	-0.102929
St. Thomas's Road	51.562858	-0.105457
Prah Road	51.563168	-0.104396
Highbury Grove	51.552607	-0.098229
Blackstock Road	51.564276	-0.103608
Blackstock Road	51.561231	-0.099144
Hornsey Road	51.555314	-0.111190
Holloway Road	51.550702	-0.109629
Seven Sisters Road	51.563462	-0.107000
Ronalds Road	51.549983	-0.108179
Fieldway Crescent	51.549403	-0.107285
Fieldway Crescent	51.549473	-0.106534
Highbury Place	51.546537	-0.103124

Street Name	Eastings	Northings
Baalbec Road	51.549920	-0.098799
Arvon Road	51.55128	-0.10516
Horsell Road	51.550691	-0.108221
Highbury Grove	51.554872	-0.097933
Grosvenor Avenue	51.548648	-0.096025
Highbury New Park	51.548610	-0.096337
Wallace Road	51.548511	-0.091900
Mountgrove Road	51.561105	-0.095467
St Paul's Road	51.546221	-0.101106

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

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 6: Traffic count normalisation methodologies

Traffic counts

To calculate the normalised percentage differences, the November 2020 traffic count volumes have been divided by 0.7787 and the May 2021 traffic counts by 0.8132 to give normalised volumes. In other words, in order to account for the fact that there was less traffic on Islington streets from January 2020 onwards we have provided adjusted figures that provide an estimate for what the traffic would have been if there was no Covid-19 disruption. This allows us to analyse the impacts of the PFS area scheme rather than the impacts of Covid-19 on the traffic volumes.

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

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

Appendix 7: Air quality monitoring

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

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

Locations	PFS road type	Monitoring	Installation	Site Type by DEFRA
		type		classification
Highbury Corner (BIS08)	Boundary Road	Diffusion tube	2000	Roadside
Holloway Road (BIS11)	Boundary Road	Diffusion tube	2000	Roadside
Blackstock Road (N24)	Boundary Road	Diffusion tube	December 2019	Roadside
Blackstock Road (N26)	Boundary Road	Diffusion tube	December 2019	Roadside
Highbury Park (N30)	Boundary Road	Diffusion tube	December 2019	Roadside
Blackstock Road (S6)	Boundary Road	Diffusion tube	January 2018	Roadside
Highbury Grove (S64)	Boundary Road	Diffusion tube	July 2018	Roadside
Tollington Road/Park (PF21)	Boundary Road	Diffusion tube	September 2020	Roadside
Arvon Road (S9)	Internal Road	Diffusion tube	January 2018	Background urban
Gillespie Road (S10)	Internal Road	Diffusion tube	January 2018	Background urban
Conewood Street (S38)	Internal Road	Diffusion tube	February 2018	Background urban
Romily Road (S49)	Internal Road	Diffusion tube	February 2018	Background urban
Drayton Park (S51)	Internal Road	Diffusion tube	February 2018	Background urban
Highbury Hill (S63)	Internal Road	Diffusion tube	July 2018	Background urban
Parkside Crescent (N13)	Internal Road	Diffusion tube	December 2019	Background urban
Monsell Road (N25)	Internal Road	Diffusion tube	December 2019	Background urban

Gillespie Road (N27)	Internal Road	Diffusion tube	December 2019	Background urban
Conewood Street (N28)	Internal Road	Diffusion tube	December 2019	Background urban
Aubert Park (N31)	Internal Road	Diffusion tube	December 2019	Background urban
Highbury Place (N32)	Internal Road	Diffusion tube	December 2019	Background urban
Drayton Park (PF9)	Internal Road	Diffusion tube	August 2020	Background urban
Bernwell Road (PF10)	Internal Road	Diffusion tube	August 2020	Background urban
Highbury Crescent (PF11)	Internal Road	Diffusion tube	August 2020	Background urban
Highbury Place (PF12)	Internal Road	Diffusion tube	August 2020	Background urban
Baalbec Road (PF13)	Internal Road	Diffusion tube	August 2020	Background urban
Highbury Fields (BIS10)	Non-street	Diffusion tube	2000	Background urban

There is also one additional diffusion tube monitor on Highbury Park in Highbury, however this was only introduced in May 2021, so has not been included in this report.

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

Methodology

Data quality control

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

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

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

Insights background

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

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

Appendix 8: Project Centre Ltd statement

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

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

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

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

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

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

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