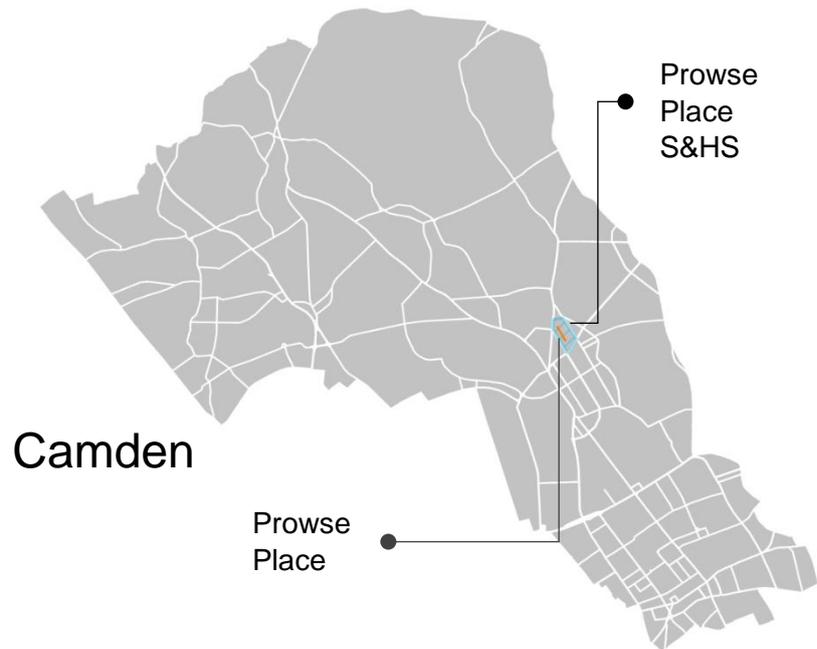




## Interim Monitoring: Prowse Place Safe and Healthy Streets Scheme

New measures have been installed on Prowse Place to create a “Safe & Healthy Streets” (S&HS) scheme - as part of the Borough’s COVID-19 Emergency response.

From engagement with stakeholders and residents, rat-running was identified as an issue between Camden Street and Royal College Street/St Pancras Way. There was also a concern that Transport for London’s proposal for a banned left turn from Camden Street into Camden Road could intensify this issue.



To address this concern, through traffic has been restricted on Prowse Place between Bonny Street and Ivor Street through removable bollards. The measure was introduced under an Experimental Traffic Order (ETO) in June 2020.

Following a request from British Transport Police (BTP), who are stationed at Camden Road Overground station, the bollards were replaced in April 2021 by an Automated Traffic Enforcement Cameras to allow unimpeded travel for BTP through Prowse Place to respond to emergency calls.

Access for residents has been maintained through alternative points of access and emergency and refuse vehicles are allowed through the restriction. The measure aims to reduce the amount of motor vehicles using Prowse Place, including reducing the number of vehicles using the very narrow bridge underpass which can create a bottleneck on this road. The scheme seeks to make it safer and easier for people to walk and cycle in and around the area and socially distance whilst walking under the railway bridge arch.

To help monitor the impact of the scheme, traffic volume data ‘**Before**-scheme and ‘**After**-scheme traffic data has been analysed – as well as emergency response times. Further monitoring will take place up to and beyond the final consultation on the scheme.



## Summary

Monitoring of 'Before' and 'After' scheme data for the Prowse Place S&HS scheme indicates the following at this point of the trial:

-  Low traffic levels have been recorded '**After**'-scheme on Bonny Street, Jeffreys Street and Ivor Street which form entry and exit routes to Prowse Place. Lower traffic levels have been recorded on Royal College Street '**After**-scheme' compared to '**Before**-Scheme'.
-  Lime dockless bike hire usage increased by 31% between 2019 (June-December) and 2020 (June-December).
-  No impact on emergency response times has been identified from the introduction of the S&HS scheme.

In summary, motor vehicle levels are low on all residential roads monitored within the Prowse Place S&HS area following the introduction of the scheme. Data gathered in regard to emergency response times and air quality levels at this stage of the trial show no impacts. The number of cycling trips ending or starting within the Prowse Place S&HS scheme by Lime bicycles is higher following the implementation of the scheme.

Further monitoring will be undertaken by Camden Council to monitor the effects of Prowse Place S&HS scheme, to consider any changes to the scheme and to help inform a future decision on whether the scheme should be made permanent.





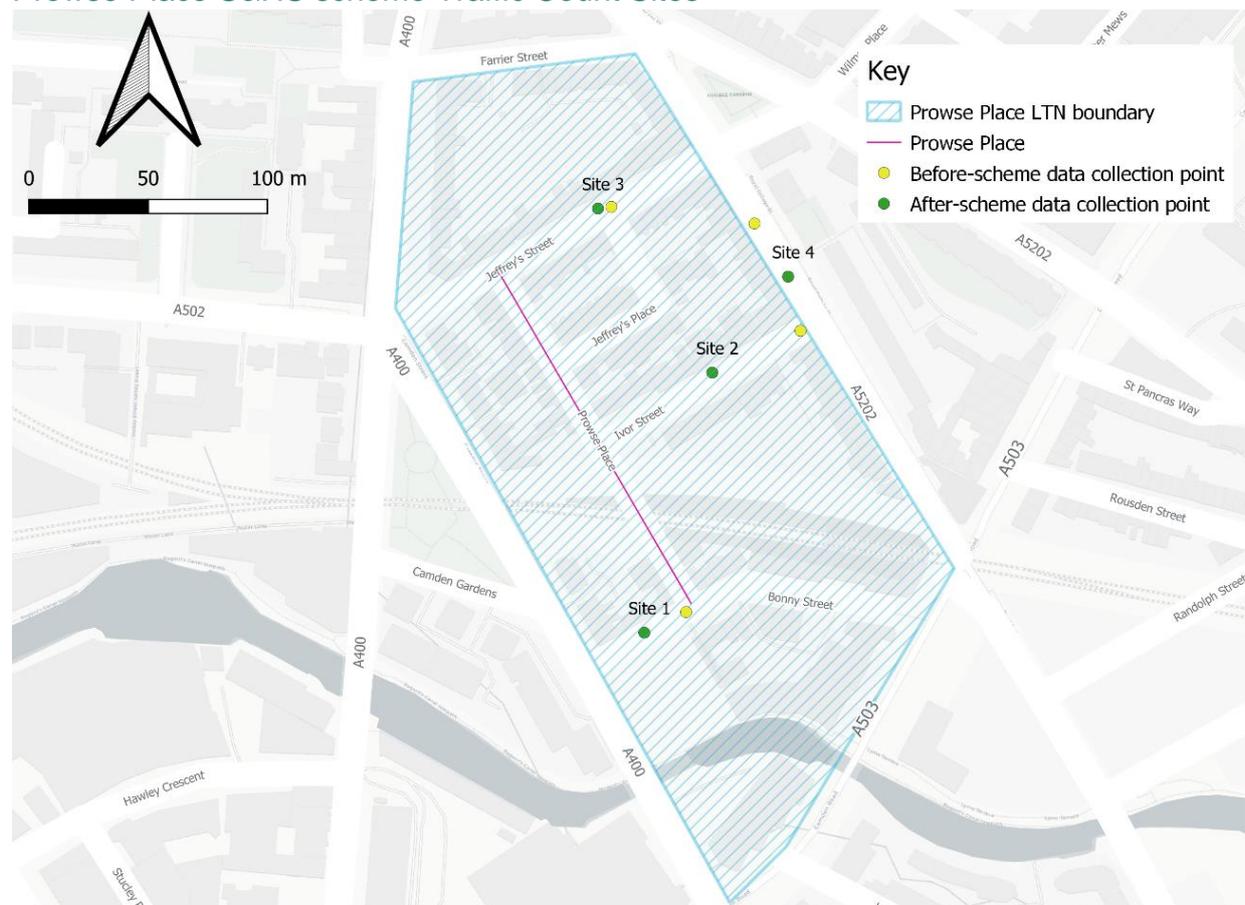
## Motor Vehicle Data

To establish changes in local traffic flows '**Before**-scheme' traffic counts, where available, have been compared against '**After**-scheme' traffic counts for links within or bounding the Prowse Place S&HS area.

Reliable '**Before**-scheme' data was available for Count Point 4 only and comprises classified count data available from 'Road Traffic Statistics' provided by Department for Transport for 07:00-19:00 on a weekday in **July 2013**.

'**After**-scheme' data was collected following the start of the trial period, in **December 2020** for a 14-day period using automatic traffic counts. A 12-hour (07:00-19:00) period was analysed to match the 'Before-scheme' data and all motor vehicle types are included in the totals presented below. The location of the '**Before**-scheme' and '**After**-scheme' sites are shown below.

### Prowse Place S&HS scheme Traffic Count Sites





Motorised traffic counts have been adjusted to account for seasonality and for changes in travel patterns due to COVID-19. Data collected in 2020 has been normalised to a 2019 (pre-COVID) baseline to ensure 'Before' and 'After' scheme counts are comparable. An adjustment factor for motorised vehicles has been derived from continuous 2019-2020 London-wide vehicle count data. The adjusted and unadjusted average weekday car flows for the Prowse Place S&HS scheme are shown below. For Count Site 4 only unadjusted data has been provided 'Before-scheme', as no factor was available for this. Please see Appendix A for more information on the methodology used and Appendix B for a breakdown of the traffic data.

### Prowse Place S&HS scheme- Weekday Average Traffic Flows (07:00-19:00)

Site ID	Road Name	Between	Direction*	Unadjusted			Adjusted		
				Before	After	% change	Before	After	% change
1	Bonny St	Camden St and Prowse Pl	Two-Way	-	232	N/A	-	267	N/A
2	Ivor St	Prowse Pl and Royal College St	Two-Way	-	137	N/A	-	158	N/A
3	Jeffrey's St	Prowse Pl and Jeffrey's Pl	EB	-	117	N/A	-	134	N/A
4	Royal College St	Ivor St and Jeffrey's St	NB	3,760	2,737	-27%	3,760	3,151	-16%

\*NB = Northbound EB = Eastbound

At Royal College Street (Count Site 4), traffic flows (cars) are lower in the 'After-scheme' data compared to the 'Before-scheme' data both in the unadjusted and adjusted scenarios. At Bonny Street, Ivor Street and Jeffreys Street, which comprise entry and exit routes to Prowse Place, traffic levels are low in the 'After-scheme' data with average two-way traffic flows ranging between 11 and 22 vehicles per hour on these links on a weekday, which is equivalent to one vehicle every three to six minutes.

### Cycling Data

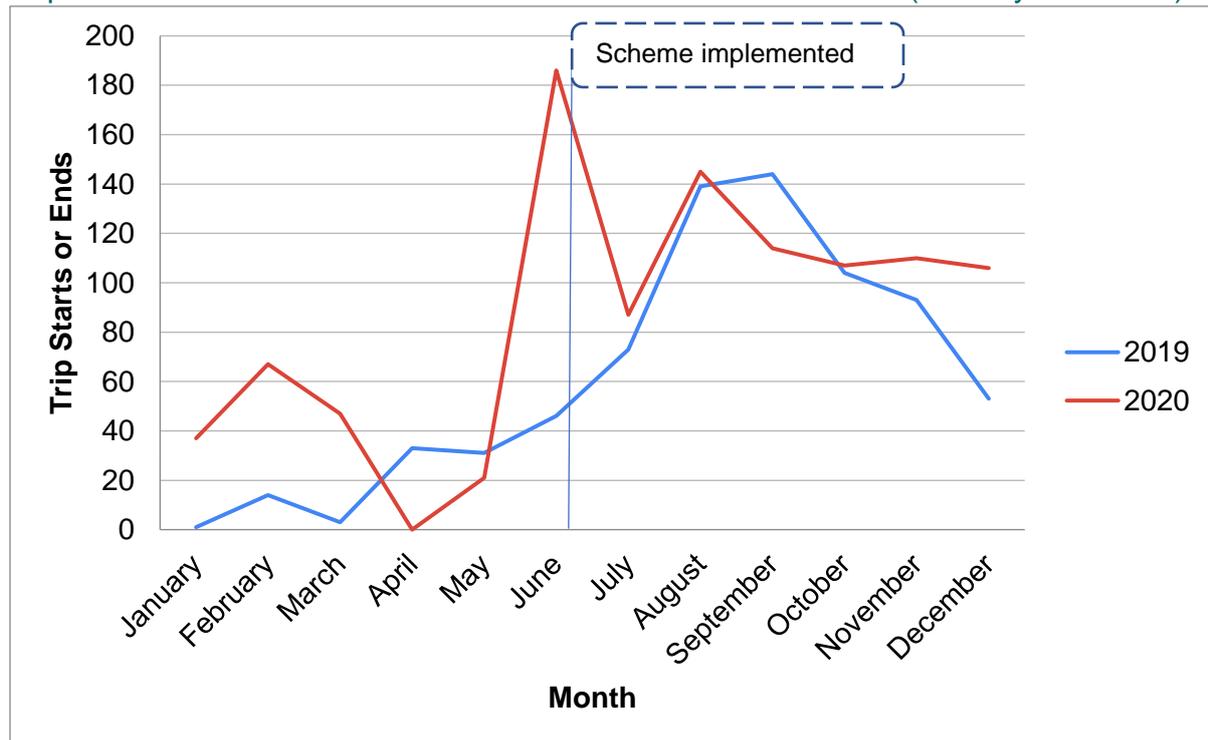
Due to the unavailability of cycling data from the 'Before-scheme' data, it has not been possible to compare cycling levels pre- and post-scheme for specific roads within the S&HS scheme.

Unadjusted 'Before-scheme' and 'After-scheme' data is available for Count Site 4 on the boundary of the S&HS scheme, with 364 cyclists using Royal College Street in July 2013 over a 12-hour period relative to 195 cycles in December 2020. Cycling levels are typically affected by seasonal variation and it is expected that cycle levels would be higher in July relative to December.



Monitoring of trip starts and ends in the Prowse Place S&HS scheme by Lime (bike rental operator) over 2019 and 2020 indicates that there has been an uptake in cycling following the implementation of the scheme. The graph below presents the number of trip starts or ends in the Prowse Place S&HS scheme between January and December 2019 and January and December 2020.

Trip Starts or Ends in Prowse Place S&HS scheme 2019-2020 (Lime cycle counts)



Cycling data collected within the Prowse Place S&HS scheme by Lime (bike rental operator) over 2019 and 2020 indicates that cycle levels are higher on average following the scheme's implementation. Across Prowse Place S&HS scheme, Lime bike usage increased by an average of **31%** when comparing cycling levels between June and December 2020 to June and December 2019.

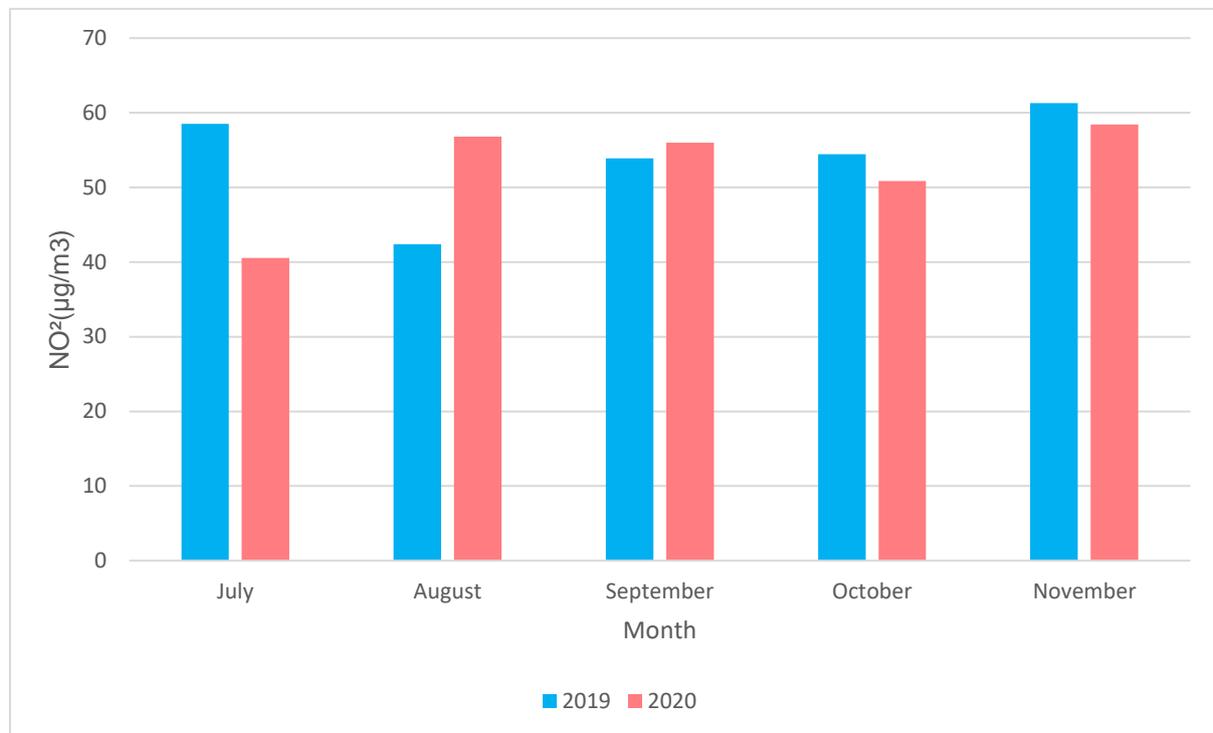
## Air Quality

Air quality monitoring data (diffusion tubes) has been sourced for Camden Road (south west of Royal College Street), which forms the closest monitoring station to the Prowse Place LTN.

The most recent, complete data available is for **July-November 2020** (after the scheme was substantially constructed), which has been compared to the **July-November 2019** period to assess any differences in Nitrogen Dioxide (NO<sub>2</sub>) levels. The results are presented in the graph below. The data shows that Nitrogen Dioxide (NO<sub>2</sub>) levels at the Camden Road monitoring site were 3% lower between July and December 2020 compared to the same period in 2019.



Air Quality Monitoring (NO<sub>2</sub>) on Camden Road in Prowse Place LTN (Jul to Nov)



This data is raw and unadjusted against the Government's bias adjustment factor. Therefore, this data cannot be measured against the National Air Quality Objective at this stage. It should be noted that air pollution is caused by multiple factors and whilst traffic is an important contributor it may be difficult to single out the impact of an individual factor. See Appendix C for a breakdown of Air Quality data

## Emergency Response Times

The London Fire Brigade (LFB) monitors the time it takes their vehicles to attend emergencies (attendance times). They use average attendance times 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.

In their '*Incident response times*' report published in 2020<sup>1</sup>, the LFB has set up their London-wide target response times (time the emergency call is answered to the arrival of a fire engine with crew at the incident scene), which for 2020 were:

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

In this report the LFB has also evaluated the impact of Low Traffic Neighbourhood (LTN) schemes, which are comparable to S&HS schemes, and which were

<sup>1</sup> <https://data.london.gov.uk/dataset/incident-response-times-fire-facts>



introduced in London in response to COVID-19 on LFB's emergency response times. The report concluded that these have not slowed down response times. Within their report they note:

*“During the pandemic we have has more resources that are immediately available to respond and roads (during lockdown periods) have been quieter. That being the case, we haven't yet noticed any impact on our attendance times due to the LTN schemes established in 2020”.*

The LFB's Mobilisation Records<sup>2</sup> have also been analysed for fire stations locations in Camden near the Prowse Place S&HS scheme (see map).

### London Borough of Camden Fire Stations

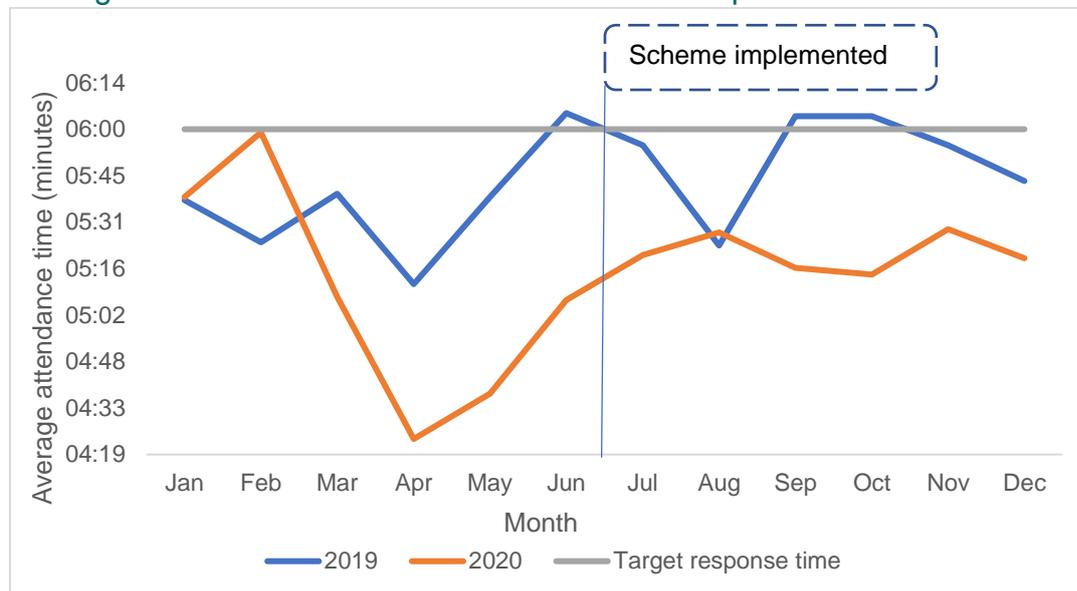


The graphs below compare the average response times for the closest fire stations to the S&HS scheme in 2019 and 2020, which comprise Euston and Kentish Town Fire Stations.

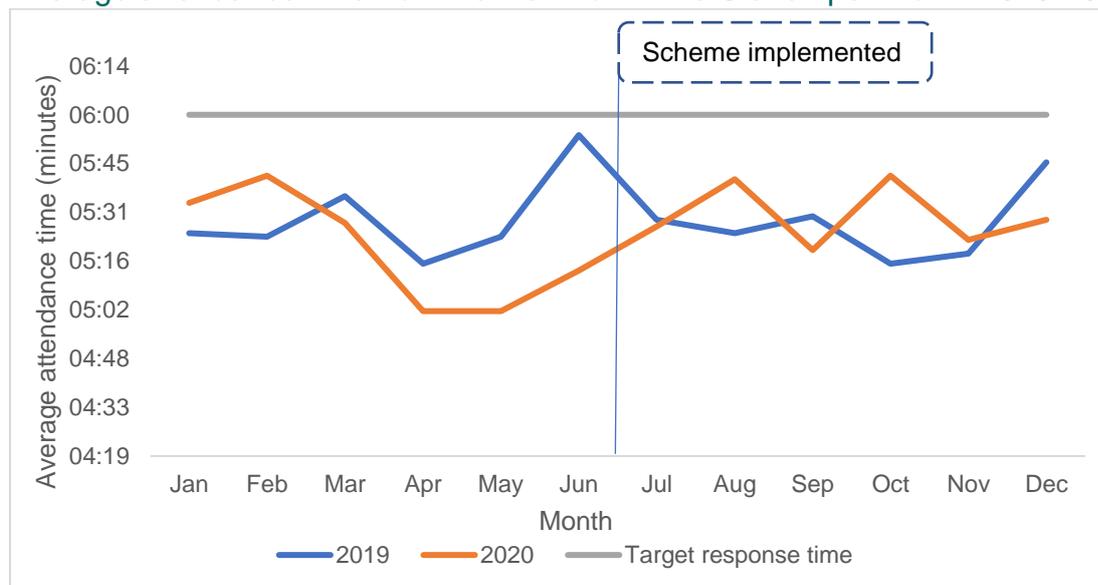
<sup>2</sup> <https://data.london.gov.uk/dataset/london-fire-brigade-mobilisation-records>



Average attendance time from Euston Fire Station per month 2019-2020



Average attendance time from Kentish Town Fire Station per month 2019-2020



Overall, the data indicates an 8% decrease in attendance times from Euston Fire Station and a 1% decrease in attendance times from Kentish Town Fire Station between 2019 and 2020. The graphs demonstrate that the LFB is consistently meeting or bettering their response time targets of 6 minutes for a first fire engine to arrive, which supports the conclusions drawn by the LFB at this point regarding S&HS scheme.

Camden Council continues to engage and consult with the London Ambulance Service (LAS) and Metropolitan Police Service (MPS) as part of the implementation of S&HS scheme and explore the ways to determine the effects of the Safe & Healthy Streets schemes on the emergency response times.



# Appendix A: Traffic Data Methodology

## Traffic Count Data

To monitor and review the impacts of the scheme, traffic count data has been collected before and after the opening of the scheme as follows:

- Before-scheme:
  - Count Site 1,2 and 3: Reliable data was not available for these count point sites pre-scheme.
  - Count Site 4 (Royal College Street): Manual classified count data sourced from DfT 'Road Traffic Statistics' on 2 May 2013 which covers a 12-hour period (07:00-19:00).
- After-scheme: Automatic Traffic Counters<sup>3</sup> were used to collect data on hourly traffic volumes by direction and vehicle class after the scheme was constructed for all four count sites. The data was collected between 5 December 2020 and 18 December 2020 with the average weekday traffic volume calculated and reported by vehicle class. This data was collected for a 24 hr period but processed for a 12 hr period (07:00-19:00) to compare to the 'Before-scheme' data.

If a full day of data was unavailable from the traffic counts, then this day was excluded from the average daily calculation of traffic volumes.

### Days of available post-scheme traffic survey data (sample)

Site ID	Rd Name	Between	Pre-scheme Sample (Days)	Post-scheme Sample (Days)
1	Bonny Street	Camden St and Prowse Pl	-	14
2	Ivor Street	Prowse Pl and Royal College St	-	11
3	Jeffreys Street	Prowse Pl and Jeffrey's Pl	-	14
4	Royal College St	Ivor St and Jeffrey's St	1	13

## Traffic Count Data Adjustment

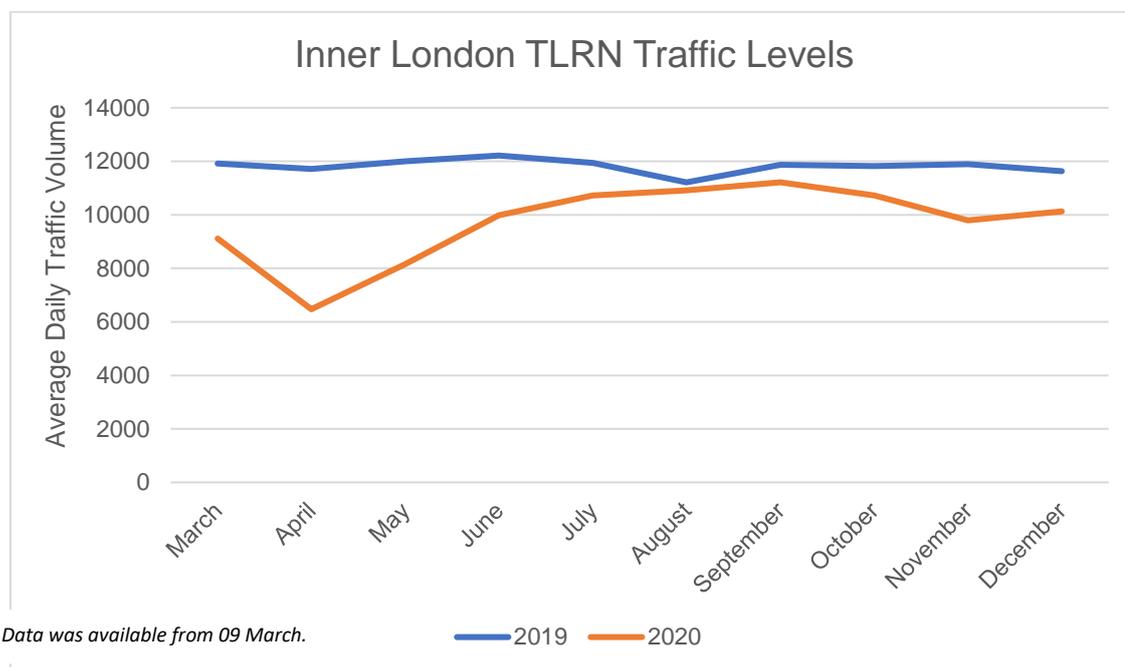
To monitor the interim effects of the scheme it has been necessary to complete traffic data collection during 2020 and at a time when travel patterns will have been affected by COVID-19 restrictions.

<sup>3</sup> Automatic Traffic Counter – Typically pneumatic tubing that runs across the road, which records vehicle volumes and classification (by axle base separation) when wheels pass over the tube.



To account for this disruption and the influence of seasonality<sup>4</sup>, the post scheme traffic data has been adjusted as follows:

- 1) Data collected in 2020 has been normalised to a 2019 (pre-COVID-19) baseline using a factor (1.1281) for weekday traffic. This has been derived from continuous traffic count data provided by Transport for London for the Inner Transport for London Road Network (TLRN) for the appropriate month. For example, traffic average daily volumes in December 2020 were 13% lower in Inner London than in December 2019 (see below).



- 2) The data has been further adjusted to account for seasonal variations in traffic flows using factors derived from comparing average weekday traffic volumes in December 2019 to the annual weekday average values for 2019 from the Transport for London dataset. The seasonality factor derived for a weekday in December is 1.0206.

The adjusted results provide an indication of the impacts of the scheme without COVID-19 and without the effects of seasonal variation in travel patterns. Both the unadjusted (raw) and adjusted traffic data are presented in the interim monitoring review for the scheme in the interests of transparency. As more data emerges, these trends will be further reviewed.

<sup>4</sup> Seasonality – Seasonal variation in travel patterns associated with changes in weather including temperature and rainfall.

# Appendix B: Traffic Data

Prowse Place S&HS Weekday Average Raw Data (07:00-19:00)

Site ID	Road Name	Between	Direction	Before						After					
				PC	MC	Car	LGV	HDV	Total*	PC	MC	Car	LGV	HDV	Total*
1	Bonny St	Camden St and Prowse Pl	EB							9	8	68	28	11	114
			WB							15	8	75	25	9	117
			Two-way								24	16	143	53	20
2	Ivor St	Prowse Pl and Royal College St	EB							3	5	11	3	1	19
			WB							4	10	73	25	9	118
			Two-way								6	14	84	28	10
3	Jeffreys St	Prowse Pl and Jeffrey's Pl	EB							147	15	73	20	10	117
4	Royal College St	Ivor St and Jeffrey's St	NB	364	161	2,365	848	386	4,124	195	156	1,894	484	204	2,737

PC = Pedal Cycle, MC = Motorcycle, LGV = Light Goods Vehicle (e.g. Van), HDV = Heavy Duty Vehicles (Heavy Goods Vehicles, Buses)

\*Total excludes PCs

Prowse Place S&HS Weekday Average Adjusted Data (07:00-19:00)

Site ID	Road Name	Between	Direction	Before						After					
				PC	MC	Car	LGV	HDV	Total*	PC	MC	Car	LGV	HDV	Total*
1	Bonny St	Camden St and Prowse Pl	EB							9	9	78	32	13	132
			WB							15	9	87	28	11	135
			Two-way								24	18	165	61	23
2	Ivor St	Prowse Pl and Royal College St	EB							3	5	13	3	1	22
			WB							4	11	85	29	11	136
			Two-way								6	16	97	32	12
3	Jeffreys St	Prowse Pl and Jeffrey's Pl	EB							147	17	84	23	11	134
4	Royal College St	Ivor St and Jeffrey's St	NB	364	161	2,365	848	386	4,124	195	180	2,180	557	234	3,151

PC = Pedal Cycle, MC = Motorcycle, LGV = Light Goods Vehicle (e.g. Van), HGV = Heavy Duty Vehicles (Heavy Goods Vehicles, Buses)

\*Total excludes PCs

# Appendix C: Air Quality Data

Site	2019 raw NO <sub>2</sub> (µg/m <sup>3</sup> ) from Jul-Nov	2020 raw NO <sub>2</sub> (µg/m <sup>3</sup> ) from Jul-Nov	Change (-% is reduction in NO <sub>2</sub> , +% is increase in NO <sub>2</sub> )
Camden Road	54.112	52.524	18%

## Appendix D: Attendance times

Month	Kentish Town Fire Station average response times in minutes			Euston Fire Station average response times in minutes		
	2019	2020	% change	2019	2020	% change
Jan	05:25	05:34	3%	05:38	05:39	0%
Feb	05:24	05:42	5%	05:25	05:59	10%
Mar	05:36	05:28	-2%	05:40	05:08	-9%
Apr	05:16	05:02	-5%	05:12	04:24	-15%
May	05:24	05:02	-7%	05:39	04:38	-18%
Jun	05:54	05:14	-11%	06:05	05:07	-16%
Jul	05:29	05:27	-1%	05:55	05:21	-10%
Aug	05:25	05:41	5%	05:24	05:28	1%
Sep	05:30	05:20	-3%	06:04	05:17	-13%
Oct	05:16	05:42	8%	06:04	05:15	-13%
Nov	05:19	05:23	1%	05:55	05:29	-7%
Dec	05:46	05:29	-5%	05:44	05:20	-7%
<b>Total</b>	05:29	05:25	<b>-1%</b>	05:44	05:15	<b>-8%</b>