

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 9

9.84 Assessing the Potential Impact of COVID 19 – the implications
for traffic forecasts for the Scheme – Supplementary Data

Planning Act 2008

Rule 8(1)(k)

Infrastructure Planning (Examination Procedure) Rules
2010

December 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning (Examination Procedure)
Rules 2010**

**A428 Black Cat to Caxton Gibbet
improvements
Development Consent Order 202[]**

**9.84 Assessing the Potential Impact of COVID 19 –
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Supplementary Data**

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1 Introduction

- 1.1.1 An assessment of the impacts of the COVID-19 pandemic on travel behaviour since the introduction of restrictions in March 2020 was undertaken by AECOM on behalf of National Highways which was submitted at Deadline 1 – ‘Assessing the Potential Impacts of COVID-19 – The Implications for Traffic Forecasts for the Scheme’ **[REP1-029]**.
- 1.1.2 This drew upon both national and local data. It also considered factors that are likely to affect the demand for travel over the longer-term, by examining emerging evidence and research on the latest thinking of the impacts on travel behaviour.
- 1.1.3 This analysis was based on data sets up to June/July 2021, the latest data available at that time. The purpose of this note is to extend and update the previous analysis of volumetric traffic data, at both National and Local level, up to the end of September 2021. This is significant as it covers the intervening period following the Step-4 removal on the 19 July 2021 of all remaining legal limits on social contact imposed under the ‘4-Step Roadmap out of lockdown’ set out in the Government’s COVID-19 Response – Spring 2021¹.
- 1.1.4 It is worth noting that the 4-Step Roadmap published in February 2021 provided that the lifting of all restrictions would not occur before the 21 June 2021. In the event, this was extended to the 19 July 2021.

2 National Traffic Monitoring

- 2.1.1 The Department for Transport (DfT) have published monitoring information on travel by mode within Great Britain since 1st March 2020². This data is as near to real time as possible and related to a pre-pandemic baseline level as follows:
- Highway traffic is expressed as a percentage of the equivalent day in the first week of February 2020.
 - Rail travel is expressed as a percentage of the equivalent week in the previous year up to w/c 8 Feb 2021; from w/c 15 Feb 2021 this reverted to the percentage of the equivalent week in 2019.
 - Bus travel is expressed as a percentage of the equivalent day of the third week of January 2020.
 - Cycling is expressed as a percentage of the equivalent day in the first week of March 2020
- 2.1.2 **Figure 2-1** shows the daily trends in travel by highway, rail, bus (excluding London buses) and cycling since 1 March 2020 until mid-November 2021.
- 2.1.3 Key observations since 19 July 2021, when pandemic restrictions were lifted, are as follows:
- Highway traffic has remained fairly static at around pre-pandemic levels.
 - Rail and bus patronage continue to recover although at a slower rate and are still some way below pre-pandemic levels.
 - Cycling trip volumes, although naturally volatile, are marginally below pre-pandemic levels.
- 2.1.4 **Figure 2-2** shows DfT travel statistics for highway travel broken down for car, LGV and HGV traffic. Key observations since July 2021, when restrictions were lifted, are as follows:
- Car traffic has remained fairly static following the lifting of restrictions and is marginally below pre-pandemic levels. There is a small discernible step reduction after September 2021. This may correspond with the commencement of the autumn academic term although at this stage is just noted without conjecture as to causality.
 - HGV and LGV traffic continue to be marginally above pre-pandemic levels.

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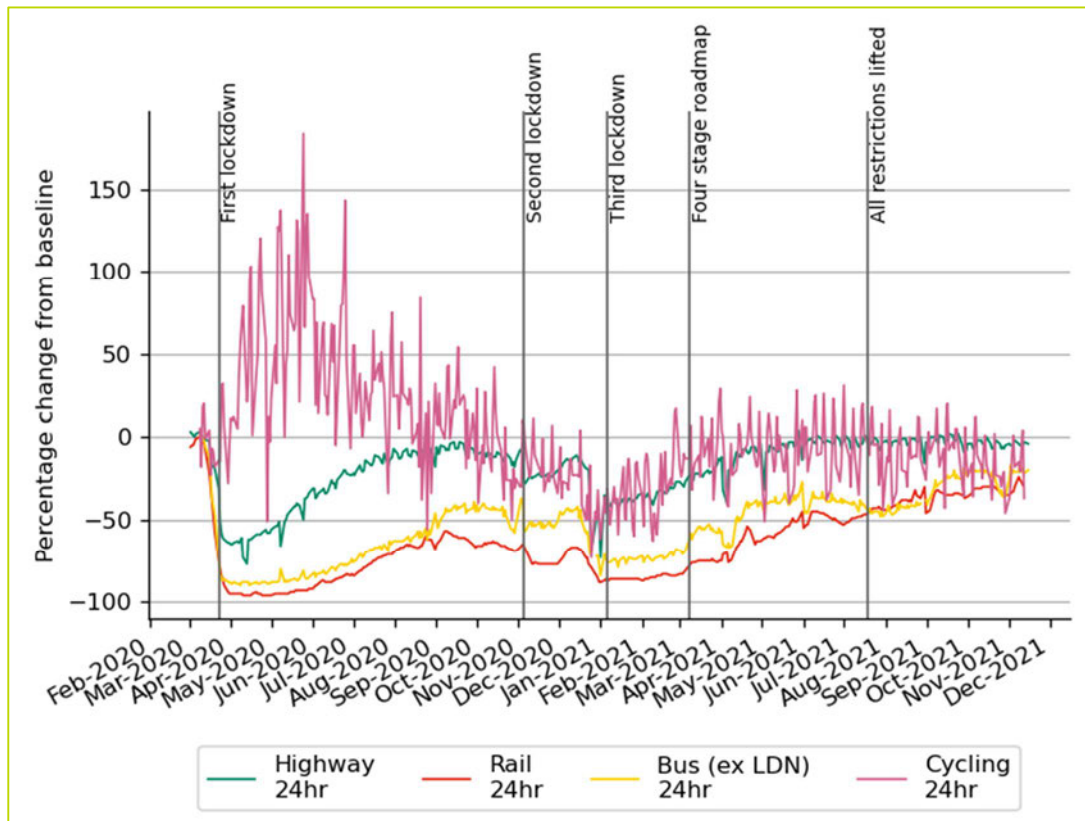


Figure 2-1: DfT Travel Statistics by Mode up to autumn 2021

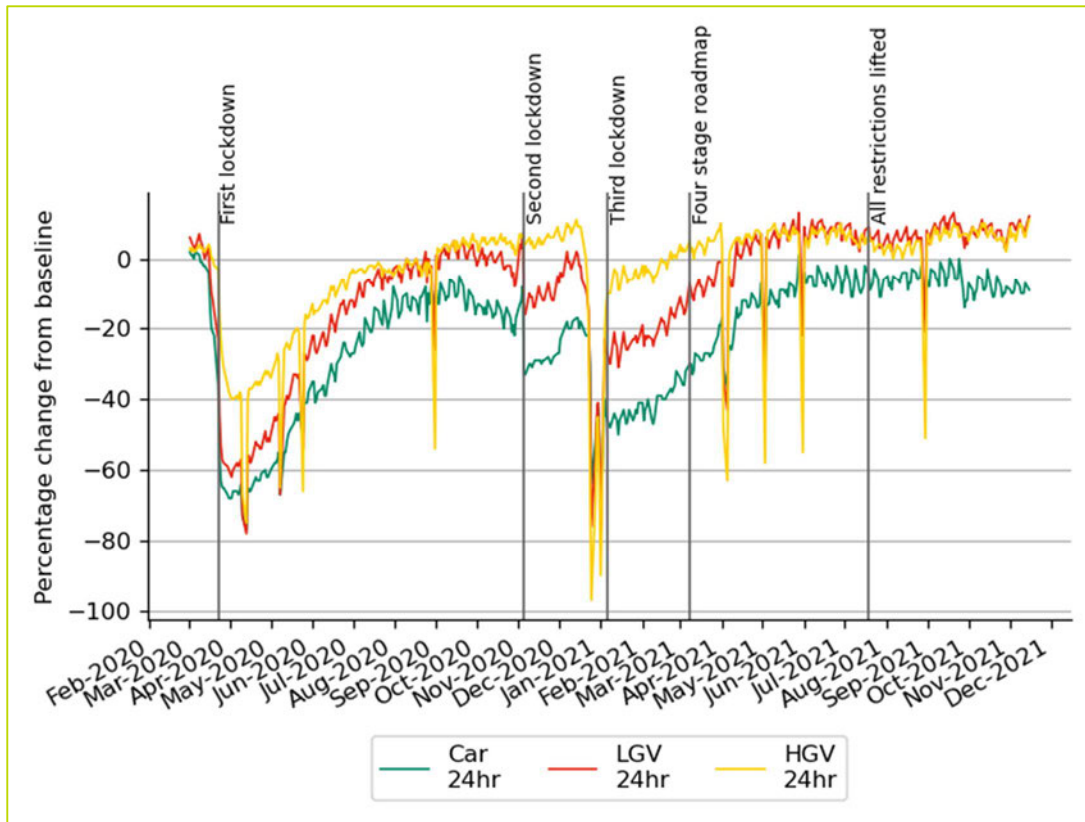


Figure 2-2: DfT Travel Statistics by Highway Vehicle Type up to autumn 2021

3 Local Traffic Monitoring

- 3.1.1 The impact of the COVID-19 pandemic on the Strategic Road Network, in the vicinity of the proposed A428 Black Cat to Caxton Gibbet Improvements, was assessed using data from National highways WebTRIS database³.
- 3.1.2 Consistent with the previous analysis reported in REP1-029, long-term count data were assessed at four locations shown in **Figure 3-1** and incorporating the most recent data for July to September 2021 (note that the two 1-way sites on the A421 and A1 have been grouped together for this assessment):
- The A421 to the west of the A1 Black Cat Junction.
 - The A1 between the junctions with the A421 and A428 near Wyboston.
 - The A428 to the east of the junction with Barford Road to the south of St Neots.
 - The A428 to the east of the junction with the B1428, Cambridge Road to the east of St Neots.



Figure 3-1: WebTRIS Count Sites

- 3.1.3 Flow plots consistent with those presented in REP1-029 are provided in Appendix A. Some minimal smoothing of the data was undertaken where there were gaps due to missing data.
- 3.1.4 The plots presented in Appendix A show traffic flows with respect to a pre-pandemic base of February 2020. Adopting a pre-pandemic base of February 2020 enabled broad observations of the impact of restrictions on traffic levels at each stage.
- 3.1.5 However, this does not take into account seasonal variations of traffic flows that occur throughout the year. For this reason, a modified approach has been adopted whereby traffic flows from March 2020 were compared against flows for the corresponding week during 2019. Furthermore, the latest analysis has been based on average weekday (Monday to Friday) daily flows in order to provide a comparison which excludes normal day to day variations through the week.
- 3.1.6 These comparisons are presented for the A421 and the A428. Traffic data for the A1 was not available from WebTRIS after late summer 2021 and therefore is not included in the comparisons against 2019 week-day traffic volumes:

With reference to Figure 3-2 to Figure 3-7 the following key observations are noted:

Following the introduction of the Government's '4-Step Roadmap out of lockdown' there was a steady increase in traffic levels up to about the beginning of June.

- a. In the few weeks during June/July immediately leading up to the lifting of all restrictions on 19th July there was a noticeable reduction in traffic levels of up to about 10%.
- b. Following the lifting of all restrictions in mid-July 2021 daily traffic volumes largely recovered from the noted reduction above during June/July with some evidence of levelling off towards the end of September.
- c. Traffic volumes towards the end of September 2021 were generally close to pre-pandemic 2019 levels for the corresponding week in the year.
- d. The exception is traffic volumes on the A428 (east of B1428) in the westbound direction, shown as Figure 3-7, where traffic volumes for September 2021 are around 10% below corresponding 2019 flow levels (i.e. an index of 0.9).

Figure 3-3: 2020-21 Average Weekday Traffic Flows compared to 2019 - A421 (west of A1) SB

Figure 3-4: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of Barford Rd) EB

Figure 3-5: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of Barford Rd) WB

Figure 3-6: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of B1428) EB

Figure 3-7: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of B1428) WB

3.1.7 With reference to **Figure 3-2** to **Figure 3-7** the following key observations are noted:

- a. Following the introduction of the Government's '4-Step Roadmap out of lockdown' there was a steady increase in traffic levels up to about the beginning of June.
- b. In the few weeks during June/July immediately leading up to the lifting of all restrictions on 19th July there was a noticeable reduction in traffic levels of up to about 10%.
- c. Following the lifting of all restrictions in mid-July 2021 daily traffic volumes largely recovered from the noted reduction above during June/July with some evidence of levelling off towards the end of September.
- d. Traffic volumes towards the end of September 2021 were generally close to pre-pandemic 2019 levels for the corresponding week in the year.
- e. The exception is traffic volumes on the A428 (east of B1428) in the westbound direction, shown as Figure 3-7, where traffic volumes for September 2021 are around 10% below corresponding 2019 flow levels (i.e. an index of 0.9).

3.1.8 It should be noted that there is missing data for A421 SB West of A1 over the Christmas period that accounts for the discontinuity in **Figure 3-3** below.

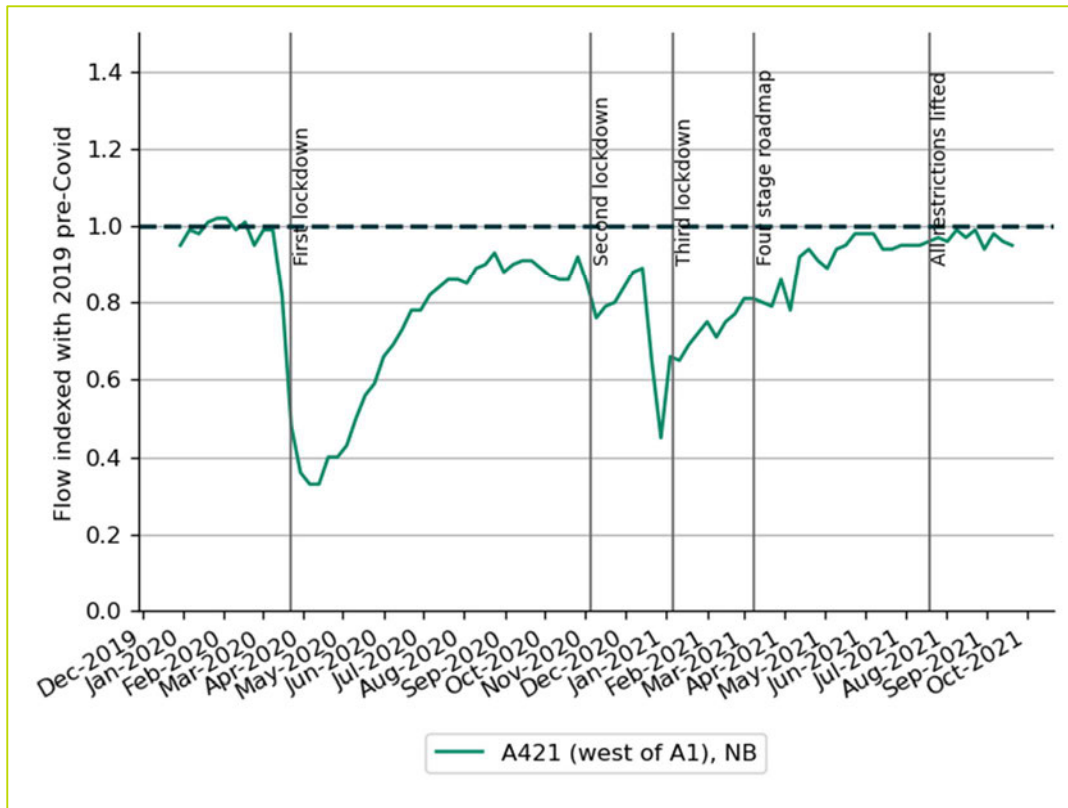


Figure 3-2: 2020-21 Average Weekday Traffic Flows compared to 2019 - A421 (west of A1) NB

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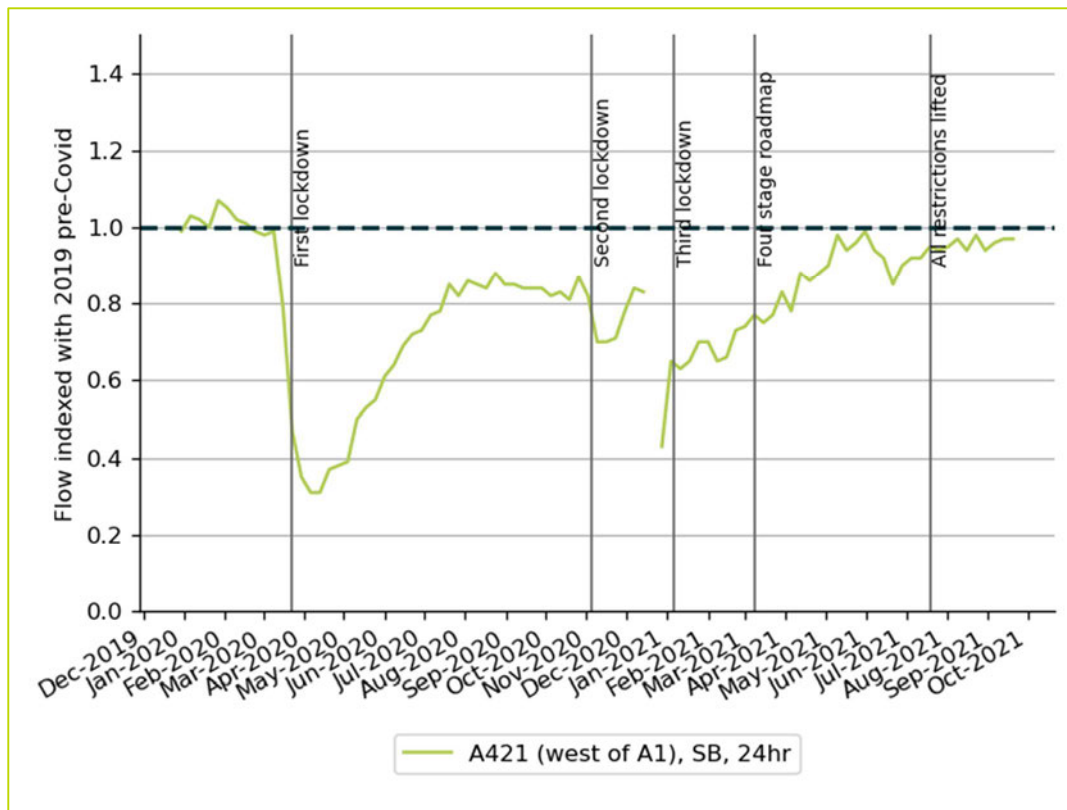


Figure 3-3: 2020-21 Average Weekday Traffic Flows compared to 2019 - A421 (west of A1) SB

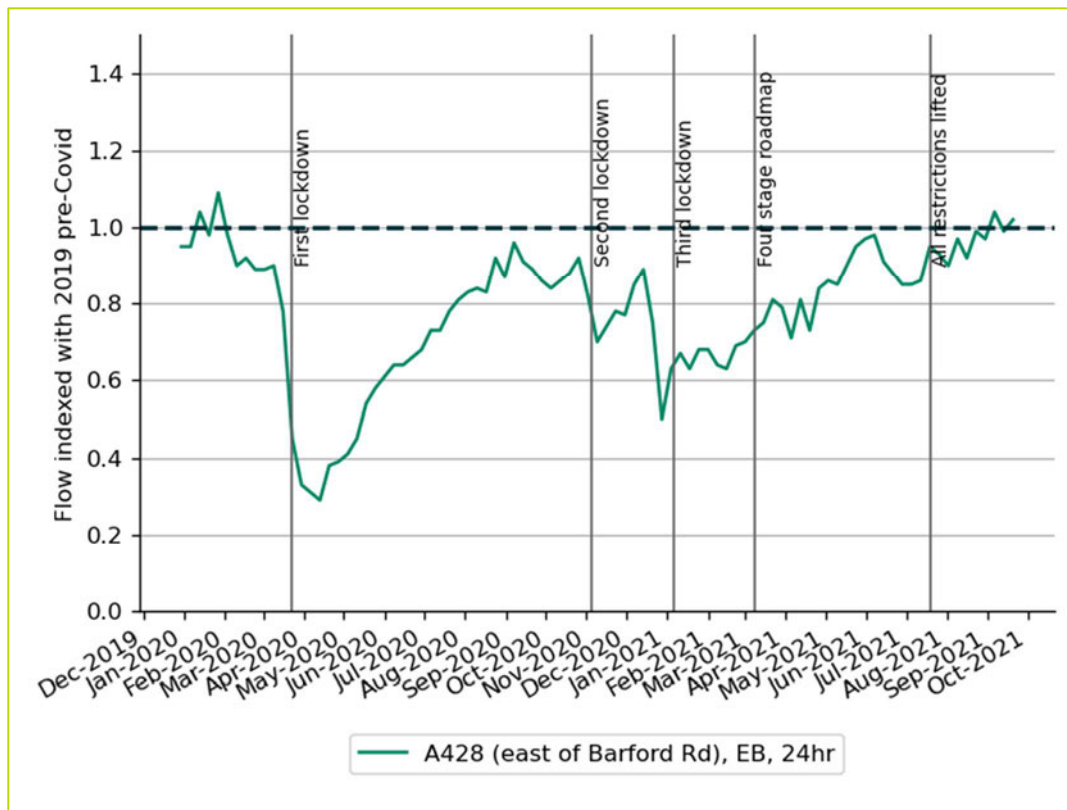


Figure 3-4: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of Barford Rd) EB

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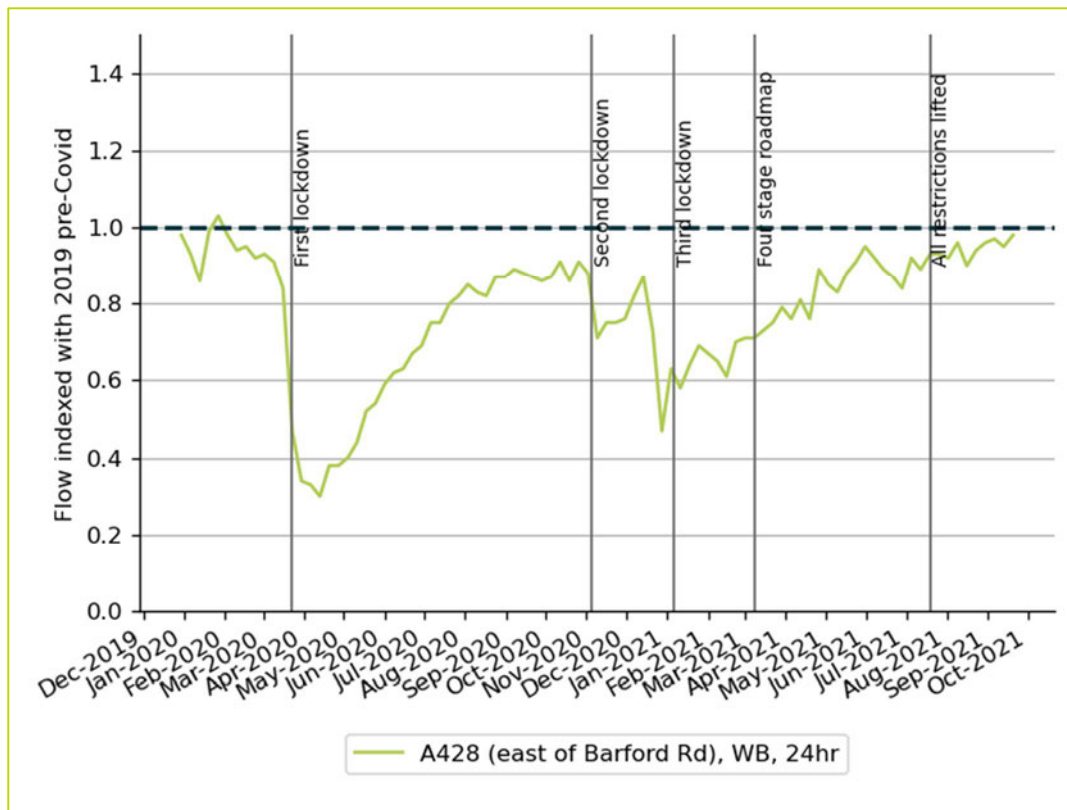


Figure 3-5: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of Barford Rd) WB

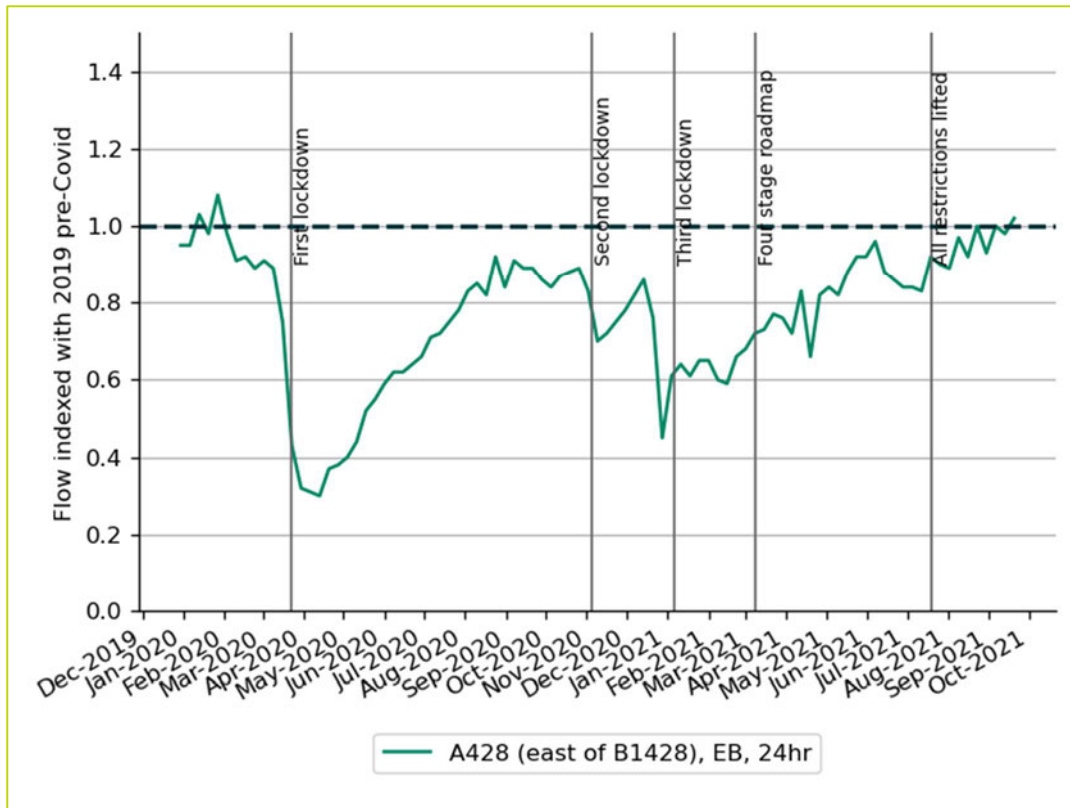


Figure 3-6: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of B1428) EB

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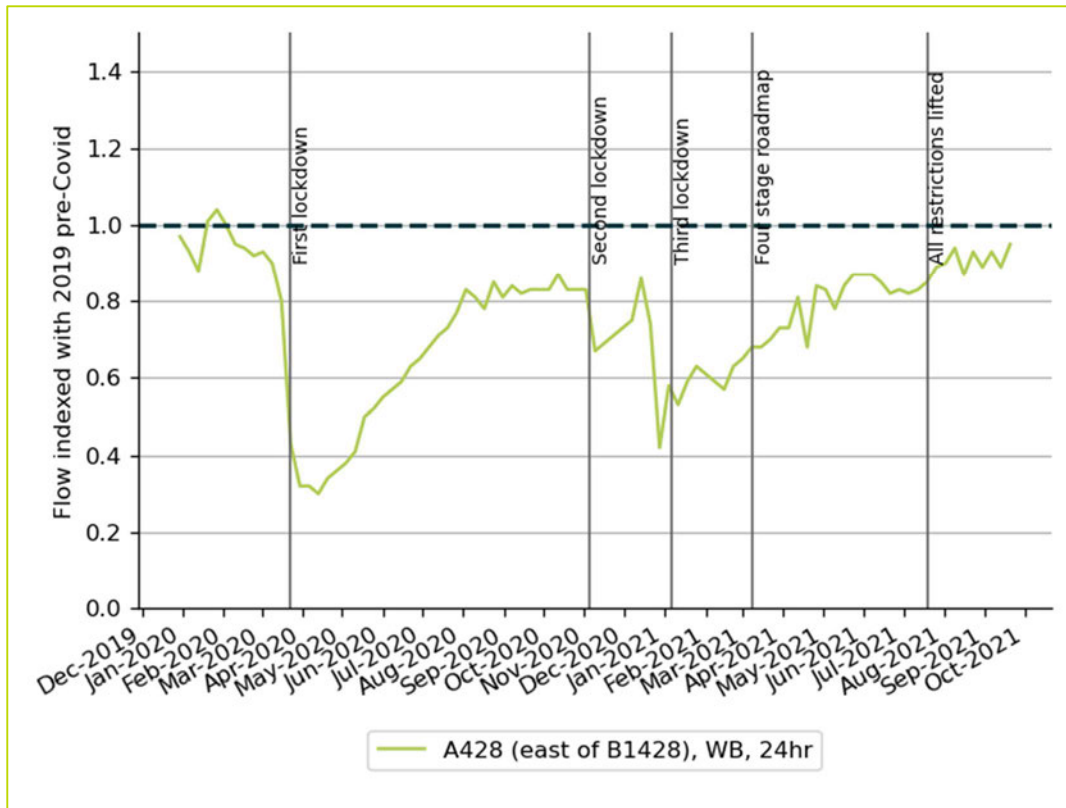


Figure 3-7: 2020-21 Average Weekday Traffic Flows compared to 2019 - A428 (east of B1428) WB

4 Conclusions

- 4.1.1 This Technical Note has extended the previous analysis presented in REP1-029 to assess the impact of Covid-19 restrictions on traffic volumes by including additional data from June 2021 up to September 2021.
- 4.1.2 Analysis has been undertaken of national data by mode (road, rail, cycling) and by vehicle type (Cars, LGVs and HGVs) and also local traffic data within the vicinity of the Scheme.
- 4.1.3 Key observations are given for the analysis of national traffic at Section 2.1.3 and Section 2.1.4. In summary, since June 2021 to the end of September 2021 the analysis suggests that, compared to pre-pandemic flows of February 2020:
- There has been little change in daily volumes of all-vehicle traffic.
 - There has been a gradual increase in rail and bus patronage - with indications of levelling off.
 - Car traffic has remained slightly below pre-pandemic levels.
 - HGV and LGV traffic remained slightly above pre-pandemic levels.
- 4.1.4 Analysis of local traffic data for the A421, A21, and A428 within the vicinity of the Scheme was also included consistent with that presented in REP1-029. This showed flows compared to a pre-pandemic base of February 2020 and presented in Appendix A.
- 4.1.5 Further analysis of local traffic data was undertaken to present average week-day traffic compared to pre-pandemic flow levels for a corresponding week in 2019. The purpose of this was to take account of normal seasonal variations of traffic flows which occur throughout the year.
- 4.1.6 This showed that since the lifting of Covid-19 restrictions in mid-July 2021, daily traffic volumes have continued to increase with some evidence of levelling off towards the end of September 2021.
- 4.1.7 As an overall observation the analysis suggests that at September 2021 traffic levels are close to pre-pandemic levels of 2019.

Appendix A

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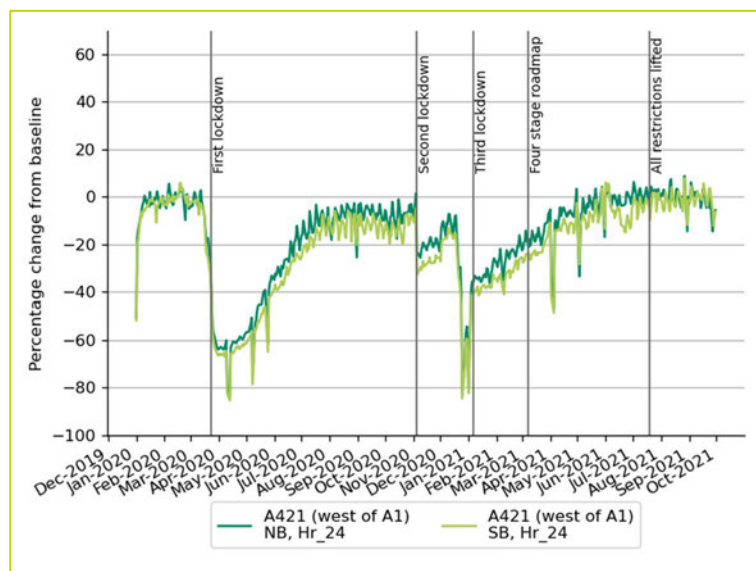


Figure A 1 - Observed Daily Traffic flows on A421 (west of A1)

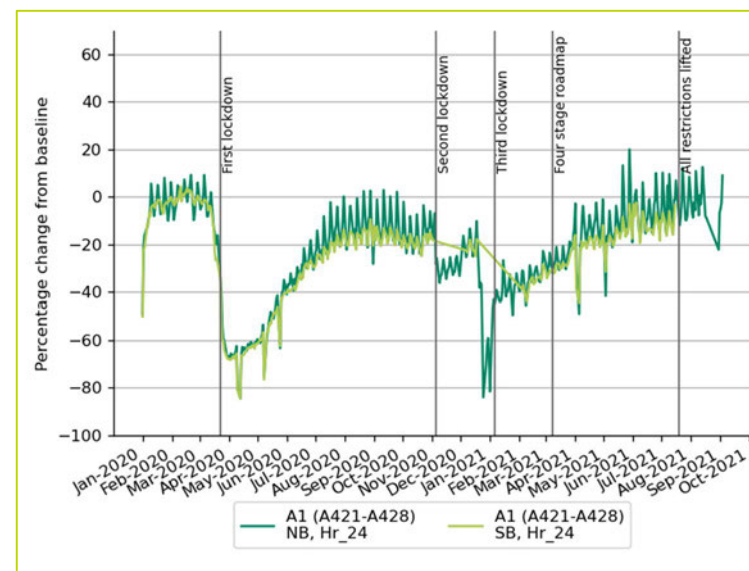


Figure A 2 - Observed Daily Traffic flows on A1 (A421-A428)

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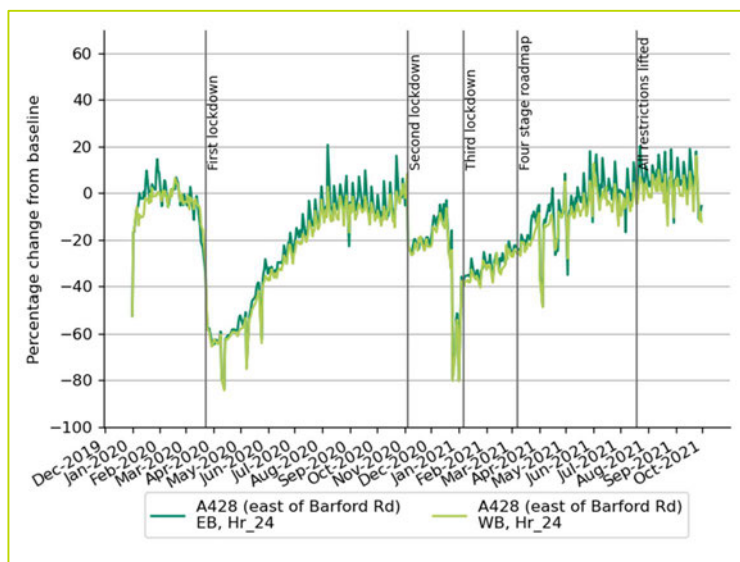


Figure A 3 - Observed Daily Traffic flows on A428 (east of Barford Rd)

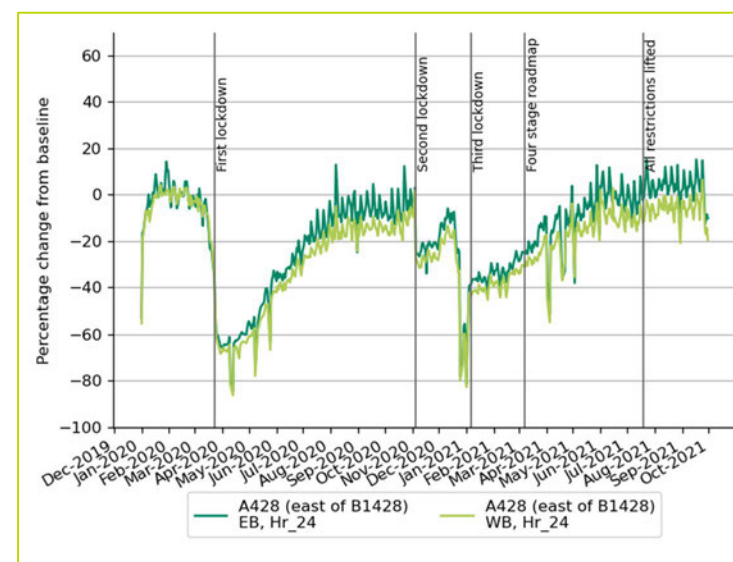


Figure A 4 - Observed Daily Traffic flows on A428 (east of B1428)

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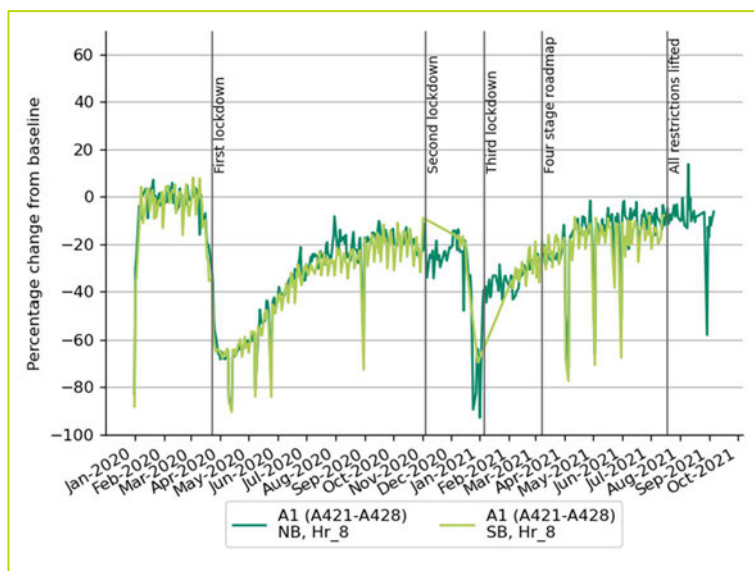


Figure A 5 - Observed Traffic flows on A1 (A421-A428) - 08:00 to 09:00

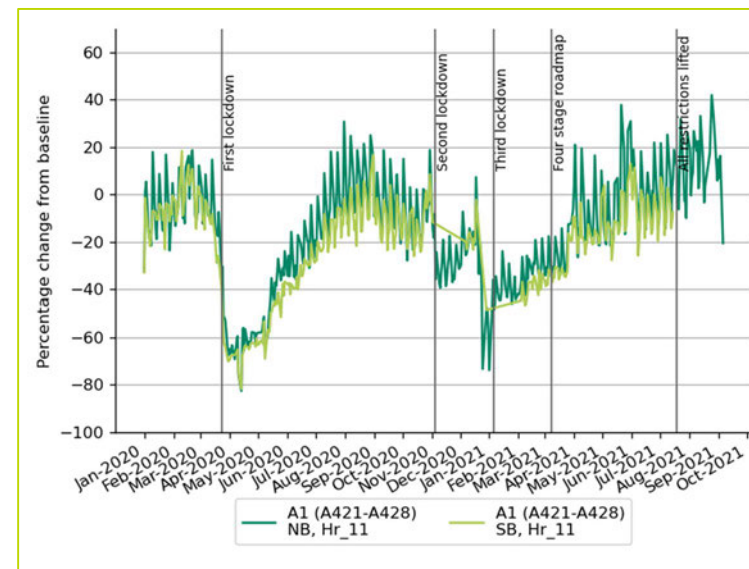


Figure A 6 - Observed Traffic flows on A1 (A421-A428) - 11:00 to 12:00

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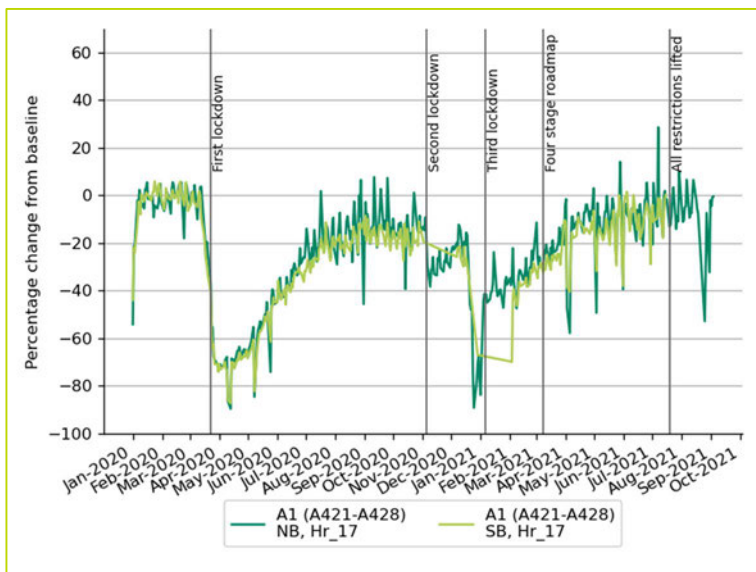


Figure A 7 - Observed Traffic flows on A1 (A421-A428) - 17:00 to 18:00

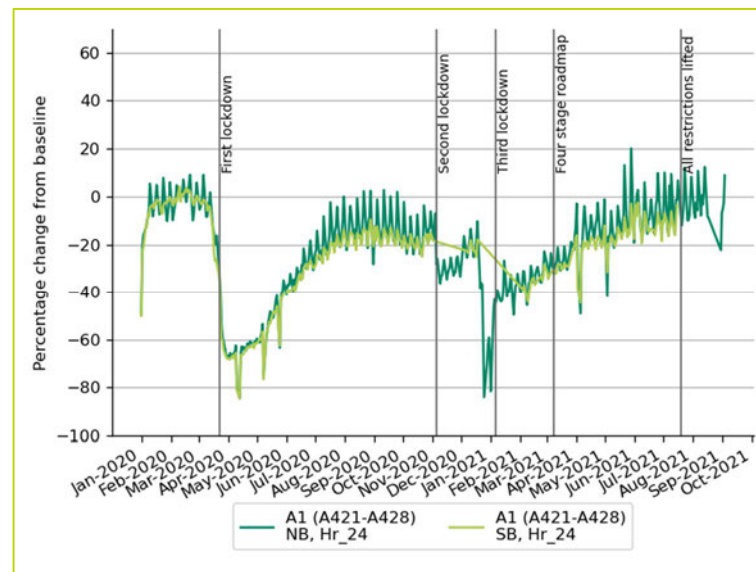


Figure A 8 - Observed Traffic flows on A1 (A421-A428) - Daily Traffic

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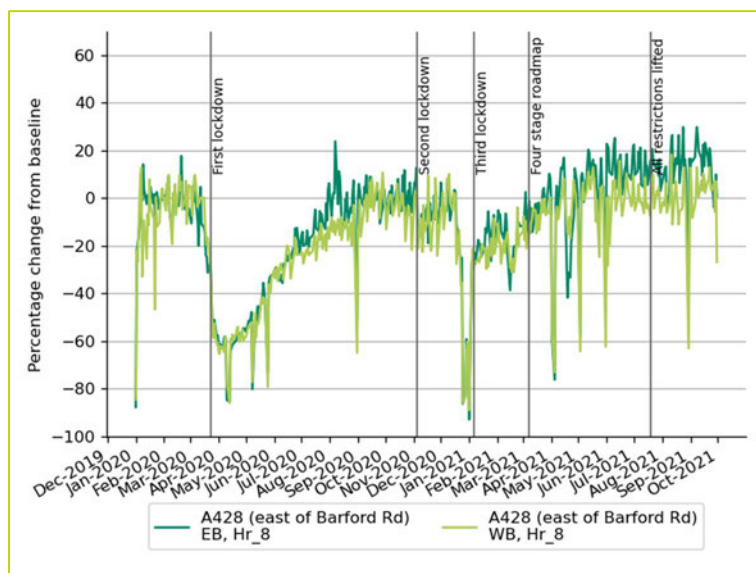


Figure A 9 - Observed Traffic flows on A428 (east of Barford Rd) - 08:00 to 09:00

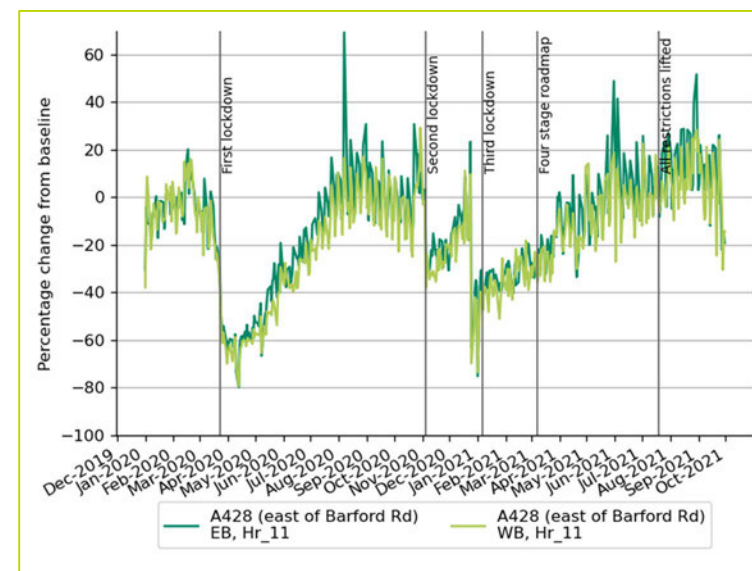


Figure A 10 - Observed Traffic flows on A428 (east of Barford Rd) - 11:00 to 12:00

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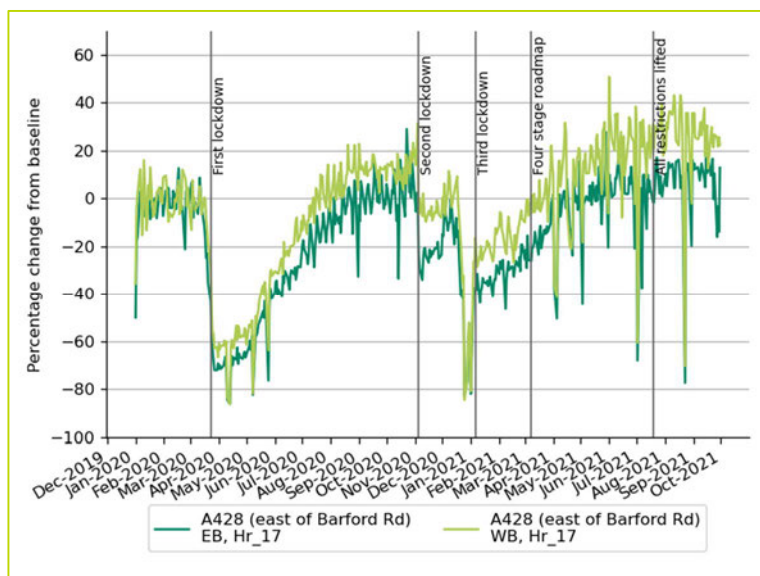


Figure A 11 - Observed Traffic flows on A428 (east of Barford Rd) - 17:00 to 18:00

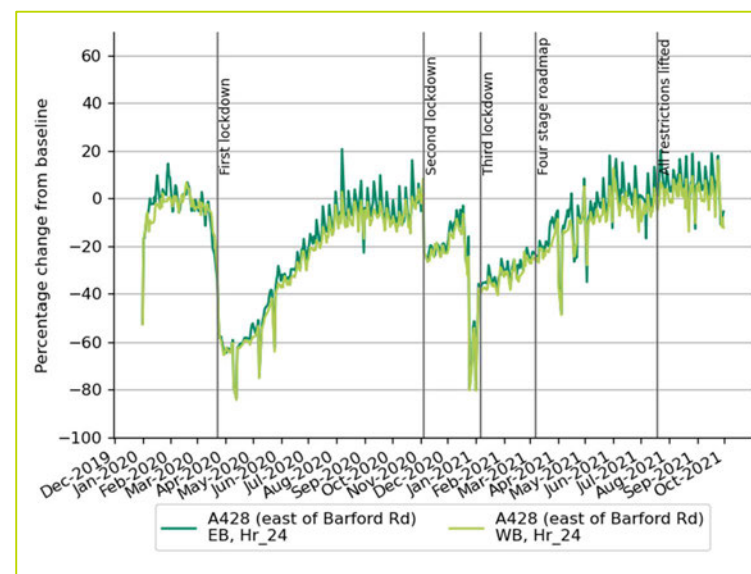


Figure A 12 - Observed Traffic flows on A428 (east of Barford Rd) - Daily Traffic