Healthy School Streets Consultation – Brookfield Primary School (Croftdown Road) Permanent Proposals

Monitoring Factsheet

This document sets out monitoring data gathered during the trial period of the Brookfield Primary School Healthy School Street scheme on Croftdown Road. It has been gathered and analysed to help assess the impact of the scheme during the trial period of operation. The data and feedback are summarised below.

Traffic Count Data

Traffic data before and after the implementation of the scheme was collected through automatic traffic counts (ATCs) on streets within and outside the scheme area and is displayed in Table 1. 'Before scheme' data was collected in March 2021 and 'after scheme' data was collected in January 2022 and June 2022 when the scheme was live.

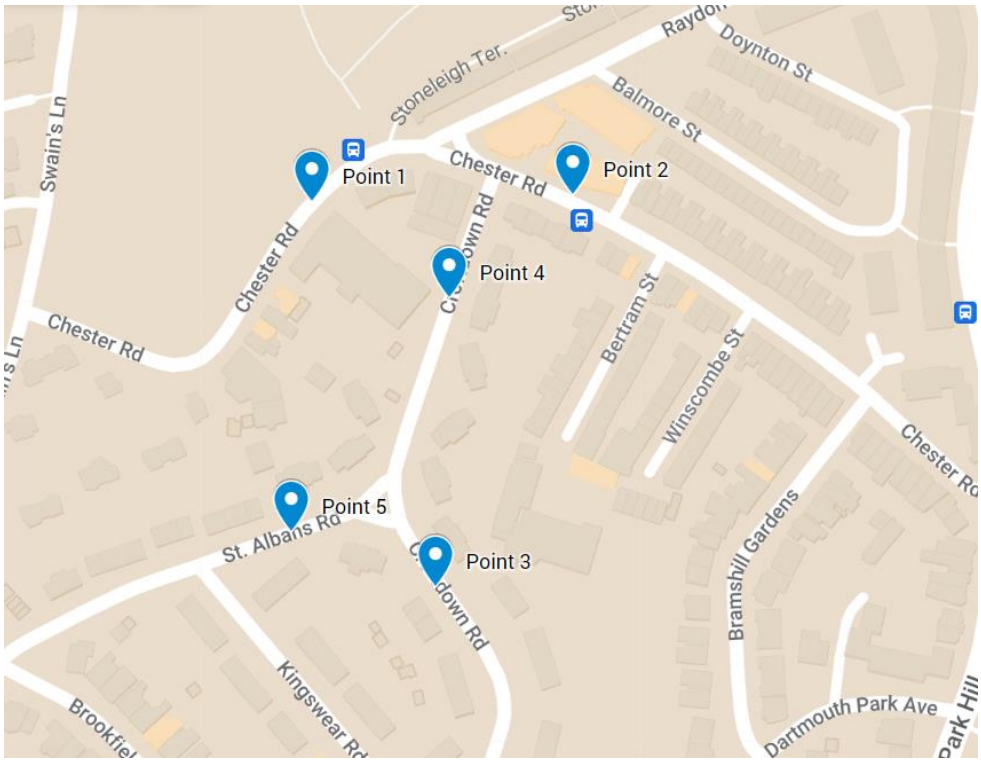
Weekly traffic counts (car, van, lorry, bus, cycle, and motorcycle) were taken over the following five-day periods:

- The week commencing 15th March 2021 (before scheme)
- The week commencing 21st January 2022 (during scheme trial)
- The week commencing 27th June 2022 (during scheme trial)

The counts covered the total number of vehicles on Monday to Friday in school term time, when all pupils were attending Brookfield Primary School.

Traffic counts were analysed during the morning (8.15am – 9.15am) and afternoon (3pm – 4pm) Healthy School Street operational times. The traffic count locations are shown in **Figure 1**. Cycle count data is analysed separately later in this factsheet.

Figure 1 – Location of Traffic Counts



The motor traffic count data is summarised in Table 1, which shows daily average traffic flows based on the weekly counting periods noted on page 1.

Table 1 –Traffic Count Data: Average Motor Vehicle Counts (Monday to Friday, AM and PM restriction times)

Site number	Location	AM Peak (08:15-09:15)					PM Peak (15:00-16:00)				
		Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 2022)	Change (Mar 21 to Jun 2022)	Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 22)	Change (Mar 21 to Jun 22)
1	Chester Road (1)	238	298	261	25%	10%	273	341	362	25%	33%
2	Chester Road (2)	197	206	200	5%	2%	276	298	324	8%	17%
3	Croftdown Road (1)	63	18	18	-71%	-71%	43	25	22	-42%	-49%
4	Croftdown Road (2)	40	13	10	-68%	-75%	61	13	9	-79%	-85%
5	St Albans Road	38	23	25	-39%	-34%	32	23	22	-28%	-31%
Total across all sites		576	558	514	-3%	-11%	685	700	739	2%	8%

When comparing the traffic counts from March 2021 (before scheme) to June 2022 (during scheme trial) on the section of Croftdown Road with Healthy School Street restrictions (Site number 4 – Croftdown Road (2)), it can be seen that there was an average 75% reduction during the morning restrictions and an 85% reduction during the afternoon restrictions. This equates to 30 fewer vehicles in the morning and 52 fewer vehicles in the afternoon. The unrestricted section of Croftdown Road also saw reductions in traffic levels of 71% (45 vehicles) and 49% (21 vehicles) in the morning and afternoon respectively, as did St Albans Road with reductions of 34% (13 vehicles) and 31% (10 vehicles) at these times.

The two sections of Chester Road that were surveyed showed increases in traffic. The section to the west of Croftdown Road (Site 1 – Chester Road (1)) saw increases of 10% (23 vehicles) in the morning and 33% (89 vehicles) in the afternoon, while the section to the east (Site 2 – Chester Road (2)) saw increases of 2% (3 vehicles) during the morning and 17% (48 vehicles) during the afternoon. This suggests that some people may now be using Chester Road as an alternative driving route or drop off/pick up point following the introduction of the trial scheme. If the scheme is made permanent, this would continue to be monitored and the Council would work with Brookfield Primary School to support parents to switch to active modes of transport for the school run. In addition, potential measures on Chester Road may be considered, and consulted on separately, as part of the wider Dartmouth Park area Safe & Healthy Streets project which is currently at feasibility stage.

Traffic Speed Data

The traffic count data collected can also be used to analyse vehicle speeds. A comparison of speeds before and after the trial scheme was implemented is shown in Table 2 below. The data includes the average speed of all vehicle classes (including cycles).

Table 2 – Traffic Speed Data: Daily Average (Monday-Friday, AM and PM restriction times)

Site number	Location	AM Peak (08:15-09:15)					PM Peak (15:00-16:00)				
		Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 2022)	Change (Mar 21 to Jun 2022)	Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 2022)	Change (Mar 21 to Jun 2022)
1	Chester Road (1)	17 mph	18 mph	17 mph	+1 mph	No change	17 mph	18 mph	17 mph	+1 mph	No change
2	Chester Road (2)	15 mph	15 mph	16 mph	No change	+1 mph	15 mph	15 mph	15 mph	No change	No change
3	Croftdown Road (1)	16 mph	13 mph	14 mph	-3 mph	-2 mph	16 mph	13 mph	12 mph	-3 mph	-4 mph
4	Croftdown Road (2)	16 mph	12 mph	13 mph	-4 mph	-3 mph	15 mph	12 mph	12 mph	-3 mph	-3 mph
5	St Albans Road	14 mph	13 mph	13 mph	-1 mph	-1 mph	14 mph	13 mph	15 mph	-1 mph	+1mph

When comparing March 2021 to June 2022 data, this shows that both the restricted and unrestricted sections of Croftdown Road recorded decreases in average speed of between 2-4mph during the restriction times. St Albans Road recorded a 1mph decrease during the morning and a 1mph increase during the afternoon while both the surveyed sections of Chester Road showed no change in average speeds apart from a 1mph increase in the morning on the section east of Croftdown Road. During both the morning and afternoon restriction times all sites surveyed showed that average vehicle speeds are below 20mph.

Cycle Flows

A comparison of cycle flows for the sites surveyed is shown in Table 3.

Table 3 - Cycle Count Data: Daily Average Counts (Monday to Friday, AM and PM restriction times)

Site number	Location	AM Peak (08:15-09:15)					PM Peak (15:00-16:00)				
		Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 2022)	Change (Mar 21 to Jun 2022)	Mar-21	Jan-22	Jun-22	Change (Mar 21 to Jan 2022)	Change (Mar 21 to Jun 2022)
1	Chester Road (1)	18	19	31	6%	72%	13	7	10	-46%	-23%
2	Chester Road (2)	11	13	21	18%	91%	8	7	7	-13%	-13%
3	Croftdown Road (1)	6	7	6	17%	0%	2	3	2	50%	0%
4	Croftdown Road (2)	8	11	16	38%	100%	5	8	13	60%	160%
5	St Albans Road	9	5	10	-44%	11%	5	7	7	40%	40%
Total across all sites		52	55	84	6%	62%	33	32	39	-3%	18%

When comparing March 2021 (before scheme) with June 2022 (during scheme trial), for the section of Croftdown Road with Healthy School Street restrictions the data shows an average increase of 8 cycles recorded during both the morning and afternoon restriction times. The section of Croftdown Road without restrictions shows no change. St Albans Road shows a negligible change of 1 cycle in the morning and 2 cycles in the afternoon. The section of Chester Road west of Croftdown Road (Site 1 – Chester Road (1)) shows an increase of 13 cycles recorded during the morning restriction times and a decrease of 3 cycles recorded during the afternoon restriction times, while the section east of Croftdown Road (Site 2 – Chester Road (2)) shows an increase of 10 cycles in the morning and a decrease of 1 during the afternoon.

Hands up and school surveys/travel planning

During the consultation we will be working closely with Brookfield Primary School to learn more about what pupils think of the Healthy School Street scheme. The school has also carried out 'hands up' surveys with pupils both before the trial scheme was introduced and during the trial. These surveys allow us to record how children travel to school by asking them to put their hand up when their mode of transport is read out. The hands up data collected during the trial is not yet available but will be analysed following the consultation.

Air Quality Monitoring

We have air quality monitoring diffusion tubes in place on Croftdown Road and Chester Road, the locations for which are shown in Figure 3. Diffusion tubes have been installed to monitor the impacts of the Healthy School Street trial and the results are shown in Table 4.

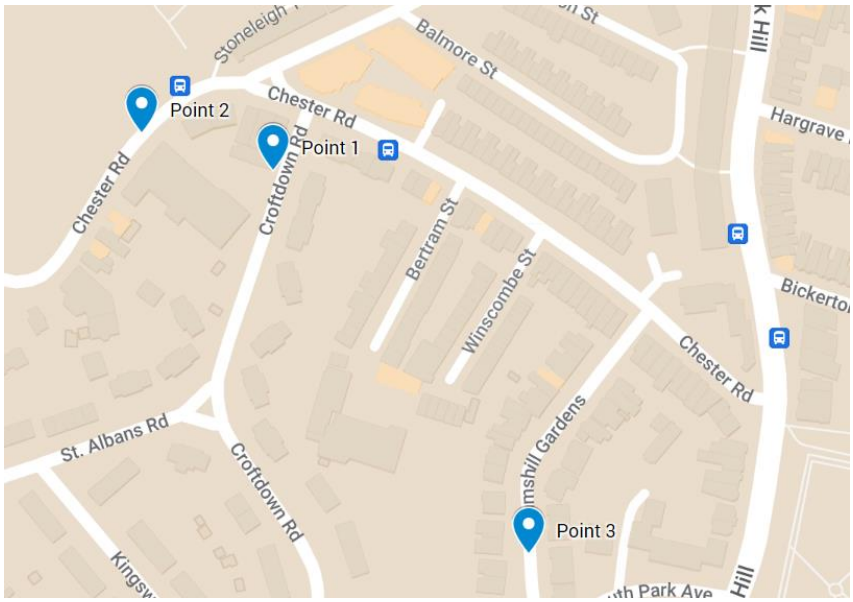
Table 4 – Raw diffusion tube NO2 Data 2021-2022

	Raw NO_2 concentration, $\mu g/m^3$			Change in NO_2 concentration	
Site	**2021 (Feb-April)**	**2022 (Feb-April)**	**Months included**	**Change in $\mu g/m^3$**	**% change**
1 - Croftdown Road	**25.81**	**23.16**	**Feb/Mar**	**-2.65**	**-10.3%**
2 - Chester Road	**29.25**	**26.37**	**Feb/Mar/Apr**	**-2.88**	**-9.9%**
3 - Bramshill Gardens	**23.86**	**20.65**	**Feb/Mar/Apr**	**-3.21**	**-13.5%**
Average across all sites				**-2.91**	**-11.2%**

The data presented in the table above is raw and unratified without applying the national bias adjustment factors. This is because the analysis has only used a selection of months rather than the full calendar annual mean NO_2 concentrations which is not available. However, it shows us that Croftdown Road, outside Brookfield Primary School, had a 10.3% decrease in NO_2 levels when comparing the data for February and March 2021 (before the scheme was introduced) to February and March 2022 (after the scheme was introduced). Outside the scheme area, Chester Road and Bramshill Gardens also had decreases of 9.9% and 13.5% respectively when comparing February-April 2021 and February-April 2022.

It is important to note that transport contributes around 31% of total NO_2 emissions in Camden over the course of a year. The majority of the remainder comes from gas use in building heating systems. This means that there is significant seasonal variation in outdoor NO_2 concentrations when heating demand is higher during cold weather. The change in NO_2 concentration at a particular location will not entirely be the result of changes in traffic volumes and there are other local factors affecting air quality.

Figure 3 – Location of air quality monitoring diffusion tubes on Croftdown Road, Chester Road and Bramshill Gardens



Feedback During the Experimental Traffic Order Period

Three comments on the scheme were received on Commonplace during the trial Experimental Traffic Order period. All of the comments received were positive towards the changes.

Some of the benefits of the scheme that respondents highlighted included:

- The scheme encourages respondents to walk and cycle.
- Air quality and traffic levels had improved.
- Improved safety for children to walk, scoot and cycle to school.

One respondent stated, “This is an important contribution to improving air quality and improving pedestrian safety which are both important for schoolchildren”.