



Brent School Streets Review

Princess Frederica Scheme Report

MP Smarter Travel

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Princess Frederica School Street

Background

In September 2020, a School Street scheme was introduced through an experimental traffic order on Purves Road, as highlighted on the map below. The Princess Frederica School Street was created to reduce air pollution and improve road safety outside Princess Frederica Primary School, which educates students from nursery to year six. 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 Princess Frederica Primary 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 analysis
- 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 Princess Frederica public consultation received 110 responses in total, 105 of whom live outside of the scheme. 91 of these responses included a comment, all of which have been analysed thematically to highlight relevant comments.

The table below summarises the proportion 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	102	4%	96%
Opposes School Street	8	12%	88%

Table 2 displays the key issues pulled from the public comments, first split into code frames then themes. The themes have been colour coded to indicate whether they are in support or opposition of the scheme. Yellow comments represent themes that are neither supportive nor oppositional.

Table 2 – Public comment themes

Code Frame	Theme	Count
Access	Support hierarchy of modes	5
	Feel barriers should be electronic	1
	Concerns about resident's access to homes/request for access badges	5
	Concerns about access of deliveries to residents	4
	Concerns about access to school of parents who live further away	1
	Concern about safety of residents when getting out of car to move barriers	1
	Concern about access of emergency vehicles to residents	1
Parking	Support reducing idling and poor parking	1
	Request for those with permits to be allowed to park within the scheme	1
	Concern about displaced parent parking	2
Traffic Levels	Support reduced traffic/congestion due to scheme	17
	Encouraged driver to choose alternative transport (train, family cargo bike)	2
	Support reduced noise pollution due to scheme	1
	Complaints about pre-scheme traffic (Purves Rd as a cut-through)	6
	Concerns about displaced traffic on other roads	4
	Concern about increase in pedestrian traffic/crowding/crowd noise	1
	Concerns about increase noise pollution from displaced traffic	1
Health	Support low-traffic streets for safety (particularly of children)	61
	Feel the scheme has made pick-up/drop-off calmer/more pleasant for parents, children and residents	26
	Support reduced air pollution due to scheme	21
	Support increased social distancing due to scheme	17
	Request for lollipop person at crossing on College Road	1
	Concerns about increased air pollution from displaced traffic	2
	Implementation	Comment on narrowness of road/pavement
	Supports measures to be imposed on parents only	1
	Feels barriers should be replaced by cameras with fines	1

	Concern about implementation and enforcement of the scheme	1
	Concern about unclear/cluttered signage	1
	Unclear to drivers if scheme operates in term time only	1
General	Suggestion for additional schemes/measures (see table 5)	8
	Supports scheme for environmental/climate benefits	5
	Feel inconvenience is outweighed by benefits	1
	Feels that scheme is unnecessary	2
	Scheme causes disturbance for local drivers	1

The most referenced themes were that respondents:

1. Support low-traffic streets for safety (particularly of children)
2. Feel the scheme has made pick-up/drop-off calmer/more pleasant for parents, children and residents
3. Support reduced air pollution due to the scheme
4. Support increased social distancing due to the scheme
5. Support reduced traffic/congestion due to scheme

The response from the public consultation was enormously positive, with 93% of the 110 surveyed saying they are in favour of the Princess Frederica School Street scheme. A large proportion of responses referenced the health and safety benefits that they feel children, parents and residents have experienced due to the scheme. There were 11 comments referencing the narrow roads and pavements of the area, most stating that this scheme has helped to resolve common issues of crowding and road safety.

The most common oppositional themes were that people:

- Were concerned about residents' access to homes
- Were concerned about the level of displaced traffic on other roads

Overall, there were no oppositional themes with the same level of recurrence as the supportive themes, indicating widespread public support for the scheme.

Parent & Guardian Consultation

The parent & guardian consultation yielded 71 responses, 100% of whom marked that they were happy that the school participated in the scheme. Two of the responses were from residents living within the scheme, who both would like to see the scheme become permanent, one with the stipulation that signposting becomes clearer. Only one person marked driving as their most regular form of transport, while the majority walked.

Table 3 – Parent & guardian transport modes

Transport Mode	Count	Percentage in Support of Scheme
Walk	65	95%
Cycle	3	100%
Walk and drive	1	100%
Walk and cycle	1	100%
Public transport	1	0%

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

Table 4 – 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	73%
	Yes, with changes	20%
	No	7%

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.”

Table 5 – Parent & guardian comment themes

Code Frame	Theme	Count
Access	Supports hierarchy of modes	3
	Improved pedestrian access to street	2
	Barriers should be electronic/lockable	2
	Concerns about resident's access to homes/request for access badges	1
	Would like access for vans to be banned	1
Traffic	Encouraged driver to choose alternative transport	1
Health/Safety	Support scheme for safety (particularly of children)	14
	Support reduced air pollution due to scheme	10
	Support increased space/social distancing due to scheme	7
	Feel the scheme has made pick-up/drop-off calmer/more pleasant for parents, children, and residents	3
	Concerns about safety of children on school street	1
	Concerns about social distancing on route	1

Implementation	Suggestions for additional schemes/measures	7
	Request for resolution to crowded pinch point (corner of Purves and College Roads)	4
	Request for resolution to traffic safety/social distancing problems on bridge	4
	Request for lollipop person on College Road zebra crossing	3
	Request for barriers to be kept in place, not replaced with cameras (as rumoured)	2
	Concern about implementation and enforcement of the scheme	8
	Concern about unclear/cluttered signage and drivers being unaware	4
General	Feel inconvenience is outweighed by benefits	1

Parent & guardians' view of the scheme were, as with the public consultation, largely positive. Benefits to the health and safety of children and parents were highlighted as the key factor for approval. Several people suggested additional measures to be paired with the School Street to make the journeys to school even safer.

The most common themes were that people:

- Support scheme for safety (particularly of children)
- Support reduced air pollution due to scheme
- Concern about implementation and enforcement of the scheme
- Support increased space/social distancing due to scheme

These are similar to the results of the public consultation, but with a greater level of concern about the implementation of the scheme. These concerns were largely focused on drivers trying to use Purves Road that were unaware of the scheme or unwilling to comply, and also the issue of school staff having to put out the barriers themselves.

Key Concerns

Following analysis of the public and parent & guardian consultation responses, some key highways changes and concerns from Blue Badge holders have been highlighted.

Highways Changes

Within both the public and parent & guardian Princess Frederica consultations, a number of requests and suggestions were made for specific highways changes. The most common requests were for resolutions to difficulty in navigating and crossing College Road, which runs perpendicular to the school street.

Four comments, recorded in table four, reference an issue with the pinch point at the junction of Purves Road and College Road, and four requests in tables four and five for a lollipop person to be at the College Road crossing.

Another four comments from the public consultation cited College Road bridge as an area that poses a risk to pedestrians due to the narrowness of the pavements, the high levels of footfall and the high levels of vehicle traffic.

Table 6 below shows a summary of the highways changes suggested, and how many people suggested them.

Table 6 – Highways changes

Highways Change	Count
Permanently block entrance to College Road or install one-way system	4
Extend scheme to include College Road	3
Traffic calming on College Road bridge	2
Move/add College Road zebra crossing to south side of Purves Road junction	2
Extend scheme to western end of Purves Road	2
Install safer crossing on Chamberlayne Road	1
Use of blurred paving/road material to indicate School Street zone that is sometimes inaccessible to vehicles	1
Close off school street to vehicles (except residents) permanently	1
Widen Purves Road pavements to make road single width, then install lights at either end to allow traffic to pass in turn, or not at all at certain times	1

Blue Badge Holders

Of the 180 combined public and parent & guardian responses, three people identified themselves as having a disability. Two of them support the scheme, with one saying it enables space and social distancing. The one person who does not support the scheme said that they think the scheme will cause increased traffic and pollution at the other end of Purves Road and on College Road, and also that parents are simply driving their children anyway and dropping them off slightly further away.

Air Quality

As part of the Princess Frederica School Street scheme, Nitrogen Dioxide (NO₂) 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.

Figure 2 shows an initial rise in NO₂ concentration around the winter months, and then a downward trend into summer, which is in line with seasonal trends for NO₂. 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.

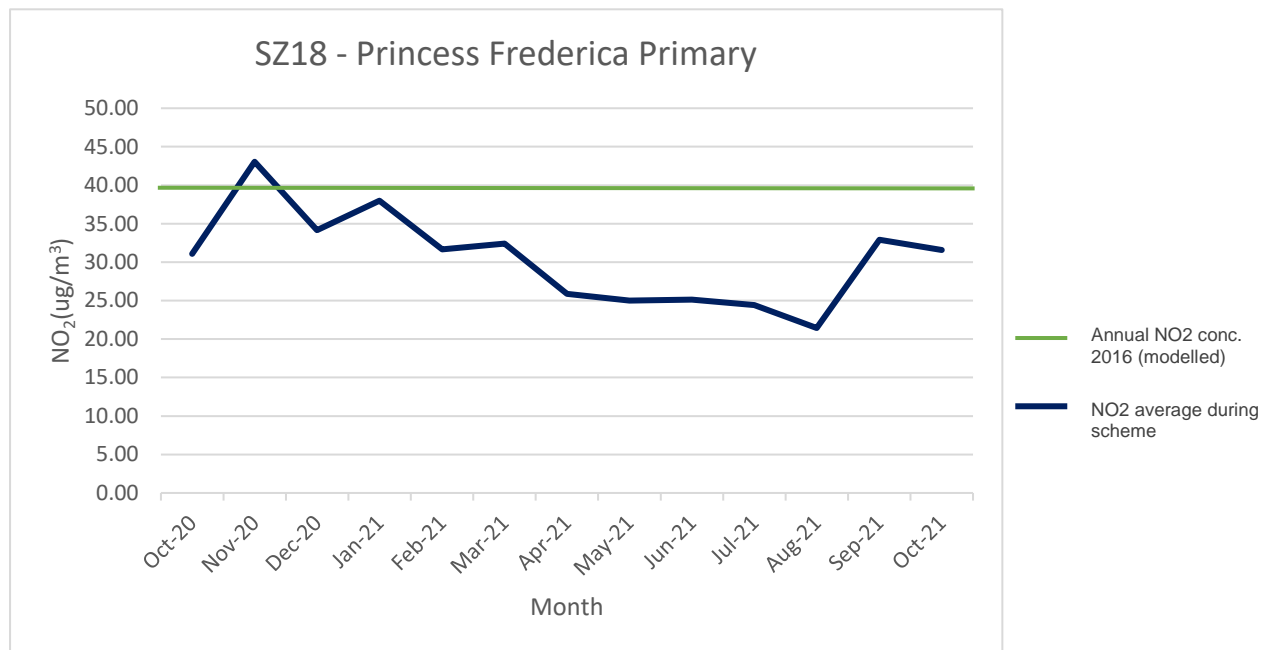


Figure 2 – NO₂ concentration at Princess Frederica Primary School

It is important to note that this data represents NO₂ 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 Princess Frederica Primary School has had a generally positive experience of the scheme, with more details of the interview shown in the table below. The school’s primary request was for an automated timed barrier be installed to take the pressure off school staff needing to monitor it.

Table 7 – Interview summary (Princess Frederica Primary School)

Overall Opinion	<ul style="list-style-type: none"> • Positive
Benefits	<ul style="list-style-type: none"> • Provided space for social distancing when combined with staggered entry times • Road safety improved • Calmer environment at pick-up and drop-off
Concerns/drawbacks	<ul style="list-style-type: none"> • Pressure on school staff to set out and man barriers • Organising deliveries to the school has become complicated • If cameras were to replace barriers, drivers may not see them
Requests for continuation	<ul style="list-style-type: none"> • Timed barrier could work better – removes need for school staff to monitor

Travel Mode Analysis

Students at Princess Frederica Primary School were surveyed before (February, 2016) and after (September, 2021) the implementation of the scheme, to identify any changes in travel modes. The travel mode data reveals a 7% increase in the number of students arriving by active travel, while public transport has decreased by 6%. The 5% decrease in car use suggests that the scheme is having the desired effect and nudging parents & guardians to more sustainable forms of travel.

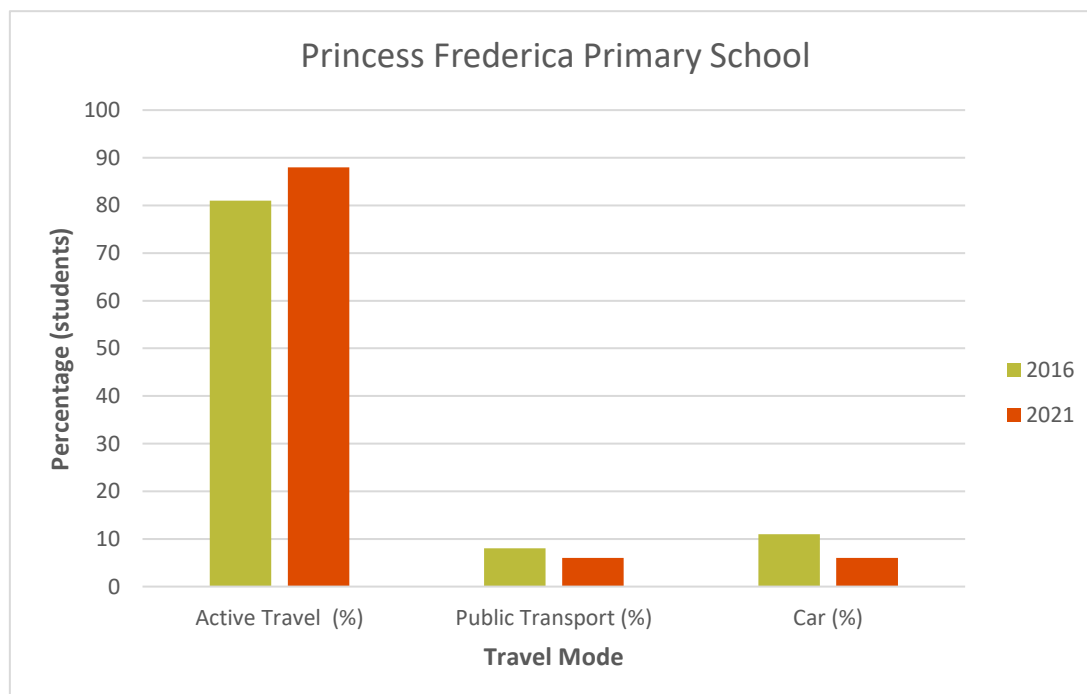


Figure 4 – Graph of travel modes of students at Elsley Primary School in 2018 compared to 2021.

Site Observations

The Brent Officer site observation of the Princess Frederica scheme was carried out on the 28th of June 2021. The following observations were made:

- Cones were placed completely closing the road between the College Road/Purves Road junction as opposed to original plan of Purves Road/Langler Road.
- Refuse collection and car drove down the road and had to reverse back up.
- Some parents concerned about congestion from drivers turning right into Purves Road from College Road and the queues over the zebra crossing.

There was no recommendation made by the officer.

Conclusion

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

Providing Space for Social Distancing

The aim of providing space for social distancing outside the school can be marked as a success. Within the consultation responses, there were 24 mentions of an improvement to social distancing. This is backed up by the school's interview, where their representative stated that the scheme has been helpful for social distancing. The scheme appears to have created a vast improvement upon the overcrowded and narrow pavements that used to be the only space for pedestrians outside the school.

Improves Air Quality

Air quality monitoring completed outside of the school shows a general decline in NO₂ concentration throughout the spring and summer of 2021, in line with seasonal trends for NO₂. A conclusion about the impact of the scheme on air pollution could be drawn if pre-implementation air quality data was available.

Encouraging Active Journeys to School

Based on the consultation data available, the scheme seems to be encouraging people to switch from driving to other modes of transport. The 7% increase in active travel indicates a small but positive change in the way students are travelling to school.

One respondent sold their car to purchase a family cargo bike to transport their children to school, while another said they had started taking the train instead of driving, and a third said that the majority of parents are now travelling to school on foot. Cargo bikes are a good pairing with School Street schemes as they resolve many of the issues cited by drivers. Using a cargo bike would speed up journeys, make bypassing barriers easy and keeps travel costs low. MP Smarter Travel would recommend the Council explore promoting cargo bike use alongside the implementation of School Streets, and particularly at Princess Frederica Primary School where the parent already using a cargo bike to serve as a great champion.

Reducing Private Vehicle Use

The support for reducing private vehicle use in the vicinity of the school is clear, with 93% of the public saying that they are in favour of the scheme, and 93% of parent & guardians saying they would either like the scheme to continue as it is, or for it to continue with some changes.

The main driver for this support appears to be improving the safety of streets for children. The most mentioned themes were all centred around child safety and reducing the risk of accidents involving cars on the way to school, particularly in cases where there is more than one child being escorted by one parent. The result of this increased safety is a much calmer and less stressful atmosphere at the start and end of the school day, with 29 people across the parent & guardian and public consultations stating this as a key benefit of reduced private vehicle use. The school echoed this opinion in their interview.

Recommendation

Based on the data analysed, we are recommending that the Princess Frederica School Street scheme remain in operation. We recommend that ANPR cameras are installed in order to alleviate the pressure of the school having to man a physical barrier. This would also remove the issue of residents being concerned about not being able to access their homes, and would deter non-residents from disobeying the scheme. To make this switch from physical barriers to cameras safe, we recommend a transitional period during which literature and information is widely distributed to ensure people are aware of the change. This will also need to be accompanied by signage that is approved by local people as being clear and effective in warning of the scheme.

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

- Mode split data to compare with previous years

For highways changes (See table 5) we recommend:

- Further public consultation on the potential extension of the scheme to cover more of Purves Road or a portion of College Road.
- Consultation with highways engineers and the public for measures to improve safety of parents and children when attempting to cross College Road, and when navigating the narrow pavements on the College Road bridge.
- Consultation with highways engineers on the possibility of installing a one-way street on College Road.

Appendices

Appendix A – Air quality data

Table A1 – Air quality data for Princess Frederica Primary School

Baseline LAEI 2016 Annual mean NO ₂ (µg/m ³)	NO ₂ reading from Diffusion Tube - RAW DATA (µg/m ³)												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
39.85	31.06	43.05	34.14	38.00	31.65	32.39	25.89	25.02	25.12	24.40	21.44	32.92	31.57