

Monitoring Factsheet – St Mary & St Pancras Primary School (Polygon Road)



This document sets out monitoring data gathered during the trial period of the St Mary & St Pancras Healthy School Street scheme on Polygon Road. Monitoring data has also been collected on the neighbouring streets on which it is proposed to expand the scheme. It has been gathered and analysed to help assess the impact of the scheme during the trial period of operation and has informed the proposal to expand the scheme. 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 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 counts covered the total number of vehicles on Monday to Friday in school term time, when all pupils were attending St Mary & St Pancras Primary School.

Traffic counts were analysed during the morning (8.30am – 9.30am) and afternoon (3pm – 4.00pm) 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 traffic count data is summarised in Table 1 below, which shows daily average traffic flows based on the weekly counting periods noted on page 1.

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

Site number	Location	АМ	Peak (08:	30-09:30)	PM Peak (15:00-16:00)			
		Mar-21	Jan-22	Change (Mar 21 to Jan 2022)	Mar-21	Jan-22	Change (Mar 21 to Jan 22)	
1	Aldenham Street	26	33	27%	34	33	-3%	
2	Chalton Street	55	57	4%	72	58	-19%	
3	Polygon Road	64	12	-81%	73	12	-84%	
4	Werrington Street	80	53	-34%	93	58	-38%	

When comparing the traffic counts from March 2021 (before scheme trial) to January 2022 (during scheme trial), it can be seen that there was an average 81% reduction in vehicles during the morning restrictions and an 84% reduction during the afternoon restrictions on Polygon Road itself, where the Healthy School Street restrictions are. This equates to averages of 52 fewer vehicles in the morning and 61 fewer vehicles in the afternoon. Werrington Street also saw reductions in both the morning and afternoon with 27 fewer vehicles (34% reduction) and 35 fewer vehicles (38% reduction) respectively. Aldenham Street saw an average increase of 27% in the morning (7 vehicles) with a negligible change in the afternoon. Chalton Street also saw a small increase (2 vehicles, 4%) during the morning and a 19% reduction (14 vehicles) in the afternoon.

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. 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)

	Location	AM Peak (08:30-09:30)			PM Peak (15:00-16:00)		
Site number		Mar-21	Jan-22	Change (Mar 21 to Jan 2022)	Mar-21	Jan-22	Change (Mar 21 to Jan 2022)
1	Aldenham Street	13 mph	16 mph	+3 mph	12 mph	15 mph	+3 mph
2	Chalton Street	14 mph	15 mph	+1 mph	14 mph	15 mph	+1 mph
3	Polygon Road	13 mph	15 mph	+2 mph	12 mph	14 mph	+2 mph
4	Werrington Street	14 mph	15 mph	+1 mph	13 mph	14 mph	+1 mph

The data for Polygon Road shows a 2 mph increase in average speed during both the morning and afternoon restriction times following the implementation of the trial scheme. The other roads surveyed also showed increases of between 1–3 mph but all had average speeds well below the local 20mph speed limit.

Cycle Flows

A comparison of cycle flows for the roads surveyed is shown in Table 3. Table 3 - Cycle Count Data: Daily Average Counts (Monday to Friday, AM and PM restriction times)

	Location	AM P	eak (08:30-	09:30)	PM Peak (15:00-16:00)			
Site number		Mar-21	Jan-22	Change (Mar 21 to Jan 2022)	Mar-21	Jan-22	Change (Mar 21 to Jan 2022)	
	Aldenham							
1	Street	1	2	100%	5	3	-40%	
2	Chalton Street	4	8	100%	5	11	120%	
3	Polygon Road	6	7	17%	6	6	No change	
4	Werrington Street	5	7	40%	5	5	No change	

When comparing March 2021 with January 2022, the data shows that there has been a minimal change in average cycling levels on the streets surveyed, apart from Chalton Street which saw increases of 4 cycles recorded during the morning restriction times and 6 cycles during the afternoon.

Hands up and school surveys/travel planning

'Hands up' 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 most recent data available for pupils at St Mary & Sy Pancras Primary School is from a survey carried out in the 2020-21 academic year, prior to the trial scheme being installed. This data shows that 95% of pupils travelled to school by walking, cycling or scooting with just 5% travelling by car.

Once the data from the 2021-22 academic year becomes available, we will be able to compare the two sets of data to determine how travel behaviour has changed following the installation of the scheme. During the consultation we will also be working closely with the school to speak to pupils to find out their thoughts about the scheme and their experiences of travelling around the borough.

Air Quality Monitoring

We have air quality monitoring diffusion tubes in place on Polygon Road, Aldenham Street and Phoenix 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 below.

Table 4 – Raw diffusion tube NO2 Data 2021-2022

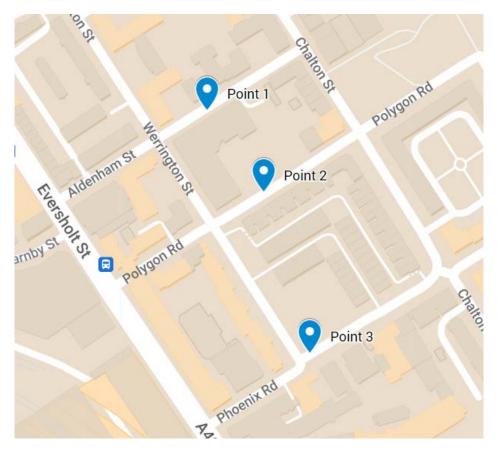
	Raw NO₂ concentration, μg/m³			Change in NO ₂ concentration	
Site	2021 (Feb- Apr)	2022 (Feb- Apr)	Months included	Change in µg/m³	% change
1 – Aldenham Street	30.93	29.10	Feb/Mar/Apr	-1.84	-5.9%
2 – Polygon Road	25.47	28.14	Mar/Apr	2.67	10.5%
3 – Phoenix Road	32.68	31.17	Feb/Mar/Apr	-1.50	-4.6%

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 NO2 concentrations which is not available. However, it shows us that Polygon Road had a 10.5% increase in NO2 levels when comparing the data for March and April 2021 (before the scheme was introduced) to

March and April 2022 (after the scheme was introduced). Conversely, Aldenham Street and Phoenix Road had reductions of -5.9% and -4.6% respectively when comparing the months surveyed (February, March and April) before and after the scheme was introduced. The data shows that for the months surveyed, all sites were below the current legal limit of 40ug/m3, and the sites will continue to be monitored if the scheme is made permanent.

It is important to note that transport contributes around 31% of total NO₂ 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 NO₂ concentrations when heating demand is higher during cold weather. The change in NO₂ concentration at a particular location won't 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 Polygon Road, Phoenix Road and Aldenham Road



Feedback During the Experimental Traffic Order Period

Seven comments on the scheme were received on Commonplace during the trial Experimental Traffic Order period. Within this total, two of the respondents were positive towards the changes, with five being negative.

The comments received that were positive towards the trial changes 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.

The comments received that were negative towards the trial changes included:

- Journey times by motor vehicle have become longer.
- The signage is unclear and there should be markings on the road.
- People ignore the restrictions and continue to drive down Polygon Road at high speeds.
- The scheme is ineffective because it does not restrict Aldenham Street.

On the 8th March 2022, Sustrans were contracted to visit the school during pick up time to discuss the trial changes with parents and carers. In addition to the above comments, the following points were also discussed:

- Almost all parents spoken to were positive about the changes.
- Some parents suggested that physical changes were needed to prevent people ignoring the restrictions and driving at speed.
- Some parents were concerned about speeding in the wider area and suggested that further restrictions beyond Polygon Road were needed.