Brent School Streets Review

Mount Stewart Scheme Report

MP Smarter Travel

109 The Print Rooms
180 Union Street
London SE1 0LH

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Mount Stewart Road School Street

Background

In September 2020, a School Street scheme was introduced through an experimental traffic order on Mount Stewart Avenue, as highlighted on the map below. The Mount Stewart School Street was created to reduce air pollution and improve road safety outside Mount Stewart Junior and Infant School, which educates students from ages three to 11. This School Street also aims to ease the impacts of the COVID-19 pandemic, by providing extra space for social distancing.

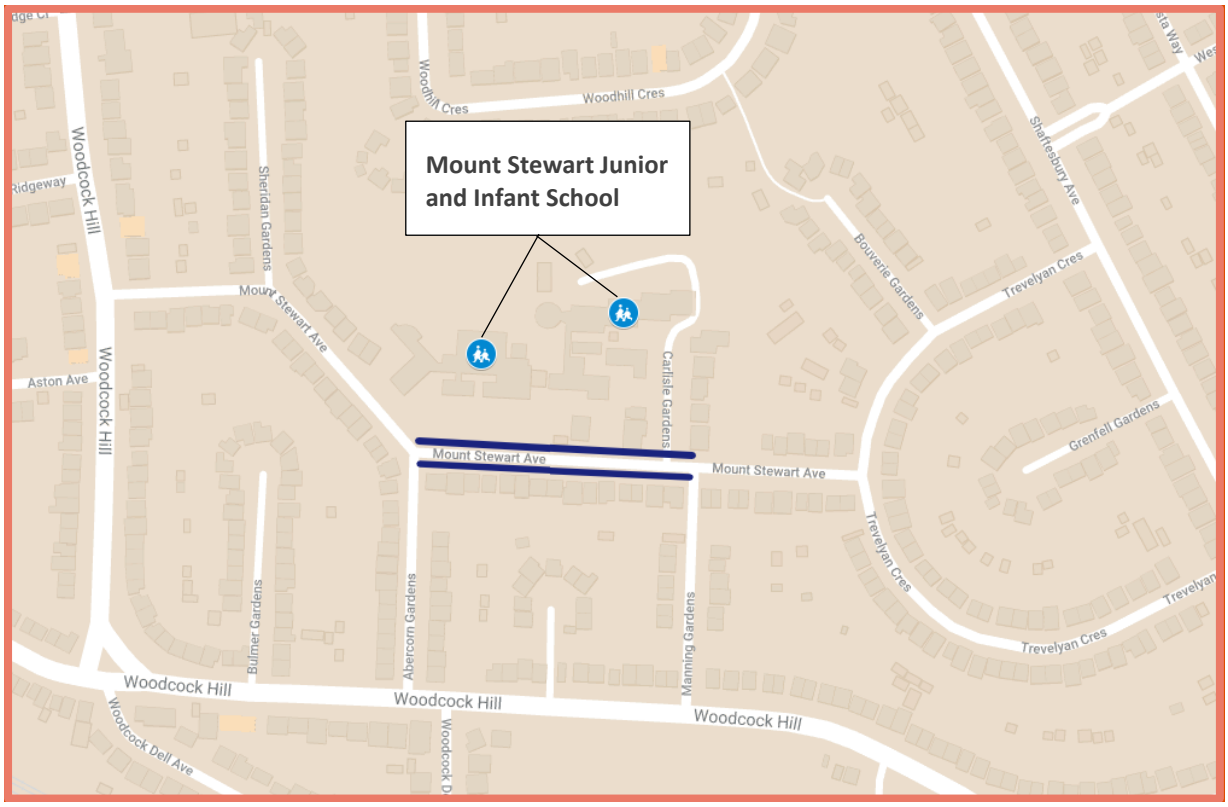

Figure 1 – Map showing location of the School Street, and Mount Stewart Junior and Infant School

Summary of Data Analysis

As part of Brent Council's Emergency School Street consultation process, the council collected multiple datasets including:

- Public consultation
- Parent & guardian consultation
- Air quality data
- School interviews
- Travel mode data
- Site observations

Below we present our analysis of these datasets, along with a recommendation as to whether the scheme should be made permanent.

Public Consultation

From September 2020 to July 2021, members of the public were invited to provide feedback on the experimental scheme. The Mount Stewart public consultation received 13 responses in total, 12 of whom live outside of the scheme. 11 of these responses included a comment, all of which have been analysed thematically to highlight relevant comments.

The table below summarises the proportions of responses who were either for or against the School Street. Responses are then broken down into those that live in or outside of the scheme.

Table 1 – Overall responses

Response	Count	Lives within scheme	Lives outside of scheme
Supports School Street	6	17%	83%
Opposes School Street	7	0%	100%

The table below presents a thematic analysis of public views and concerns about the Mount Stewart scheme. Themes are colour coded to indicate whether they are in support of or opposition to the scheme.

Table 2 – Public comment themes

Code Frame	Theme	Count
Access	Concern about residents' (living NEAR not IN scheme) access to homes/request for passes	1
	Concerns about access of guests and deliveries to residents	1
Consultation	Concern about perceived lack of wider public consultation	1
Parking	Concern about inconsiderate displaced parent parking (blocking driveways, on corners, refusing to move)	1
Traffic	Concern about congestion at barrier pinch points	2
	Concerns about displaced traffic on other roads	2
	Concern about impact on bus timetables	1
Health	Support reduced air pollution due to scheme	1
	Concern about increased air pollution from displaced congestion	4
General	Ideas for ways to encourage sustainable transport (bike schemes, shuttle buses)	1
	Request for scheme to be extended to both ends of Trevelyan Crescent, Manning gardens, Abercorn gardens and full length of Mount Stewart Avenue.	1
	Concern about occasional lack of people staffing barrier	1
	Feels car parking restrictions at school should just be enforced more	1
	Concern about lack of signage, staffing and diversions	1
	Feel measures only benefit residents of scheme	1
	Feels lengthening drop-off and pick-up times would do more to improve social distancing	1
	Concern about implementation and enforcement of scheme	1
	Feels scheme is a waste of money	1

The most mentioned theme was that people were concerned about the scheme causing an increase in air pollution by creating greater levels of traffic and longer journey times to avoid the scheme. The traffic itself was also a cause for concern for a two people, with two more people concerned about traffic at each of the scheme's barriers, creating pinch points.

Parent & Guardian Consultation

The parent & guardian consultation yielded 25 responses, none of whom were residents of the scheme. Only three of the parents & guardians said they most regularly drive to school, four said they drive and walk with equal measure, and the remainder (18 people) said their most regular mode of transport is walking. None selected cycling.

The table below shows the responses to the key questions of the parent & guardian consultation.

Table 3 – Parent & guardian consultation

Question	Response	Percentage
Overall, are you happy that the school participated in this scheme?	Yes	100%
	No	0%
Would you like the scheme to be made permanent?	Yes	72%
	Yes (with changes)	16%
	No	8%

The table below presents the results of a thematic analysis of responses to the question: "Do you have any comments about the scheme? E.g., what has worked well or not so well." Themes are colour coded to indicate whether they are in support of or opposition to the scheme, with yellow themes indicating a comment that neither supports nor opposes.

Table 4 – Parent comment themes

Code Frame	Theme	Count
Parking	Concern about inconsiderate/dangerous parent parking	1
Traffic	Supports reduced congestion	1
	Parents still drive their children to school and drop as close as possible	3
	Concern about displaced congestion	2
Health/Safety	Support scheme for safety (particularly of children)	8
	Supports encouraging children to walk	2
	Feel the scheme has made pick-up/drop-off calmer	2
	Support reduced air pollution because of scheme	2
	Support increased space/social distancing because of scheme	2
General	Request for scheme to be extended to include wider area	1
	Make Abercorn Gardens and Manning Gardens a one-way road	1
	Request for greater traffic warden presence/policing	2
	Voluntary one-way system could help improve the situation, but it is not being adhered to	1
	Issues with early finish on Wednesdays, cars forget and drive through	1

The Parent & guardian view of the scheme was overall positive, with particular emphasis on the safety benefits of the scheme. Another common group of themes was around parent parking and manoeuvres. Parent & guardians reported that many parents are still dropping they children off in cars as close to the barriers as possible, prompting safety concerns and requests for more thorough policing of where people are parking and turning.

Key Concerns

Following analysis of the public and parent & guardian consultation responses, the following topic areas have been identified as key concerns.

Highways Changes

Within both the public and parent & guardian Mount Stewart consultations, two requests were made for specific highways changes.

Table 5 – Highways changes

Highways Change	Count
Extend scheme to include surrounding roads	1
Make Abercorn Gardens and Manning Gardens a one-way road	1

Blue Badge Holders

None of the people responding to either the public or the parent & guardian consultation identified themselves as having a disability.

Air Quality

As part of the Mount Stewart School Street scheme, Nitrogen Dioxide (NO_2) levels were monitored at the school over a twelve-month period from October 2020 to October 2021.* Figure 2 presents this data along with the modelled annual average for 2016 (Annual Pollution Maps) for reference.

The NO_2 data for this scheme shows a spike in November, which is observed across the majority of the Brent School Street schemes, it's expected that this is driven by particular meteorological conditions. However, this dataset also shows a large spike in April 42.26 µg/m^3, 9.38 µg/m^3 higher than November's recording. This reading is unusual and is not replicated within any of the air quality data collected as part of the Brent School Streets review. MP Smarter Travel believe this point should be seen as an anomaly, caused potentially by the April's diffusion tube being installed in a new location or a temporary change in a local NO_2 source, such as an exhaust flue.

Ideally, data would be collected for at least a year before and after the implementation of the scheme. This would enable changes to be identified and more reliably attributed to the School Streets scheme. However, for this set of implementations, this was not possible.

*See Appendix A for full air quality datasets.

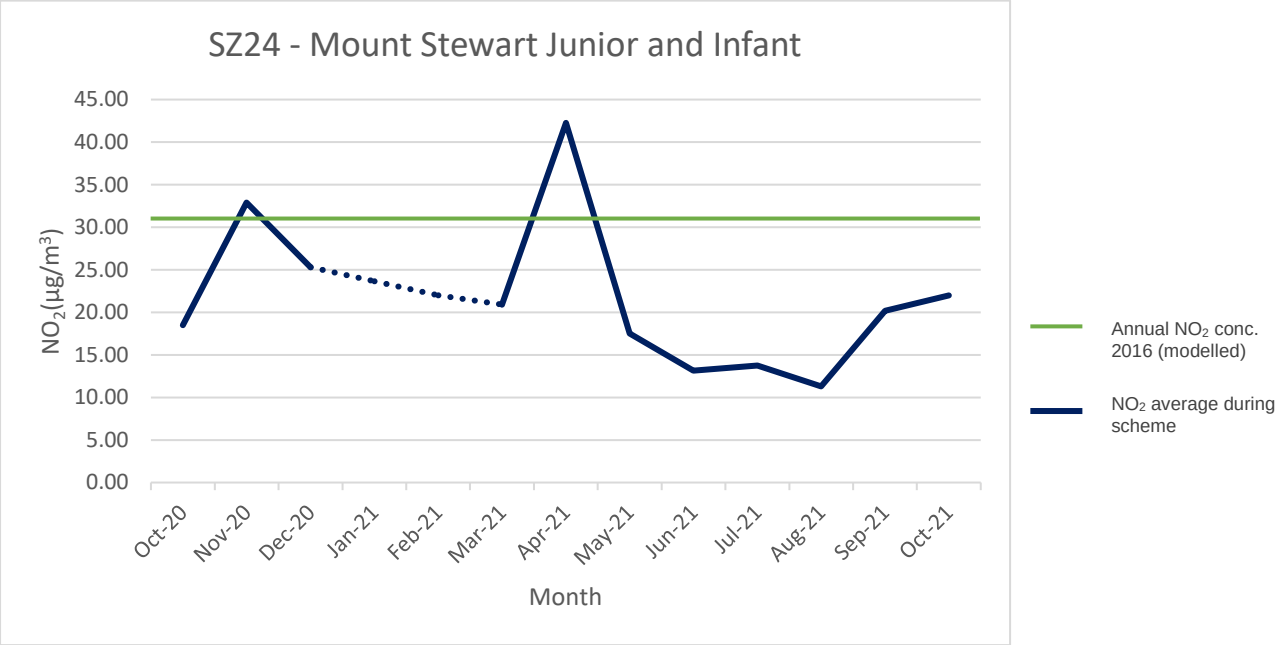

Figure 2 – NO_2 concentration at Mount Stewart Junior and Infant School

It is important to note that this data represents NO_2 levels over the course of the scheme post-implementation, rather than being proof of scheme impact. There are multiple factors at play including meteorological conditions, school holidays and COVID-19 restrictions, which will have impacted the data.

School Interview

Through interview, MP Smarter Travel found that Mount Stewart Junior and Infant School has had a generally positive experience of the scheme, with more details of the interview shown in the table below. They highlighted a safer environment for children being the most significant benefit from the scheme, although the member of staff was unable to give much feedback on other areas such as social distancing and increasing active transport.

The school requests that the council investigates the discord between the one-way system and the Mount Stewart scheme, as well as greater council presence at the barriers to take pressure off members of school staff.

Table 6 – Interview summary

Overall Opinion	• Positive (changes needed)
Benefits	• Much safer environment for children to walk, scoot and cycle to school.
Concerns/drawbacks	• Clash between scheme and one-way system on Abercorn Gardens, pushing traffic issues further down road. • Policing the scheme takes up a lot of staff time. • Cars are parked inconsiderately and drivers make dangerous manoeuvres in front of the barrier.
Requests for continuation	• Investigation from the council into the clash between the scheme and the one-way system • Greater council presence to police the barriers

Travel Mode Analysis

Students at Mount Stewart Junior and Infant School were surveyed before (March 2017) and after (July 2021) the implementation of the scheme, to identify any changes in travel modes. It should be noted that in the first survey, only students at the junior school were recorded, while in the second the whole school was surveyed.

Figure 4 indicates a large increase in the number of students undertaking active travel since 2017, with a more than 50% reduction in car use. As school travel plans tend to log a year-on-year 4% decrease in car use, we would expect to see a 16% decrease between 2017 and 2021. Therefore, a decrease of 31% in car use, shows that the School Street has considerably accelerated a decrease in car use.

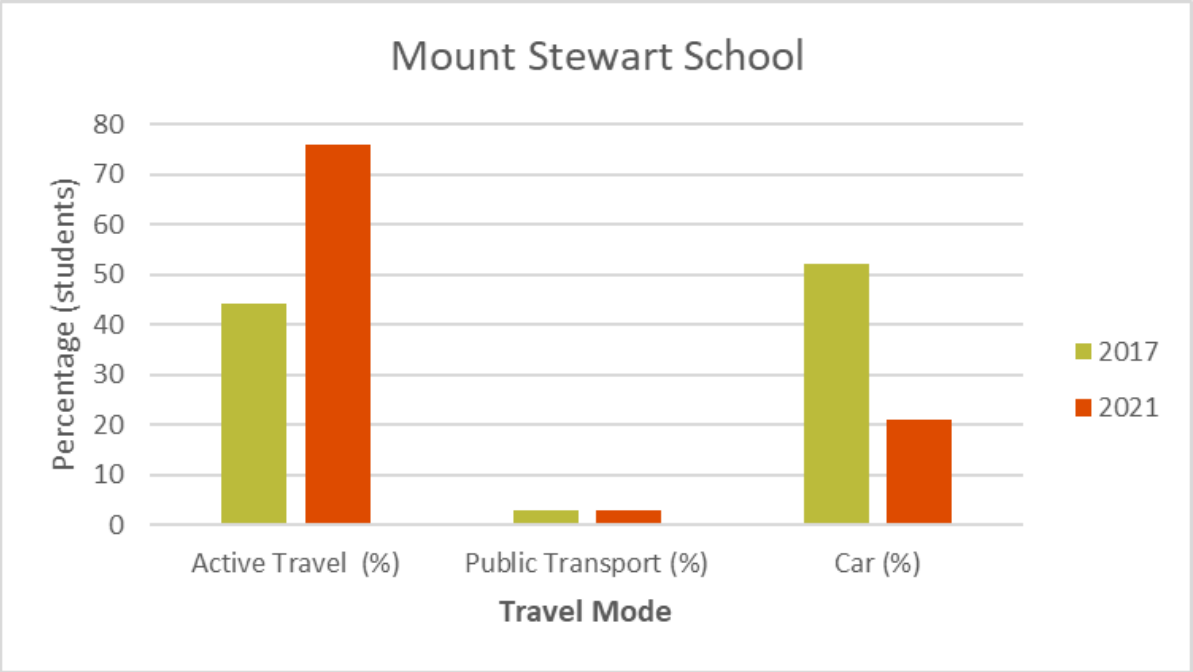

Figure 4 – Graph of travel modes of students at Mount Stewart Junior and Infant School compared to 2021.

Site Observations

The Brent Officer site observation of the Mount Stewart School Street scheme was carried out on the 22nd of July 2021. The following observations were made:

- Bottleneck traffic past closure 1 towards Woodcock Hill despite school trying to run a one-way system.

The recommendation made by the officer was to potentially have an enforced one-way system during school street times.

Conclusion

The summaries below assess how effectively the aims of the scheme have been met.

Providing Space for Social Distancing

Within both the public and parent & guardian consultations, only two people made reference to having more space for social distancing, which may suggest it has not been a particularly noticeable benefit. It was also not mentioned in the school interview, so further data is needed in this area for a robust conclusion to be drawn.

Improves Air Quality

With two months of missing data and one anomalous result, conclusions about the scheme's effect on air pollution are only based on seven months of reliable data to interpret. Disregarding April 2021's anomaly, NO_2 concentrations outside the schools show a decreasing trend throughout the scheme's implementation. Furthermore, a conclusion about the impact of the scheme on air pollution could be drawn if more pre-implementation data was available. The public and parent & guardian consultation yielded three people saying that they appreciated the improvement in air pollution.

Encouraging Active Journeys to School

There is little anecdotal evidence about the success of this aim from the public and parent & guardian consultations or the school interview. However, with 76% of students responding that they use active travel as their most dominant form of transport, and 72% of parent & guardians saying they mostly walk to school, active journeys are certainly being undertaken.

Reducing Private Vehicle Use/Resident Views

Only one of the consultation responses came from a resident of the scheme area, who was in favour of the scheme as long as there is always "someone to move the barriers when you need to get in and out of the road". This person said that on occasion they have had to move the barriers themself, which made them feel unsafe and inconvenienced.

Reducing private vehicle use appears to have been effective, based on the large reduction in car use in the travel mode survey.

Recommendation

Based on the data analysed, we are recommending that the Mount Stewart School Street scheme is continued, but with adjustments to surrounding traffic regulations. As per the Brent Officer's recommendation, the potential for an enforced one-way system should be assessed and implemented in order to avoid bottlenecks at the boundary of the scheme.

We also recommend further data collection and analysis of the following:

- Observations of footfall and crowding at pick-up and drop-off (social distancing)

For highways changes (See table 5) we recommend:

- Further public consultation regarding any extensions of the scheme into surrounding roads.

- Consultation with highways engineers may be necessary for implementing a one-way scheme on Abercorn Gardens and Manning Gardens.

Appendices

Appendix A – Air quality data

Table A1 – Air quality data for Mount Stewart Junior and Infant school.

Baseline LAEI 2016 Annual mean NO_2 ($\mu g/m^3$)	NO_2 reading from Diffusion Tube - RAW DATA ($\mu g/m^3$)												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
31.84	18.48	32.88	25.30	X	X	20.91	42.26	17.53	13.16	13.75	11.30	20.19	22.00