# ROSENDALE SCHOOL STREET



Rosendale Road hosts thousands of children on the school run each day; over a thousand children at school on the site (Rosendale Primary and Turney Special School) plus thousands travelling through the area to local state secondaries (Elmgreen, Kingsdale, Charter) and independent primary and secondary schools in Lambeth/Southwark (Rosemead, Oakfield, Dulwich College, Dulwich Prep, Alleyns and JAGS). This is a community response to the road danger and air pollution thousands of children and local residents face each day.

# Benefits of a School Street for Rosendale Primary

# An updated report by Rosendale Clean Air Group<sup>1</sup>

# Who We are

Rosendale Clean Air is a community group formed of parents at Rosendale primary school & local residents in the area. Our members include residents of almost all the local roads<sup>2</sup>. The Rosendale school street is a community response to the levels of traffic and air pollution children and local residents have to deal with every day.

# **Proposal**

- A school street around Rosendale Primary School & Children's Centre & Turney School (SE21), with entry and exit points at the four locations indicated in red on the map.
- Closures to prevent North & South-bound and East & West-bound traffic accessing the school sites.
- Suggested timings 08:00-09.30 and 15:00-16:30, Monday to Friday.
- Exemptions to include residents living within the School Street area, for Rosendale and Turney school blue badge holders, and for Turney minibuses.
- Design details (e.g. hours of operation) to be determined in consultation with local stakeholders.



#### **Benefits**

### 1) Reduced air pollution and road danger for pupils at Rosendale and Turney schools

- Rosendale Primary School is one of Lambeth's biggest primary schools, with 662 pupils of whom over 90% walk or cycle to school<sup>3</sup>. A further 70 children aged 6 months to 4 years old attend the on-site Rosendale Children Centre. Next door to Rosendale School is Turney Primary and Secondary Special School, with 143 pupils.
- Children travelling to these schools by foot or bicycle are currently exposed on their journey to queueing traffic, idling vehicles, speeding and poor parking.
- Children travelling to these schools by car are likewise often dropped off amidst stressful road conditions, as commuting traffic tries to pass by this is a particular problem for Turney SEND pupils.
- This School Street programme will reduce road danger, pollution, and stress for close to 900 pupils, mostly of primary age, and their families.

#### 2) Fills in a 'missing link' in the local active travel network

• The west end of Turney Road is currently a missing link between the Rosendale Cycle Track and the Dulwich School Travel Zone. Our proposal would fill this gap.

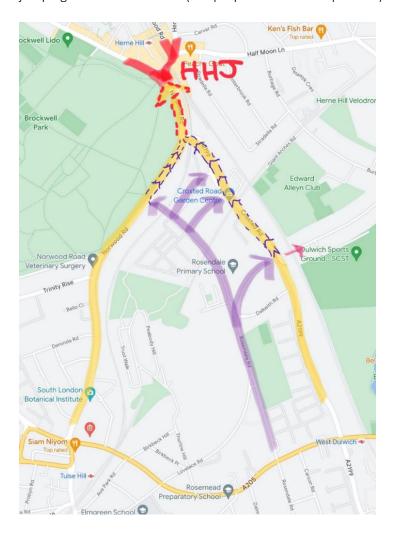
<sup>&</sup>lt;sup>1</sup> Contact us on cleanair.rosendale@gmail.com

<sup>&</sup>lt;sup>2</sup> Please see section 4) for full list of residents associations & groups we collaborate with

<sup>&</sup>lt;sup>3</sup> We track this termly via parent surveys on our sustainable travel app HomeRun

#### 3) Reduced problem queueing and improved bus times on local roads

- At present, northbound traffic is routed up Rosendale Road as it provides a quicker alternative at peak times due to the congestion on Croxted and Norwood Roads.
- However, this does not mean that traffic gets through the area any quicker overall, because almost all the traffic on all three of these roads ultimately needs to get through the bottle-neck of the Herne Hill junction, which is over-capacity.<sup>4</sup>
- The Rosendale traffic therefore merges with Croxted / Norwood just prior to Herne Hill junction (HHJ), increasing congestion and delaying buses on Croxted and Norwood Roads. This traffic is essentially queue-jumping ahead of the buses (see purple arrows in map below).



- Moreover, the process of vehicles pulling in and out to jump the queue, creates inefficient flows around the junctions in question, slowing down the overall average speed of traffic through the area. Vehicles pulling in and out at junctions also creates road danger, including where the cycle track crosses Hawarden and Guernsey Grove, and on the cycle and walking zebra crossing at the junction of Rosendale and Norwood Road.
- For these reasons, we have long argued that a school street around Rosendale School could help improve traffic flow and bus times in the area and that this should at least be trialled on an experimental basis. The recent extension of the Rosendale cycle track provided a 'natural experiment' opportunity to test this. Specifically, from 2<sup>nd</sup> to 20<sup>th</sup> October, Rosendale Road was fully closed to motor vehicles from Lovelace Road to Dalkeith Road, mimicking what would happen during a school street.

<sup>5</sup> This effect is known as Braess's paradox https://en.wikipedia.org/wiki/Braess%27s\_paradox

<sup>&</sup>lt;sup>4</sup> This is true of almost all northbound traffic on Rosendale Road during the proposed school street hours because 1) there is very little reason to travel northbound up Rosendale and then left onto Norwood Road (rather than the A205); and 2) the bus gates in Dulwich Village block most traffic from travelling north up Rosendale and then along Turney through Dulwich Village.

<sup>5</sup> This effect is known as Bross's paradox better (/op wilkingdia org/wilki/Propss)(27s, paradox)

• Below we compare traffic and bus data for weekdays in the 'School Street' weeks 2<sup>nd</sup> to 13<sup>th</sup> October (when Rosendale Road was closed to traffic and all local schools were in termtime) to weekdays in the 'Control' weeks 6<sup>th</sup> to 17<sup>th</sup> November (when Rosendale Road was open to traffic and all local schools were in termtime).<sup>6</sup> We focus on traffic during the morning peak, as this is when congestion is most acute.

#### Croxted Road

• We received TfL iBus data for bus journey times on weekdays between 7am-10am on main roads surrounding Rosendale Road. <sup>7</sup> Our first report only presented data for Croxted Road Northbound, which is our main corridor of interest because of the chronic congestion it experiences. This updated report has been expanded to cover the three A-roads that make a triangle around the Rosendale area, plus the section of Croxted and South Croxted Road below the South Circular that runs parallel to Rosendale Road. These are the corridors that, in our judgement, are most likely to be affected by a Rosendale School Street.

Corridor	From / To	Bus Routes	Mean journey time during School Street weeks (min/km)	Mean journey time during Control weeks (min/km)	Change during School Street weeks
Croxted road above South Circular, Northbound	South Circular to Brockwell Park	3, 201	4.7	7.0	-34%***
Croxted road above South Circular, Southbound	Brockwell Park to South Circular	3, 201	3.4	3.6	-5%
Norwood Road, northbound	Tulse Hill station to Brockwell Park	68, 468	5.4	5.7	-5%
Norwood Road, southbound	Brockwell Park to Tulse Hill Station	68, 468	3.9	4.0	-2%
South Circular, eastbound	Tulse Hill station to West Dulwich station	P13, 201	4.6	4.2	+9%
South Circular, westbound	West Dulwich station to Tulse Hill station	P13, 201	4.4	5.7	-22%**
South Croxted / Croxted road below South Circular, Northbound	Gipsy Hill Roundabout to South Circular	3	4.7	4.3	+10%
South Croxted / Croxted road below South Circular, Southbound	South Circular to Gipsy Hill Roundabout	3	3.7	3.8	-3%

<sup>\*</sup>p<0.05, \*\* p<0.01, \*\*\*p<0.001, as judged from linear regression models adjusting for day of the week

• As shown in the Table above, the largest difference in both absolute and relative terms was seen for our main corridor of interest, i.e. Croxted Road above the South Circular travelling northbound. This corridor saw an average bus journey time that was 34% faster during the School Street weeks than during the Control weeks (mean 4.7 minutes/km vs 7.0 minutes/km).<sup>8</sup> We expect the relative improvement would be even greater for bus journeys during the core school street time window of 8am and 9am, when congestion on Croxted Road is greatest.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> We exclude train strike days in these analyses, namely 05/Oct/22, 07/Nov/22, 09/Nov/22, 04/Oct/23 (this is an improvement from the first version of this report, which did not have day-level data that would allow this).

<sup>&</sup>lt;sup>7</sup> Data from <a href="https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-3104-2324">https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-3441-2324</a>

<sup>&</sup>lt;sup>8</sup> To check that this substantial observed difference on Croxted Road Northbound did not reflect bus journey times routinely being faster in October than in November, we made the same comparison for the equivalent weeks in 2022 (i.e. 3/10/2022 to 14/10/2022 versus 07/11/2022 to 18/11/2022) and 2021 (i.e. 4/10/2021 to 15/10/2021 versus 08/11/2021 to 19/11/2021). This revealed that, on the contrary, October journey times were in fact 30% slower than November bus journey times in 2022 (excluding train strike days), and 27% slower in 2021. This adds weight to our belief that the positive effect we saw during the School Street weeks was indeed caused by the closure of Rosendale Road.

<sup>&</sup>lt;sup>9</sup> TfL told us that extracting iBus data for the time window 8am to 9am might not be possible under a Freedom of Information request as it would require a bespoke calculation. We encourage Lambeth Council to request this bespoke calculation.

- In addition, there was a statistically significant improvement in bus journey times on the South Circular westbound, with journey times that were 22% faster during the School Street weeks.
- On the remaining corridors, the trend was towards slightly faster journey times on 4 corridors and towards slightly slower journey times on 2 corridors. However, these effects were all relatively small in size and not statistically significant, meaning they may have reflected chance variation.
- We conclude that a Rosendale school street would reduce the chronic northbound morning congestion on the northern section of Croxted Road. These data also suggest it might reduce westbound congestion on the South Circular, and that it would not have a large impact for better or worse on other surrounding main roads.

#### Turney Road, Guernsey Grove and Hawarden Grove

- We used Telraam data on the numbers of cars travelling eastbound on weekdays between 8-9am on Guernsey Grove and Hawarden Grove. 8-9am is the peak hour for vehicle volumes on both roads. During the School Street weeks the average recorded number of cars was 82% lower on Guernsey Grove than during the Control weeks (9 vs 51 cars), and also 82% lower on Hawarden Grove (11 vs 62 cars).<sup>10</sup>
- Turney Road has no Telraam data. Instead we used SCOOT traffic light data from the Turney Road \* Croxted Road junction to estimate eastbound vehicle flows on Turney Road on weekdays between 7am and 10am. 

  During the School Street weeks the average estimated total vehicle flow was 91% lower than during the Control weeks (average 52 vs 587 for total vehicle flow). 

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- We conclude that a Rosendale school street would eliminate the current eastbound morning traffic queues on Turney Road, Guernsey Grove, and Hawarden Grove. Among other benefits, this would make it easier for staff and pupils to access Turney SEND School car park.

#### Rosendale Road below the South Circular

- We used Telraam data on the numbers of cars travelling northbound on weekdays between 8-9am on the section of Rosendale Road just below the South Circular. 8-9am is the peak hour for vehicle volumes on this section of Rosendale road. During the School Street weeks the average recorded number of cars travelling northbound was 40% lower than during the Control weeks (mean 199 vs 330 cars). The average number of cars travelling southbound was 12% lower (82 vs 94 cars). 13
- As an alternative way to estimate impacts on traffic volumes, we used SCOOT traffic light data. Specifically, we used data from the South Circular \* Rosendale Road junction to estimate northbound vehicle flows on Rosendale Road on weekdays between 7am and 10am. 14 During the School Street weeks the average total number of vehicles was 34% lower than during the Control weeks (average 688 vs 1045 for total vehicle flow). This is a reassuringly similar percentage change to the 40% decrease estimated from the Telraam data, giving confidence to the accuracy of these estimates.
- In addition, the SCOOT traffic light data estimated that the northbound 'average congestion percentage' on Rosendale Road was only 0.2% during the School Street weeks, as compared to 7.1% during the Control weeks. This suggests the near elimination of northbound traffic queues at this junction.
- We conclude that a Rosendale school street would reduce total traffic and reduce or eliminate morning northbound traffic queues on the section of Rosendale just below the South Circular. This would be particularly valuable to mitigate any potential for additional congestion caused by the extension of the Rosendale cycle lane, or by potential street improvement measures on surrounding streets.

<sup>&</sup>lt;sup>10</sup> Data from <a href="https://telraam.net/en/location/9000005459">https://telraam.net/en/location/9000005459</a> and <a href="https://telraam.net/nl/location/9000005421">https://telraam.net/en/location/9000005459</a> and <a href="https://telraam.net/nl/location/9000005421">https://telraam.net/nl/location/9000005421</a>

<sup>&</sup>lt;sup>11</sup> Data from <a href="https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-2944-2324">https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-2944-2324</a>

<sup>&</sup>lt;sup>12</sup> This calculation only uses data from the first of the two School Street weeks. We exclude the second week (9 to 13 October 2023) because the SCOOT estimated vehicle flow data is zero every day, which we think likely to reflect a recording artefact.

<sup>&</sup>lt;sup>13</sup> Data from <a href="https://telraam.net/nl/location/9000005416">https://telraam.net/nl/location/9000005416</a>

<sup>&</sup>lt;sup>14</sup> Data from <a href="https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-2944-2324">https://tfl.gov.uk/corporate/transparency/freedom-of-information/foi-request-detail?referenceId=FOI-2944-2324</a>

Illustrative photos of the School Street versus Control weeks, for the roads assessed above

# Turney Road eastbound





Croxted Road northbound





Rosendale Road northbound





'School Street' trial weeks

'Control' (i.e. normal) weeks

# 4) Local support

#### Turney school – Sue Osborne, Chair of governors

"We confirm the positive effect the Rosendale Road Closure had on our Turney Road pupil drop off. It offered students arriving by private hire vehicles and parent transport a safer, swifter and calmer drop off experience. The current drop off situation is pressured and may get worse with the possibility of increased pupils next year. However, we have a number of concerns that need addressing. These include enabling access through proposed filters to all Turney vehicles and ensuring that the length of pupils' journeys is not made longer. We would request an independent disability impact assessment to be concluded to ensure the benefits are realised for our pupils and any admin costs are adopted by the council".

#### Rosendale School parents

- "It's been fantastic with the road closed," said Hannah Ross-Tatam, mum of three children at Rosendale School. "It's been calm and quiet with no cars racing towards Norwood Road. It's felt much safer, especially on the cycle path, letting the children cycle freely without the constant worry of cars shooting across it, at the junctions with Hawarden and Guernsey Grove."
- "Having Rosendale Road as a permanent school street would make a huge



Families from Rosendale School, celebrating the 'school street' trial and calling for it to be made permanent

- difference to my daughter and all the children walking to school locally," said Vanessa Gibbin, parent of 9- and 11-year-old siblings at Rosendale Primary School.
- "My son has asthma and air pollution triggers his symptoms which means he needs to use his inhaler more often. He often complains that he struggles to breathe while running or playing in school. I think a major cause of the pollution is the static traffic during drop off and pick up times. If we can have road closures during those times it would help reduce air pollutants," said Shehnaz Shekh, parent of a year 2 child at the school.
- Please see our Brixton Buzz article for further information on Rosendale school parent support.

#### Other groups

Rosendale Clean Air is a community group with parents and residents involved from almost all roads in the area. The Rosendale school street is a community-wide response to the road danger, congestion and pollution that children and local residents have to deal with every day. We are actively in touch with, and collaborating with:

- Birbeck Hill & Birbeck Place RA
- Croxted Road residents

- Dalkeith Road residents
- Hawarden & Guernsey Grove RA
- Lairdale Estate Residents Association (on Rosendale Road)
- Lovelace Road RA
- Pymers Mead, Walkerscroft Mead, Coney Acre residents
- Rosendale Road North section residents (no residents associations)
- Rosendale School PTA
- Rosendale Road (South of South Circular) residents association
- Thurlow Park RA
- Turney Special School via governor representative
- The West Dulwich 'Safe Routes To School' group