LONDON BOROUGH OF CROYDON

REPORT:	**CABINET**	
DATE OF DECISION	**15th May 2024**	
REPORT TITLE:	**The Future of The Brighton Road Experimental Orders to Support Cycle Lanes**	
CORPORATE DIRECTOR / DIRECTOR:	**Nick Hibberd, Corporate Director of Sustainable Communities, Regeneration & Economic Recovery**	
LEAD OFFICER:	**Karen Agbabiaka** **Director of Streets and Environment** **Abu Barkatoolah Project Manager and Report Author**	
LEAD MEMBER:	**Councillor Scott Roche, Cabinet Member for Streets and Environment**	
KEY DECISION?	**Yes**	0124SAE REASON: Decision significantly impacts on communities living or working in an area comprising two or more Wards
CONTAINS EXEMPT INFORMATION?	**NO**	**N/A**
WARDS AFFECTED:	**Waddon, South Croydon, Purley Oaks & Riddlesdown and Purley & Woodcote.**	

1. SUMMARY OF REPORT

1.1 This report provides recommendations for the future of the Experimental Traffic Orders (ETO's) relating to Brighton Road which were introduced to support cycle lanes in line with relevant statutory guidance. Brighton Rd is part of the Strategic Road Network maintained by the council. The Experimental Traffic Management Orders to support the Brighton Rd cycle scheme was introduced in April 2023 under an Experimental Traffic Order for a duration of 18 months which included a 6-month statutory process for inviting objections. The Experimental Traffic Order allowed for a period of monitoring to assess whether the scheme has worked or not. The Experimental orders allowed swift introduction of measures to capture opportunities to encourage cycling during the period of pandemic with reduced traffic volumes. The Orders encompass traffic measures to allow cycle lanes which run through the following wards from north to south: Waddon, South Croydon, Purley Oaks & Riddlesdown and Purley & Woodcote. The measures which were put in place, variously under experimental orders and in alignment with the Traffic Signs Regulations and General Directions (TSRGD) 2016 and 2020, include the following:

- Mandatory and advisory cycle lanes with light segregation (wands and defenders). It is worth noting that traffic wands/defenders are not considered to be traffic signs as prescribed by the Traffic Signs Regulations and General Directions 2016.
- No waiting at any time restrictions (under experimental traffic order) to protect the cycle lanes.
- No loading / unloading at any time restrictions along residential frontages (under experimental traffic order)
- Loading / Unloading restrictions between 10am and 3pm outside of shop frontages (under experimental traffic order)
- Short term parking bays inside roads and in bus lanes (under experimental traffic order
- New and improved zebra crossings
- Junction improvements at key locations

1.2 Integral to the trial period of the Experimental Traffic Orders, technical reviews were undertaken by the council as well as appointed Consultants WSP and Arcadis. The detailed outcome of the technical review is included in Annex 2 of this report, and this has informed the recommendations within this report. Below is a summary of key problems which have been identified with the usage of the light segregation (use of wands and defenders) leading to a recommendation for their removal.

i. Road safety problems for both cyclists and motorists
ii. Emergency services experiencing difficulties and delays in responding.
iii. Maintenance issues, cycle lane cannot be mechanically swept resulting in debris and blocked gulleys.
iv. Residents living along Brighton are prohibited from getting deliveries at all times.

1.3 The outcome of the statutory consultation process and responses received is set out in Appendix A annex 1 in full and the analysis of the responses is detailed in paragraph 5.

1.4 The Experimental Traffic Orders which came into force on 3rd April 2023 for a period of 18 months and will expire on 2nd October 2024. The 18-month period allowed for 6 months objection period from the start of the Experimental Traffic Order operational date. This provided an opportunity for residents who may be directly or indirectly affected or others who had concerns about the operation of the experimental orders, to make representations to the council.

1.5 From 2016 the Department for Transport removed the requirement for mandatory cycle lanes to be introduced under a Traffic Management Order. To prevent parking in mandatory cycle lanes double yellow lines are introduced instead (no waiting at any time restrictions). In accordance with the Highway code drivers must not continuously drive in mandatory cycle lanes thus increasing the risk of collisions with cyclists. This applies to advisory cycle lanes as well unless it is unavoidable. For example, when emergency service vehicles are responding to calls on blue light running general traffic are allowed to move to one side even if it means driving into a mandatory cycle lane for a short stretch or duration. Delaying emergency service vehicles responses can be life threatening.

2.0 RECOMMENDATIONS

For the reasons set out in the report, and having due regard to 1) the outcome of the statutory consultation, 2) technical assessments, 3) the equalities considerations as set out in Appendix B, 4) section 122 Road Traffic Act 1984 and 5) the reasons for recommendations as set out primarily in paragraph 3, the Executive Mayor in Cabinet, is recommended to:

2.1 Make the following Experimental Orders (as listed in Annex 2) permanent:

i) THE CROYDON (TRAFFIC MOVEMENT) (NO.22) Experimental ORDER 2023- Brighton Rd cycle scheme changes to bus lane restrictions (Order Ref 2023/40)

ii) The Croydon (Prohibition and Restriction of Stopping, Loading and Waiting) and (Free Parking Places) (No.4) Experimental Order 2023 – Brighton Rd cycle scheme changes to waiting & loading restrictions (Order ref 2023/41)

iii) The Croydon (On-Street Charged-For Parking Places) (No.4) Experimental Order 2023 – Brighton Rd cycle scheme changes to parking bays (Order Ref 2023/42)

2.2 For the reasons set out at paragraph 3.3 agree to the removal of all light segregation (wands and defenders) along the cycle lanes given the issues identified from the technical review as detailed more fully at Appendix 1 annex 2.

2.3 Note that officers will separately be undertaking a review of parking places in roads adjoining Brighton Road and junctions which adjoin the Brighton Road to assess whether additional measures might be required to ease congestion and traffic progression in those roads and through those junctions, following on from concerns raised in relation to the impact of the operation of the various Experimental Orders (listed at 2.1) on adjoining roads and junctions. The review will include making adjustments to existing parking places and introducing new ones, additionally specific junctions have been identified for inclusion in the review. (See Appendix A annex 4 for more details)

2.4 Note that if it is necessary, following this review in 2.3, to seek additional traffic management measures, these will be addressed either under existing delegated authority of the Corporate Director Sustainable Communities, Regeneration and Economic Recovery or brought forward for further consideration by the Executive Mayor or Executive Mayor in Cabinet as appropriate.

3. REASONS FOR RECOMMENDATIONS

3.1 The experimental orders were introduced to test whether or not the proposed measures along the Brighton Road corridor, which included a widened cycle lane would be effective in enhancing road safety for all road users and to improve conditions and infrastructure for cycling in Brighton Road, which has been identified as one of the corridors with the highest potential for cycling in Croydon. The changes were

introduced experimentally so that their effectiveness could be assessed before any decision is made to make them permanent.

3.2 In summary, the reasons for the recommendations are.

a. The light segregation has proved problematic, and it is therefore officers' recommendation that this needs to be removed. (see Appendix A annex 2)
b. The technical review has identified positive benefits (see Appendix A annex 2) in road safety terms associated with the removal of the light segregation.

3.3 Summary of problems with the light segregation:

- The Emergency services have confirmed in writing they are experiencing problems along this main road on blue light running relating to being delayed by vehicles not being able to move to the kerbside.

- Any damaged defenders are creating trip hazards and potential obstruction to all road users and increase the risk of injuries.

- The current light segregation cannot be mechanically swept, and debris left in the cycle lanes create a hazard for cyclists. Additional, debris by the kerb side has caused blocked road gullies which cause localised flooding and degrade the usability of the cycle lanes and create a further hazard for cyclists.

- In relation to the light segregation a total of 1426 separate reasons were raised as part of the 458 objections received for the experimental scheme during the statutory process. (one objection can include many reasons). A total of 490 reasons (34%) stated were about the light segregation being a hindrance. The other 936 reasons stated relate to other objections. A detailed analysis is included in Appendix A annex 1.

3.4 There have been some material benefits from the Experimental Orders being in place to facilitate cycling, and these are:

- The widened cycle lanes (as supported by the experimental traffic orders) provide a safer area on the main road for cyclists as per the Department for Transport guidance (Local Note 1/20). The technical review has identified a reduction in vehicular speeds across the 12-hour period (from 7am to 7pm) where speeds are below the 30mph speed limit. Lower speeds on a main road can encourage more people to cycle and also create a less intimidating environment for pedestrians.

- A Road Safety Audit dated 16th April 2024 (see Appendix A annex 3) has not raised any concerns in relation to the widened mandatory / advisory cycle lanes which have been in place for 15 months to date which are supported by the experimental traffic orders as mentioned in this report.

3.5 **Matters to Consider when Deciding to Make an ETO permanent.**

3.5.1 The Road Traffic Regulation Act 1984 (RTRA) and the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 (LATOPR 1996) establish the procedures for making a traffic regulation order, (including an Experimental Traffic Regulation Order)

3.5.2 Regulation 23 of the Local Authority Traffic Order which governs making an experimental order permanent, provides that the Council is able to rely on the truncated process for approval of an experimental order being made permanent provided that the requirements of Regulation 23(3) are met.

3.5.3 For these purposes, highways officers confirm that the above requirements have been met, the recommendation in the report is therefore to make the Experimental Orders Permanent in compliance with Regulation 23.

3.5.4 In exercising its powers under the Act, the Council is required (by virtue of Section 122 of the Road Traffic Regulation Act 1984) to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off street, whilst at the same time having regard to the following considerations:

- The desirability of securing and maintaining reasonable access to premises.
- The effect on the amenities of any locality affected.
- Air quality.
- Facilitating the passage of public service vehicles and securing the safety and convenience of persons using them; and
- Any other matters appearing to the Council to be relevant.

3.5.5 For proper consideration of the above matters, the decision-maker is required to: have in mind the section 122(1) duty as set out above; then have regard to factors which may point in favour of imposing a restriction on movement of traffic and pedestrians (including all the factors in section 1); and finally balance the various considerations and come to the appropriate decision.

3.5.6 In balancing the considerations above, it is considered that the proposed changes to bus lane restrictions as per the ETO Order Ref 2023/40 should proceed, on the basis of the following key factors: • The Statement of Reasons provides that “the Order introduces experimental bus lane changes in Brighton Road between Haling Road and Baines Close, as part of a scheme to facilitate mandatory cycle lanes on either side of Brighton Road. The bus lanes will allow use by pedal cycles as well as taxis and buses and will operate 7am-7pm, Mon-Fri on the west side, and 7-10am and 3-7pm, Mon-Fri on the east side. The Order is intended to improve conditions and infrastructure for cycling in Brighton Road, which has been identified as one of the corridors with the highest potential for cycling in Croydon. The changes are being introduced experimentally so that their effectiveness can be assessed before any decision is made to make them permanent.”

• The current scheme has neither impacted on accessibility to public transport services nor cause any inconvenience to public transport users as bus stops accessibility has not been affected.
• By providing facilities to encourage cycling and walking, there may be some local mode shift from private vehicles, supporting a reduction in exposure to and creation of harmful emissions affecting air quality.
• Passage for public service vehicles along Brighton Road is maintained and access for users has been considered, with all existing bus stops maintained.

•The council has had no concerns raised by Transport for London insofar as delays to public transport services.
•There is a need for public service vehicles responding to emergencies to be able to access Brighton Road safely and expeditiously, and so the cycle lane still allows access for emergency vehicles both to travel along Brighton Road and to access the kerb provided that light segregation (which is not in place by virtue of traffic management orders) is removed as recommended in this report.
• The introduction of the cycle lanes facilitates improvements to the safe and convenient movement of cycle traffic.

3.5.7 In balancing the considerations above, it is considered that the proposed changes to waiting and loading restrictions and free parking places as per ETO Order ref 2023/41 should proceed, on the basis of the following key factors:

• The statement of reasons provides that "the Order introduces experimental changes to waiting and loading restrictions and loading and disabled bays in Brighton Road and in the side roads, as part of a scheme to facilitate mandatory cycle lanes on either side of Brighton Road. The changes will prevent or limit parking in the cycle lanes and provide parking and loading opportunities in the side roads. The Order is intended to improve conditions and infrastructure for cycling in Brighton Road, which has been identified as one of the corridors with the highest potential for cycling in Croydon. The changes are being introduced experimentally so that their effectiveness can be assessed before any decision is made to make them permanent."

•Provided light segregation (which is not in place by virtue of a traffic management order) is removed as recommended in this report, access, including for motorised traffic, is maintained to all residential and other properties, albeit that parking arrangements may cause some inconvenience to residents due to the introduction of cycle lanes.
• The technical assessment shows that the current experimental orders allow for servicing of local shops by allowing loading and unloading between 10am and 3pm.
• The current provision of parking bays inside roads provides for shoppers who frequent the local shops.
• By providing facilities to encourage cycling and walking, there may be some local mode shift from private vehicles, supporting a reduction in exposure to and creation of harmful emissions affecting air quality.
• The introduction of the cycle lanes facilitates improvements to the safe and convenient movement of cycle traffic.

3.5.8 In balancing the considerations above, it is considered that the proposed changes to parking bays as per the ETO Order Ref 2023/42 should proceed, on the basis of the following key factors:

The Statement of reasons provides that "the Order introduces experimental changes to parking bays in Brighton Road, as part of a scheme to facilitate mandatory cycle lanes. The changes will remove or relocate parking bays from Brighton Road into the side roads and amend existing parking in the side roads to keep the cycle lanes clear. It will also amend 2-hr payment parking in Brighton Road between Upland Road and Baines Close to operate between 10am and 3pm, Monday to Saturday. The Order is intended to improve conditions and infrastructure for cycling in Brighton Road, which has been identified as one of the corridors with the highest potential for cycling in Croydon. The changes are being introduced experimentally so that their effectiveness can be assessed before any decision is made to make them permanent."

• Provided light segregation (which is not in place by virtue of a traffic management order) is removed as recommended in this report, access, including for motorised traffic, is maintained to all residential and other properties, albeit that parking arrangements may cause some inconvenience to residents due to the introduction of cycle lanes.
• The current restrictions i.e. waiting and loading restrictions prevent the parking of vehicles in the cycle lanes which would otherwise degrade the usability of the cycle scheme.
• By providing facilities to encourage cycling and walking, there may be some local mode shift from private vehicles, supporting a reduction in exposure to and creation of harmful emissions affecting air quality
• The introduction of the cycle lanes facilitates improvements to the safe and convenient movement of cycle traffic.
• The current provision of parking bays inside roads provides for shoppers who frequent the local shops.

3.5.9 Finally, in determining whether or not to make a traffic management order, the Council is required, under Regulation 9 of the LATOPR to consider whether it is under a duty under regulation 9(3) to hold a public inquiry before making an order. Even where an inquiry is not mandated, the Council may still choose to hold an inquiry to consider objections before making any other order.

3.6 The proposals do not change any access to properties; therefore, officers consider that there is no impact in this regard. It is not considered that the implementation of the Brighton Road changes will impede on the right of individuals to respect for private and family life either in public or on private land.

3.7 Finally, Equalities including assessment of the Public Sector Equalities Duty are set out and detailed in section 9 and Appendix B for members' consideration.

4. ALTERNATIVE OPTIONS CONSIDERED:

4.1 Integral to the technical review a list of alternatives proposals was assessed to look at their viability and whether they could be recommended.

4.1.1 ***Retention of the light segregation for the cycle lanes*:** Whilst the Department for Transport Local Transport Note 1/20 recommends a physical form of separation between cyclists and high volumes of traffic and high speeds for a main road with a 30-mph speed limit, in light of concerns raised, it is officers' view that the light segregation could continue to cause potential problems for both motorists and cyclists Additionally,

- damaged units could continue to be a potential hazard to road users including cyclists,
- maintaining the cycle lane free of debris given that a mechanical sweeper cannot be used is proving very difficult.

4.1.2 ***Removal of all cycle facilities/ lanes thus providing more road space to motorised vehicles*:** The removal of the light segregation and all cycle lanes would force cyclists to join the mix of motorised traffic in both directions. Given the high volume across most parts of the day, the consequences of this option are:

a) A high risk of conflict would exist between motorised traffic and cyclists which could lead to serious collision injuries, furthermore this would discourage cycling altogether and the connection between the Croydon Town Centre, Purley and destinations further south would be severely fragmented.
b) Removing all cycle facilities would mean the road space would have to be re-allocated to motorised traffic, hence the traffic lanes would become wider (northbound and southbound lanes could be more than 5 metres wide each way) which could lead to increasing speeds across most part of the day, increasing the perception and real road danger through placing vulnerable road users at higher risks of injury and collision.

This option would not necessarily increase journey times for vehicular traffic, which can be influenced by the following factors listed:

- the level of interruptions caused by the operation of the uncontrolled zebra crossings and signalled controlled crossings especially during peak times.
- the frequency at which vehicles enter and leave the main road via side roads.
- the number of bus stops along the route and availability of road space for overtaking
- the manner in which the road functions throughout the day, i.e. servicing requirements, illegal parking, etc.
- the density of traffic during peak and off peak which can cause a congested state at specific times.
- Interruption of flow by signal junctions

c) Removing the cycle facilities/ lanes would compromise the council's active travel programme It could jeopardise future funding bids where active travel could play a key role in the Council accessing funding. The Council could lose future opportunities for submitting and securing bids.
d) There is no technical rationale which could demonstrate that the removal of all cycle lanes would be of significant benefit, with this in play there is a high risk of clawback from TfL for current funding and potentially legal challenges.

4.1.3 ***Conversion all mandatory lanes to advisory lanes:*** Mandatory cycle lanes, with a solid lane marking, are spaces on carriageway dedicated to cyclists within the signed hours of operation (if this is limited). Advisory cycle lanes delineate an area of the carriageway that is intended for the use of cyclists and should indicate a recommended (but never required) line of travel for cyclists. They instruct other vehicles not to enter unless it is unavoidable. They are indicated by broken white line. Advisory cycle lanes by nature of their function do not provide exclusivity of road space for cyclists. Motorised traffic can legally encroach into the advisory lanes and drive very close to cyclists. This behaviour can intimidate cyclists and provide little dynamic kinetic envelope (space required for cyclist to safely manoeuvre) and in so doing increase the risk of conflict. Depending on the speed of motorised vehicles this conflict could result in serious injuries. The volume of heavy goods poses a significant risk should a conflict occur. No waiting at any time restrictions would still be required to prevent parking, if a single yellow line operating during the daytime (7am to 7pm) was introduced it would allow vehicles to park and block the cycle lanes outside of these hours, resulting in cyclists mixing with motorised traffic. The usability of the cycle lanes would be severely diminished and would discourage people from cycling. Furthermore, the council would be seen to have removed a protected exclusive lane only to replace it with a measure

which could encourage conflicts and increase the severity of collision injuries should they occur. This option would be in conflict with the council's agenda for promoting active travel and healthier lifestyle.

4.1.4 ***Introduction of formal parking bays along some sections of the high street on the main road*:** The proposal to introduce formal parking bays along certain sections of the main corridor was assessed. Given the current design of motorised vehicles, parking bays would have to be a maximum of 2.4m to ensure parked vehicles are well within the confines of the parking bay markings. The upper section of Brighton Road is geometrically constrained and cannot physically accommodate the required width for parking bays. Additionally, 1) passing traffic having to overtake a formal parking bay would require more road space and there is a high risk of head-on conflict if they straddle too far in the opposing traffic lane, 2) cyclists overtaking a parked vehicle in a 2.4m bay would require a 1 metre buffer to reduce conflict with opening of car doors. Heavy goods traffic and buses overtaking parked vehicles in formalised 2.4m bays would have encroach further into the opposing traffic lane and pose a significant risk to the safety of other road users. Additionally, with a 2.4 metre parking space the with flow traffic lane would be reduced to below 3 metres and this is considered sub-standard on a strategic road and would neither pass a Road Safety Audit nor the formal TFL approval process, i.e. TMAN in line with the Traffic Management Act 2004 for all Strategic Roads. There may be location (s) where it is possible to have parking bays.

4.1.5 ***Reducing the widths of all cycle lanes to their previous widths (pre-scheme widths)***

The previous widths of the cycle lane varied between 1.2 and 1.5 metres along the entire length of the main road. Cyclists and pedestrians are considered vulnerable road users in the road user hierarchy and sit above any motorised traffic user within that hierarchy including motor cyclists. Whilst it is recognised that such cycle lane dimensions existed along this main road for many years including across many parts of London, it was then considered adequate as a minimum standard. There has been new guidance issued by both central government and Transport for London on design standards for cycling which supersedes previous standard. The recent design guide LTN 1/20 and the TfL London Cycling Design Standard has taken into consideration the importance of cycling as a sustainable mode of transport to tackle the challenges we all face and to promote cycling as a heathier mode of transport. In doing so the guidance has raised the design standard to ensure the safety of cyclists is not compromised given the increasing numbers across London. In view of recent design standard, reducing the lane widths will deviate from specifications aimed at improving conditions for cyclists who are considered vulnerable. The current widths and associated proposed adjustments will ensure speeds of motorised traffic are kept lower than the 30-mph speed limit which can reduce the severity of road collisions should they occur. Additionally, with a narrower cycle lane (or wider traffic lane) drivers or motorcyclists would drive closer to cyclists and could result in poor driving behaviours with risks of potential conflicts.

4.2 The above alternatives proposals were given serious considerations and were found not to be practicable on road safety terms.

5. CONSULTATION

5.1 Schemes introduced under an ETO invite and must allow for objections to be made for a period of 6 months from the point they come into force. Objections are permitted from anyone affected by the scheme regardless of their status. The comments received during this objection period must be considered by the Council in determining whether any changes should be made to the experiment whilst it is in force and in considering whether to proceed to a permanent TMO following the experiment.

5.2 To ensure that the council has captured the views of the public carefully, the council agreed to implement the measures designed to support cycling on the Brighton Rd under Experimental Traffic Orders (ETOs) from 3 April 2023 which included a 6-month objection period from the start of the ETO operational date. This provided an opportunity for residents and emergency services who may be directly or indirectly affected or others who had concerns about the operation of the experimental orders, to make representations to the council.

5.3 To make the process of submitting a representation as convenient as possible, the council along with the traditional method of being able to write in, also enabled receipt of objections through its 'Get Involved' web platform.

Analysis of responses received from the Experimental Order statutory process.

i. Number of objections :458 (87% of total)
ii. Number of other :12 (11% of total)

Whilst objections were received as part of the statutory process for the Experimental Order, we also received limited support for the experimental scheme as follows.

Number of supports =58 (11% of total)

5.4 The full analysis of responses received from the statutory consultation is included in Appendix A Annex 1.

6. CONTRIBUTION TO THE EXECUTIVE MAYOR OF CROYDON BUSINESS PLAN AND COUNCIL PRIORITIES

6.1 Mayor's Business Plan: The scheme falls in line with outcome 2 of Croydon Executive Mayor's Business Plan: Become a council which listens to, respects and works in partnership with Croydon's diverse communities and businesses.

6.2 Council Priorities: Active travel can contribute to a healthier lifestyle and decrease dependency on fossil fuel-based transport and as a result reduce the level of air pollution. Changing travel behaviour is key to ensuring the borough is greener and less polluting as increasing levels of particulate matter can have a significant impact on the health of those who are vulnerable, especially children and the elderly. The introduction of safer cycling infrastructure can assist in reducing the perception that cycling is dangerous and encourage more people to cycle for short and long trips. As we move forward to tackling climatic challenges promoting and encouraging sustainable travel behaviours are key to rise above these challenges. The Council is working towards a Sustainable Agenda and active travel can make significant inroads in contributing to this agenda.

7. FINANCIAL IMPLICATIONS

7.1 Financial Risk

7.1.1 The scheme improvements outlined in the Recommendations, including upgrading the mandatory cycle lanes and the removal of the wands and defenders, are likely to incur a cost between £100k-£150k. Usually these costs would be covered by the primary funder, in this case Transport for London (TfL). However, as noted above, due to the challenging timescales in preparing technical assessments and this report, there has been insufficient time to properly consult with TfL. This means that for the purposes of this report it should be assumed that Council's budgets will have to cover this cost.

7.1.2 There is also the potential that agreeing changes to the scheme before properly consulting with TfL will lead to the clawback of funding relating to scheme implementation, most likely via a reduction in funding for 2024/25. This would have a material impact on the delivery of a range of projects and schemes, including those in the Reconnected Croydon Levelling Up Fund programme.

7.1.3 In mitigation, this report sets out evidence that the light segregation has been the cause of incidents on the public highway and that the alternative proposals enhance the safety of cyclists and other road users along Brighton Road as far as practicable through creating buffer zones.

7.1.4 In addition, whilst there is a risk of clawback relating to some elements of the implemented scheme, it could be argued that the other components of the scheme are road safety related (raised zebra crossings, widened mandatory cycle lanes and public realm improvements) and should not be subject to any discussions regarding potential clawback.

Comments approved by Nish Narendran (Finance Manager) on behalf of the Director of Finance 27.03.2024.

8. LEGAL IMPLICATIONS

8.1 Variously, Section 6 -8 124 and Part IV of Schedule 9 to the Road Traffic Regulation Act 1984 (as amended) ("RTRA") provides powers to introduce, vary and implement Traffic management Orders. Sections 9-13A RTRA make provision for Experimental Traffic Orders.

8.2 The Local Authorities' Traffic (Procedure) (England and Wales) Regulations 1996 (the 1996 Regulations), establish the procedures for making a traffic regulation order, including an Experimental Traffic Regulation Order. The procedural provisions giving permanent effect to an Experimental Traffic Regulation Order are set out in regulations 22 -24, Schedule 2and Schedule 5 to the 1996 Regulations. This includes details of documentation which the council must deposit and have available for public inspection as part of the process and that any person may object within the period of 6 months from the date an experimental order comes into force, to an order making the experimental order permanent. It is incumbent on the Council to take account of any objections received to making the experimental order permanent, and any representations made during the consultation stage must be reported back to, and considered by, the decision maker before a final decision is made. The Experimental

order process also provides for amendments to be made to such orders within specified parameters under Section 10 of the RTRA, but any such amendments trigger an additional 6-month consultation period from the date the amendment is published. The maximum duration of an experimental order is 18 months (save in circumstances where the Secretary of State exercises his powers to extend to allow for a public inquiry to take place).

8.3 Regulation 23 of the Local Authority Traffic Order which governs making an experimental order permanent, provides that the Council is able to rely on the truncated process for approval of an experimental order being made permanent provided that the requirements of Regulation 23(3) are met and the sole effect of an order ("a permanent order"), is to reproduce and continue in force indefinitely the provisions of an experimental order or of more than one such order ("a relevant experimental order"), whether or not that order has been varied or suspended under section 10(2) of the Road Traffic Regulation Act 1984.

8.4 Regulations 6 (consultation), 7 (notice of proposals) and 8 (objections) of the LATOPR 1996 shall not apply to a permanent order where the requirements specified in regulation 23 (3) have been complied with in relation to each relevant experimental order.

8.5 The regulation 23(3) requirements are that—

(a)the notice of making contained the statements specified in Schedule 5 of the LATOPR.

(b)deposited documents (including the documents referred to in sub-paragraphs (c) and (e)) were kept available for inspection in accordance with Schedule 2 of the LATOPR throughout the whole of the period specified in regulation 22(4).

(c)the deposited documents included a statement of the order making authority's reasons for making the experimental order.

(d)no variation or modification of the experimental order was made more than 12 months after the order was made; and (e)where the experimental order has been modified in accordance with section 10(2) of the RTRA, a statement of the effect of each such modification has been included with the deposited documents.

8.6 In determining whether or not to make a traffic management order, the Council is required, under Regulation 9 of the LATOPR to consider whether it is under a duty under regulation 9(3) to hold a public inquiry before making an order. Even where an inquiry is not mandated, the Council may still choose to hold an inquiry to consider objections before making any other order. The report details officers' consideration of these elements.

8.7 By virtue of section 122(1) of the Road Traffic Regulation Act 1984, the Council must exercise its powers under that Act so as to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians), and the provision of suitable and adequate parking facilities on and off the highway having regard (so far as practicable) to the following matters:

(a) The desirability of securing and maintaining reasonable access to premises.
(b) The effect on the amenities of any locality affected and the importance of regulating and restricting the use of roads by heavy commercial vehicles, so as to preserve or improve the amenities of the areas through which the roads runs.
(c) The national air quality strategy.
(d) The importance of facilitating the passage of public service vehicles and of securing the safety and convenience of persons using or desiring to use such vehicles; and
(e) any other matters appearing to the local authority to be relevant.

8.8 The Council must have proper regard to the matters set out at section122(1) and (2) and specifically document its analysis of all relevant section 122 considerations when reaching any decision. Court of Appeal (in Trail Riders Fellowship v Hampshire County Council [2019] EWCA Civ 1275 (18 July 2019)) examined the relationship between section 122 and a council's traffic management order-making powers and established that the approach should be for the decision-maker to: have in mind the section 122(1) duty; then have regard to factors which may point in favour of imposing a restriction on movement of traffic and pedestrians (including all the factors in section 1); and finally balance the various considerations and come to the appropriate decision

8.9 Section 16 of the Traffic Management Act 2004 imposes 'The Network Management Duty', requiring a local traffic authority to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives:

a) securing the expeditious movement of traffic on the authority's road network; and

b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.

8.10 The action which the authority may take in performing that duty includes, in particular, any action which they consider will contribute to securing:

(a) the more efficient use of their road network; or
(b) the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic on their road network or a road network for which another authority is the traffic authority.

8.11 Section 31 of the Traffic Management Act defines 'traffic' as including pedestrians. The Traffic Management Act 2004, Network Management Duty Guidance explains that the Network Management Duty requires the local traffic authority to consider the movement of all road users: pedestrians and cyclists, as well as motorised vehicles. It also explains that the overall aim of the "expeditious movement of traffic" implies a network that is working efficiently without unnecessary delay to those travelling on it. But the duty is also qualified in terms of practicability and other responsibilities of the authority. This means that the Duty is placed alongside all the other things that an authority has to consider, and it does not take precedence.

8.12 Cycle lanes are usually created from the carriageway and cycle tracks from a footway or footpath. However, cycle facilities physically separated from the main carriageway

are commonly known as and signed as cycle tracks, even if they have been created from the carriageway. Section 65 of the Highways Act 1980 empowers a local highway authority, in or by the side of a public highway, to construct a cycle track as part of the highway, and to alter or remove a cycle track constructed by them under this section.

8.13 Section 4 of the Cycle Tracks Act 1984 (provision of barriers in cycle tracks, etc.) empowers a highway authority to provide and maintain, in any cycle track constituting or comprised in a public highway, such barriers as they think necessary for the purpose of safeguarding persons using the cycle track; and, where a cycle track is adjacent to a public footpath or footway, provide and maintain such works as they think necessary for the purpose of separating, in the interests of safety, persons using the cycle track from those using the footpath or footway. The highway authority may alter or remove any works provided by them under section 4 of the 1984 Act.

8.14 The Greater London Authority Act 1999 ("GLA 1999) places a duty on each London local authority to have regard to the Mayor of London's Transport Strategy when exercising any function. This therefore includes the exercise of its Traffic Management Duty and when deciding whether to make an experimental traffic order permanent.

8.15 Under section 159 of the GLA 1999 Transport for London (TfL) may give financial assistance to a London local authority by way of a grant, loan or other payment, to provide safe, integrated, efficient and economic transport facilities or services to, from or within Greater London.

8.16 In exercising its powers under section 159, TfL may have regard to any financial assistance previously given and the use made by the authority of such assistance. TfL may also impose conditions on any financial assistance it provides, including conditions for repayment in whole or in part in specified circumstances.

8.17 In taking decisions and bringing forward these proposals, regard should be had to the provisions of the Human Rights Act 1998. In particular, the provisions of Article 1, of the First Protocol protection of property and Article 8, right to respect for private and family life. In relation to Article 8, right to respect for private and family life has a broad interpretation and extends to being in a public place if there is a reasonable expectation of privacy there. This right can be interfered with where lawful, necessary and proportionate to protect a number of other concerns including public safety and health. These human rights should be considered. To the extent that it is considered that they are infringed the proposals should only go ahead if it is considered that the infringement is necessary and proportionate.

8.18 When considering the Public Sector Equality Duty (PSED) under Section 149 of the Equality Act 2010, decision makers must evidence consideration of any potential impacts of proposals on groups who share the protected characteristics, before decisions are taken. This is detailed in Section 10 and Appendix 2.

8.19 Section 149 of the Act requires public bodies, in the exercise of its functions, to have due regard to the need to:

- Eliminate unlawful discrimination, harassment, victimisation and any other conduct prohibited by the Act.
- Advance equality of opportunity between people who share a relevant protected. characteristic and those who do not.

Foster good relations between people who share a relevant protected characteristic and people who do not share it.

8.20 Approved by Sandra Herbert, Head of Litigation and Corporate Law, on behalf of the q Director of Legal Services and Monitoring Officer. (02/052024)

9. EQUALITIES IMPLICATIONS

9.1 An Equalities Impact Analysis has been undertaken indicating at this stage no major negative impacts on those protected characteristics (Appendix B).

9.2 Comments approved by Ken Orlukwu, Senior Equalities Officer, on behalf of Helen Reeves, Head of Strategy & Policy on 23 April 2024

10. APPENDICES

Appendix A

Annex 1 Analysis of objections
Annex 2 Detailed technical review of the Experimental Scheme
Annex 3 Road Safety Audits (to be published as a supplement agenda)
Annex 4 List of junctions and parking places for review

Appendix B – Equality Impact Assessment

Appendix A

Annex 1 Analysis of objections

Extract from the consultant's report.

Fig, I show the spread of responses received across the borough.

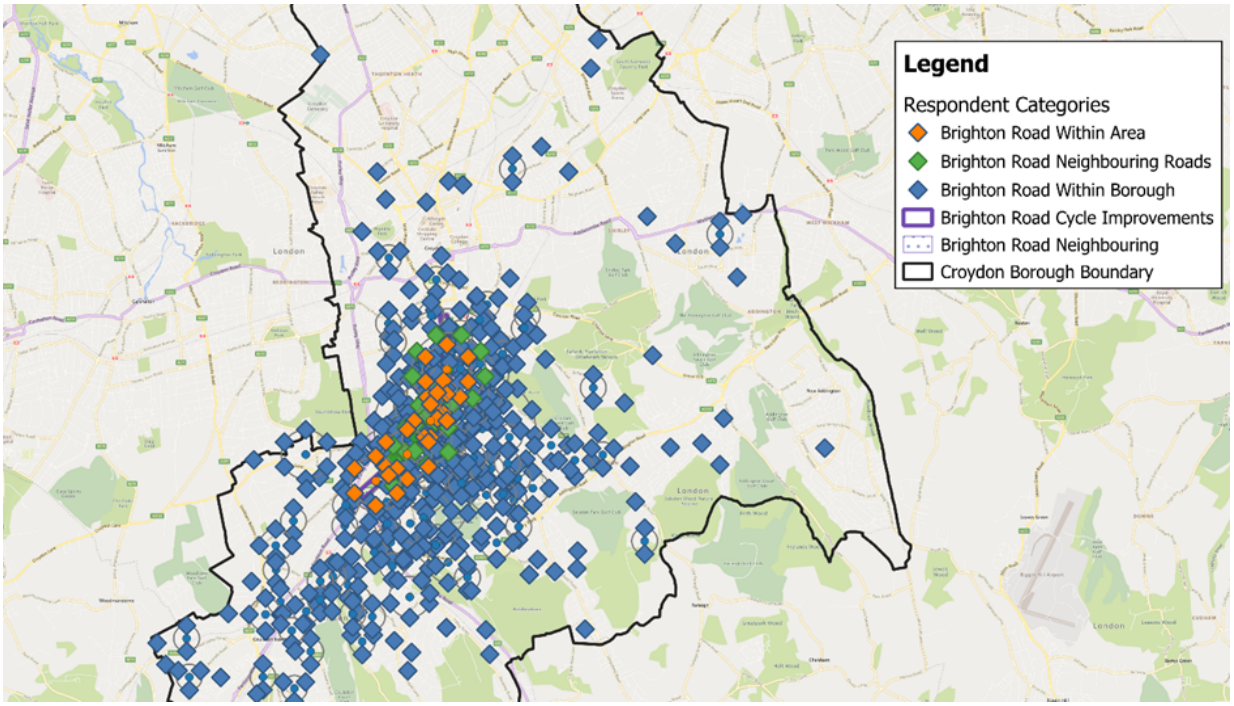
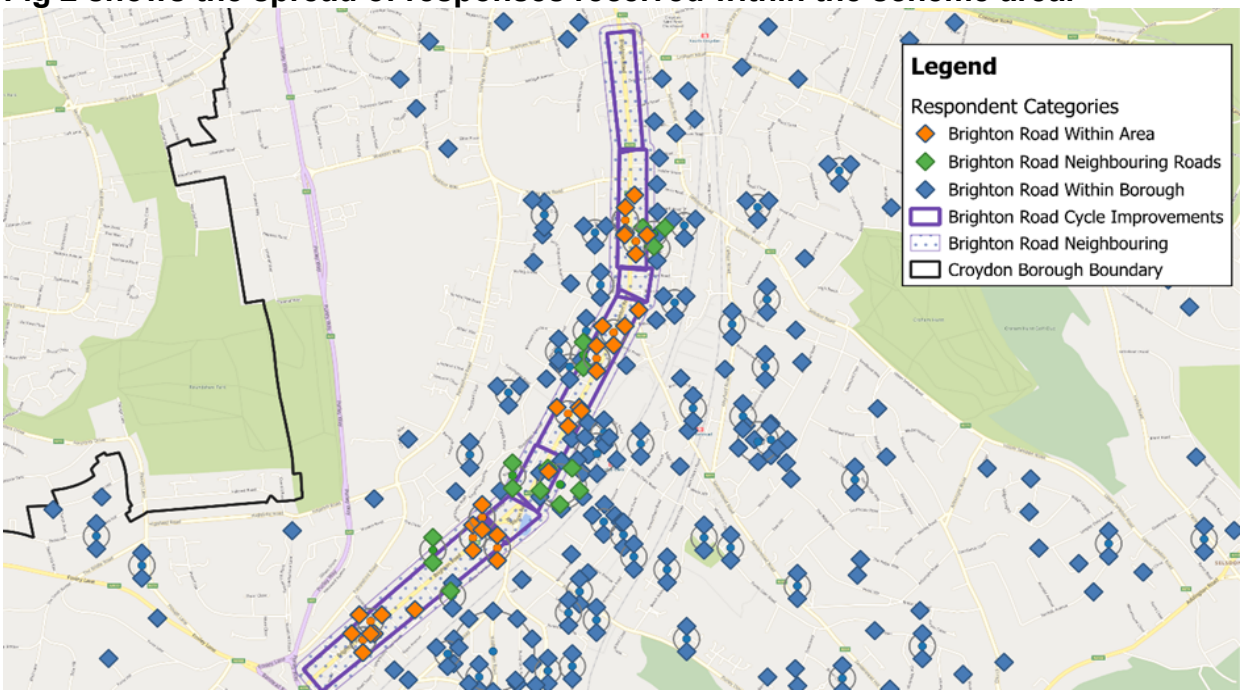


Fig 2 shows the spread of responses received within the scheme area.



Overview of the Statutory consultation: The 6 months objection period started when the experimental orders came into force on the 3rd of April 2023 and ended on 3 Sept 2023 whilst the rest of the experiment continues until the expiry date of 2 October 2024. Objections are permitted from anyone affected by the scheme regardless of their status. The comments received during this objection period must be considered by the Council in determining whether any changes should be made to the experiment whilst it is in force and in considering whether to proceed to a permanent TO following the experiment. The table below outlines in detail the responses received from the following channels.

Table 1 shows the number of responses received via different channels.

Respondent Source	Response received	Duplicate	Blank	Outside of Croydon	Total assessed
Email	3				3
Getinvolved	704	128	37	19	520
Letter	4				4
Participant	1				1
Total	**712**	**128**	**37**	**19**	**528**

Below is the percentage of responses received from the total of 528 assessed.

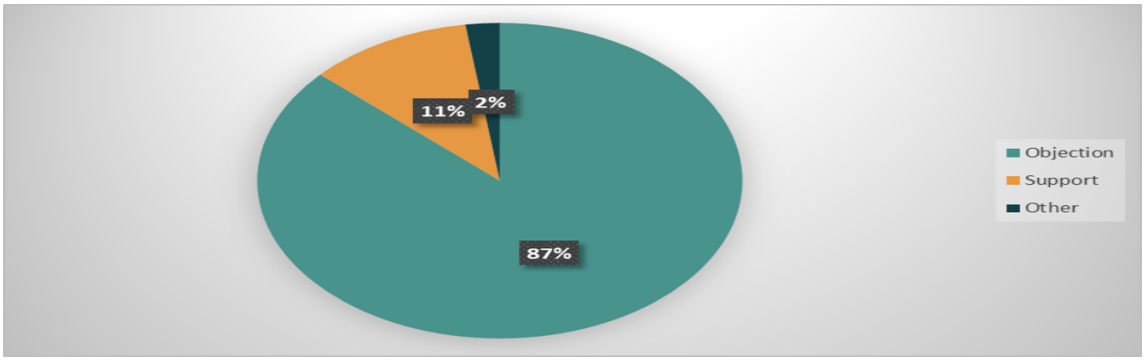


Table 2 shows responses received by location.

Respondent Area	Objection	Support	Other	Total
Within Area	29		1	30
Neighbouring Roads	12	2	1	15
Within Borough	350	51	6	407
No Location Data	67	5	4	76
Grand Total	**458**	**58**	**12**	**528**

Table 3 shows objection themes and officer comments

Summmary of Objection themes and officer comments				
Ref	Objection Themes	% of total	Number	Officer comments
1	**Traffic, congestion and infrastructure management issues** (including increased traffic congestion, cycle infrastructure design/implementation issues, public transport impacts, parking impacts, road surface damage/maintenance, incorrect or poor usage of cycle lanes).	41%	188	The previous road layout before any cycle lane widening would not have provided two traffic lanes in each direction along the entire length.There is an element of vehicular traffic being contained within narrower traffic lanes than in the previous road layout , this containement helps to reduce traffic speeds and improve road safety. To date TfL has not raised any concerns about bus delays. The only junction which has been altered to reduce the approach lanes from 2 to 1 in the northbound direction only is Christchurch Rd/ Brighton Rd. Other signal junctions have retained two lanes on their approaches . The wands create a hindrance to those who need access to their properties and the cycle lanes cannot be swept by mechanical means leaving accumulation of debris.
2	**Safety and accessibility concerns** (including emergency vehicle access, service vehicle access, increased loitering, noise, disturbance and crime, cycle infrastructure design issues/hazards and increased danger due to road layout/traffic flow.	33%	151	Currently, the light segregation hinders emergency services progression in both directions. No evidence of crime, noise and disturbance.Wands have been removed by residents so that vehicular could be gained. There is an on-going cleansing issue as the cycle lanes cannot be machanically swept and the damaged defenders are a hazard to all road users.It is considered that there is no impact on traffic flow as the main road carries large volume of traffic during the peak hours similar to other main roads in this category.
3	**Environmental and health Impacts** (including pollution and emissions concerns, pedestrian movement and quality of life impediments, debris and litter accumulation.	10%	46	No evidence of increasing pollution given no assessments undertaken. In general, strategic corridors like Brighton Rd carry high volume of traffic and additioanlly can have retail frontages and other local amenities including schools which genetrate high pedestrian activities during peak hours. As indicated in the technical assessments, speed tend to drop during the peak hours and rises gradually during the off peak periods. This is true for all main corridors across the capital. Creating a safer environment is paramount for their safety . Cycle lanes cannot be mechanically swept hence the cycle lanes accumulate debris.
4	**Objections to specific aspects of scheme** (such as the removal of central reservations or the implementation of extended parking prohibitions.	9%	41	Removal of central islands at some zebra crossings was necessary to acccomodate widening of cycle lanes. Zebra crossings were raised to reduce approach speeds of vehicles.
5	**Economic and resource allocation issues**(including cost of changes concerns, issues with prioritisation of resources, impact on local businesses).	7%	32	Changes to Brighton Road were funded by TfL and formed part of the council's active travel programme. Modifications were made to introduce off peak loading / unloading at shop frontages, furthermore parking bays were also introduced on side roads to facilitate parking for shoppers.
	Total		**458**	

The supportive comments were categorised into the following themes:

a) **Safety and Security Enhancement** (including appreciation of the segregated cycle paths, positive views on the enhanced protection for cyclists, and support for initiatives that reduce car traffic).
b) **Health and Environmental Benefits** (including the perception that the measures had encouraged healthier forms of travel, the recognition that the measures could reduce air pollution and create a healthier environment and that the measures supported environmentally friendly switches in travel modes).
c) **Support for Active Travel and Sustainable Transportation** (such as support for the promotion of cycling and walking, a desire for an extension of such measures across the borough, and the view that the measures supported a more equitable and accessible transport system).
d) **Approval of Infrastructure Development and Connectivity** (including the view that the measures had created infrastructure that improved the borough's connectivity, and that the measures made the borough more accessible for different modes of transport).
e) **Economic and Social Benefits** (such as positive impacts on local businesses, and more general support for the initiative).

Table 4: Reasons for objections grouped by objection theme, one objection can have more than one reason.

Themes	Objection Sub-Category	Total
Traffic, congestion and infrastructure management issues	Increased traffic congestion	246
	Incorrect or poor usage of cycle lanes	119
	Cycle infrastructure design/implementation issues	99
	Parking impacts	43
	Public transport impacts	39
	Road surface damage/maintenance	35
Safety and Accessibility Concerns	Emergency vehicle access concerns	167
	Cycle infrastructure design issues/hazards	129
	Increased danger due to road layout/traffic flow	54
	Safety concerns	46
	Concerns about visibility of measures	42
	Service vehicle access	38
Environmental and Health Impacts	Pollution and emissions concerns	59
	Pedestrian movement and Quality of Life impediments	34
	Debris and litter accumulation	33
	Aesthetic concerns	20
Objections to specific aspects of scheme or the scheme itself	General Objection	103
	Objections to specific aspects of scheme	26
Economic and Resource Allocation Issues	Cost of changes concerns	52
	Issues with prioritisation of resources	31
	Impact on local businesses	11
Total		**1426**

Within the comments about *increased traffic congestion*, there were a number of respondents who raised concerns about congestion at the Purley Oaks Recycling Centre. Examples of comments relating to this topic were:

- *"There are regularly queues along the length of Brighton Road covered by this scheme.*

- *"Increased congestion at Purley Oaks Recycling Centre, there is now no way for cars to queue up to get in without blocking the main road."*

The second most comment concern raised was related to *emergency vehicle access*. Examples of comments relating to this topic were:

- *"Bollards make it impossible to get out of the way of ambulances".*
- *"Emergency vehicles are pushed into oncoming traffic."*

Cycle infrastructure design issues/hazards was the third most common concern raised. This category included concerns about safety due to the design and layout of the scheme. Examples of comments relating to this topic were:

- *"They are difficult to see and a few nights ago driving in torrential rain I was quite frightened because I knew they were there BUT COULD NOT SEE THEM."*
- *"The bollards and their supports are dangerous to anybody clipping one by accident."*

A summary of the reasons for supporting the scheme is provided.

Table 5: Areas of support raised.

Themes	Objection Sub-Category	Total
Safety and Security Enhancement	Appreciation of segregated/widened cycle path(s)	22
	Enhanced Protection for Cyclists	21
	Promotion of Physical Activity	1
	Support for initiatives that reduce car traffic	6
Economic and Social Benefits	General Support	29
	Positive impacts for local businesses	1
Support for Active Travel and Sustainable Transportation	Advocacy for Cycling and Walking	16
	Desire for Extended Routes	6
	Equity in Transportation Access	1
Approval of Infrastructure Development and Connectivity	Positive Change in Travel Infrastructure	13
Health and Environmental Benefits	Environmental Consciousness	2
	Improved Air Quality	2
Total		**120**

The most common type of support was responses that offered *general support* for the scheme without identifying specific reasons. An *appreciation of segregated/widened cycle path(s),*

support for the *enhanced protection for cyclists,* and *advocacy for cycling and walking* were the next most common reasons for supporting the scheme.
Examples of supportive comments included:

- *"I like the concept of dedicated bike lanes."*
- *"My feedback about the changes that have been made so far is VERY POSITIVE."*
- *"The cycle lane barriers are a great idea, offering greater reassurance to cyclists..."*

Annex 2 Detailed Technical review

Existing Traffic Management Orders

Below is a list of Experimental Orders which are in place to accommodate the Cycle Scheme:

a. THE CROYDON (TRAFFIC MOVEMENT) (NO.22) Experimental ORDER 2023- Brighton Rd cycle scheme changes to bus lane restrictions (Order Ref 2023/40)
b. The Croydon (Prohibition and Restriction of Stopping, Loading and Waiting) and (Free Parking Places) (No.4) Experimental Order 2023 – Brighton Rd cycle scheme changes to waiting & loading restrictions (Order ref 2023/41)
c. The Croydon (On-Street Charged-For Parking Places) (No.4) Experimental Order 2023 – Brighton Rd cycle scheme changes to parking bays (Order Ref 2023/42)

Please note there is no specific Experimental Order for the mandatory cycle lanes. The Department for Transport changed the legislation in 2016 to remove the need for any Traffic Management Orders for mandatory cycle lanes. As such from 2016 double yellow lines "no waiting at any time" restrictions are required to be in place where mandatory cycle lanes are introduced. In general loading restrictions can vary within a section of mandatory cycle lane.

Summary of the technical review supporting the recommendations

Positive aspects of the review

- A Road Safety Audit (Ref RSA454) was carried out in 2021(see Appendix A annex 3) on a set of detailed design proposals for widened mandatory cycle lanes (between 1.8 to 2.0 metres) with no wands and defenders along the scheme length. The Road Safety Audit did not raise any safety concerns with regard to the widened mandatory / advisory cycle lanes and furthermore it did not recommend any light segregation to enhance safety of cyclists. A Road Safety Audit dated 16th April 2024 (see Appendix A annex 3) carried out for an adjusted scheme (with no wands and defenders) did not raise any road safety concerns insofar as a cycle scheme with no wands and defenders are concerned.

- The technical assessments have indicated that speed across the 12-hour period (from 7am to 7pm) ranges from 20 mph to 25 mph north of Capella Court. The speed ranges from 25-30 mph south of Capella Court where flows are lower (due to a lot of traffic diverting to Sanderstead Road) and traffic lanes are more generous. Hence demonstrating that the lower observed speeds can create a condition conducive to cycling using widened cycle lanes (or narrower traffic lanes) without any light segregation. Lower speeds increase drivers' awareness of their environment. Lower traffic speeds can contribute to lower approach speeds to zebra crossings resulting in pedestrians feeling safer to cross, reducing the risk of ""failing to stop incidents" on approaches to zebra crossings, especially in wet conditions.

- In accordance with the Department for Transport Local Transport Note 1/20 a cyclist in motion moves laterally to maintain balance especially at lower speeds and requires a space profile (dynamic kinetic envelope) of approximately 1 metre to safely cycle. The widened cycle lanes along Brighton Road are between 1.8m

to 2 metres wide and adequately wide to enhance safety for cyclists. Additionally, cyclists do not feel intimidated with passing traffic as motorised traffic tend to leave a wider passing gap with the lane in place.

- Traffic speeds along the main corridor in both directions are between 20-30 mph between 7am and 7pm and 30-35 mph between midnight and 6am. Reduction in traffic speeds can contribute to a decrease in severity of personal injury collisions should they occur and reduces the perception of road danger for all road users in particular cyclists and pedestrians.

- Observational research has indicated that Off peak loading and unloading at specific locations where shops exist are working satisfactorily, cyclists are able to overtake parked vehicles during the off-peak periods. (no formal parking bays exist at these locations, as these are not technically viable)

Problems identified:

- The emergency services have raised concerns in writing (email received on 16 January 2024) as they have significant difficulties in driving along the main road in an emergency, the light segregation prevents vehicles from relocating to the kerbside to allow them safe passage.

- The light segregation (wands and defenders) poses an increasing pressure on resources, both in terms of replacement of damaged units and sweeping the cycle lanes on a regular basis. The mechanical sweeper cannot access the cycles lanes and with limited resources it is not feasible to sweep the lanes manually. Therefore, debris collect within the lane which poses a safety risk to cyclists and reduces its usability.

- With limited resources there is no capacity to inspect the wands and defenders on a weekly basis. Monthly inspection takes place, and the wands and defenders can easily be damaged soon after any inspection regime and create a hazard for road users.

- The light segregation, particularly where they are damaged, are hazardous to road users including cyclists, there have been reported incidents to the council including personal injury incidents. The council has received 5 claims since October 2023.

Necessary adjustments to mitigate any road safety risks through the removal of the light segregation:

The removal of the light segregation will necessitate the introduction of buffer zones along the southern section south of Capella Court to the end of the scheme. The speed profile along this stretch is 25-30 mph. The buffer zones will take the form of road markings placed alongside the existing cycle lanes i.e. south of Capella Court to ensure motorised traffic especially heavy goods / buses keep a safe distance from cyclists. This is critical as the removal of the light segregation might encourage poor drivers 'behaviour through driving too close to cyclists in the absence of the light segregation. These adjustments do not require any Traffic management orders, nor do they deviate from current regulations in making ETMO permanent.

The proposed layout could achieve a similar speed profile to the northern section and in so doing achieve a consistent speed profile along the entire stretch of 20-25 mph. A consistent speed profile along the entire stretch would not necessarily impact on journey times as the latter is dependent upon many factors such as time of day, the strategic nature of the road as a thoroughfare with servicing requirements, numerous bus stops to service current bus routes, road layout constraints, number of intersections, interruptions to traffic flow by high pedestrian demand at zebra crossings and at signal controlled crossings and junctions.

Technical review of the 2022 Transport for London Guidance for the use of Traffic Wands with Cycle Infrastructure.

Paragraph 2.3 of the TfL guidance states 5 key considerations for the use of wands on the public highway and these are:

1. **Safety** – risk of injury or damage to persons and properties using the highway owing to the presence of the feature.
2. **Access** - Wands should not restrict access where it is permitted or be positioned in such a way that creates difficulty for intended users of the facilities and adjacent highway.
3. **Equality**- Failure to reasonably perform legal duties pertinent to the Equalities Act – does the provision of wands unreasonably impact on people with protected characteristics defined under the Equalities Act.
4. **Maintenance** – cost of ensuring features perform to the expected level and do not provide contribution to (1) above owing to their condition.
5. **Enforcement** – do the traffic wands enhance or undermine potential enforcement action.

Ref: https://content.tfl.gov.uk/guidance-for-the-use-of-traffic-wand-with cycle-infrastructure.pdf

The 5 key considerations have been assessed against current operation of the light segregation integral to the experimental scheme to have a better understanding of the impact.

Tfl Guidance key considerations		
Considerations	**What needs to be considered**	**Impact on current scheme with wands and defenders (light segragation)**
Safety	Risk of injury or damage to persons and properties using the highway owing to the presence of the feature.	The light segragation has been problematic to both cyclists and motorists
Access	Wands should not restrict access where it is permitted or be positioned in such a way that creates difficulty for intended users of the facilities and adjacent highway.	Emergency services have confirmed in writing that they are having difficulties in responding to emergency calls on blue light running
Equalities	Failure to reasonably perform legal duties pertinent to the Equalities Act – does the provision of wands unreasonably impact on people with protected characteristics defined under the Equalities Act	The provision of wands creates a hindrance to all residential frontages including anyone with protected characteristics who lives on Brighton Road
Maintenance	Cost of ensuring features perform to the expected level and do not provide contribution to (1) above owing to their condition.	The damaged defenders are hazardous to all road users and continue to pose a significant road safety hazard. Furthermore the cycle lanes cannot be mechanically swept and given limited council resources it is not practicable to carry out manual sweeping on a regular basis. Consequently debris in the cycle lane poses a hazard to cyclists and reduces its usability.
Enforcement	do the traffic wands enhance or undermine potential enforcement action.	Servicing / deliveries are taking place illegally and in some cases wands are being removed by residents to gain access to frontages for ease of deliveries.

Traffic monitoring

WSP consultancy was commissioned to carry out an appraisal on the current traffic conditions along the entire length of Brighton Road corridor which is subject to the ETO's during the operation of the ETO's. The data analysed was collected using Automatic Traffic Counters (ATC's) across various sections of the main corridor to obtain a good understanding of the current traffic conditions with the cycle lane and segregation in place. The study has been carried out within the 12 months of the experimental period of 18 months and after settling down period following on from the start of the experiment. The data was collected across 7 ATC sites in May 2023 and across 3 ATC locations in February 2024 to provide a comprehensive set of data and be able to compare between May 2023 and Feb 2024.

A summary of the technical findings is outlined below. The improvements along Brighton Road starts from its junction with Bartlett Road to Purley High St just after the signal junction with Christchurch Road. Brighton Road is considered a high street with shop frontages concentrated at the top half on both sides and residential frontages and other businesses dominating the bottom half. A high street with mixed priorities and competing demands serving the local community and also those who come further afield. Therefore, there is a need to caring out a balancing act to ensure all needs are catered for and that alongside this road safety is not compromised for all those who uses this busy high street.

Technical summary: Speed surveys were carried out at 7 locations between Haling Park Road and Brantwood Road and samples of speed profiles are shown at two locations for both northbound and southbound. All other locations show similar speed profiles. It noted that Brighton Rd has a posted 30 mph speed limit.

Table 1 Brighton Road just north of Haling Park Road Northbound showing speed profile and traffic volume profile blue bar charts) across the 24-hr period

Summary of Cycle Collision monitoring

A brief study of cycle related injury collisions was carried out a) before the scheme was built, b) during construction and c) after implementation. The table below outlines the findings.

Year	Number of collisions	Slight	Serious
2018-2022 before scheme was constructed	18	12	6
2022-2023(during construction)	3	2	1
April 2023 – June 2023 (after construction)	6	5	1

A direct comparison between before and after cannot be made as the scheme has only been introduced since April 2023 and a comparison cannot be made between before data and after data for the same period, i.e. min of 3 years before and 3 years after as in industry normal practice. No conclusion can be drawn from the data. It is only a reported data set.

Table 1a Brighton Road just north of Haling Park Road Northbound showing speed profile and traffic volume profile (blue bar charts) across the 24-hr period.

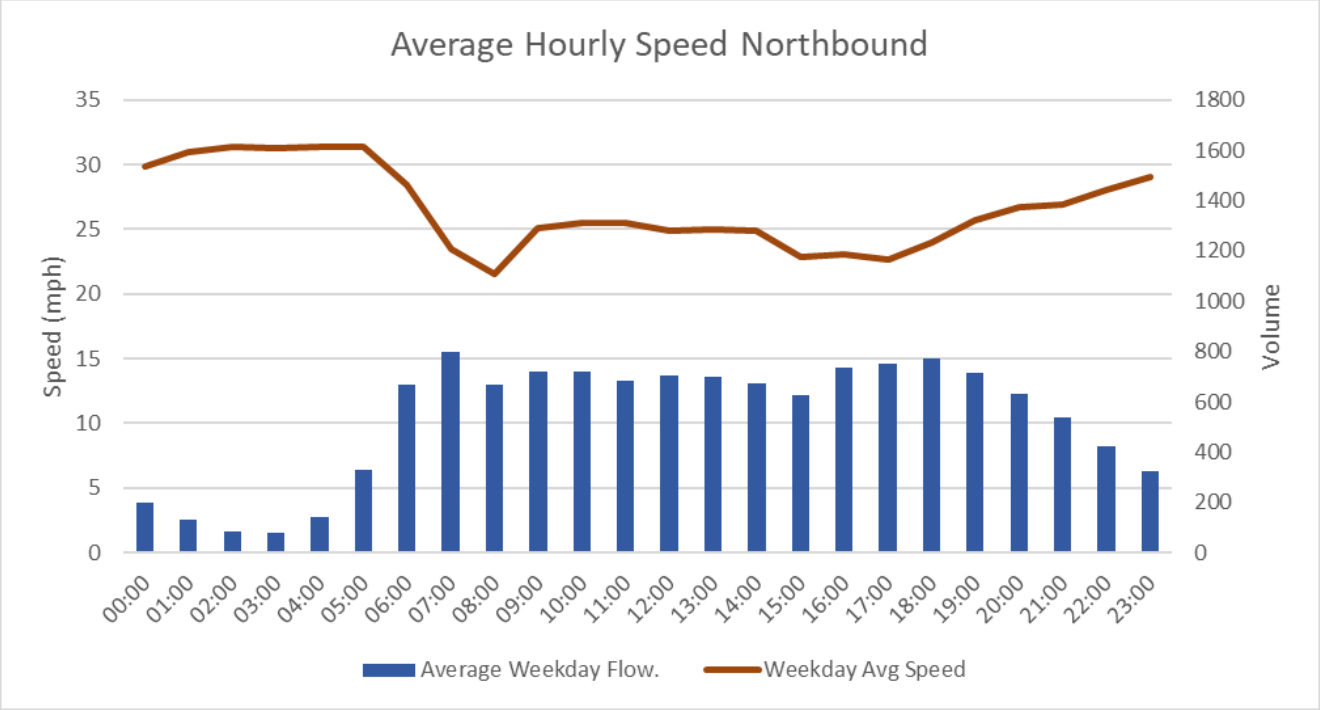


Table 1a Brighton Road just north of Haling Park Road Southbound showing speed profile and traffic volume profile (blue bar charts) across the 24-hr period.

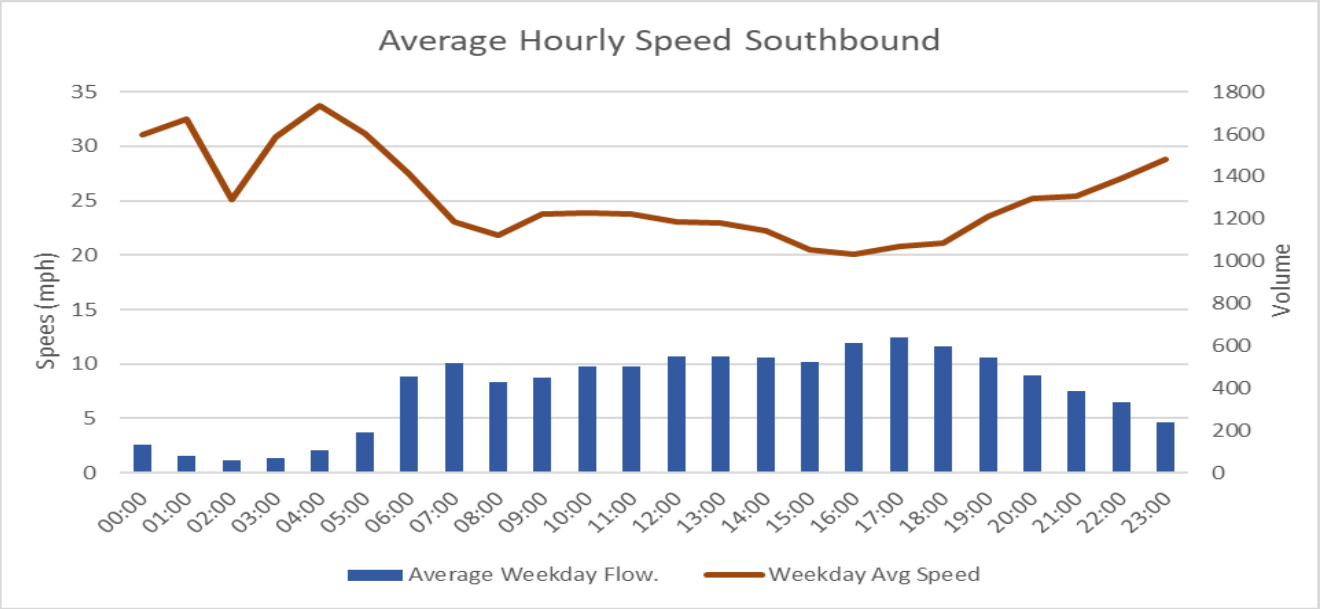


Table 2 Brighton Road just north of Purley Downs Road Northbound showing speed profile and traffic volume profile (blue bar charts) across the 24-hr period (the decrease in traffic volume is due to traffic diverting to Sanderstead Road)

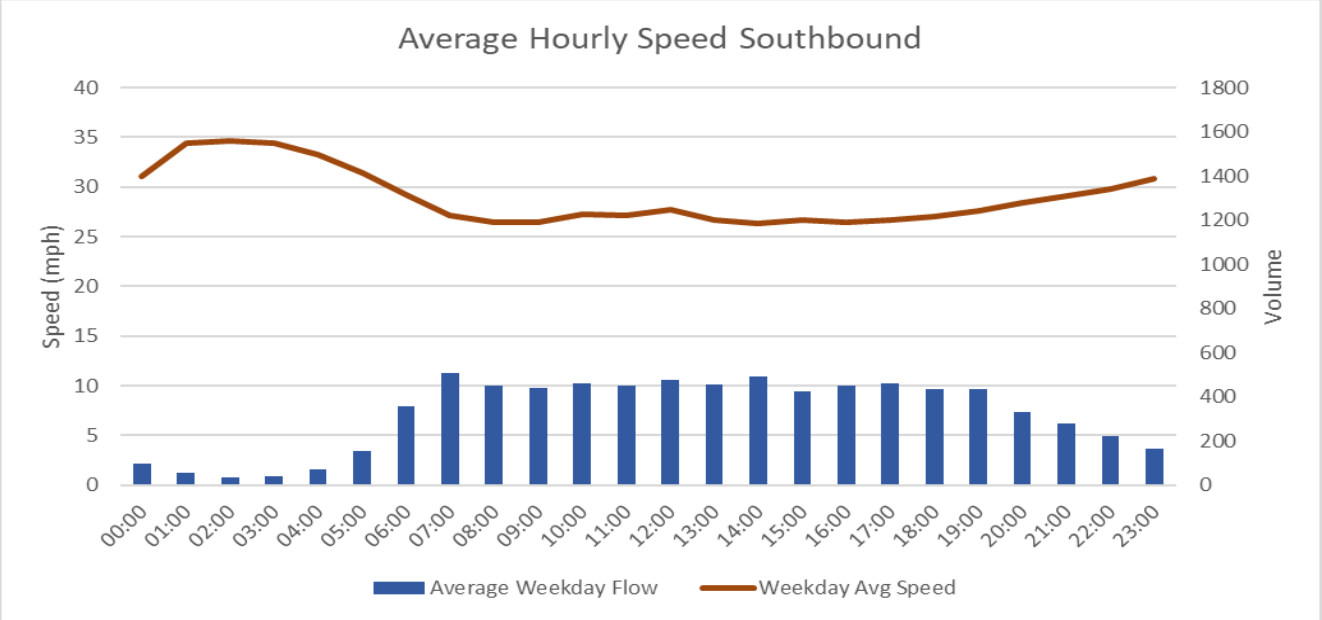
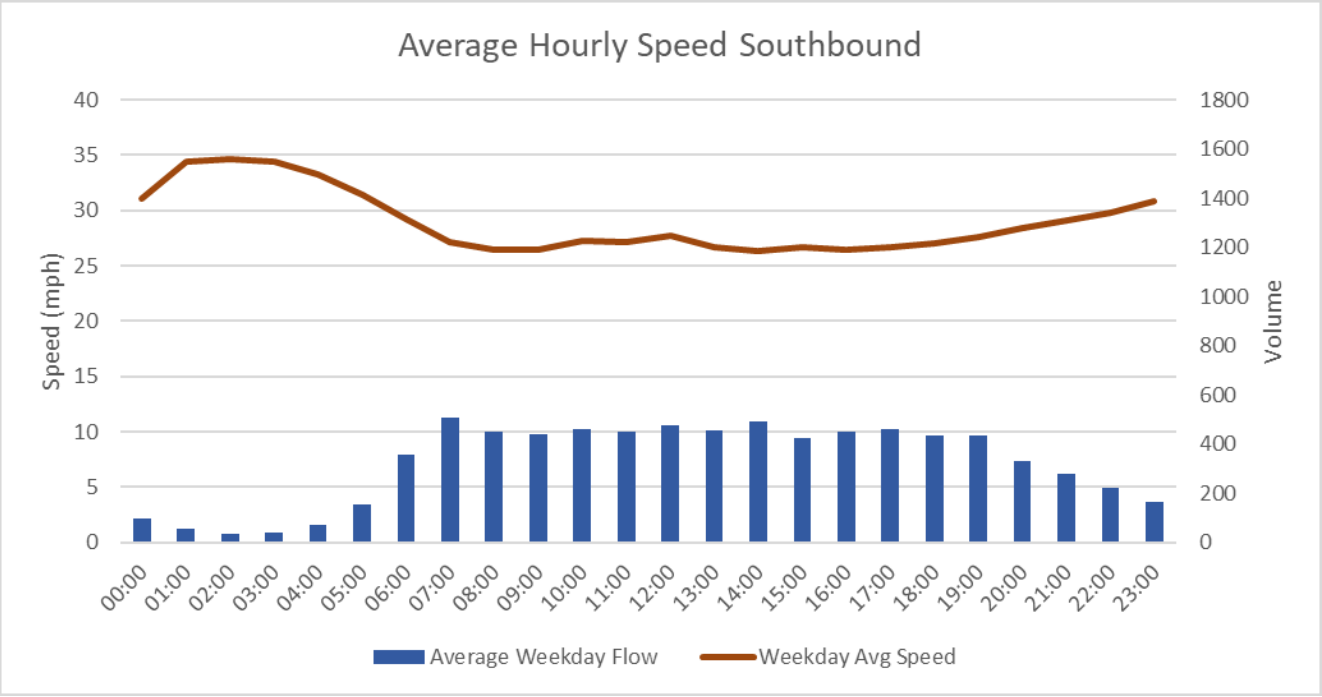


Table 2a Brighton Road just north of Purley Downs Road Southbound showing speed and volume of cycle profile (blue bar charts) across the 24-hr period (the decrease in traffic volume is due to traffic diverting to Sanderstead Road)



Speed summary along the corridor.

- Current peak-hour speeds when volumes along corridor are highest (07:00-08:00) average 24mph.
- North of the Capella Court gyratory, average speeds fluctuate between 20mph to 25mph throughout the day (08:00-19:00), suggesting the consistent impact of congestion and other measures in keeping speeds below the 30mph speed limit.
- South of the Capella Court gyratory –nearest Purley town centre –speeds remain closer to the 30mph speed limit.
- Speeds overnight remain at or above the 30mph speed limit along the entire corridor.

Summary of Traffic Volume analysis

- Daily flows of traffic are upwards of 12,000 per day in both directions north of Sanderstead Road, and nearly 10,000 per day south of the B269 –highlighting the strategic importance of Brighton Road in terms of people and goods movement.
- Average peak-hour flows are 800vph (vehicles per hour) in either direction north of Sanderstead Road, and 600vph in either direction south of the B269 junction.
- HGVs numbers range from 600-800 per day northbound and 400-600 per day southbound. HGVs make up 5-6% of all traffic across the corridor during the day, with this proportion rising to 10-14% overnight.
- The corridor carries 850 London Buses per day (both directions), with 25 buses per hour in each direction throughout the day (07:00-19:00).
- Daily flows for cycles average nearly 200 cycles per day in both directions.
- Directionally this includes 92 cycles per day northbound and 105 cycles per day southbound with the bulk concentrated over the day (07:00-21:00). Hourly cycle flows are low and concentrated in the peaks.
- Motorcyclists account for 400 on average in both directions per day.

Table 3 shows a typical cycle flow profile just north of Purley Road Northbound

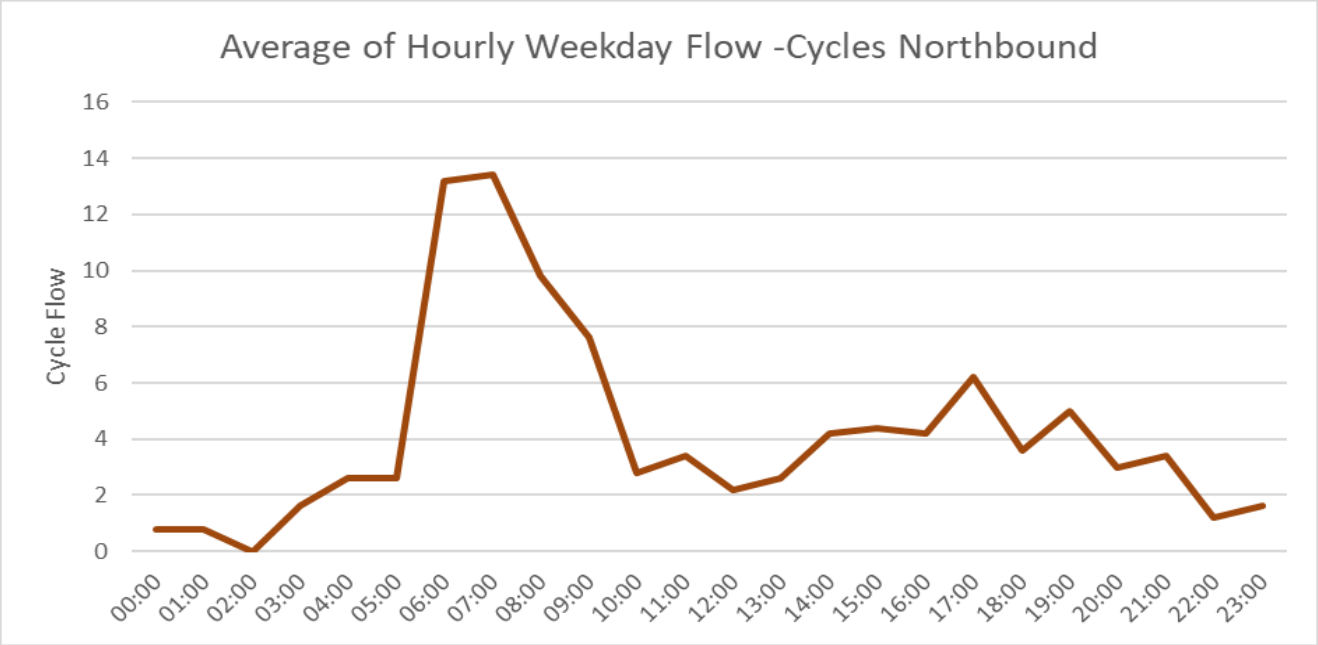
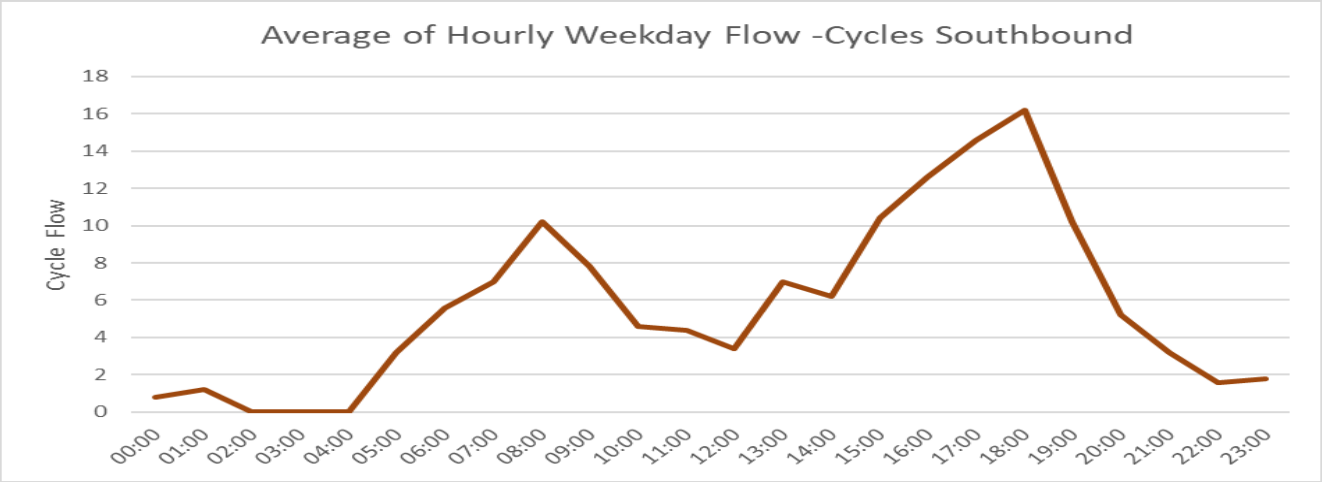


Table 3a shows a typical cycle flow profile just North of Purley Road Southbound



Observational Research

Arcadis Consulting (UK) Ltd was commissioned by the Council to undertake an operational study for the A235 Brighton Road, to observe behaviours of users of the route since the Brighton Road corridor improvements were constructed in April 2023. The locations for the research were specified by the Council and were identified to help gain an understanding of specific traffic behaviour in particular locations. The following table outlines the locations requested and the Council's reasoning behind their analysis.

Video cameras were installed at the locations on Brighton Road as outlined in table 4 of the traffic monitoring annex, to record data on Thursday 8th and Friday 9th February 2024. The footage has been used to observe pedestrian, cyclist and motor vehicle movements at the various locations as required. To represent a neutral weekday, only data from Thursday 8th February was observed. It should be highlighted that the weather was overcast/wet on the day of the survey, and that due to project timescales this was in early February.

The observations are thus caveated that they represent a snapshot in time, and observations on other days/months may bring additional insights. It is understood that the high number of camera locations has been based on various operational aspects of the scheme, the need to have a full appreciation of road user behaviour and interactions between cyclists and motor vehicles, and to justify the removal of the light segregation whilst maintaining safety for cyclists.

Table 4 outlines camera locations and the information required.

Ref	Locations	Information required
1	Along southbound section of the one-way system by Capella Court, near Riddlesdown Rd junction	To observe drivers along the wide one-way section at the gyratory to see how the expanse of road space create speeding opportunities and how they use the lanes
2	Capella Court	To observe left turning movements into Riddlesdown Rd from the gyratory, vehicles turning left into Riddlesdown Rd do so at speed and sweep the large radius and observation will assist in redesign and need to improve safety of cyclists.
3	Along the southbound approach to Christchurch Road signal junction	To observe junction operation, in particular the hooking arrangements for right turning traffic in relation to ahead movements and cycle movements. Ahead movements tend to bypass right turning traffic and enter the cycle area hence risk of collision. The junction was changed from two approach lanes to one.
4	Along Southbound section towards Christchurch Road	To observe queue lengths on southbound approach to junction from a distance. Could also capture northbound movements using same camera
5	Northbound approach at Brighton Rd / Christchurch Rd junction	To observe cycles' interaction with ahead lane and from Purley approach.
6	Northbound approach	To observe lane discipline as they travel northbound away from junction of Christchurch Rd / Brighton Rd
7	Northbound approach	To observe movements approaching the recycling centre by Capella Court and level of congestion if any. Concerns were raised about the congestion that the cycle lanes have caused to this movement.
8	Northbound approach	To observe behaviour at zebra crossings in the vicinity of Capella Court and entrance to the recycling centre
9	Northbound from Biddulph Rd from number 570 Brighton Rd	To observe user behaviours during off peak loading arrangements and look at how cyclists navigate around parked cars
10	Outside number 488 Brighton Rd	To observe user behaviours at this zebra crossing
11	Opposite Toby Carvery along Brig	To observe user behaviours at zebra crossing outside Toby Carvery
12	Northbound approach by Shell Petrol station by Churchill Rd	To observe behaviours at zebra crossing, centre islands were removed when the cycle lanes were designed and built hence we have received complaints, the increase in perceived road danger and cars failing to stop for pedestrians.
13	From Crunden Rd northbound	To observe behaviours at zebra by Mansfield Rd
14	Newark Rd	To observe at zebra crossing by Newark Rd
15	Haling Park Rd	To observe at zebra crossing by Haling Park Rd
16	Newark Churchill Rd	Between The Studio and No 305-309 where we have off peak loading between 10am and 3pm southbound lane, vehicles park in the cycle lane and buses having to overtake and cross the opposing traffic lane as they head south. We need to have evidence of such behaviours.

The high-level findings of the analysis are presented below.

Location	Summary
Zebra crossings along the corridor	In general, on the approach to the identified zebra crossings along the corridor, late braking vehicles or vehicles failing to stop for pedestrians has been identified. Pedestrians repeatedly had to wait for vehicles to stop when standing at a number of crossing points.
Riddlesdown Road junction	Visual observations from video footage demonstrates that vehicles are keeping to the inside of the upstream southbound section of Brighton Road, which gives left turning vehicles a wider turning circle into Riddlesdown Road and appears to allow them to maintain a higher speed during the turning movement. Blocking back from the right-turn give-way onto Brighton Road northbound impacts the Riddlesdown Road junction on select occasions in both AM and PM peak periods.
Southbound lane at Capella Court	The southbound lane on the Capella Court gyratory features speeding and subsequently severe braking events, most likely due to the width of the lane. .
Northbound at Capella Court / Recycle Centre	A general issue of poor lane usage has been identified, including vehicles queueing two abreast when waiting to turn right onto Brighton Road southbound or swerving through the nearside lane designated for vehicles travelling ahead into the recycling centre.
Christchurch Road junction	It may be common for vehicles at this junction to encroach into the cycle lane when passing right turning traffic. There were no observations made of vehicles encroaching into the cycle lane when a cyclist was present. Congestion often forms when buses and Ordinary Goods Vehicles turn right due to their large turning circle.
Loading bays near Biddulph Road	It was observed during video analysis in the off-peak period, that it was common for vehicles to park for a short amount of time in the cycle lane. This caused a handful of cyclists to move out into the carriageway. A number of vehicles, including buses, were observed to be encroaching across the carriageway centre line into the southbound lane. Some vehicles were doing so due to parked cars in the cycle lane. This was particularly prevalent when drivers/passengers of parked cars opened car doors into the carriageway, forcing arriving northbound vehicles to make evasive manoeuvres and use additional carriageway width to continue northbound along Brighton Road. Whilst loading restrictions are in place outside shops just north of Biddulph Road, cars were observed to be stopping within the cycle lane in both AM and PM peak periods. More vehicles were observed to be stopping in the PM peak, meaning cyclists are forced into the carriageway at a time of increased traffic flow.

Appendix A annex 3

Road Safety Audits reports

Appendix A Annex 4

Table 5 list of junctions for review

Ref	Junctions
1	Brighton Rd junction with Haling Park Rd (issue right turners into Haling Park Rd being blocked)
2	Brighton Rd junction with Sanderstead Rd (review current keep clear and investigate a box junction
3	The one-way system along the Capella Court Gyratory leading to the junction with Riddlesdown Road,
5	Brighton Rd and Christchurch Rd signal junction review improve traffic flow.
6	Brighton Rd junction with Whytecliffe Rd opposite Purley War Memorial Hospital (issue include queuing traffic in between stop lines and potential review for a box junction

Parking Places: Introduce 15 new permanent parking places (subject to detailed design) on side roads as per the table below. The operation of these bays will be free of charge to park for the first hour and pay for the second, maximum stay is 2 hours.

Table 6: list of new parking places

Side Roads	Number of parking bays
Biddulph Rd	2
Biddulph Rd	2
Churchill Rd	2
Churchill Rd	2
Napier Rd	2
Crunden Rd	5
Total	**15**

Footway parking :25 metres of parking places on Brighton Rd between Biddulph Rd and number 560 Brighton Rd under permanent traffic orders to accommodate retail servicing. Parking spaces to be placed across both footway and the carriageway (footway parking style) The operation of these bays will be free of charge to park for the first hour and pay for the second, maximum stay is 2 hours.

Relaxation of loading and unloading restrictions to allow for servicing between 10am - 4pm along all residential frontages and outside of shop frontages.

Review the parking places in Allenby Avenue to ease congestion at its junction with Brighton Rd