Bishopsgate Monitoring Q1 Summary - Network Performance

Buses

Scheme

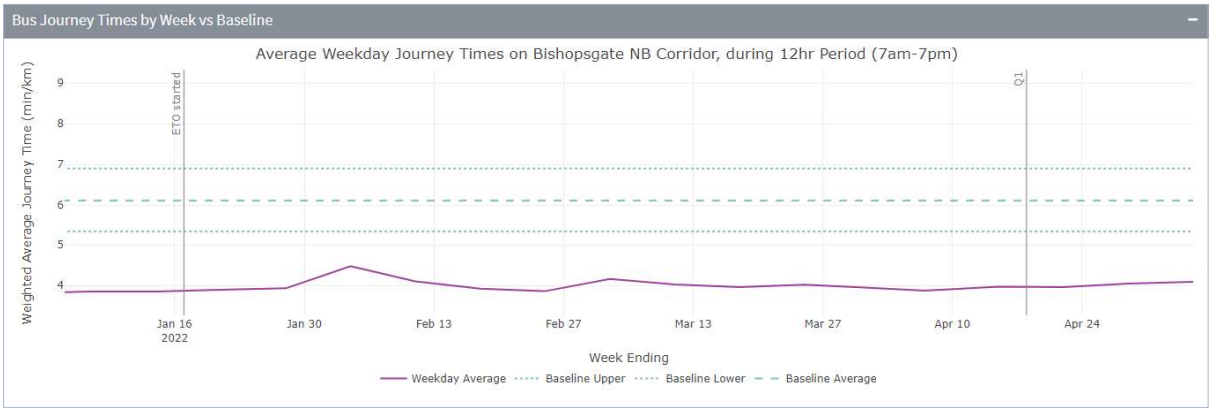
Network

Core Criteria: Bus operations are not unreasonably impacted by the experiment

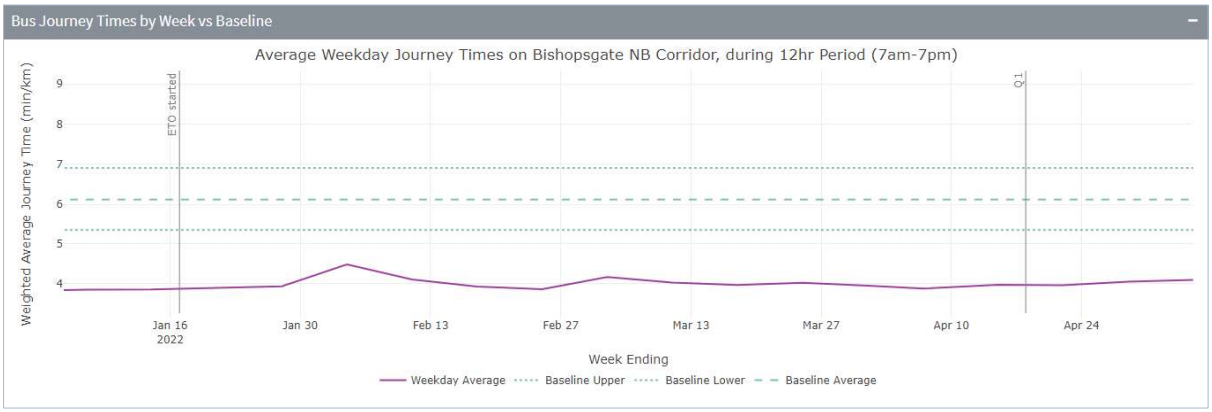
iBus data – comparison of bus journey times across the scheme area to the pre-pandemic average. A successful scheme will show journey times consistently lower than one Standard Deviation from the baseline on Bishopsgate and for the surrounding network journey times are within one Standard Deviation of the pre-pandemic average.

Bus performance within the scheme extents has consistently been below the lower threshold. Northbound journey times are 2 min/km quicker than the 6.1 min/km baseline; southbound journey times are 1 min/km quicker the 6.5 min/km baseline.

Out of the 11 corridors in the surrounding network reported on in this quarter, most have generally performed within the thresholds, in several cases below the lower threshold. Two areas of concern are London Wall West and Moorgate (PM only). These are currently being investigated alongside a signal timing review to find improvements.



Bishopsgate Northbound Bus Performance



Bishopsgate Southbound Bus Performance

See Appendix A for details on the bus section of the dashboard.

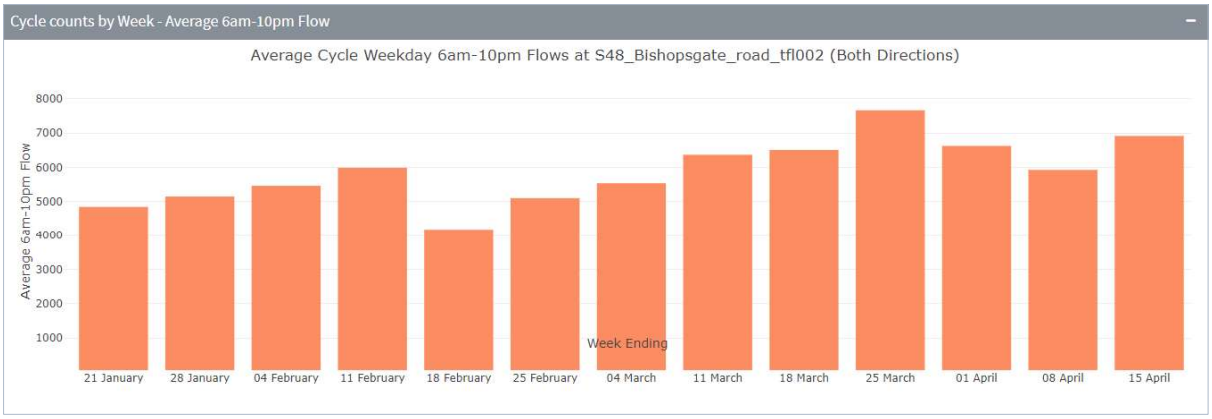
Richard Whybrow – Principal Network Manager, Network Performance Delivery

Cycles

Core Criteria: Cycling levels are good and the experience for cyclists and pedestrians is improved.

We expect cycle numbers to continue to a level similar to that during the TTRO or to increase (data collected from September 2020 onwards show a rise in demand and there are consistently over 6,000 cyclists a day using this route), subject to consideration of seasonality and pandemic factors affecting travel patterns. 2019 Survey indicated 5,700 at Liverpool Street.

Average daily 2-way flow has been rising into April to 5500 at the south end close to Monument and 7000 at Liverpool Street. Based on previous data for the corridor and general cycling trends this rise is expected to continue into Q2. The current flow at Liverpool Street Station is significantly above the 2019 survey although it should be noted this survey was taken in November when cycle flow would traditionally be lower than April.



Bishopsgate by Liverpool Street Cycle Flow (Vivacity)

Core Criteria: Cycling levels are good and the experience for cyclists and pedestrians is improved

Cycling provision meets Cycle Route Quality Criteria, on unsegregated sections vehicle flow should aim to be less than 200 per hour and no more than 500 per hour as per LCDS.

3 out of the 4 locations within the extents of the restrictions are significantly under the 500 v/hr limit and Gracechurch Street is under 200 v/hr. However, it should be noted that bus flow for northbound is less than expected and further investigation will be carried out. The location just north of Wormwood Street is close to the 500 v/hr limit and should be monitored closely. This correlates well to the ACC camera slightly further north but before Liverpool Street.

Cycle Criteria	Bus	Total	Non-Bus	% Non-Bus
Bishopsgate by Liverpool Street (Both Directions)	128.3	195.9	67.6	34%
Bishopsgate north of Wormwood/Camomile (Both Directions)	142.3	446.3	304.0	68%
Bishopsgate south of Wormwood/Camomile (Both Directions)	127.6	357.8	230.2	64%
Gracechurch Total Flow (Both Directions)	107.8	285.9	178.1	62%

Average Hourly Vehicle Flow (Vivacity) – 18th March 2022

See Appendix B for details on cycle section of the dashboard.

Richard Whybrow – Principal Network Manager, Network Performance Delivery

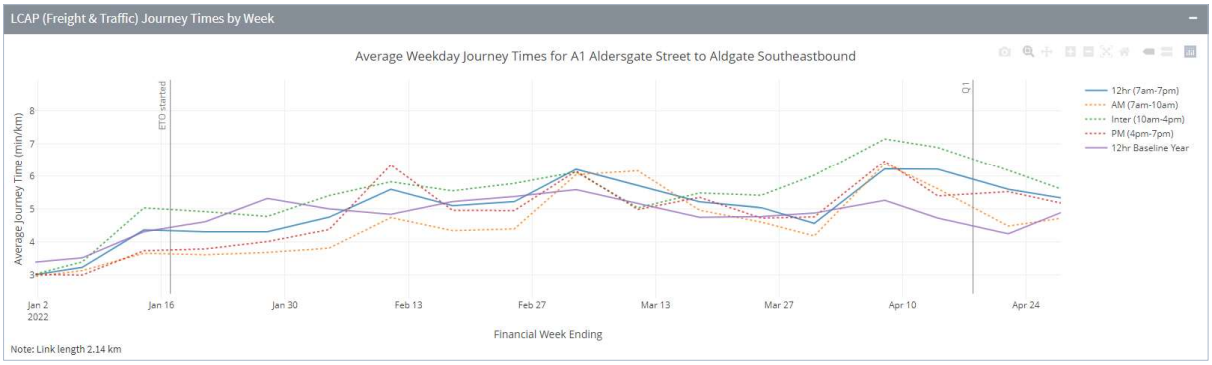
Traffic

Supporting Criteria: Road network operations are not unreasonably impacted

Traffic disruption data – There should not be an unreasonable impact to traffic performance in the scheme area including consideration of displacement traffic to other routes

Pedestrian wait times do not increase compared to pre-pandemic levels

Traffic journey times on selected links in the surrounding network are generally consistent with the baseline or in some case faster. Link through the Old Street roundabout have been affected by the ongoing scheme works. Scheme works at Mansell Street and the fire at Aldgate have also had short-term effects.



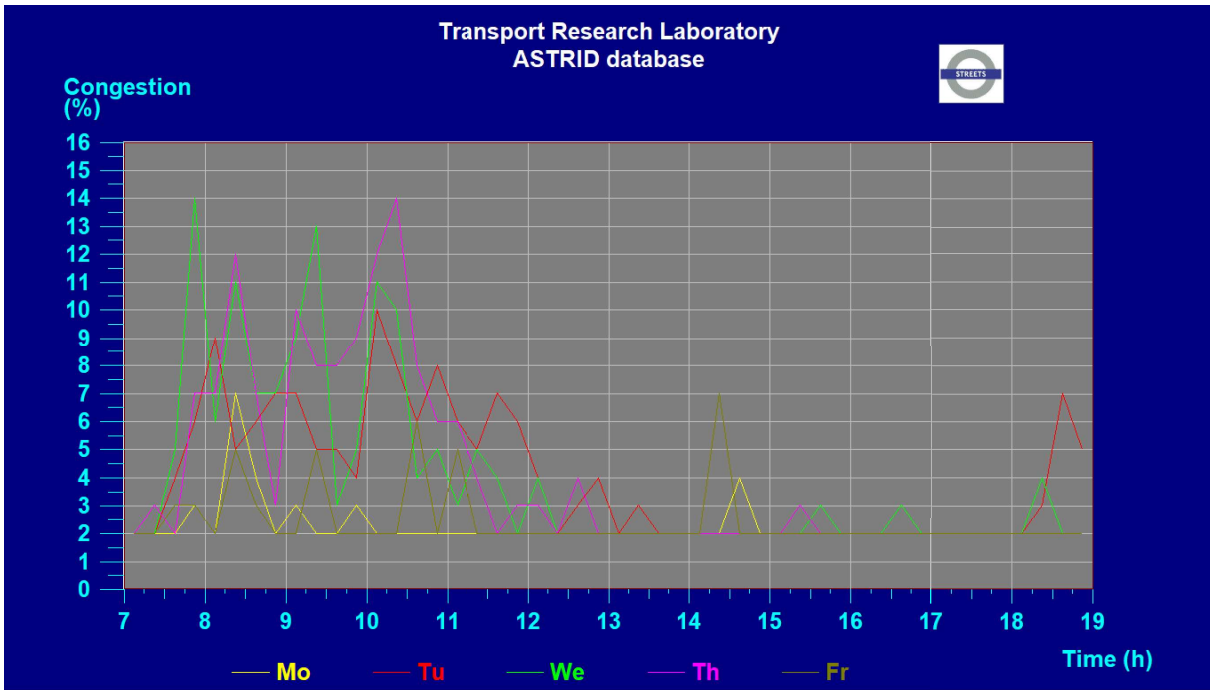
Aldersgate Street to Aldgate South Eastbound Traffic Journey Time (LCAP)

Traffic counters are generally consistent with the baseline with some fluctuations on City Road and Old Street most likely due again to the scheme works. The Bishopsgate ATC has been used to check against the cycling core criteria requiring vehicle flows below 500 v/hr.

Average Hourly Flows – Bishopsgate (ATC)

From the traffic surveys average hourly traffic flows on Leadenhall Street were around 140 v/hr westbound and 120 v/hr eastbound across the day, slightly higher in the AM peak. Surveys from 2019 indicate a total of ~325 v/hr on average on Leadenhall Street.

Flows have increased on Eastcheap to around 190 v/hr westbound and 240 v/hr eastbound across the day, eastbound lower in the AM peak. In order to mitigate this, increase a new method of control at the beginning of February was implemented at Monument increasing available capacity for Eastcheap. Congestion data shows some westbound congestion in the AM peak and part of the morning but very low beyond that.



SCOOT profile data for congestion on Eastcheap westbound

Traffic flows on London Wall have also increased. This can be attributed to both Bishopsgate and other City restrictions on east-west movements. The increase in flow correlates with the increase in bus journey times on London Wall West (eastbound). This is being actively investigated alongside a review of the signal timings and resolution of several detection faults caused by resurfacing or other works. This will be closely monitored over the next few weeks by Network Performance.

Appendix A – Buses: Dashboard information

Average journey times are compared against Baseline thresholds which give an indication of 'normal' journey times, based on March 2019 - March 2020 data. Journey time plots from the dashboard are shown in the following section with a focus on the first three months of the Experimental Traffic Order (17th January 2022 – 18th April 2022).

Bus journey times are monitored on the Bishopsgate corridor within the scheme extents and on the surrounding corridors.

- Bank Station
- Bevis Marks
- Bishopsgate
- Cannon Street
- Commercial Street
- Eastcheap
- Great Eastern Street*
- Leadenhall Street
- London Bridge
- London Wall East
- London Wall West
- Moorgate
- Old Street*
- Shoreditch High Street

*Both Great Eastern Street and Old Street are both heavily influenced by the Old Street scheme works and are not being included within the analysis for this quarter.

The Baseline journey times are given as an average from 7am to 7pm unless otherwise stated.

Appendix B – Cycles: Dashboard information

The dashboard gives the average hourly flow and average daily (6am-10pm) weekday flow. During this first quarter, January-April, cycle flows are traditionally lower due to colder and more inclement weather.

Data is taken from validated Vivacity cameras only.

The locations are:

- Norton Folgate /Primrose Street /Spital Square
- Bishopsgate by Liverpool Street Station
- Bishopsgate / Wormwood / Camomile
- Gracechurch Street by Monument

The Vivacity camera data in the dashboard is also broken down into modes for each of the count-lines. The data has for an average week (non-holiday, no serious incidents etc) has been extracted for 7am-7pm, the time of operation of the restrictions.

This data has been extracted for week ending 18th March. Data is shown for each direction, then combined where both directions exist. The combined flow is used to check against the cycling core criteria requiring vehicle flows below 500 v/hr.

Appendix C – Traffic: Dashboard information and other data sources

Traffic monitoring is from multiple sources. Within the dashboard there are selected LCAP links within the surrounding network, automatic traffic counters (ATC) and mode share from the Vivacity cameras located within the scheme extents. Other sources include SCOOT and UTC data, NMCC reports, and traffic survey undertaken at selected location at the end of April 2022.

LCAP links

- Aldersgate St to Aldgate SEbound
- Commercial St NWbound
- Commercial St SEbound
- City Rd to Great Eastern St SEbound
- Commercial St to Tower Br Rd SWbound
- Tower Br Rd to Commercial St NEbound

ATC

- *Bishopsgate*
- *Aldgate High St*
- *City Road*
- *Old St EB*
- *Old St WB*

Vivacity Cameras

- Norton Folgate /Primrose Street /Spital Square
- Bishopsgate by Liverpool Street Station
- Bishopsgate / Wormwood / Camomille
- Gracechurch Street by Monument

Freight & Traffic Journey Times are reported using selected London Congestion Analysis Project (LCAP) links. This data is based on automatic number plate recognition (ANPR) camera captures and comprises links between these cameras. Average journey times have been calculated by week, by peak. The dashboard shows data from week commencing 24/11/19 and is updated weekly. The baseline is a 12-hour (7am-7pm) average from the equivalent from 2019.

Data for selected ATCs (automatic traffic counters) are within the dashboard and are split by direction and day type. The baseline represents a 'pre-COVID' baseline of 2019/20 and all dates in the following 3 years, are matched to the same 2019/20 baseline. The Bishopsgate ATC can be used to check against the cycling core criteria requiring vehicle flows below 500 v/hr.

Traffic Surveys have been undertaken in 5 locations:

- Bishopsgate / Leadenhall / Gracechurch St / Cornhill (00/021)
- London Wall / Moorgate (00/009)
- London Wall / Blomfield St (00/064)
- Cannon St (by #90 Sainsbury's Local)
- Eastcheap / Rood Lane / St Mary at Hill (unsig)

SCOOT data have also been extracted from the UTC traffic system at selected locations.