

Elsworthy Road Healthy School Street

Monitoring Factsheet

This document sets out the monitoring data gathered during the trial period of the Elsworthy Road Healthy School Street to help assess the impact of the scheme.

Traffic Count Data

Traffic data before and after the implementation of the trial scheme was collected through Automatic Traffic Counts (ATCs) on 7 streets within and in the vicinity of the scheme area. The traffic count locations are shown in Figure 1 below.

Figure 1: Traffic count locations



Traffic counts were undertaken during school term time, when all pupils were attending St Paul's CE Primary school, and includes cars, van, lorries, buses, cycles and motorcycles. 'Before trial scheme' data was collected for a period of two weeks, 21 Feb to 6 March 2022, and again during the trial period, also for two weeks, 8 to 21 June 2023. The traffic count data is summarised in Table 1 below. It shows average daily traffic counts (motor vehicles only) during the Healthy School Street restriction times in the morning (8.30am – 9.30am) and afternoon (3pm – 4pm) and excludes weekends.

Table 1: Daily average vehicle counts (Monday to Friday, AM and PM Healthy School Street restriction times)

Site	AM Peak (8.30-9.30)			Av. PM peak (15.00 – 16.00)				
	Feb	June	Cha	nge	Feb 2022	June	Change	
	2022	2023	No.	%		2023	No.	%
05: Primrose Hill Rd	988	737	-252	-25%	820	745	-75	-9%
06: Elsworthy Rd	343	89	-254	-74%	352	99	-252	-72%
07: King Henry's Rd	321	403	82	26%	320	393	73	23%
08: Elsworthy Rise north of K. Henry's Rd	27	39	12	44%	41	59	19	46%
09: Elsworthy Rise south of K Henry's Rd	25	88	63	248%	52	93	41	79%
10: Lower Merton Rise north of K Henry's Rd	85	107	22	26%	133	138	4	3%
11: Lower Merton Rise south of K Henry's Rd	80	136	56	71%	139	142	3	2%
Total across all sites	1,869	1,600	-270	-14%	1,856	1,669	-187	-10%

The data shows that, on the section of Elsworthy Road within the Healthy School Street restriction area (Site 06 - Elsworthy Road) there was a 74% reduction in vehicles during the AM Peak and a 72% reduction during the PM Peak during the trial compared to the 'before' data. This equates to 254 fewer vehicles during the morning restrictions and 252 fewer vehicles during the afternoon restrictions. Site 05 - Primrose Hill Road also saw a 25% reduction (-252 vehicles) in traffic volumes during the AM peak and a 9% reduction (75 vehicles) in the PM peak.

Figure 2 **Error! Reference source not found.**below presents the average *daily* traffic flows (Monday to Friday only) at Site 06 – (Elsworthy Road) both for the 'before' and 'during the trial' scheme periods. It shows that there were significantly lower traffic volumes

on Elsworthy Road during the trial period compared to the 'before scheme' scenario and a sharp decline in traffic volumes during the Healthy School Street hours of restriction.

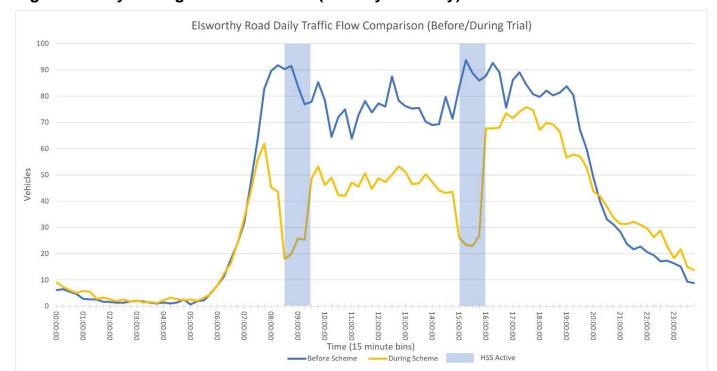


Figure 2: Daily Average Vehicle Counts (Monday to Friday)

The remaining sites in the vicinity of the Healthy School Street saw an increase in traffic volumes. The largest increase proportionally was at Site 09 - Elsworthy Rise, south of King Henry's Road, which saw an increase of 248% in the number of vehicles during the AM peak period and 79% during the PM peak period. This increase equates to 63 additional vehicles during the morning restrictions and 41 additional vehicles during the afternoon restrictions.

Whilst some traffic displacement is likely to occur as a result of the Healthy School Street restrictions, the data shows that in total, across all sites surveyed, traffic levels reduced during the trial by 14% (- 270 vehicles) during the morning times of restriction, and 10% (- 187 vehicles) during the afternoon restrictions.

Traffic Speed

The traffic count data has also been used to analyse and compare vehicle speeds from before and during the trial Healthy School Street for the same period, as shown in Table 2 below. The data includes the average speed of all vehicle classes (including cycles) during the morning and afternoon Healthy School Street restriction times.

Table 2: Daily average traffic speeds (Monday-Friday, AM and PM Healthy School Street restriction times)

Site	AM P	eak (8:3 mph	0-9:30)	Av. PM Peak (15:00-16:00) mph		
Site	Feb- 2022	June 2023	Change	Feb- 2022	June 2023	Change
05: Primrose Hill Road	17	15	-2	14	13	-1
06: Elsworthy Road	17	16	-1	15	17	2
07: King Henry's Road	20	20	0	20	20	0
08: Elsworthy Rise north of King Henry's Road	13	12	-1	14	13	-1
09: Elsworthy Rise south of King Henry's Road	17	17	0	18	18	0
10: Lower Merton Rise north of King Henry's Road	18	18	0	18	18	0
11: Lower Merton Rise south of King Henry's Road	21	20	-1	21	21	0

Speed data for all sites show either a reduction in average speed or no change during the morning restricted times. All sites also recorded either a reduction in average speed or no change during the afternoon restricted times except Site 06 - Elsworthy Road: the data shows an average speed increase of 2mph during the afternoon restrictions although, at 17mph, this is still well under the 20mph speed limit.

Average speeds recorded at all sites were below the 20mph speed limit during the trial period with the exception of Site 11 - Lower Merton Rise south of King Henry's Road, which recorded an average speed of 21mph in the PM peak.

Cycle Flows

A comparison of cycle flows for the same monitoring periods before and during the trial Healthy School Street scheme is shown in Table 3 below. It shows that there was an overall increase in cycle volumes across all sites of 26% (20 cycles) during the morning restrictions and a 10% (5 cycles) increase during the afternoon restrictions. For Site 6 specifically (Elsworthy Road) there was a 59% increase in cycle volumes during the morning restrictions and a 36% increase during the afternoon restrictions. This equates to 20 additional cycles in the morning peak and 5 additional cycles in the afternoon peak within the Healthy School Street restriction area. Some of the remaining sites in the vicinity of the Healthy School Street saw a reduction in cycle volumes, with the largest (proportionately) at Site 09 - Elsworthy Rise south of King Henry's Road: data shows a 100% reduction in both the am and pm peaks, however this represents just 3 fewer cyclists in each peak period.

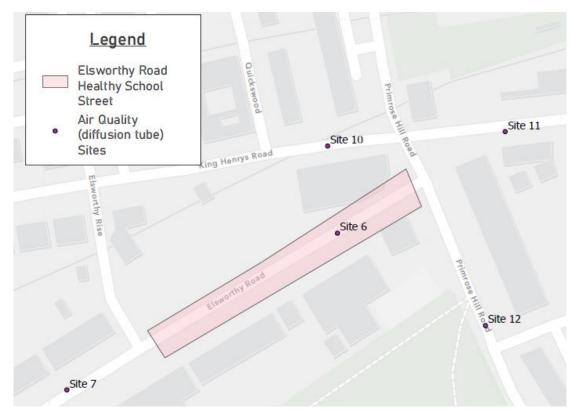
Table 3: Daily Average cycle counts (Monday to Friday, during AM and PM Healthy School Street restriction times)

	AM Peak (8:30-9:30)				Av PM Peak (15:00-16:00)			
Site	Feb- 2022	Jun- 2023	Change		Feb-	Jun-	Change	
			No.	%	2022	2023	No.	%
05: Primrose Hill Road	19	22	3	16%	11	13	2	18%
06: Elsworthy Road	34	54	20	59%	14	19	5	36%
07: King Henry's Road	23	22	-1	-4%	13	13	0	0%
08: Elsworthy Rise north of								
King Henry's Road	2	2	0	0%	2	2	0	0%
09: Elsworthy Rise south of								
King Henry's Road	3	0	-3	-100%	3	0	-3	-100%
10: Lower Merton Rise north								
of King Henry's Road	3	3	0	0%	2	2	0	0%
11: Lower Merton Rise south								
of King Henry's Road	3	4	1	33%	2	3	1	50%
Total Across all Sites	87	107	20	23%	47	52	5	10%

Air Quality Monitoring

Air quality monitoring was undertaken using data from five diffusion tubes installed in the area surrounding St Paul's CE Primary School, as shown in Figure 3 below.

Figure 3: Location of air quality monitoring diffusion tubes



Air quality data was monitored between Jan-Apr 2022 (before trial scheme) and January - April 2023 during trial scheme. The results are shown in Table 4.

Table 4: Changes in NO2 concentrations

Site		ncentration g/m³	Change in NC concentration		
Site	2022 (Jan-Apr)	2023 (Jan-April)	Months included	μg/m³	%
6: Elsworthy Road west of Primrose Hill Road	29.24	28.53	Jan/Mar/Apr	-0.71	-2.4%
7: Elsworthy Road west of Elsworthy Rise	35.91	35.00	Jan	-0.91	-2.5%
10: King Henry's Road west of Primrose Hill Road	31.69	27.68	Mar/Apr	-4.01	-12.6%
11: King Henry's Road east of Primrose Hill Road	27.34	24.96	Feb/Mar/Apr	-2.39	-8.7%
12: Primrose Hill Road south of Elsworthy Road	35.14	38.30	Jan	3.16	9.0%
	-0.97	-3.5%			

The data presented in Table 4 is **raw and unratified** without applying the national bias adjustment factors, in accordance with the Local Air Quality Management Technical Guidance. This is because the analysis has only used a selection of months rather than the full calendar annual mean NO2 concentrations which is not available. As such, while the comparison allows for an interpretation of relative change in NO₂ level, we cannot compare the levels to the National Air Quality Objective (legal limit) for NO2. In addition, Table 4 does not provide data for all four months (January to April) for each monitoring period for all sites. Data is only provided for those months where there is comparable data; for other months, diffusion tube data was either missing or was erroneous upon analysis.

The summary data show that there was an average overall reduction in NO2 from 2022 to 2023 across all five sites both in absolute terms (0.97µg/m3 of NO2) and proportionately (3.5%). However, the diffusion tube on Primrose Hill Road, south of Elsworthy Road (Site 12) saw an increase of 9%, whilst the other 4 sites included in this analysis saw a reduction in NO2. Nevertheless, the data shows that for the months surveyed, all sites were below the current legal limit of 40ug/m3. In addition, the overall reduction in NO2 for this Healthy School Street for this monitoring period is greater than the average reduction for all of Camden's other monitoring sites (Table 5):

Table 5: Average NO2 data for Healthy School Street sites compared to rest of Camden with valid data

Site group	Number of sites	Average change 2022 – 2023 (µg/m3)	Average change (%)	
Elsworthy Road HSS	5	-0.97	-3.5%	
All other Camden sites	226	-0.21	0.001%	

Transport contributes around 31% of total NO2 emissions in Camden over the course of a year. The majority of NO2 comes from gas use in building heating systems. This means that there is significant seasonal variation in outdoor NO2 concentrations when heating demand is higher during cold weather. The change in NO2 concentration at a particular location will therefore not be entirely due to changes in traffic volumes and there are other local factors affecting air quality. The Council has committed to achieving the updated World Health Organisation's standards of 10ug/m3 by 2034.

Feedback during the trial Experimental Traffic Order Period

38 comments were posted on the Council's <u>Commonplace</u> platform about the Healthy School Street on Elsworthy Road during the trial Experimental Traffic Order period. When asked 'how do you feel about the Healthy School Street for St Paul's Primary school?', 16 (42%) respondents posted that they were either 'unhappy' or 'dissatisfied' with the scheme. Their concerns focused on longer journey times by car, including inconvenience to teachers who drive, traffic levels remaining bad or worse, with deteriorating air quality. Two respondents noted that the signposting was not good and drivers were not aware that they would be penalised. One also noted that traffic levels have increased on King Henry's Road as a result of the scheme.

10 respondents (26%) were 'happy' or 'satisfied' with the Healthy School Street changes. Two respondents noted that it is safer for children to walk and cycle, with one noting that they now feel safe to cycle. Two noted that they are now encouraged to walk more although they also commented that vehicle journey times are longer.

A further 6 'were neutral', two of whom thought it was safer for children to walk to school. A further 6 did not state any opinion on any aspect of the scheme.