

Appendix 1

The following available data has been analysed to identify any changes to the network in August 2020;

1. Traffic Surveys and Cycling surveys

Traffic data was collected at permanent sites along the A4 between Huntercombe Roundabout and J5 M4. The data in the tables 1-4 show traffic counts for peak times and these are defined as journeys starting between 08:00hrs – 09:00hrs and 17:00hrs – 18:00hrs. (These are defined as average flows in tables 1-4)

The permanent traffic count sites along the route are located on;

- A4 Bath Road/Walpole Road- Site currently out of commission from week 29,
- A4 Bath Road/Lansdowne Avenue-traffic volume is low in week 35
- A4 London Road / nr M4 J5 o/s Hotel- Traffic volume increased in week 31 and 32 for both the average flow between am and pm peak times.
- A4 Bath Road / Stowe Road – There is a slight increase of traffic flow between week 30-32 and traffic appears to normalise from week 33 to week 35.

Given the limited data at this time, it is too early to conclude that the bus lane has either improved bus journey times or has had a negative impact on the network. Further analysis will be undertaken in the coming months.

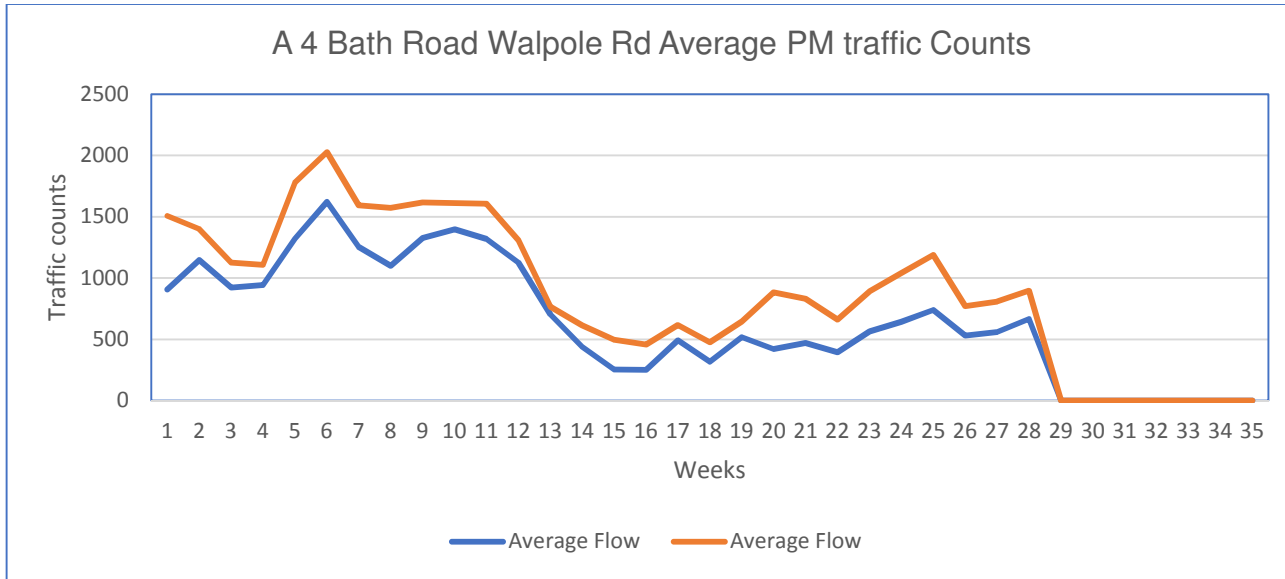


Table 1 Average Traffic Counts A4 Bath Rd Walpole Rd

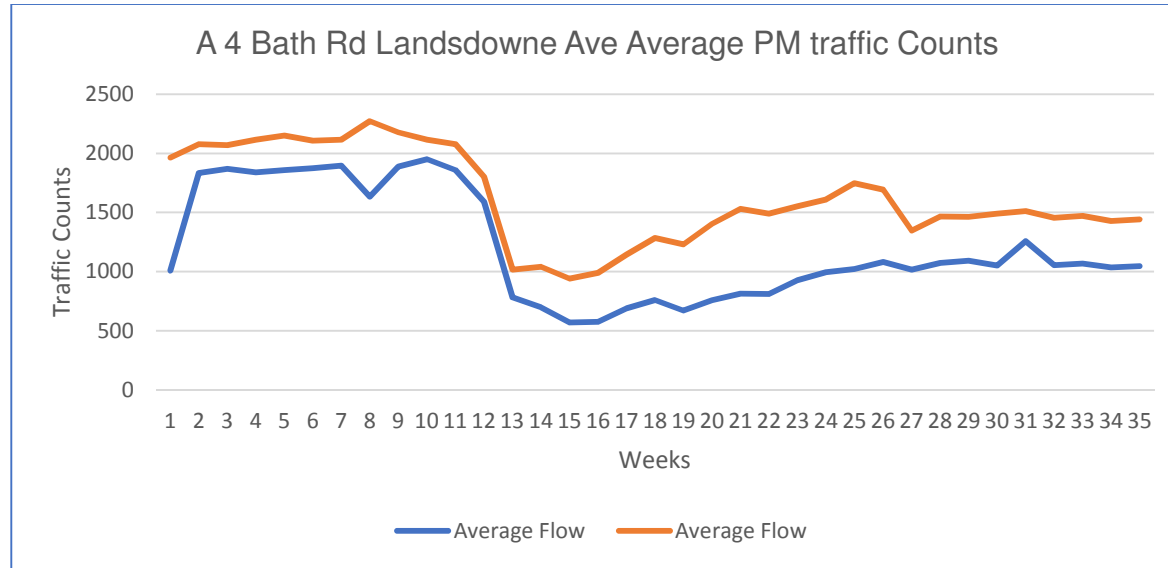


Table 2 Average Traffic Counts Bath Rd/Lansdowne Av

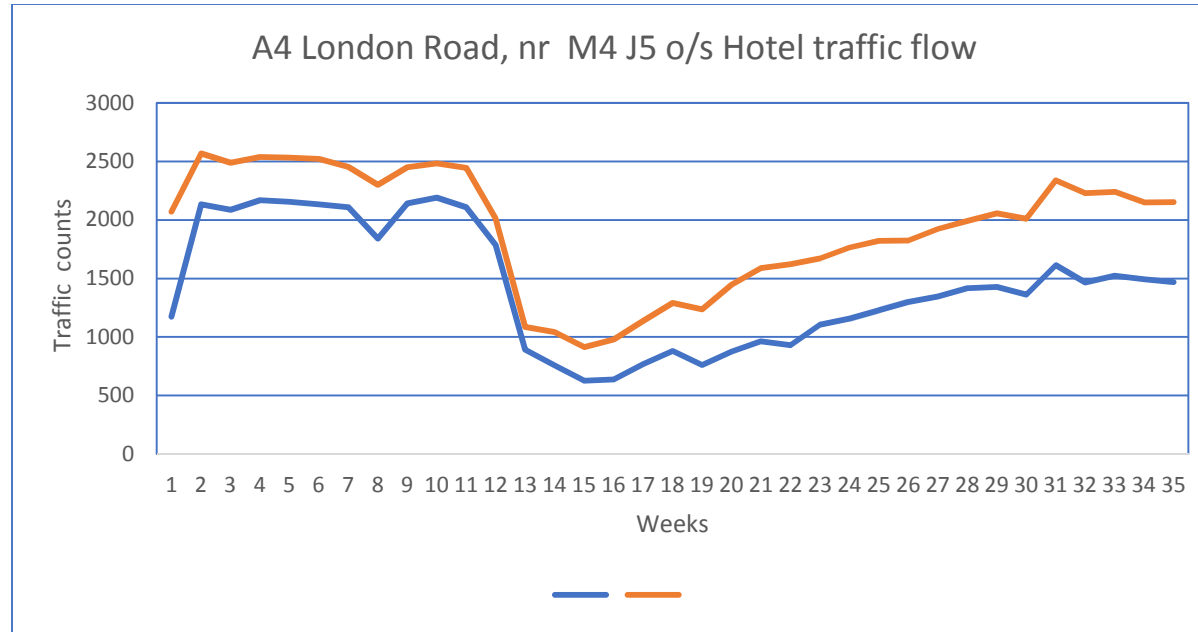


Table 3 Average Traffic Counts A4 London Road nr M4 J5 O/S Hotel

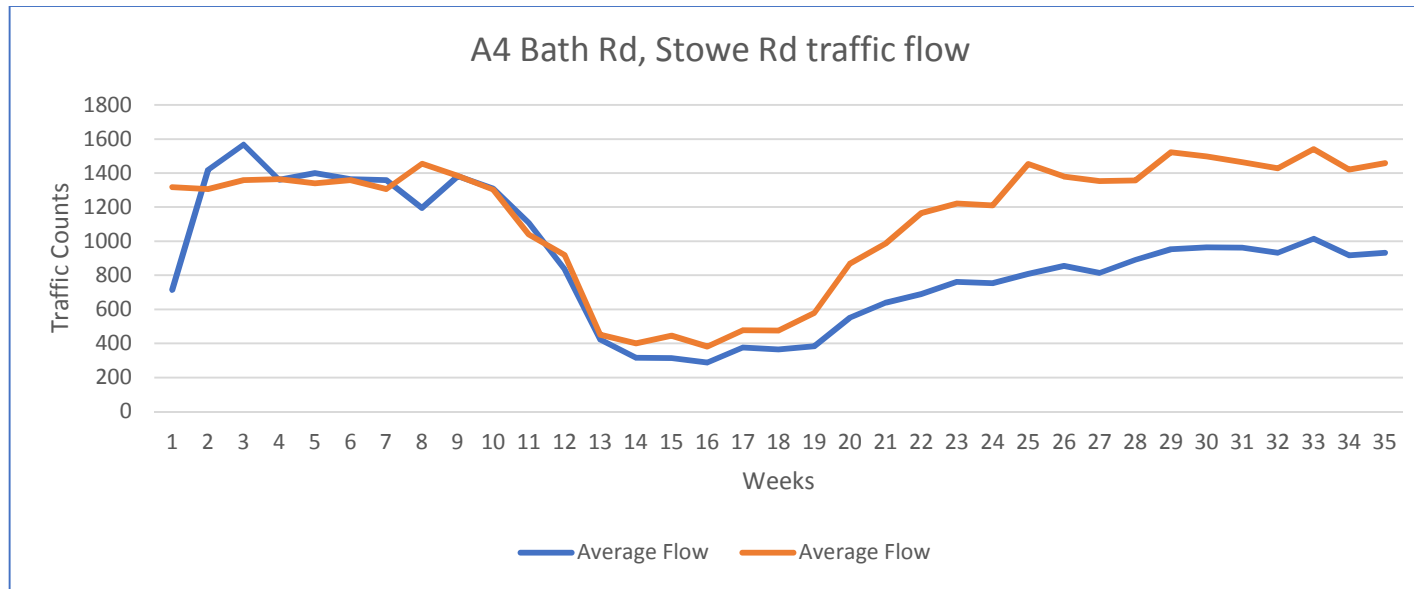


Table 4 Average Traffic Counts Bath Rd/Stowe Road

1b. Cycle Data

Cycle survey data is not available for August 2020. There is only one cycle counter along the route, and this only picks up cyclists on the footway. The Major Infrastructure Team is currently undertaking a procurement exercise to obtain quotes for installation of video surveillance that will be used to monitor journey times and counts along the route.

2. Blue Tooth surveys

Journey time survey data was obtained from the existing permanent Bluetooth devices along the A4.

Monthly average journey times data obtained shows that compared to the last 3 months there is a slight increase in journey times in August on the A4 Huntercombe Roundabout to M4 J5. This may have been due to the road works between Slough library and Uxbridge Road.

Comparison of the August 2019 and August 2020 journey time data shows an average 1-minute increase to the journey times along the routes. Due to technical issues with the blue tooth detectors on routes 15e, 15d both westbound and eastbound no data was recorded for July and August.

Route number	Route	Miles	August Journey Time for routes
15	A4 Huntercombe Rdbt to M4 J5 Eastbound	5.1	22 minutes
15c	Huntercombe Rdbt to Dover Rd Eastbound	0.9	4 minutes
15e	Dover to Tuns junction Eastbound	1.0	0
15d	Tuns junction to HoS Eastbound	0.8	0
15f	HoS to Sainsburys Rdbt Eastbound	0.7	3 minutes
16	M4 J5 to A4 Huntercombe Rdbt Westbound	5.1	21 minutes
16c	Dover Rd to Huntercombe Rbt WB	0.9	3 minutes
16e	Tuns junction to Dover WB	1.0	0
16d	HoS to Tuns junction WB	0.8	0
16F2	Sainsburys Rdbt to HoS WB	0.7	2 minutes

Monthly average JT - A4 Huntercombe Rdbt to M4 J5

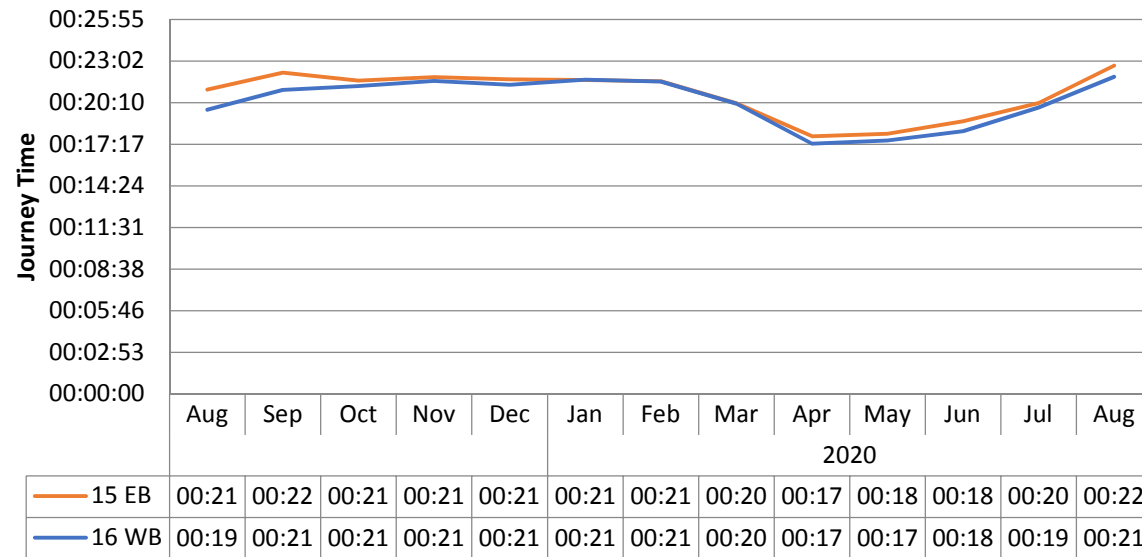


Table 5 Monthly average journey times A4 Huntercombe roundabout to M4 J5

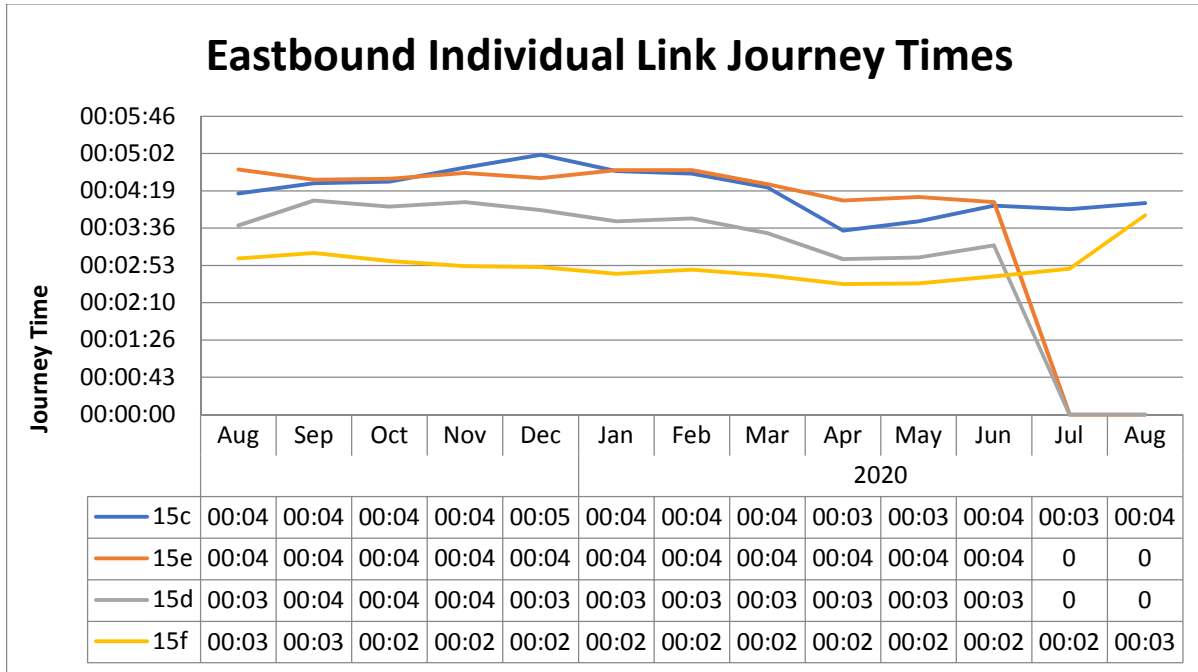
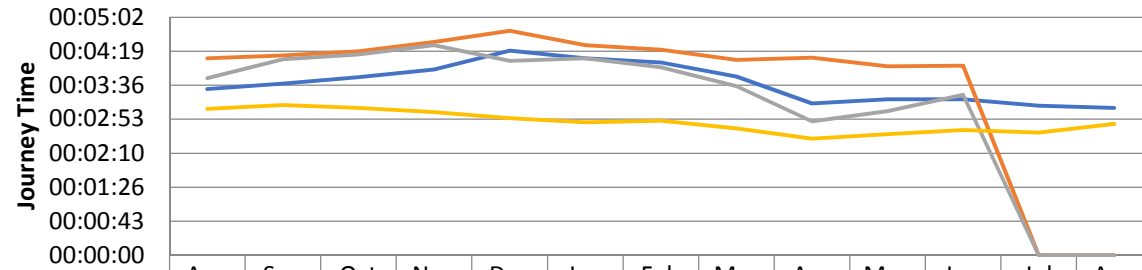


Table 6 Eastbound Individual link journey times for all routes

Westbound individual link Journey Times



	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
16c	00:03	00:03	00:03	00:03	00:04	00:04	00:04	00:03	00:03	00:03	00:03	00:03	00:03
16e	00:04	00:04	00:04	00:04	00:04	00:04	00:04	00:04	00:04	00:04	00:04	0	0
16d	00:03	00:04	00:04	00:04	00:04	00:04	00:03	00:03	00:02	00:03	00:03	0	0
16F2	00:03	00:03	00:03	00:03	00:02	00:02	00:02	00:02	00:02	00:02	00:02	00:02	00:02

Table 7 Westbound Individual link journey times for all routes

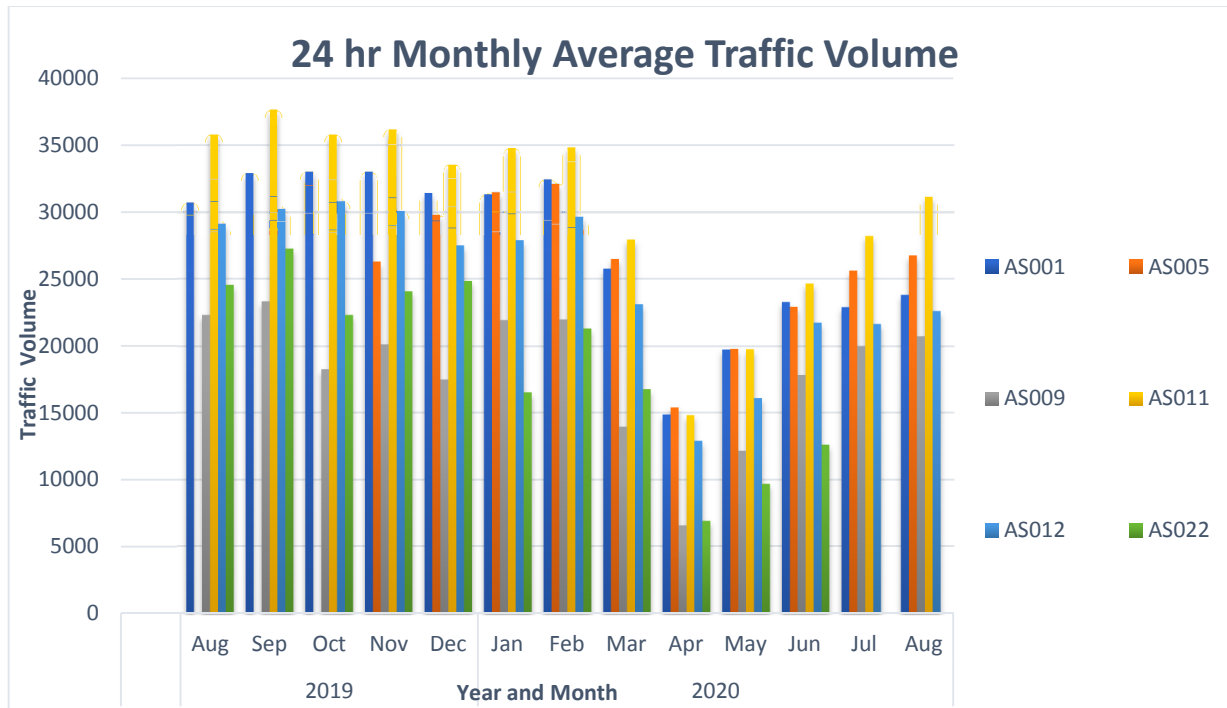


Table 8 24hrs Monthly Average Traffic volume

2. Air Quality

Data presented from all monitoring stations (figure 2 – 8) shows that air quality is improving across all stations. This may however have been influenced by the impact of the lockdown which has reduced vehicle trips on the main network. Analysis from August 2020 data shows that Nitrogen Dioxide (NO₂) levels are beginning to rise again however a clearer trend will be presented by data gathered in the coming months.

All stations have been included here, but it is difficult to attribute all as benefitting from the A4 bus and cycle lane

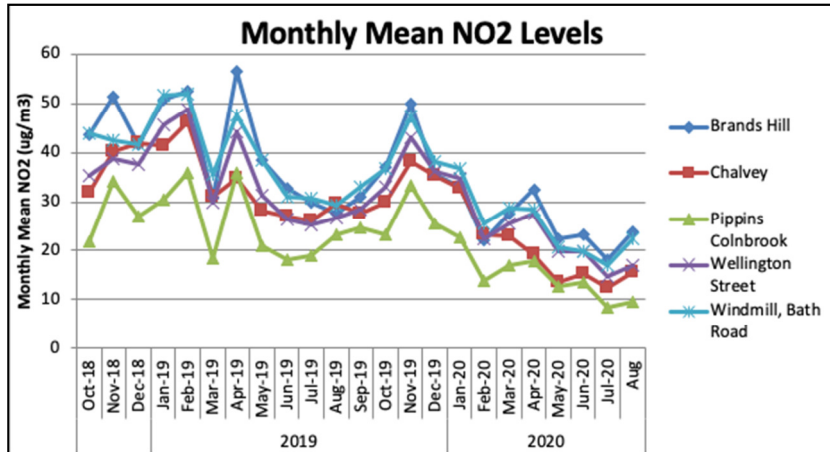


Figure 1: Monthly mean NO₂ concentrations from 2018 to 2020. Trends suggest that air quality is improving across all continuous monitoring stations however meteorological impacts may contribute to this. Data for August 2020 suggests that NO₂ levels are beginning to rise again – this can only be confirmed once more data is recorded in the following months.

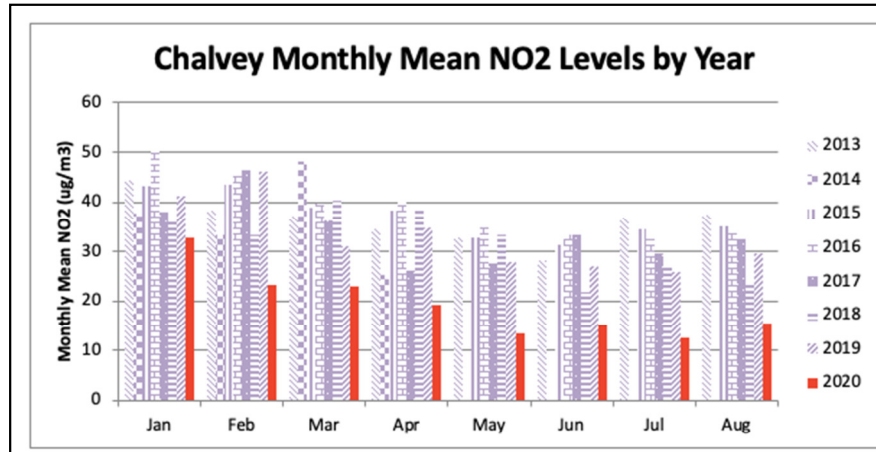


Figure 2: Monthly mean NO₂ concentrations in Chalvey compared by year (2013-2020). Currently, 2020 has the lowest concentrations when compared to previous years. Although meteorological impacts can contribute towards this variation, a clear reduction in NO₂ can be observed

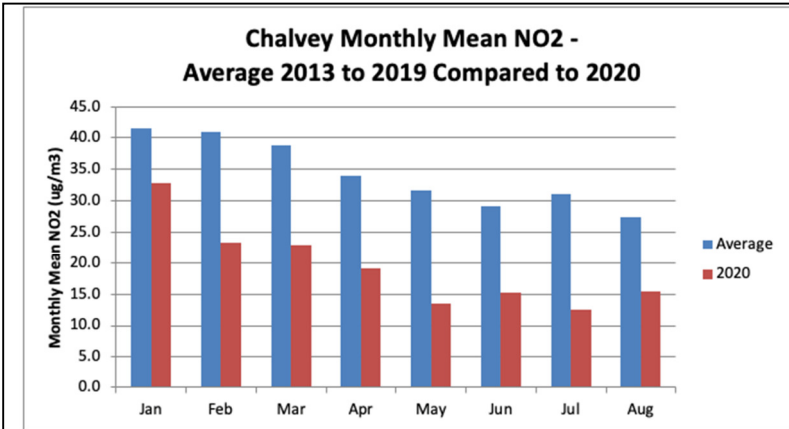


Figure 3: Monthly mean NO₂ average in Chalvey from 2013-2019, compared with concentrations recorded in 2020. Again, we can observe lower concentrations in 2020 compared to the average for previous years.

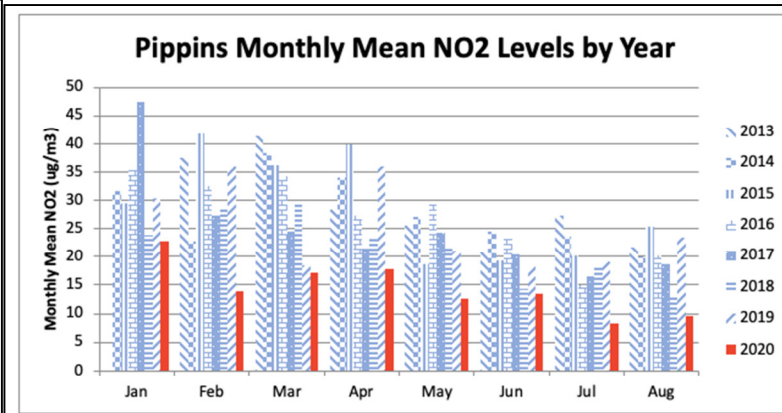


Figure 4: Monthly mean NO₂ concentrations in Pippins Colnbrook compared by year (2013-2020). Currently, 2020 has the lowest concentrations when compared to previous years. Although meteorological impacts can contribute towards this variation, a clear reduction in NO₂ can be observed

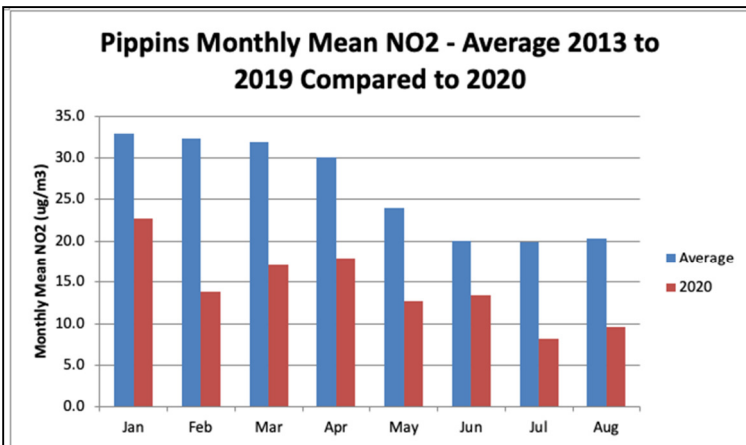


Figure 5: Monthly mean NO₂ average concentration in Pippins Colnbrook from 2013-2019, compared with concentrations recorded in 2020. Again, we can observe lower concentrations in 2020 compared to the average for previous years.

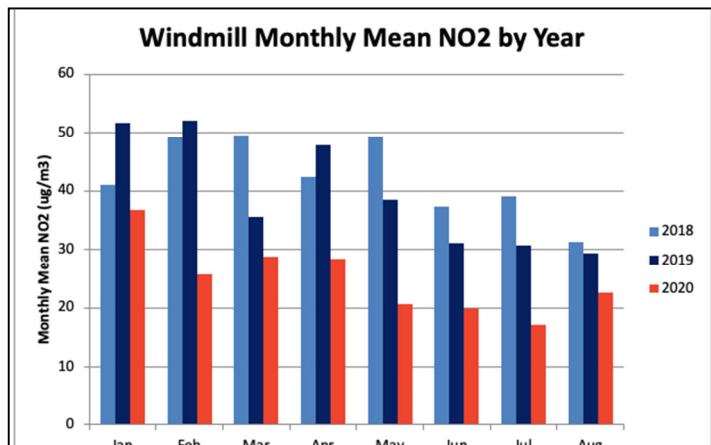


Figure 8: Monthly mean NO₂ average concentration at Windmill station from 2018-2019 (monitor was installed late 2017), compared with concentrations recorded in 2020.

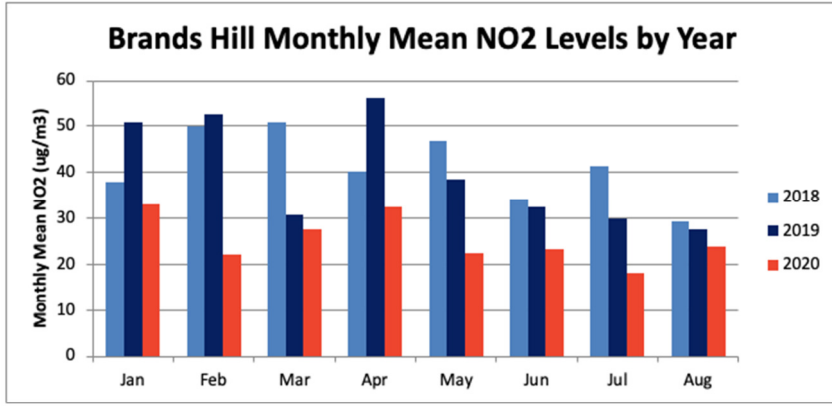


Figure 6: Monthly mean NO2 average concentration in Brands Hill from 2018-2019 (monitor was installed late 2017), compared with concentrations recorded in 2020. August data suggests that NO₂ concentrations are beginning to rise again, and is similar to previous years' data.

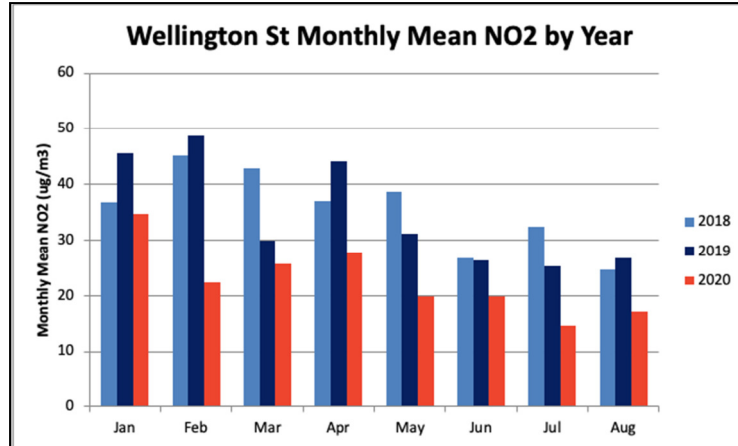


Figure 7: Monthly mean NO2 average concentration on Wellington Street from 2018-2019 (monitor was installed late 2017), compared with concentrations recorded in 2020.

3. Bus journey times

A small data sample has been collected for bus journey times and shows journey times during the AM and PM peak. These are run-times, with bus stop dwell times excluded. The results are for route 4 between Dover Road and Slough Library for the 3 two-week periods:

- 24 February - 6 March (pre-lockdown)
- 20 April - 1 May (post-lockdown, pre-bus lane implementation)
- 10 - 21 August (post-bus lane implementation)

The section between Slough Library and Uxbridge Road has been excluded from the analysis because of roadworks that affected the results for August 2020. A clearer picture of the journey times will be seen once a full analysis has been undertaken as part of the wider monitoring exercise. In this section the AM and PM peak is defined as journeys starting in the section between 08:00 and 08:59, and PM peak is defined as journeys starting in the section between 17:00 and 17:59.

- **AM Peak**

The AM peak sees a reduction in journey time of between 35% and 40% in both directions in both Apr/May and August. Journey time variability has declined further in the AM peak, and towards Heathrow the reduction in variability is greater with the bus lane. The evidence points to the bus lanes locking in the reduction in journey times seen with the lockdown, with a further improvement (towards Heathrow) in journey time consistency.

- **PM Peak**

The evidence is more mixed for the PM peak. Data for routes towards Heathrow is missing for April/May, but the reduction in bus journey time post-bus lane introduction is similar to the one observed in the AM peak. Towards Maidenhead, the reduction in journey time appears to have decayed with the introduction of the bus lane but journey time variability has substantially improved. Towards Heathrow, there is a reduction in journey time variability of nearly one-third.

AM Average Run Times (mins:secs)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar	10:10	12:40
Apr/May	6:35	7:29
August	6:14	8:05

AM Standard Deviation Run Time (mins:secs)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar	1:46	1:52
Apr/May	1:16	1:02
August	0:39	1:02

PM Average Run Times (mins:secs)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar	10:03	11:47
Apr/May	N/A	7:43
August	6:38	10:05

PM Standard Deviation Run Time (mins:secs)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar	2:25	2:04
Apr/May	N/A	1:47
August	1:43	0:47

Below are the percentage changes for Apr/May and August over Feb/Mar.

AM Average Run Times (change/pre-Covid)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar		
Apr/May	-35%	-41%
August	-39%	-36%

AM Standard Deviation Run Time (change/pre-Covid)		
Time period	Towards Heathrow	Towards Maidenhead
Feb/Mar		
Apr/May	-28%	-45%
August	-63%	-45%

Conclusion

Despite the improvements in air quality, traffic flow and volume, the variability of the data due to seasonality, Covid 19, working at home arrangements and schools closed since lockdown should be taken into account since all of these factors affect the impact the bus lane has on the network. Further analysis will be undertaken in the coming months as normal traffic conditions begin to emerge and reports produced to present the results. The scheme will also look at developing extra deliverables during the consultation period and identify/investigate wider benefits such as safety, regeneration, development and social inclusion.

Data	Traffic and Cycle survey data.	Air Quality Nitrous Oxide (NOx) and PM10 data	Bus Journey times	Bus Ridership	Enforcement Cameras	Customer Surveys	Traffic signals and timings	Accident data*	SMaRT bus fares	Cycling hire scheme	eScooters
Data Status	August Data Available for Traffic Surveys	August data available	August data available	Data collection in progress	No data available Equipment to be installed	In progress currently being collated	No data available, measures being determined	No data available	No data available	No data available	No data available
Source	Drakewell and Video capture (currently going through procurement)	Slough Environmental Quality Team	Bus operators	Bus operators	Slough Parking Team	Bus operators or SBC	Slough Traffic Signals Team	CrashMap or AccsMap	Bus operators - Stewarts and Businesses	Cycle Hire scheme	Operator to be confirmed
Use	Traffic volume and speed. To measure cyclist's volume	Monitor emission reductions	Identify journey time reliability and improvement	Identify number of passengers (How?) Do we have this data?	Identify recorded violations	Identify success of scheme	Expected to include capacity measures at all key junctions along the route, including the Copthorne roundabout	To identify collision data	To identify number of tickets purchased per week	Identify registered users, new registrations and bicycle hires	Identify number of users Routes travel