Holmes Road Area Safe and Healthy Streets Scheme

Monitoring Factsheet

This document sets out the monitoring data gathered during the trial period of the Holmes Road Healthy School Street scheme and has been used in the development of the Holmes Road Area Safe and Healthy Streets Scheme proposals. The data 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 trial scheme was collected through Automatic Traffic Counts (ATCs) on streets within and outside the scheme area. 'Before trial scheme' data was collected in January 2022 and 'During trial scheme' data was collected in December 2022 (after 6 months) and May 2023 (after 12 months) when the trial scheme was live.

Traffic counts (including car, van, lorry, bus, cycle, and motorcycle) were untaken over the following periods:

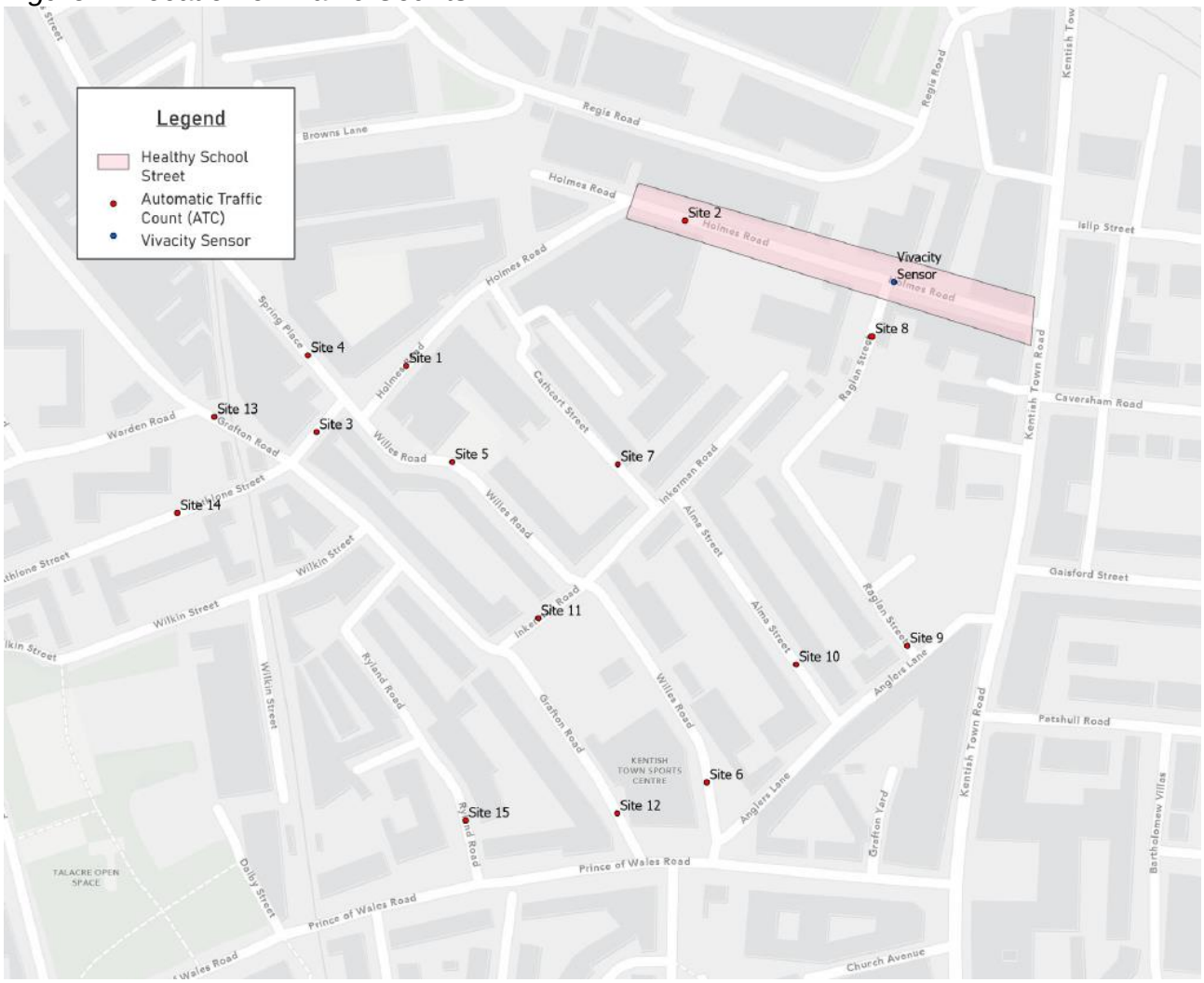
- The week commencing 24th January 2022 (before trial scheme)
- The week commencing 10th December 2022 (during scheme trial)
- The week commencing 15th May 2023 (during scheme trial after 12 months)

Traffic was counted during school term time when all pupils were attending St. Patrick's Catholic Primary School.

Data was also collected using a Vivacity sensor located on Holmes Road directly outside St Patrick's Catholic Primary School. The Vivacity sensor covers the pavements in addition to the road and captures pedestrian, car, van, lorry, bus, cycle, and motorcycle data. The Vivacity sensor was installed on 22 March 2022.

Figure 1 below presents the traffic count locations.

Figure 1: Location of Traffic Counts



Average Motor Vehicle Traffic Counts During Healthy School Street Restriction Times

The results presented in Table 1 below show the 5-day average daily traffic flows during the morning (8am – 10am) and afternoon (2pm – 4pm) Healthy School Street restriction times (excluding cycles).

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

Site	AM Peak (8-10am)					PM Peak (2-4pm)				
	Jan-22	Dec-22	May-23	Change (Jan-22 to Dec-22)	Change (Jan-22 to May-23)	Jan-22	Dec-22	May-23	Change (Jan-22 to Dec-22)	Change (Jan-22 to May-23)
Site 1 - Holmes Rd	672	171	292	-501 (-75%)	**-379 (-56%)**	520	186	307	-333 (-64%)	**-212 (-41%)**

Site 2 - Holmes Rd	533	62	125	-470 (-88%)	-408 (-77%)	465	93	162	-372 (-80%)	-303 (-65%)
Site 3 - Holmes Rd	455	353	320	-102 (-22%)	**-135 (-30%)**	390	302	322	-88 (-23%)	-69 (-18%)
Site 4 - Spring Pl	163	131	143	-32 (-19%)	-20 (-12%)	165	140	137	-25 (-15%)	-28 (-17%)
Site 5 - Willes Rd	126	256	187	130 (103%)	**61 (48%)**	104	213	159	109 (105%)	**56 (54%)**
Site 6 - Willes Rd	129	242	218	112 (87%)	**89 (69%)**	139	234	217	94 (68%)	**77 (56%)**
Site 7 - Cathcart St	58	43	60	-15 (-26%)	2 (3%)	49	25	51	-24 (-49%)	2 (4%)
Site 8 - Raglan St	62	4	11	-59 (-94%)	**-51 (-83%)**	57	7	16	-49 (-87%)	**-41 (-72%)**
Site 9 - Raglan St	54	52	50	-3 (-5%)	-4 (-7%)	51	51	59	0 (0%)	9 (17%)
Site 10 - Alma St	49	30	41	-19 (-39%)	-8 (-16%)	41	38	45	-3 (-6%)	4 (9%)
Site 11 - Inkerman Rd	62	55	52	-7 (-12%)	-10 (-17%)	42	42	48	0 (0%)	6 (15%)
Site 12 - Grafton Rd	268	297	296	29 (11%)	28 (11%)	274	319	324	45 (16%)	50 (18%)
Site 13 - Grafton Rd	259	224	230	-34 (-13%)	-29 (-11%)	315	326	279	11 (3%)	-36 (-12%)
Site 14 - Athlone St	361	252	319	-109 (-30%)	-42 (-12%)	285	244	302	-41 (-14%)	17 (6%)
Site 15 - Ryland Rd	95	86	41	-9 (-9%)	**-54 (-57%)**	86	88	55	2 (2%)	**-32 (-37%)**
Total	3346	2257	2385	-1089 (-33%)	-960 (-29%)	2983	2308	2483	-675 (-23%)	-500 (-17%)

When comparing the traffic count data collected on Holmes Road within the Healthy School Street restriction area (Site 2), between January 2022 (before trial scheme) and May 2023 (during trial scheme after 12 months), a 77% reduction in motor vehicle traffic was observed during the morning restriction period and a 65% reduction during the

afternoon restriction. This equates to an average of 408 fewer vehicles in the morning and 303 fewer vehicles in the afternoon.

Several other streets also recorded a reduction in motor vehicle traffic volumes during the morning and afternoon restrictions. The most significant percentage reductions were recorded at Site 8 - Raglan St (where an ‘at all times’ motor vehicle restriction was installed) where traffic volumes reduced by -83% (-51 vehicles) during the morning restriction times and -72% (-41 vehicles) during the afternoon restriction times, Site 15 - Ryland Rd where traffic volumes reduced by -57% (-54 vehicles) during the morning restriction times and -37% (-32 vehicles) during the afternoon restriction times, Site 1 (Holmes Road between Willes Road and Cathcart Street), where traffic volumes reduced by 56% (-379 vehicles) during the morning restriction times and -41% (-212 vehicles) during the afternoon restriction times and Site 3 - Holmes Rd (between Grafton Road and Willes Road) where traffic volumes reduced by 30% (-135 vehicles) during the morning restriction times.

Some streets recorded an increase in average daily motor vehicle traffic during the morning and afternoon restriction times. The most significant percentage increases were recorded at Site 6 - Willes Rd (between Anglers Lane and Inkerman Road) where traffic volumes increased by 69% (89 vehicles) during the morning restriction times and 56% (77 vehicles) during the afternoon restriction times and Site 5 - Willes Rd (between Inkerman Road and Holmes Road) where traffic volumes increased by 48% (61 vehicles) during the morning restriction times and 54% (56 vehicles) during the afternoon restriction times.

When comparing the traffic count data collected across all sites surveyed between January 2022 (before trial scheme) and May 2023 (during trial scheme after 12 months), there was an overall reduction in average traffic levels of 29% during the morning restriction times and 17% during the afternoon restriction times. This equates to an average of 960 fewer vehicles in the morning and 500 fewer vehicles in the afternoon.

Average Daily Motor Vehicle Traffic Counts

The results presented in 2 below show the 5-day average daily traffic flows (excluding cycles).

Table 2: Motor Traffic Count Data: Average Daily Vehicle Counts (Monday to Friday)

Site	Jan-22	Dec-22	May-23	Change (Jan-22 to Dec-22)	Change (Jan-22 to May-23)
Site 1 - Holmes Rd	3969	2477	3675	-1492 (-38%)	-294 (-7%)
Site 2 - Holmes Rd	3667	2495	3316	-1173 (-32%)	-351 (-10%)
Site 3 - Holmes Rd	3060	3057	3404	-2 (0%)	344 (11%)
Site 4 - Spring Pl	1216	1214	1249	-2 (0%)	33 (3%)
Site 5 - Willes Rd	764	1134	930	370 (48%)	**166 (22%)**
Site 6 - Willes Rd	960	1178	1138	218 (23%)	178 (18%)
Site 7 - Cathcart St	346	204	332	-142 (-41%)	-14 (-4%)
Site 8 - Raglan St	380	63	102	-317 (-84%)	**-277 (-73%)**
Site 9 - Raglan St	324	315	354	-9 (-3%)	30 (9%)
Site 10 - Alma St	269	211	260	-58 (-22%)	-9 (-3%)
Site 11 - Inkerman Rd	288	265	302	-23 (-8%)	14 (5%)
Site 12 - Grafton Rd	1956	2031	2259	75 (4%)	303 (15%)
Site 13 - Grafton Rd	2202	2239	2103	37 (2%)	-99 (-5%)
Site 14 - Athlone St	2208	1927	2706	-281 (-13%)	**498 (23%)**
Site 15 - Ryland Rd	646	592	394	-54 (-8%)	**-252 (-39%)**
Total	22253	19401	22521	-2852 (-13%)	267 (1%)

When comparing the traffic count data collected on Holmes Road within the Healthy School Street restriction area (Site 2), between January 2022 (before trial scheme) and May 2023 (during trial scheme after 12 months), there was a 10% reduction observed in average daily motor vehicle traffic equating to 351 fewer vehicles per day. Several other streets also recorded a reduction in average daily motor vehicle traffic. The most significant percentage reductions were recorded at Site 8 - Raglan St, where traffic volumes reduced by -73% (-277 vehicles) and Site 15 - Ryland Rd, where traffic volumes reduced by -39% (252 vehicles).

Some streets recorded an increase in average daily motor vehicle traffic. The most significant percentage increases were recorded at Site 14 - Athlone St, where traffic volumes increased by 23% (498 vehicles), Site 5 – Willes Rd (between Inkerman Road and Holmes Road), where traffic volumes increased by 22% (166 vehicles) and Site 6 - Willes Rd (between Anglers Lane and Inkerman Road) where traffic volumes increased by 18% (178 vehicles).

When comparing the traffic count data collected across all sites surveyed between January 2022 (before trial scheme) and May 2023 (during trial scheme after 12 months), there was an overall 1% increase in average daily motor vehicle traffic, equating to 267 vehicles.

Table 2 below shows the 5-day average daily traffic flows (excluding cycles) by direction on Holmes Road within the Healthy School Street restriction area (Site 2).

Table 2: Motor Traffic Count Data: Average Daily Vehicle Counts by Direction (Monday to Friday)

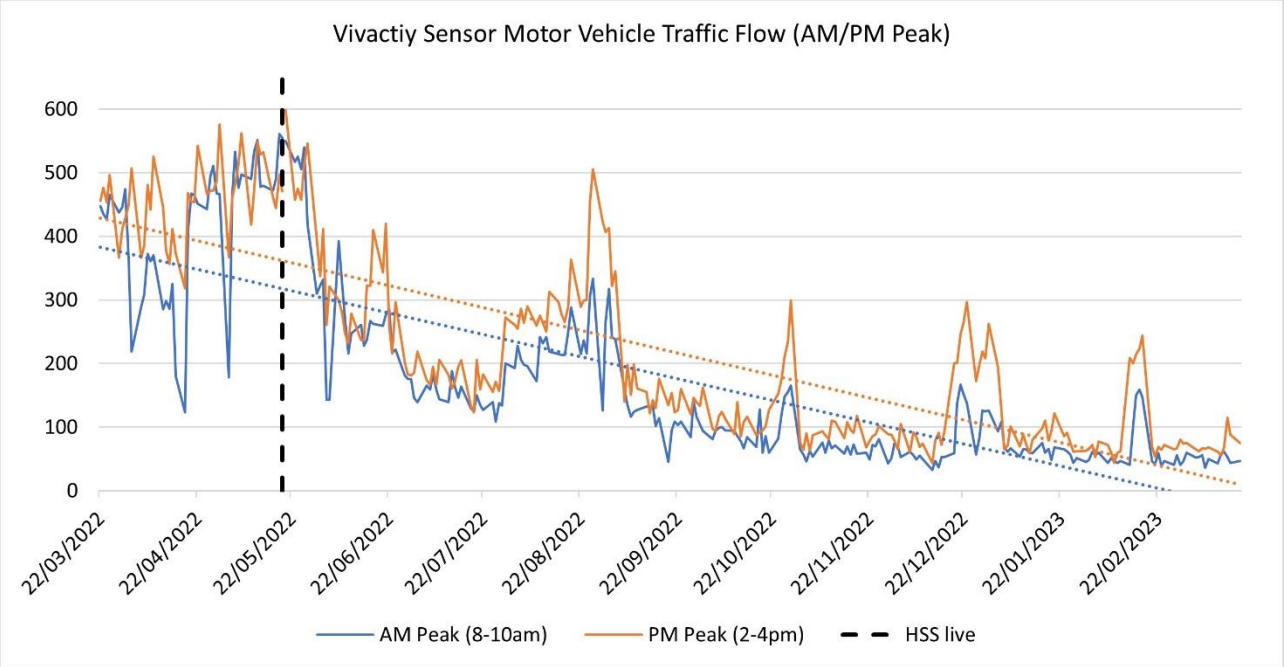
Site	Eastbound					Westbound				
	Jan -22	**Dec -22**	**May -23**	**Change (Jan-22 to Dec-22)**	**Change (Jan-22 to May-23)**	**Jan -22**	**Dec -22**	**May -23**	**Change (Jan-22 to Dec-22)**	**Change (Jan-22 to May-23)**
Site 2 - Holmes Rd	1786.1	1305.8	1574.2	-480 (-27%)	-212 (-12%)	1881.05	1188.8	1741.6	-692 (-37%)	-139 (-7%)

When comparing the traffic count data collected on Holmes Road within the Healthy School Street restriction area (Site 2) by direction, between January 2022 (before trial scheme) and May 2023 (during trial scheme after 12 months), there was a 12% reduction in eastbound average daily motor vehicle traffic equating to 212 fewer vehicles and a 7% reduction in westbound average daily motor vehicle traffic equating to 139 fewer vehicles.

Motor Vehicle Flows (Vivacity sensor)

Traffic data was also collected by a 'Vivacity' sensor, which was installed on Holmes Road within the Healthy School Street, near the junction with Raglan Street (see Figure 1). The sensor was fully operational from the 22nd March 2022 and captures 24-hour road and pavement numbers and categorises them. To understand the impact of the scheme on traffic flows, a 12-month period beginning on the 22nd March 2022 has been analysed. The traffic volumes (motor vehicles only) on weekdays during the hours of the Healthy School Street operation are shown in Figure 2.

Figure 2: Vivacity Sensor Motor Traffic Count Data: Average Vehicle Counts (Monday to Friday, during AM/PM restriction times)



The data in Figure 2 shows that motor traffic during the AM and PM restriction times has decreased significantly following the introduction of the Healthy School Street on the 19th May 2022. The data also highlights traffic increases outside of school term times when the Healthy School Street restrictions are deactivated.

Traffic Speed Data

The Automatic Traffic Count data collected was used to analyse vehicle speeds. A comparison of speeds before and after the trial scheme was implemented is shown in Table 3 below. The data includes the average speed of all vehicle classes (including cycles).

Table 3: Traffic Speed Data (mph): Daily Average (Monday to Friday, AM and PM during Healthy School Street restriction times)

Site	AM Peak (8-10am)					PM Peak (2-4pm)				
	Jan-22	Dec-22	May-23	Change (Jan-22 to Dec-22)	Change (Jan-22 to May-23)	Jan-22	Dec-22	May-23	Change (Jan-22 to Dec-22)	Change (Jan-22 to May-23)
Site 1 - Holmes Rd	15	13	14	-2	-1	16	15	17	-1	+1
Site 2 - Holmes Rd	15	14	14	-1	-1	15	15	15	No Change	No Change
Site 3 - Holmes Rd	12	11	12	-1	No Change	12	12	12	No Change	No Change
Site 4 - Spring Pl	15	13	15	-2	No Change	15	14	15	-1	No Change

Site 5 - Willes Rd	15	16	17	+1	+2	15	17	17	+2	+2
Site 6 - Willes Rd	16	15	18	-1	+2	16	17	20	+1	**+4**
Site 7 - Cathcart St	10	8	13	-2	**+3**	10	9	14	-1	**+4**
Site 8 - Raglan St	11	8	11	-3	No Change	12	9	12	-3	No Change
Site 9 - Raglan St	14	10	13	-4	-1	14	12	14	-2	No Change
Site 10 - Alma St	15	12	15	-3	No Change	14	14	16	No Change	+2
Site 11 - Inkerman Rd	12	11	13	-1	+1	12	12	13	No Change	+1
Site 12 - Grafton Rd	15	14	15	-1	No Change	16	15	16	-1	No Change
Site 13 - Grafton Rd	15	16	14	+1	-1	16	15	14	-1	-2
Site 14 - Athlone St	16	14	15	-2	-1	16	15	16	-1	No Change
Site 15 - Ryland Rd	11	9	11	-2	No Change	12	10	11	-2	-1

When comparing the speed data collected in January 2022 (before trial scheme) with the data collected in May 2023 (during trial scheme after 12 months), average speeds recorded on Holmes Road within the Healthy School Street restriction area (Site 2) reduced by 1 mph during the morning restriction times and stayed the same (no change) during the afternoon restriction times. Average traffic speeds on some of the remaining streets increased, with the most notable increase being on Cathcart Street during the morning restriction times (+3mph) and Willes Road/Cathcart Street during the afternoon restriction times (+4mph). Average speeds recorded at all sites were below the 20mph speed limit in the during trial scheme scenario.

Cycle Flows (ATC)

A comparison of cycle flows for the roads surveyed using Automatic Traffic Counts is shown in Table 4.

Table 4: Cycle Count Data: Daily Average Counts (Monday to Friday, AM and PM during Healthy School Street restriction times)

Site	**AM Peak (8-10am)**					**PM Peak (2-4pm)**				
	Jan-22	**Dec-22**	**May-23**	**Change (Jan-22**	**Change (Jan-22**	**Jan-22**	**Dec-22**	**May-23**	**Change (Jan-22 to Dec-22)**	**Change (Jan-22**

				to Dec-22)	to May-23)					to May-23)
Site 1 - Holmes Rd	66	38	48	-28 (-42%)	-18 (-27%)	40	34	26	-6 (-15%)	-14 (-35%)
Site 2 - Holmes Rd	69	19	68	-50 (-72%)	-1 (-1%)	41	20	52	-21 (-51%)	11 (27%)
Site 3 - Holmes Rd	50	13	39	-37 (-74%)	-11 (-22%)	31	20	30	-11 (-35%)	-1 (-3%)
Site 4 - Spring Pl	32	8	39	-24 (-75%)	7 (22%)	19	9	31	-10 (-53%)	12 (63%)
Site 5 - Willes Rd	23	9	31	-14 (-61%)	8 (35%)	16	10	21	-6 (-38%)	5 (31%)
Site 6 - Willes Rd	32	15	44	-17 (-53%)	12 (38%)	14	11	16	-3 (-21%)	2 (14%)
Site 7 - Cathcart St	9	1	14	-8 (-89%)	5 (56%)	5	0	4	-5 (-100%)	-1 (-20%)
Site 8 - Raglan St	8	1	4	-7 (-88%)	-4 (-50%)	5	1	7	-4 (-80%)	2 (40%)
Site 9 - Raglan St	4	1	6	-3 (-75%)	2 (50%)	5	4	6	-1 (-20%)	1 (20%)
Site 10 - Alma St	7	3	12	-4 (-57%)	5 (71%)	6	5	10	-1 (-17%)	4 (67%)
Site 11 - Inkerman Rd	5	2	8	-3 (-60%)	3 (60%)	5	3	6	-2 (-40%)	1 (20%)

Site 12 - Grafton Rd	77	22	127	-55 (-71%)	50 (65%)	38	16	66	-22 (-58%)	28 (74%)
Site 13 - Grafton Rd	89	16	147	-73 (-82%)	58 (65%)	47	22	84	-25 (-53%)	37 (79%)
Site 14 - Athlone St	21	7	27	-14 (-67%)	6 (29%)	14	11	21	-3 (-21%)	7 (50%)
Site 15 - Ryland Rd	11	1	14	-10 (-91%)	3 (27%)	4	1	8	-3 (-75%)	4 (100%)
Total	503	156	628	-347 (-69%)	125 (25%)	290	167	388	-123 (-42%)	98 (34%)

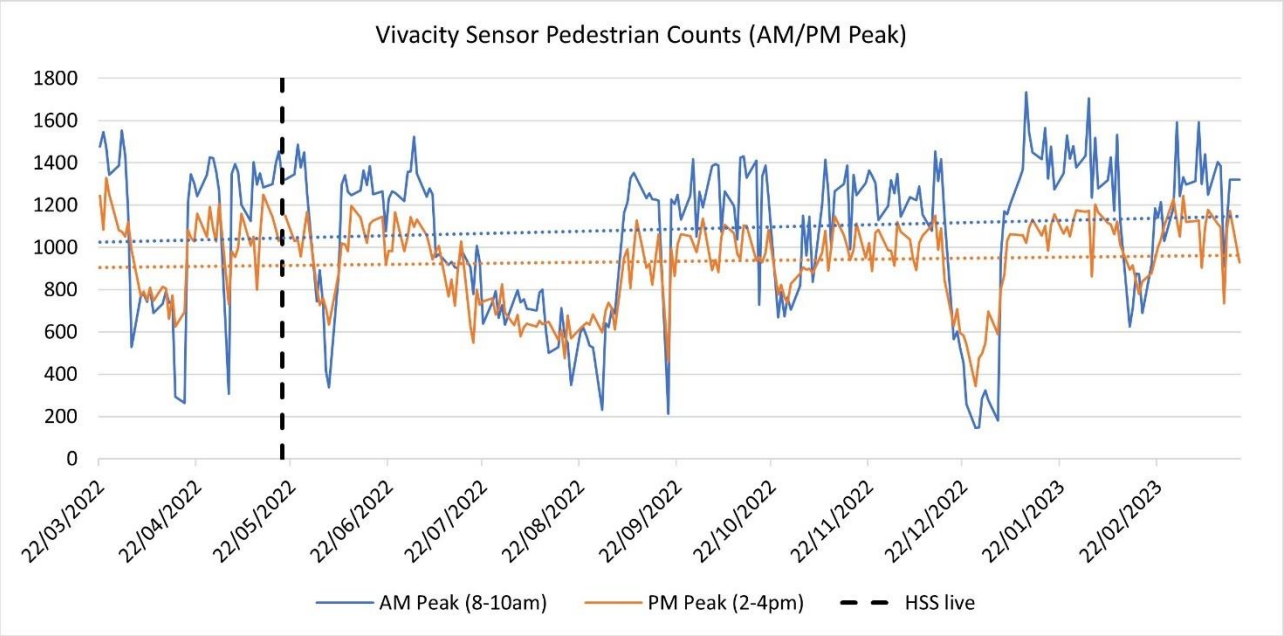
When comparing the traffic count data collected on the section of Holmes Road within the Healthy School Street restriction area (Site 2) from January 2022 (before trial scheme) to May 2023 (during trial scheme after 12 months), there was a 1% reduction during the morning restriction times and a 27% increase during the afternoon restriction times. This equates to a reduction of one cyclist during the morning restrictions and 11 additional cyclists during the afternoon restrictions. Cycle volumes increased on all remaining streets except for Site 1 – Holmes Road (between Willes Road and Cathcart Street), Site 3 - Holmes Rd (between Grafton Road and Willes Road) and Site 8 - Raglan St during the morning restriction times and on all streets except for Site 1 – Holmes Road (between Willes Road and Cathcart Street), Site 3 - Holmes Rd (between Grafton Road and Willes Road) and Site 7 - Cathcart St during the afternoon restriction times.

Across all of the sites surveyed before and after the implementation of the trial scheme, there was an overall 25% increase (125 cycles) during the morning restrictions and a 34% increase (98 cycles) during the afternoon restrictions.

Cycle/Pedestrian Flows (Vivacity sensor)

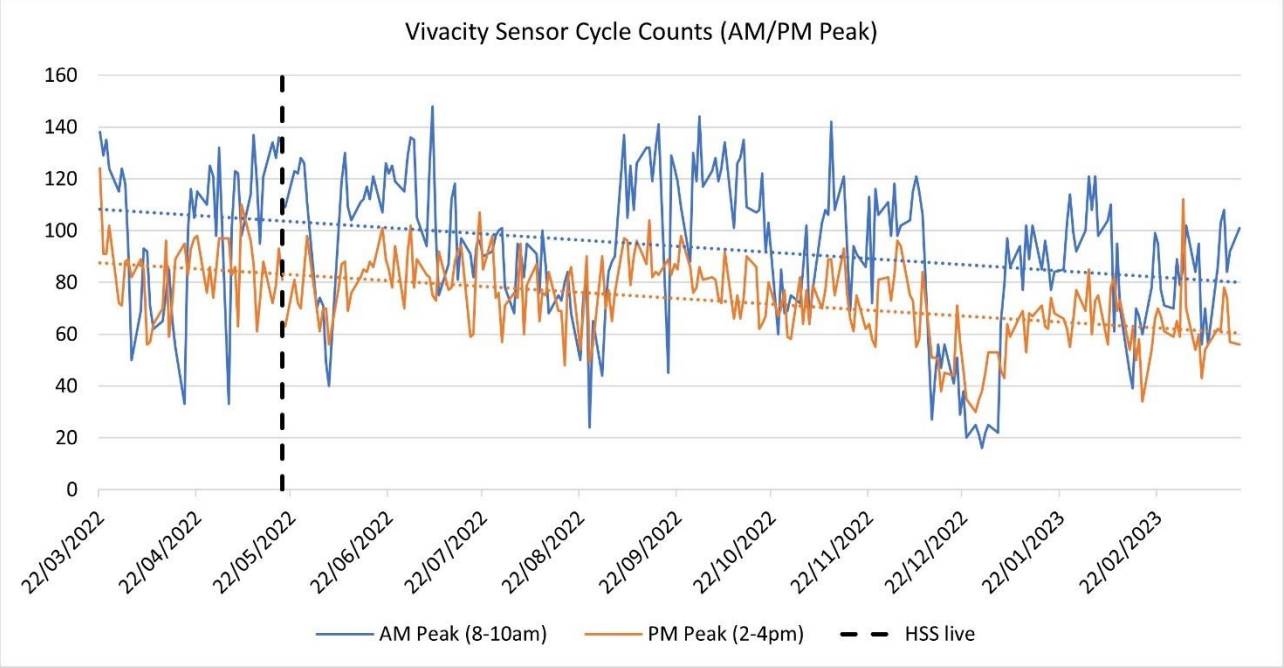
Cycle and pedestrian count data was also collected by the ‘Vivacity’ sensor, which was installed on Holmes Road, near the junction with Raglan Street. The sensor was fully operational from 22 March 2022 and captures 24-hour road and pavement numbers and categorises them. To understand the impact of the scheme on cycle and pedestrian flows, a 12-month period beginning on 22 March 2022 has been analysed. The total pedestrian and cycle volumes on weekdays during the hours of the Healthy School Street operation are shown in Figure 3 and Figure 4 below.

Figure 3: Vivacity Sensor Pedestrian Count Data: Average Pedestrian Flows (Monday to Friday, during AM/PM restriction times)



The data in Figure 3 shows that pedestrian volumes on Holmes Road during the AM and PM restriction times have increased gradually following the introduction of the Healthy School Street on 19 May 2022.

Figure 4: Vivacity Sensor Cycle Count Data: Average Cycle Flows (Monday to Friday, during AM/PM restriction times)



The data in Figure 4 shows that cycle volumes on Holmes Road during the AM and PM restriction times have decreased gradually following the introduction of the Healthy School Street on 19 May 2022. It should be noted that whilst the trend shows a slight reduction in

cycling across the year, this could be due to several factors, including changes in weather patterns and other traffic management measures in the area.

Road Safety (Collision Data)

STATS19 Collision data has been sourced from TfL, comparing the collisions recorded on Holmes Road and Raglan Street (within the trial scheme area) during the 3-year period between 19 May 2019 and 18 May 2022 (before trial scheme) with those recorded between 19 May 2022 and 18 May 2023 (during trial scheme).

Analysis of the data indicates a total of 1 serious casualty from collisions in the trial scheme area which occurred during the 3-year period before the trial scheme on 03 April 2021 (see location in Figure 5). During the trial scheme, no incidents were reported within the trial scheme area.

Figure 5: Location of Collision Before Trial Scheme

Air Quality Monitoring

Air quality monitoring diffusion tubes are in place on Holmes Road, Raglan Street and Inkerman Road, all of which are in close proximity to St. Patrick's Catholic Primary School. Air quality data was monitored between Jun-Dec 2021 (before trial scheme) and Jun-Dec 2022 (during trial scheme). Diffusion tubes were installed to monitor the impacts of the Healthy School Street trial and the results are shown in Table 5.

Table 5: Raw diffusion tube NO2 Data 2021-2022

Site	Raw NO_2 concentration, $\mu g/m^3$			Change in NO_2 concentration	
	2021 (Jun-Dec)	2022 (Jun-Dec)	Months included	Change in $\mu g/m^3$	% change
Holmes Road outside St. Patrick's School	24.31	23.56	Jun/Jul/Aug/Sep/Nov/Dec	-0.75	-3.1%

Raglan Street outside St. Patrick's School	22.92	21.57	Jun/Jul/Aug/Sep/Oct/Nov/Dec	-1.35	-5.9%
Inkerman Road outside St. Patrick's School	22.15	22.33	Jun/Jul/Aug/Oct/Nov/Dec	0.18	0.8%
Average across all sites				-0.64	-2.7%

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 harmful NO2 concentrations reduced on both Holmes Road (-3.1%) and Raglan Street (-5.9%), when comparing data collected before and after the Healthy School Street was implemented. NO2 concentrations increased by 0.8% on Inkerman Road.

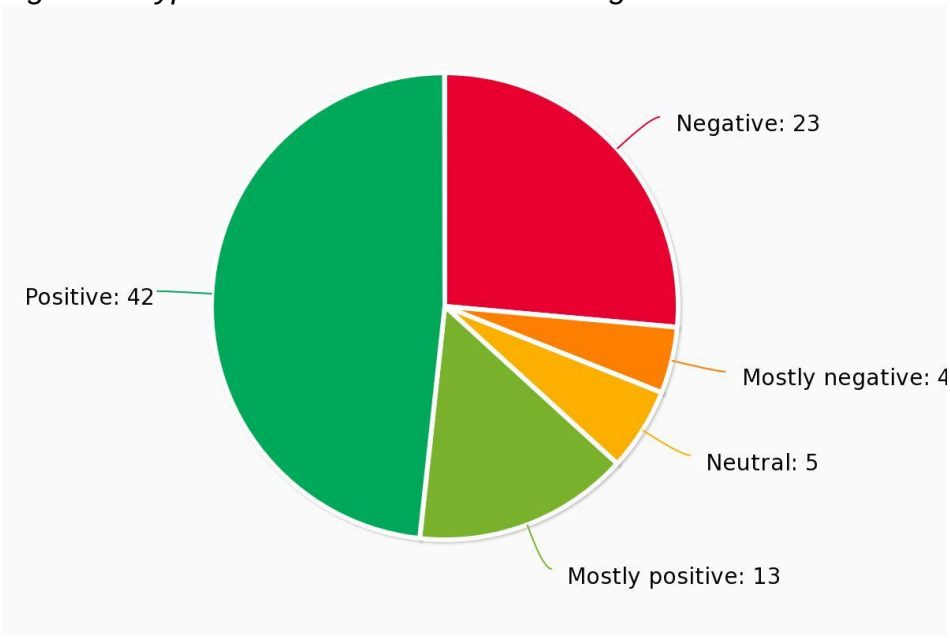
The summary statistics show that the average change in NO2 from 2021 to 2022 across all three sites was a reduction both in absolute terms (-0.64µg/m3 of NO2) and as a percentage (-2.7%). The data shows that for the months surveyed, all sites were below the current legal limit of 40ug/m3, and the sites 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 will not entirely be the result of 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 Experimental Traffic Order Period

Throughout the trial, an online Commonplace survey was open for people to provide feedback on the scheme. The survey link was shared on all written (letters/posters) communications about the scheme and a survey reminder was sent out to residents and businesses 6 months into the trial. If a respondent did not have internet access a phone number was available on all communication materials to request a paper copy. 90 comments on the scheme were received during the trial. Within this total, 55 of the respondents were positive/mostly positive towards the changes, with 27 being negative/mostly negative (see Figure 6).

Figure 6: Type of comments received during the trial



The key comments received that were positive towards the trial changes include:

- The restriction has made Holmes Road and other nearby streets quieter and made it easier to walk/cycle in the area.
- The restriction has improved air quality.
- Has improved safety conditions for children who live/attend schools in the area.

The key comments received that were negative towards the trial changes include:

- People now have to make longer car journeys to avoid the restrictions.
- Some people should be exempt from the restrictions including disabled people and residents who live in the area.
- The restrictions make it harder for people to access their homes.
- Traffic has increased on nearby streets in the area.
- Traffic levels on Holmes Road are still bad outside the restriction times.
- Some drivers ignore the restrictions making it more dangerous for children.

The key suggestions for improvement include:

- The scheme should be extended to include the Collège Français Bilingue de Londres as many parents still drive to this school.
- Holmes Road and other streets in the area should be permanently closed to motor vehicles or made one-way.
- The pavements in front of the school are too narrow and need to be widened.
- The permanent scheme should include more plants and trees.