Stoke Newington Church Street - Healthy Streets Project

Interim traffic update

February 2022

Background and scope of report

On 20th September a 7am-7pm bus gate was installed on Stoke Newington Church Street (SNCS) to reduce private motor traffic on this traffic-dominated local high street.

The scheme is being monitored through a combination of data sources, which become available at different times. The full monitoring strategy is available in the delegated powers decision report found here:

https://rebuildingagreenerhackney.commonplace.is/proposals/stoke-newington

The data in this report is an update and includes data that was available as of the end of February 2022. This is not a comprehensive traffic analysis of all information being used to monitor the scheme, but aims to make public the data that is available.

New continuous traffic counters were installed and have been active since 1 Sept 2021 on Stoke Newington Church Street, Lordship Park, Lordship Road and Green Lanes to measure the volume of cycles, pedestrians and several classes of motor vehicles based on size: cars, Light Goods Vehicles (LGV), Buses, Rigid large vehicles (OGV1) and largest vehicles such as heavy goods vehicles (OGV2). Transport for London has shared 3 years of data from their continuous traffic counters on Stoke Newington Rd (A10, junction with Walford Rd) and Albion Road.

Furthermore, one week automatic traffic counts using pressure tubes were taken at selected locations before and after the scheme started.

TfL have also provided local bus performance data.

Traffic on Stoke Newington Church Street - up to January 2022

A new continuous traffic counter was installed on Stoke Newington Church Street on 1 September 2021. It is located east of Kersley Street, therefore it does not measure the exact number of vehicles that travel through the bus gate further west as there are three 'exit routes' between the counter and the bus gate restriction, but does provide evidence as to the

levels of traffic on the approach to the bus gate. Compliance with the bus gate restriction is monitored by the enforcement cameras at the location and will be released in the future.

Figure 1 and **table 1** show daily data from the Stoke Newington Church Street traffic counter east of Kersley Road for the period up to the end of January 2022.

Figure 1: Stoke Newington Church St, east of Kersley Rd, 24 hour totals - All motor vehicles (including buses), pedestrians and cyclists

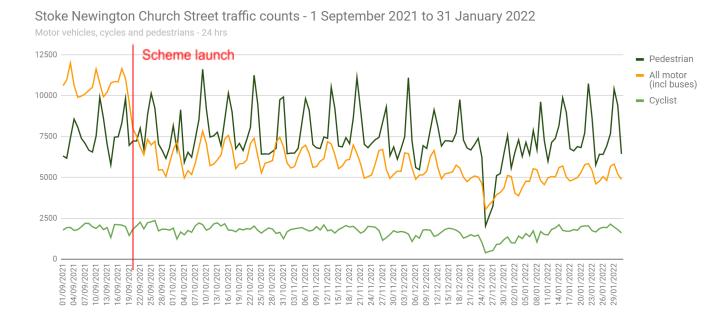
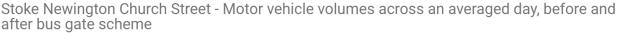


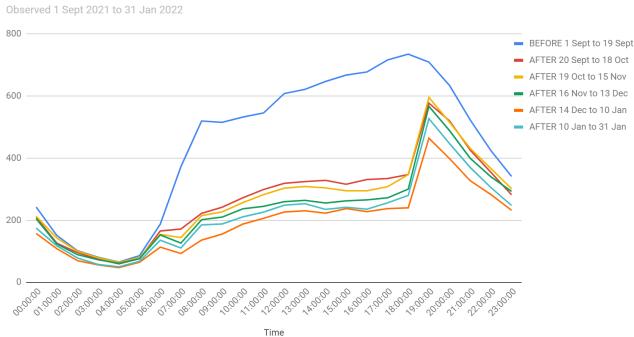
Table 1: Stoke Newington Church Street: 24 hour Average Flow of Motor Vehicles, Pedestrians and Cycles

	All motor	Pedestrians	Cycles	Bus
Before (Mon 6 Sept - Sun 19 Sept)	10584	7613	1938	822
After (Mon 10 Jan - Sun 23 Jan)	5211	7783	1817	835
Change	-5373	170	-121	13
% change	-50.8%	2.2%	-6.2%	1.6%

The bus restriction on Stoke Newington Church Street applies only between 7am and 7pm. Figure 2 shows how traffic patterns have changed to the timing of the bus gate restrictions. There is not a significant 'pre-restriction' peak in traffic in the morning period, but the evening shows a steep increase in traffic after the restriction ends at 7pm, although volumes remain lower after 7pm than they were before the scheme. One of the reasons for the time limited restriction was to enable vehicle access at night time for customers of the night time economy.

Figure 2: Stoke Newington Church Street patterns of motor traffic by hour of day before and after implementation of bus gate





During the hours of the bus gate restriction, the dominant form of traffic on the road is pedestrians. Prior to the scheme, pedestrian volumes were lower than motor vehicles. After the scheme was implemented, pedestrians significantly outnumbered motor vehicles with more than twice the number of pedestrians as vehicles. **Figure 3** shows data from the same traffic counter during the times of day that the bus gate operates, 7am to 7pm. The trend is similar to the daily flows, with the exception that pedestrian counts are showing a greater relative increase compared against the pre-scheme baseline, and the ratio of pedestrians to motor vehicles is greater.

Figure 3: Stoke Newington Church Street: 7am to 7pm Average Flow of Motor Vehicles, Pedestrians and Cycles

Stoke Newington Church Street traffic counts - 1 September 2021 to 31 January 2022 Motor vehicles, cycles and pedestrians - 7am to 7pm

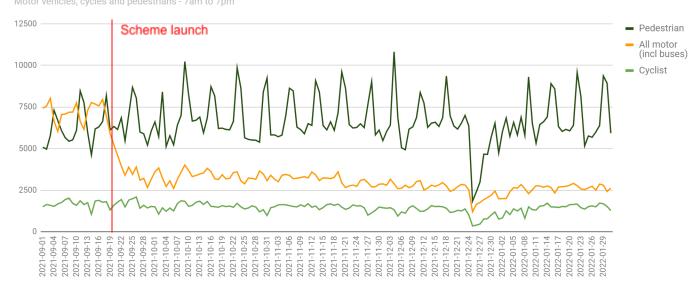


Table 2: Stoke Newington Church Street: 7am to 7pm Average Flow of Motor Vehicles, Pedestrians and Cycles

	All motor	Pedestrians	Cycles
Before (Mon 6 Sept - Sun 19 Sept)	7157	6095	1711
Jan (Mon 10 Jan - Sun 23 Jan)	2691	6616	1524
Change (Jan vs before)	-4466	521	-188
% change	-62.4%	8.5%	-11.0%

Footfall on Stoke Newington Church Street

Looking more closely at the pedestrian counts, over a 24 hour period, pedestrian numbers have increased by 2.2%, however, during the period when the bus gate operates (7am to 7pm), pedestrian numbers have increased by 8.5%. **Figure 4 and table 3** show a two-direction count of pedestrians on Stoke Newington Church Street (at Kersley Rd) during the operational time of the bus gate (7am-7pm).

Figure 4: Stoke Newington Church St, east of Kersley, Pedestrian Flows, 7-7

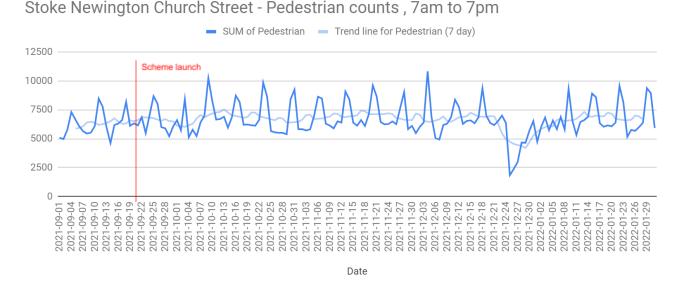


Table 3: Stoke Newington Church Street - Daily average pedestrian flows (two week periods), 7am - 7pm, before and after the scheme

	Before	After				
	Mon 6 Sept - Sun 19 Sept	Mon 4 Oct - Sun 17 Oct	Mon 1 Nov - Sun 14 Nov	Mon 6 Dec - Sun 19 Dec	Mon 10 Jan - Sun 23 Jan	
Pedestrians	6095	6690	6528	6380	6616	
Change vs before		594	432	285	521	
% change		9.75%	7.09%	4.68%	8.54%	

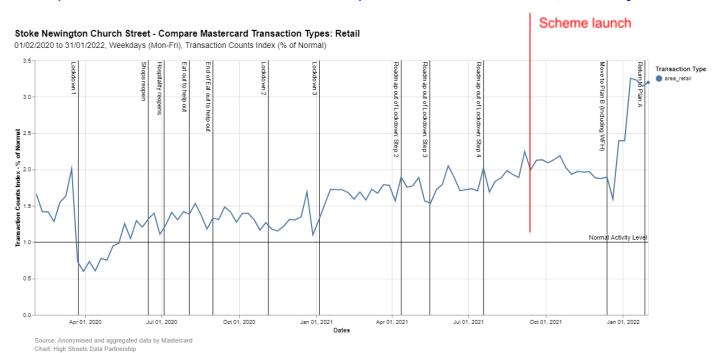
Retail footfall

The pedestrian count data is consistent with data on retail spending provided by the High Streets Data Partnership. **Figure 5** shows anonymised and aggregated Mastercard data for the period 1 Feb 2020 to 31 January 2022 which shows the number of weekday transactions

as a % of the same week in the previous year (for 2021 they used 2019 as the comparison year instead of 2020).

For the period following implementation of the scheme, the number of transactions remained higher than the same week in the reference year.

Figure 5: Stoke Newington Church Street and Albion Road - Mastercard Transactions Index (number of transactions as % of Normal), 01/01/2019 to 01/02/2020, Weekdays



Traffic across the area

Looking at the locations where there are continuous traffic counts across the area, as of December 2021 (the last period TfL data is available), traffic had decreased by 14.6%. Notable changes include decreases of 43% and 39% on Church St and Albion Road respectively, with Lordship Park seeing a 19% increase. The largest change was on Lordship Road, a 77% decrease in traffic or more than 17,000 vehicles per week.

Figure 6: Daily motor vehicle flows across Stoke Newington area, 1 Sept 2021 to 31 Dec 2021

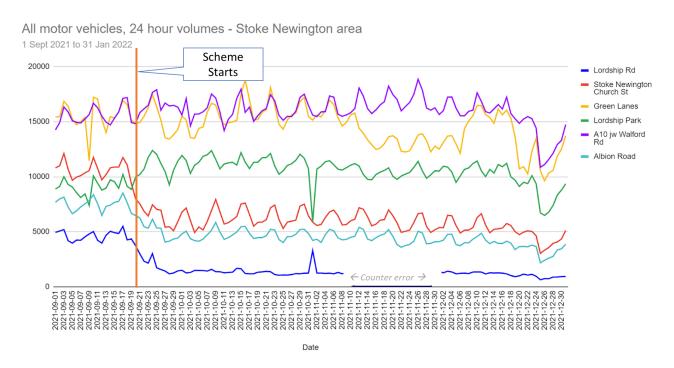


Table 4: Volumes of motor vehicle traffic on Stoke Newington Church Street and surrounding main roads before and after installation

	Stoke Newington Church Street	Lordship Road	Green Lanes	Lordship Park	A10 jw Walford Road	Albion Road	Combined
Before							
(1 Sept - 20 Sept)	10654	4632	15514	9078	15568	7510	62957
After							
(21 Sept - 19 Dec)	6081	1090	14858	10834	16356	4568	53787
Change	-4572	-3541	-656	1755	787	-2942	-9170
% change	-42.9%	-76.5%	-4.2%	19.3%	5.1%	-39.2%	-14.6%

Further traffic counts

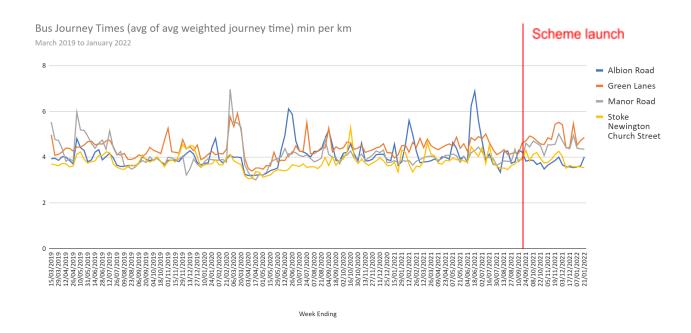
In addition to the results obtained from continuous counters described above, there were a series of temporary counters placed across the area. These tended to use pressure tubes stretched across the road and left in place for a minimum of one week. Although not as detailed as the continuous counters, 7 day counts give a good indication of traffic patterns at a relatively low cost and so allow for monitoring at further locations. These counts will be repeated in the Spring of 2022.

ROAD With one-week Tube-Counter	Nov 20 BEFORE	July 21 BEFORE	Nov 21 - AFTER	Change from previous Max
Queen Elizabeth Walk	1037	1577	1235	-21.7%
Grayling Road	714	854	682	-20.1%
Yoakley Road	611		568	-7.0%
Bouverie Road	1255	4068	1129	-72.2%
Marton Road		911	697	-23.5%
Defoe Road		1621	1087	-32.9%
Kersley Road	1190		1259	5.8%
Dynevor Road jw A10	n/a		384	
Mildmay Road	2662	1810	1507	-43.4%
Matthias Road	8341	6814	8338	0.0%
Crossway		12303	12577	2.2%
Boleyn Road N of Crossway		7509	8541	13.7%
Boleyn Road S of Crossway	2840	4520	3487	-22.9%
Amhurst Park	14260	16830	17449	3.7%
Nevill Road S of Barbauld Rd	1576		1661	5.4%
Nevill Road N of Dynevor Rd	1131		1016	-10.2%
Walford Road	495		642	29.7%

Bus Performance

Protecting and improving buses is an important part of the aims of the Hackney Transport Strategy. Data is obtained (in arrears) from TfL buses and this has been analysed to show the patterns below.

Figure 6: Stoke Newington Church Street and Manor Road:
Average Mon-Fri Bus Journey Times, Minutes per km, March 2019 - Jan 2022



As with general traffic, there has been much volatility in the past 18 months that can be attributed to the pandemic. In the period since the scheme was implemented, bus journey times have increased slightly on Manor Road and Green Lanes, improved on Albion Road and marginally increased on Church Street. This is shown in **table 5** and will continue to be monitored.

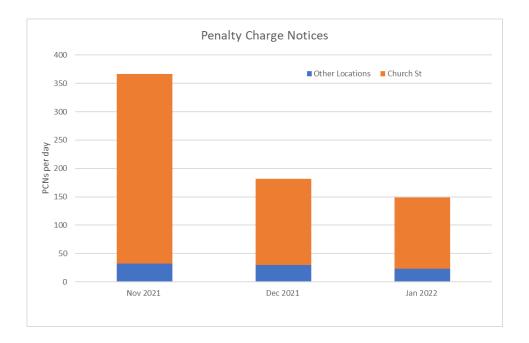
Table 5: Avg Mon-Fri Bus Journey Times Minutes per km

	Baseline	AFTER - Average of Avg Weighted JT (min/km)	Change	% change
Albion Road, SNCS	3.95	3.72	-0.23	-5.76%
Green Lanes	4.37	4.87	0.50	11.50%
Manor Road	4.16	4.54	0.38	9.21%
Stoke Newington Church Street (Green Lanes to Albion Road)	3.84	3.86	0.02	0.56%

Enforcement and compliance

For the first few weeks of operation those passing though cameras were given warning notices which changed to Penalty Charge Notices around mid October. As shown in **figure 7**, the use of warning notices, and the extensive warning signage has helped reduce the number of penalties on Church Street and on a total of five other smaller restriction points. The number of PCNs has reduced by over 50% in 3 months.

Figure 7: Penalty Charge notices issued at Stoke Newington Church Street and surrounding LTN filters, Nov 2021 to Jan 2022



On Church Street there are currently around 10 violations per hour. Although this is naturally reducing as the scheme becomes better known, we are continuing to look for ways of making the closure more noticeable.

Air Quality

Pollution measurement takes place at fixed points in the area as shown here https://hackney.gov.uk/air-quality/. In order to estimate the impacts on all other roads a transport and emissions model is being developed by consultants Aecom. This report should be available in spring 2022 and the results will be used to inform the decision of whether to make permanent or remove the scheme.