

Please note Part 2 report is now confidential appendix.

London Borough of Enfield

Portfolio Report

Report of: Richard Eason, Healthy Streets Programme Director

Subject: Bowes Primary Area Quieter Neighbourhood

Cabinet Member: Cllr Caliskan

Executive Director: Sarah Cary

Ward: Bowes

Key Decision: KD 5402

Purpose of Report

1. The purpose of this report is to provide details of the Bowes Primary Area Quieter Neighbourhood (Bowes QN) trial measures introduced by means of Experimental Traffic Orders (ETOs) in Summer 2020. This report invites a decision on making the trial permanent.
2. The Bowes QN project objectives are to:
 - Create healthier streets in the Bowes Primary Area in line with the Healthy Streets Indicators¹ as set out in the Mayor's Transport Strategy².
 - Significantly reduce the volume of through motor traffic on minor roads within the project area.
 - Enable a longer-term increase in levels of walking and cycling within and through the scheme area.
3. This report sets out the activities undertaken during the trial and reviews the outcomes against the project objectives, along with an impact assessment on the pre-published³ range of project monitoring areas of focus.

Proposal(s)

4. That, in order to retain the operation of the Bowes Primary Area Quieter Neighbourhood, it is recommended that the provisions of the following

¹ <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets#on-this-page-3>

² <https://tfl.gov.uk/corporate/about-tfl/the-mayors-transport-strategy>

³ <https://letstalk.enfield.gov.uk/2794/widgets/9476/documents/10683>

experimental traffic orders continue in force by means of permanent orders made under sections 6, 45, 46 and 84(1) of the Road Traffic Regulation Act 1984.

- The Enfield (Prescribed Routes) (No. 4) Experimental Traffic Order 2020,
 - The Enfield (Waiting and Loading Restriction) (No. 185) Experimental Traffic Order 2020
 - The Enfield (20 m.p.h. Speed Limit) (Amendment No. 1) Experimental Traffic Order 2020
 - The Enfield (Waiting and Loading Restriction) (Amendment No. 170) Experimental Traffic Order 2019 (Variation No. 1) Experimental Traffic Order 2020
 - The Enfield (Residents' Parking Places) (Bowes Park) (No. 1) Experimental Traffic Order 2019 (Variation No. 1) Experimental Traffic Order 2020
5. Taking into account the various matters set out in the body of the report, the factors in favour of making the experimental traffic orders permanent outweighs the disbenefits and/or disadvantages. This report sets out how the volume of local traffic has dropped within the area and the number of people walking and cycling in the area has increased.
6. It is further recommended that no Public Inquiry into this project takes place on the basis that there has been significant opportunity for all views to be canvassed during an extended consultation period, including objections to making the orders permanent, and for these views to be presented to the decision-maker for consideration; the proposal does not contain issues which are particularly complex.
7. These recommendations should be considered in the knowledge that:
- A subsequent report is to be produced as soon as possible which explores mitigation measures to improve access for residents with disabilities through potential exemptions and includes consideration of those with caring responsibilities.
 - A subsequent report is produced which recommends the implementation of a School Street at Bowes Primary.
 - The filter on Maidstone Road at its junction with Warwick Road is amended from a bollard to camera controlled filter, increasing permeability for any exemptions, including the emergency services.
 - The filter on Maidstone Road at its junction with Warwick Road is reviewed to determine whether further public realm improvements could be implemented at this location.
 - A review is undertaken of traffic speed and volume on the unclassified roads, monitored as part of this project, that are outside the Bowes QN area. This will inform the potential residential areas of focus for further QN style interventions.

- A post-project monitoring plan is developed to continue to carry out some high-level monitoring in this area of the Borough.
 - A decision on the implementation of a bus gate on Brownlow Road is taken when further monitoring has occurred following the implementation of Haringey's Bounds Green LTN, enabling a full assessment of network impact.
 - Measures to improve an East / West walking and cycling route through the area are investigated.
8. Note that the Leader must make the decision in relation to the proposals in this report on the basis that the Council may reject or accept the future proposals set out in this paragraph 7.

Reason for Proposal(s)

9. A number of experimental traffic orders were made to bring into operation the trial measures implemented in the Bowes QN. To enable the scheme to be retained, further orders need to be made under sections 6, 45, 46 and 84(1) of the Road Traffic Regulation Act 1984. To help inform the decision, the report sets out the progress against project objectives and objections to the scheme being made permanent, as well as details of the monitoring of this trial.
10. The primary objectives of the project were to create healthier streets within the area, significantly reduce the volume of through motor traffic and enable a longer-term increase in walking and cycling levels. With transport accounting for 39% of the Borough emissions, it is essential that this sector plays a key role in moving towards the goal of being a carbon neutral Borough by 2040. In transport terms, no singular project will provide the answer. The Healthy Streets programme consists of a comprehensive range of interventions that collectively will enable more sustainable transport choices. As projects are knitted together and a coherent network of quiet streets and safe walking and cycling infrastructure on primary roads is delivered, longer-term change will be enabled. This report sets out the impacts for consideration of this particular project, considered against this wider context.

Relevance to the Council's Corporate Plan

11. Good homes in well-connected neighbourhoods. This project supports the Council's commitment to encourage people to walk and cycle, which improve connectivity of neighbourhoods.
12. Sustain strong and healthy communities. The project, and the underlying Enfield Healthy Streets Framework⁴, seeks to create healthier streets. This

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https://governance.enfield.gov.uk/documents/s87876/Enfield%20Healthy%20Streets%20Cabinet%20Report%20-%20Final_020621.pdf

approach puts people and their health at the heart of decision making. It is a long-term plan for improving the user experience of streets, enabling everyone to be more active and enjoy the subsequent health benefits.

13. Build our local economy to create a thriving place. Wider investment in the walking & cycling network forms part of the Council's strategy to support our high streets and town centres by providing safe and convenient access to local shops and services.

Background

14. Low traffic neighbourhoods (LTNs) have been in use in London since the 1960s. They are increasingly being used in London and other cities in the UK and beyond to reduce through traffic in residential areas and aim to increase levels of walking and cycling. The Enfield Healthy Streets Framework sets out a range of interventions, including Low Traffic Neighbourhoods, which was endorsed by the Council Cabinet. However, prior to the implementation of the more recent projects, there is a range of historic measures that the Borough has taken to 'filter' unclassified roads to address the problem of excessive motor traffic on roads that were not designed with that function.
15. The Bowes QN project aims to align with the policy context of local, regional and national policies and strategies that seek to respond to the climate emergency and increase levels of physical activity, and post-pandemic to enable a green recovery. The project objectives are to:
 - Create healthier streets in the Bowes Primary Area in line with the Healthy Streets Indicators⁵ as set out in the Mayor's Transport Strategy.
 - Significantly reduce the volume of through motor traffic on minor roads within the project area.
 - Enable a longer-term increase in levels of walking and cycling within and through the scheme area.
16. In September 2020, the current trial was implemented with funding provided by the Department for Transport Emergency Active Travel Fund. Restrictions of the funding were that work must start within four weeks of receiving the allocation and be complete within eight weeks of starting. A copy of the Department for Transport letter setting out the timeframe and consequences for not complying is at Appendix 1. The interventions are shown in Annex 1. Restrictions to through motor traffic were introduced at:
 - a. Maidstone Road at its junction with Warwick Road.
 - b. York Road at its junction with Brownlow Road.
 - c. Palmerston Road at its junction with the A406 North Circular Road.
 - d. Warwick Road, near the junction with Maidstone Road. This restriction is enforced via camera which allows unhindered access for emergency vehicles.
 - e. Palmerston Road at the junction with Kelvin Avenue, via a new traffic island restricting right turns from Palmerston Avenue into Kelvin Avenue.

⁵ <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets#on-this-page-3>

Additional to the above restrictions, a 20mph maximum speed limit was implemented on Beech Road, Elvendon Road, Goring Road, Hardwicke Road and Westbury Road, and parts of Brownlow Road and Queens Road within Enfield.

17. The current trial was introduced using a number of Experimental Traffic Orders (ETOs), which are valid for a maximum of 18 months. The Orders came into effect on 31st July 2020 and expire on 31st Jan 2022. The Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 make provision for orders to be made giving permanent effect to the experimental orders, subject to a number of requirements being met, including
- The notice of making containing the required statements;
 - The deposited documents being available for inspection (allowing for the temporary arrangements made during the Covid-19 pandemic);
 - The deposited documents including a statement of the reason for making the experimental order;
 - No variation or modification of the experimental orders was made more than 12 months after the order was made.
18. The above requirements have been met in this instance.
19. In June 2021, an interim report on the Bowes QN was published⁶ that set out the monitoring that had taken place up to that point. A decision was made that the Bowes QN trial should continue to enable further traffic data collection to take place post the lifting of lockdown. This decision was scrutinised by the Overview and Scrutiny Committee.

Main Considerations for the Council

Alignment with strategic context

20. The Bowes Primary Area QN is delivered in the context of local, regional and national policies and strategies that seek to respond to the climate emergency, reduce traffic congestion and increase levels of physical activity, and post-pandemic response to enable a green recovery.
21. The Climate Change Act, amended in 2019, commits the UK to achieving net zero carbon emissions by 2050. The Government is supporting local authorities to encourage sustainable travel through its Active Travel Fund and the 2020 national walking and cycling strategy, Gear Change. The strategy includes:
- *“That physical inactivity is responsible for one in six UK deaths (equal to smoking) and is estimated to cost the UK £7.4 billion annually”*
 - *“In order to really deliver a step-change in the UK, we must go further, faster. Millions more journeys need to be walked or cycled.”*
 - *“Low-traffic neighbourhoods will be created in many more groups of residential streets.”*

⁶ <https://governance.enfield.gov.uk/ieListDocuments.aspx?CID=107&MID=13728>

22. The Government's Net Zero Strategy: Build Back Greener⁷, released in October 2021, sets out the Government's long-term plan to end the UK's domestic contribution to man-made climate change by 2050. Two transport key commitments in this plan are:

- *"Increase the share of journeys taken by public transport, cycling and walking"*
- *"Invest £2 billion in cycling and walking, building first hundreds, then thousands of miles of segregated cycle lane and more low-traffic neighbourhoods with the aim that half of all journeys in towns and cities will be cycled or walked by 2030."*

23. Additional guidance was published by the Secretary of State for Transport in July 2021⁸ to assist local authorities to meet their statutory network management duty. The guidance sets out high-level principles to help local authorities to manage their roads and identify what actions they should take, bearing in mind the ambitions set out in 'Gear Change'⁹. In particular, the guidance emphasises the need to implement and retain schemes that support a green recovery from the Coronavirus pandemic by encouraging walking and cycling.

24. The 2018 Mayor's Transport Strategy (MTS) sets the overall direction and objectives for transport across London. The MTS, and the supporting evidence¹⁰ for the MTS, includes the following statements:

- *"A target for 80% of all trips to be made on foot, by bicycle or by public transport by 2041."*
- *"74% of car trips could be made by a more sustainable mode, for example cycling, walking or public transport."*
- *"The majority (58%) of car trips are made by London residents in outer London."*
- *"Without further action, the average Londoner will waste 2.5 days a year sitting in congested traffic by 2041. Most congestion is caused by there being more traffic on a day-to-day basis than there is space for – traffic methods can help but ultimately, we need to reduce traffic volumes."*
- *"Even in a densely populated city such as London, some journeys can only reasonably be made by car. But the amount of space that can or should be taken up by private road transport is limited, and the population is growing. As well as prioritising more space-efficient and sustainable modes, research suggests that most people agree that the limited remaining space should be prioritised for 'essential' traffic."*
- *"Poor air quality causes the equivalent of up to 9,400 deaths per year and an annual health cost of £1.4 - £3.7 billion."*
- *"Without further action, London is expected to exceed World Health Organisation levels of PM2.5 until well after 2030."*

25. Quieter Neighbourhoods align closely with the following policies in the MTS:

⁷ <https://www.gov.uk/government/publications/net-zero-strategy>

⁸ <https://www.gov.uk/government/publications/reallocating-road-space-in-response-to-covid-19-statutory-guidance-for-local-authorities/traffic-management-act-2004-network-management-in-response-to-covid-19>

⁹ <https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england>

¹⁰ <https://content.tfl.gov.uk/mts-supporting-evidence-challenges-opportunities.pdf>

- *“Policy 1: The Mayor, through TfL and the boroughs, and working with stakeholders, will reduce Londoners’ dependency on cars in favour of active, efficient and sustainable modes of travel, with the central aim for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041.”*
- *“Policy 2: The Mayor, through TfL and the boroughs, and working with stakeholders, will seek to make London a city where people choose to walk and cycle more often by improving street environments, making it easier for everyone to get around on foot and by cycle, and promoting the benefits of active travel. The Mayor’s aim is that, by 2041, all Londoners do at least the 20 minutes of active travel they need to stay healthy each day.”*
- *“Policy 6: The Mayor, through TfL and the boroughs, and working with stakeholders, will take action to reduce emissions – in particular diesel emissions – from vehicles on London’s streets, to improve air quality and support London reaching compliance with UK and EU legal limits as soon as possible. Measures may include retrofitting vehicles with equipment to reduce emissions, promoting electrification, road charging, the imposition of parking charges/ levies, responsible procurement, the making of traffic restrictions/ regulations and local actions.”*
- *“Policy 10: The Mayor, through TfL and the boroughs, and working with stakeholders, will use the Healthy Streets Approach to deliver coordinated improvements to public transport and streets to provide an attractive whole journey experience that will facilitate mode shift away from the car.”*

26. TfL’s Healthy Streets for London¹¹ document sets out how TfL will put people and their health at the centre of decision making, helping everyone to use cars less and to walk, cycle and use public transport more. The Healthy Streets Approach is the framework underpinning the MTS. Key to the Healthy Streets Approach, are the ten Healthy Streets Indicators¹².

27. The Enfield Healthy Streets Framework was approved by Cabinet in June 2021. The report sets out the framework for developing and delivering Healthy Streets projects which incorporates the Healthy Streets Approach. The framework identifies activities to deliver on local, London and national policy objectives. Low Traffic Neighbourhoods are identified and discussed in Activity 1 (creating a high-quality walking and cycling network) of the Healthy Streets Framework. Annex A¹³ of the framework sets out the following:

- *“Enfield’s share of sustainable transport trips is amongst the lowest in London, with 31% trips walked, <1% cycled and 22% made on public transport. Correspondingly, the proportion of car trips exceeds the London average with 48% of trips made by private vehicles in Enfield, compared to 35% in London.”*

¹¹ <https://content.tfl.gov.uk/healthy-streets-for-london.pdf>

¹² <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets#on-this-page-3>

¹³ https://governance.enfield.gov.uk/documents/s87877/Enfield%20Health%20Streets%20Annex%20A_Additional%20Information.pdf

- *“Findings from the 2016 analysis of Walking Potential conducted by TfL highlights that Enfield is within the top five Boroughs in terms of potentially walkable trips and of cycling potential. The analysis suggested that an additional 315,000 trips could be cycled daily.”*
- *“Between 2008 and 2019, the number of miles driven on Enfield’s roads increased by 313,000,000.”*
- *“While the level of traffic on ‘main roads’ (A and B roads and motorways) has remained relatively constant since the 1990s, the volume of traffic using ‘minor roads’ (C and unclassified roads) has increased substantially since the late 2000s. “*
- *“Continued growth in population is expected to cause further strain on the road and public transport network if the modal split trends remain. “*

28. Government guidance¹⁴ on roads classification states:

- *“The system of roads classification is intended to direct motorists towards the most suitable routes for reaching their destination. It does this by identifying roads that are best suited for traffic.*
- *All UK roads (excluding motorways) fall into the following 4 categories:*
 - *A roads – major roads intended to provide large-scale transport links within or between areas*
 - *B roads – roads intended to connect different areas, and to feed traffic between A roads and smaller roads on the network*
 - *classified unnumbered – smaller roads intended to connect together unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of the network. Similar to ‘minor roads’ on an Ordnance Survey map and sometimes known unofficially as C roads*
 - *unclassified – local roads intended for local traffic. The vast majority (60%) of roads in the UK fall within this category”*

29. The key routes in the vicinity of the Bowes QN are:

- A406 North Circular Road (Bowes Road), part of the Transport for London Road Network
- A109 Bounds Green Road, for which Haringey Council is the traffic and highway authority
- A105 Green Lanes
- B106 Brownlow Road.

30. As set out in the Bowes QN Project Rationale¹⁵ document published on the project page, it is acknowledged that it will take a number of years to deliver the range of infrastructure projects that are necessary to enable longer-term change. An example of longer-term growth in active travel observed is described in a study¹⁶ of LTNs in Waltham Forest. The study concluded that

¹⁴ <https://www.gov.uk/government/publications/guidance-on-road-classification-and-the-primary-route-network/guidance-on-road-classification-and-the-primary-route-network>

¹⁵ <https://letstalk.enfield.gov.uk/2794/widgets/9476/documents/10682>

¹⁶ <https://findingspress.org/article/17128-low-traffic-neighbourhoods-car-use-and-active-travel-evidence-from-the-people-and-places-survey-of-outer-london-active-travel-interventions>

after three years, LTN residents did 115 minutes more walking per week and 20 minutes more cycling per week, compared to the control group.

Monitoring of the trial

31. The monitoring data and outcomes are discussed in further detail in Table 1. The project Monitoring and Evaluation Plan¹⁷ sets out the areas of focus for monitoring. In Table 1 each of the areas have been considered individually and the impacts assessed. Where the monitoring data refers to 'Internal Roads', 'Boundary Roads', and 'Surrounding Roads', they are defined as per Figure 1. Two areas of focus set out in the Monitoring and Evaluation Plan are discussed in later sections within this report; 'Residents, businesses and stakeholder's views', are discussed in paragraphs 113 to 135 and 'equality considerations' are discussed in paragraphs 143 to 169.

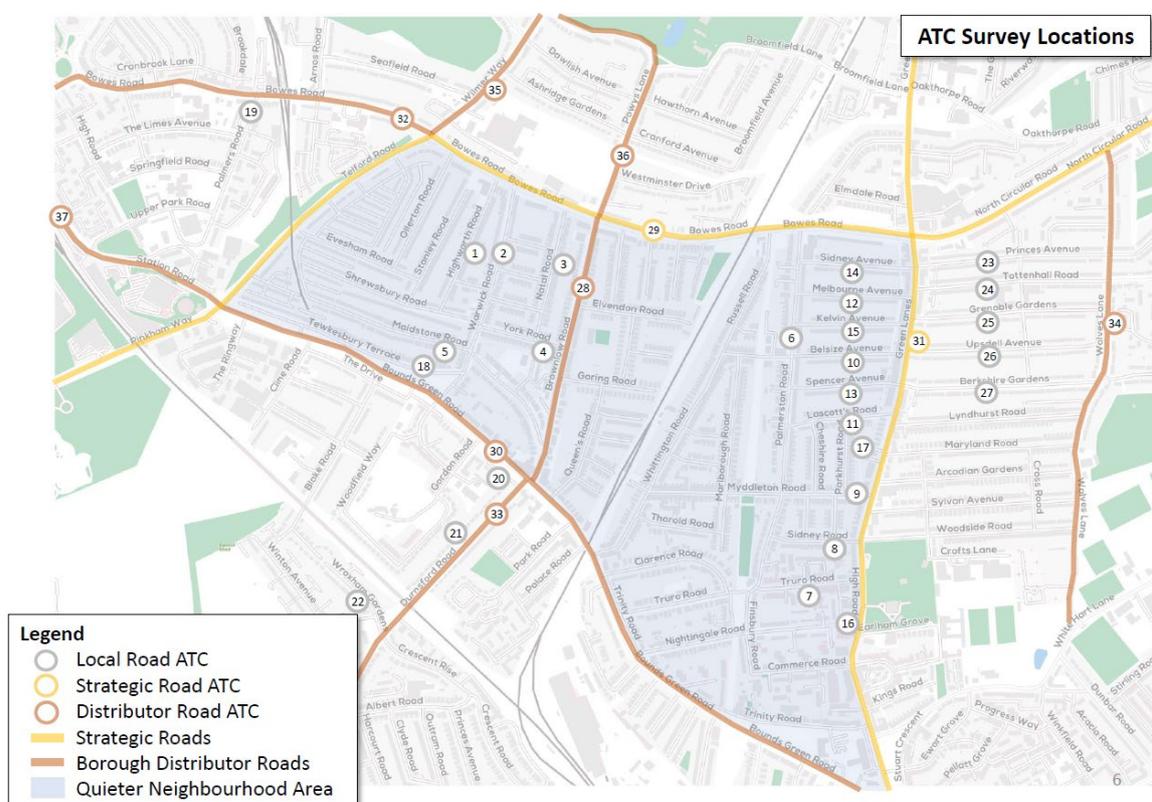


Figure 1: Monitored roads for traffic volumes and speeds and locations of Automatic Traffic Counts (ATCs)

Table 1: Project Monitoring

Traffic volumes	32. Traffic volumes were monitored via Automatic Traffic Counts (ATCs) at locations shown in Figure 1. Pre-implementation and post-implementation data have been compared to inform how the QN has influenced the local and surrounding highway network. Details of the analysis is included in Appendix 2 and Addendum 1.
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¹⁷ <https://letstalk.enfield.gov.uk/2794/widgets/9476/documents/10717>

Local roads (within Bowes QN)

33. Based on 18 surveyed sites, the average reduction in traffic on local roads within the QN is 16%.

The three roads within the QN area with the greatest decrease in the average daily number of vehicles are shown below:

	Pre	Post	Difference	% Difference
Palmerston Road	3075	1186	-1889	-61%
York Road	1925	141	-1784	-93%
Maidstone Road	1111	174	-937	-84%

34. The three roads within the QN area with the greatest increase in the average daily number of vehicles are shown below:

	Pre	Post	Difference	% Difference
Nightingale Road	2612	3459	847	32%
Spencer Avenue	635	1324	690	109%
Truro Road	3184	3695	511	16%

35. Nightingale Road, Spencer Avenue and Truro Road have seen an increase in motor traffic as these are some of the routes which remain available for through traffic. They have remained as through routes largely as a result of the Bowes QN ending at the Borough boundary. However, it is now clear that Haringey Council intends to implement an LTN in the area¹⁸. If they proceed, it is anticipated the volumes on these roads would significantly reduce as the Haringey interventions will complete an area wide approach to preventing through traffic.

36. Highworth Road experienced an increase in traffic volume, but due to an initial low volume of traffic (520 vehicles in 24 hours), the increased volume (613 vehicles in 24 hours) remains low. However, this road includes a school and therefore any increase in traffic is a concern and mitigating measures are recommended. Therefore, the Council is investigating a School Street on Highworth Road as part of a further Borough wide rollout of School Streets.

37. Queens Road was not initially identified for monitoring, however Haringey Council has advised that residents on Queens Road have reported an increase in motor traffic. This is likely due to vehicles bypassing the banned right turn at the Brownlow Road / Bounds Green Road junction.

Strategic / Distributor Roads

¹⁸ <https://www.haringey.gov.uk/parking-roads-and-travel/travel/transport-strategy/low-traffic-neighbourhoods-haringey>

38. Brownlow Road – The Bowes QN project included the opportunity to explore a ‘bus gate’ on Brownlow Road. This feature would restrict private motor vehicles from passing through a particular point on the road, on either a 24/7 or timed basis. Feedback was requested as part of the engagement and consultation. Work has commenced to understand the network impact of declassifying what is currently a Borough distributor road (the impact on wider bus routes needs to be considered, in addition to those bus routes that use Brownlow Road). Having regard to both authorities’ network management duty, it is not possible to conclude this assessment until further monitoring has taken place post the implementation of the Haringey Bounds Green LTN. On this basis, it is recommended that further data collection takes place a minimum of 6 months after the Haringey LTN is fully implemented. Haringey & Enfield Council have agreed to work together on the collection of data to enable a joint process of analysis. It is acknowledged that Brownlow Road is currently showing a 2% traffic increase in traffic volume. Average traffic speeds are 15mph in either direction. It is understood that the uncertainty over the bus gate will be of concern to a number of residents living on Brownlow Road. However, the recommendation is that a decision on the implementation of a bus gate on Brownlow is taken when further monitoring is complete, post the implementation of Haringey’s LTNs, enabling a full assessment of network impact. Enfield Council is looking to install a permanent traffic monitoring site on Brownlow Road to help inform this assessment.

39. Boundary to the QN – Based on the three sites surveyed (A406 Bowes Road, Green Lanes and Bounds Green Road), the average reduction in traffic on strategic / distributor roads on the boundary of the QN is 2%.

40. External to the QN – In addition to the boundary roads, six further strategic / distributor roads around the QN area were surveyed. Based on these sites, the average increase on traffic on strategic / distributor roads outside the QN is 2%.

Local Roads (external to the QN)

41. Woodfield Way & Rhys Avenue – these roads experienced an increase in traffic volumes. Wroxham Gardens experienced a decrease. Haringey Council is investigating implementing an LTN in the area. If they proceed, it is anticipated the volumes on these roads would significantly reduce.

42. Palmers Road - experienced an increase in traffic volumes. The Council proposes to carry out further investigation in this area.

	<p>43. Ladder roads between Green Lanes and Wolves Lane (Princes Avenue to Berkshire Gardens) – data from 2016 for Grenoble and Berkshire Gardens has been compared to the measured data in September 2021. There has been a slight reduction in flows on these roads since 2016. The average 24 hour traffic volume on Grenoble Gardens in 2016 was 1906 vehicles, compared to 1845 vehicles in September 2021. The corresponding flows in Berkshire Gardens is 1838 and 1683 vehicles.</p> <p><i>Limitations of data</i></p> <p>44. The reported changes in the network should not be considered as only influenced by the Bowes QN. This project has been implemented during the pandemic which has created changes in travel patterns. It is not known what longer-term impacts the pandemic will have. Pre-implementation surveys were undertaken in July 2020 while some lockdown restrictions were in place and some schools were closed. Post-implementation surveys were undertaken in September 2021. The analysis includes a ‘sensitivity test’ where a factor has been applied to mitigate the impacts of Covid on the data. Details of the analysis methodology is in Appendix 2 and Addendum 1.</p> <p>45. Acknowledging the limitations in the data, the unprecedented impacts of the pandemic and that Haringey are exploring further mitigation measures, the impacts associated with traffic volume do not, in isolation, suggest that the trial should not be made permanent.</p>
Vehicle speeds	<p>46. Vehicle speeds were monitored via Automatic Traffic Counts (ATCs). Details of the analysis methodology and results is in Appendix 2.</p> <p><i>Local roads (within Bowes QN)</i></p> <p>47. Across the 18 surveyed locations, vehicle speeds have reduced by an average of 1mph.</p> <p><i>Strategic / Distributor Roads</i></p> <p>48. Across the three surveyed locations of the boundary roads (A406 Bowes Road, Green Lanes and Bounds Green Road), vehicle speeds have reduced by an average of 4mph.</p> <p>49. Across the six surveyed locations of the surrounding strategic / distributor roads, vehicle speeds have changed by less than 1mph over the 24 hour period.</p> <p><i>Local Roads (external to the QN)</i></p> <p>50. Across the four surveyed locations of the surrounding local roads, vehicle speeds have increased by an average 1 mph.</p> <p>51. The observed changes in traffic speed before and after the trial do not suggest that the trial should not be made permanent.</p>

<p>Bus journey times</p>	<p>52. Bus journey times in the area have been analysed using iBus data supplied by TfL. Pre-scheme journey times are an average journey between November 2019 and February 2020, before travel restrictions were introduced due to Covid-19. Post-scheme journey times are an average journey between September and October 2021 after the pandemic restrictions were lifted (29 July 2021), and following the summer holidays.</p> <p>53. Details of the analysis and methodology is in Appendix 2 and Addendum 1.</p> <p>54. Overall, bus journey times have generally improved. In the AM peak, 60% of trips in the area have shown a decrease in journey time. In the PM peak, 85% of the trips in the area have shown a decrease in journey time. In the AM peak hour, bus journey times were between 39 seconds faster and 74 seconds slower. In the PM peak hour, bus journey times were between 151 seconds faster and 41 seconds slower. As with traffic volumes, there may be a range of factors, beyond the Bowes QN project, that are contributing to the overall results.</p> <p>55. The three journeys that have increased by over 60 seconds have been analysed in more detail:</p> <ul style="list-style-type: none"> • 184 northbound in the AM peak (74 seconds) • 221 westbound in the AM peak (63 seconds) • 232 eastbound in the AM peak (61 seconds) <p>56. All routes northbound on Brownlow Road have increased by some degree, with the most affected being the 184 northbound in the AM peak, which is showing an increase in journey time of 74 seconds.</p> <p>57. The increase for the 221 westbound in the AM peak (63 seconds) is mainly a result of some delays experienced on Bounds Green Road between the stops at Nightingale Road and Palace Road.</p> <p>58. The main source of delay in the 232 eastbound was identified on Bowes Road east of Telford Road between the stops at New Southgate Station and Telford Road.</p> <p>59. The impacts on bus journey times identified above, when considered in isolation, are not considered to be significant enough to not make the trial permanent.</p> <p>60. Enfield has an ongoing work programme to work with TfL to identify measures to improve the operation of buses. As part of this ongoing programme, Enfield has been working to develop a proposal to improve journey times and reliability on Green Lanes. This work was underway prior to the Covid-19 pandemic and the implementation of the Bowes QN. In October</p>
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	<p>2021, plans to extend the operational hours of the northbound bus lanes were published. More information can be found on the Enfield Let's Talk website¹⁹.</p> <p>61. The Council will continue to work with TfL to identify ways in which bus journey times can be improved across the Borough.</p>
Pedestrians	<p>62. A sample of three locations were monitored for pedestrian volumes in July 2019 and July 2021. These locations were:</p> <ul style="list-style-type: none"> • Warwick Road • Brownlow Road • Palmerston Road <p>63. Across the three sites, pedestrian volumes increased by an average of 14%. Warwick Road and Brownlow Road increased by 26% and 16% respectively, and Palmerston Road decreased by 9%.</p> <p>64. Further details are included in Appendix 2.</p> <p>65. The pandemic may have impacted on walking levels, and whilst there are limitations to the data, this overall increase in pedestrian activity appears to be a positive trend.</p>
Cycling	<p>66. Cycle volumes were monitored via Automatic Traffic Counts (ATCs).</p> <p>67. <i>Local roads (within Bowes QN)</i> Across the surveyed locations, the results show an overall increase in cycle activity by around 20%. Significant increases were observed on Maidstone Road and York Road, with 81 and 61 more cycles recorded in an average 24 hour period, up from pre implementation volumes of less than 5 on each road.</p> <p><i>Strategic / Distributor Roads</i></p> <p>68. Brownlow Road observed a decrease of 29 fewer cycles recorded in an average 24 hour period, down from a pre implementation volume of 203.</p> <p>69. The only boundary road where before and after data is available is Bounds Green Road which has seen a reduction of around 40%, down from a pre implementation volume average 24 hour volume of 129.</p> <p>70. The reductions on Brownlow Road and Bounds Green Road are likely indicators that cyclists are choosing to reassign to the quieter roads within the QN.</p>

¹⁹ <https://letstalk.enfield.gov.uk/bus-priority-scheme>

71. Across the surveyed locations of other strategic / distributor roads, excluding the boundary roads, the results show an overall increase in cycle activity by around 16%.

Local Roads (external to the QN)

72. Across the surveyed locations, the results show Palmers Road has increased significantly, with small reductions on two of the sites and a larger reduction on Wroxham Road.

73. Further details of cycle volumes by road and the analysis methodology are in Appendix 2.

Cycle parking

74. Occupancy data from cycle hangars within the Bowes QN area show that demand for cycle parking in the area is higher than the Enfield average. This is shown in Figure 2. Demand for cycle parking in the QN area is also high, as shown in Figure 3. Whilst these trends cannot be directly attributable to the QN, they indicate strong demand for cycle parking in the area.

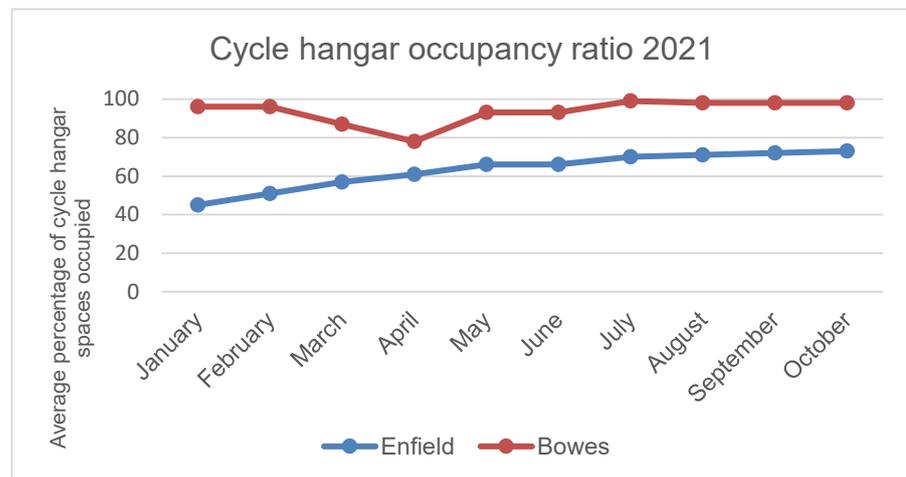


Figure 2: Cycle hanger occupancy in the Bowes QN and Enfield

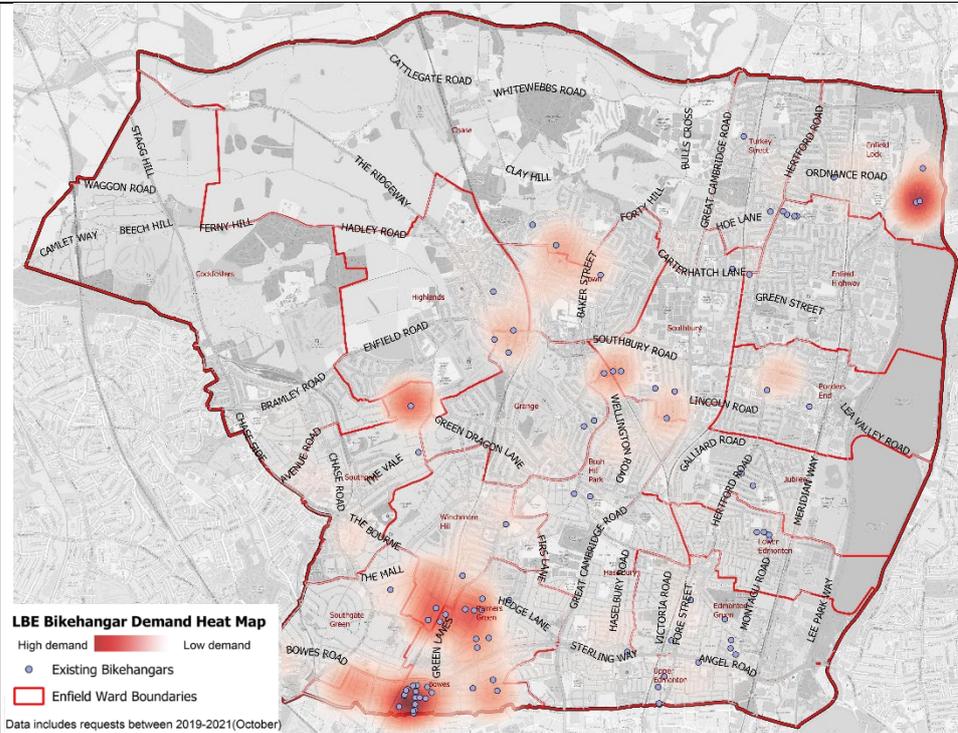


Figure 3 Bike hangar demand heat map of requests between January 2019 and October 2021

75. One of the aims of projects such as this is to create a network of streets that when connected together will enable the development of safe corridors for walking and cycling on quiet streets. Where space allows, and as part of the development of a wider network, this approach can be complemented by segregated cycling facilities on primary roads. It should be acknowledged that changing travel behaviours is part of a longer-term programme that the Council is pursuing. The data suggests the start of a trend in the right direction.

76. The Council is investigating options to improve the environment for cycle movements across Brownlow Road. This aims to provide greater connectivity to Bowes Park station, the Myddelton Road shops and Palmerston Road which leads to a safe cycle crossing at the A406. Implementation will be subject to funding, approvals and further community engagement.

Emergency services

London Ambulance Service (LAS)

77. Since the implementation of the trial in August 2020, there have been three incidents reported by the LAS. The incidents involved a delay to an ambulance travelling east-west through the project area as a result of a filter. It is unclear how the delayed crew were navigating to and from the scene. Any patient impacts are not divulged by the LAS when reporting delays. The LAS were asked to provide input into this report. This representation has been included at Annex 2. This response has been provided by a LAS representative who was not involved in the project in the earlier stages and was

therefore not involved in the conversations that the Council had with local LAS representatives and the consultation that took place on the designs prior to the implementation. The Council have clarified this point in its response to the LAS at Annex 3.

78. As part of the implementation of the project, the Council has invested in technological solutions to ensure that updates are effectively made to commercially available navigation solutions such as Google, TomTom and Bing. This enables the emergency services to update their own navigational systems as they deem necessary. The Council continues to work with the emergency services to gain more insight into the navigational approach that crews are taking if any delays occur, to help determine whether there are any further steps that can be taken to minimise any issues. The solution provider is now working with TfL and the large commercial providers to examine how changes can be made to support emergency services more effectively by providing navigation data which understands exemptions for emergency vehicles. This is a highly technical and developing market which will require a lot of development over time.

79. To improve permeability for east-west movements within the QN area, the Council will investigate converting the fixed modal filter at Maidstone Road to a camera enforced filter. This location has been selected as it will also respond to feedback received through the EQIA process that this road is used by Blue Badge holders to facilitate pick up and drop off at Bounds Green tube station.

London Fire Brigade (LFB)

80. LFB has informed the Council that the Bowes QN has had little or no effect on their response as a service and has not reported any issues regarding the QN. The Council has not received any objections from the LFB.

Metropolitan Police Service (MPS)

81. The MPS has not raised any incidents of delayed response due to this project. The Council has not received any objections from the MPS. However, in preparing for this report the MPS were contacted, informed that the report was been produced, and were offered an opportunity to provide comment. The MPS did not provide any specific comments other than confirmation that the project has not directly affected their core policing responsibilities. Considerations on crime are addressed in the following section.

82. It should be noted that during the trial, where removeable bollards were used, these have been upgraded to a more advanced locking mechanism that the LFB carry keys for. The LAS and MPS have made their own operational decisions to not carry keys to removable bollards.

	<p>83. The Council remain committed to working with the emergency services and through regular dialogue will continue to be responsive to any issues raised. On the basis of no objections from the emergency services, there is no suggestion that the scheme should not be made permanent.</p>
Crime and anti-social behaviour	<p>84. Public mappable Police data has been reviewed in the Bowes Primary Area QN and Bowes ward. The 2019/2020 period (September 2019 to August 2020) has been compared to the 2020/2021 period (September 2020 to August 2021). There has been a 2% decline overall in offence numbers since implementation of the QN. Offences across the Bowes and Southgate Green wards have increased by an average of 7% within the same time period.</p> <p>85. Further details, including a breakdown of offences by crime category, is included in Appendix 3.</p>
Noise	<p>86. To understand the impact on noise the Council employed noise specialist consultants. The noise model used in the assessment is dependent on traffic data, which to the extent possible, took into the account of the Covid-19 pandemic. The assessment is primarily a study focussed on the change in noise levels associated with the project (as opposed to absolute levels), which is not significantly impacted by total traffic volumes.</p> <p>87. The scale of change in noise levels are categorised based on industry guidance to determine perceptible differences. The assessment predicts that the project has led to moderate to major decreases in noise levels along York Road and Maidstone Road, as well as moderate decreases on Palmerston Road during the night period. The scheme is predicted to have increased noise levels moderately along Spencer Avenue and on occasion Sidney Road and Woodfield Way. These impacts are likely to be mitigated if Haringey proceed with their Bounds Green LTN. Although the project led to small changes to noise levels on other roads, the scale of the changes are unlikely to be perceptible, are within the margin of error and may not be directly attributable to the project.</p> <p>88. The noise assessment report is included in Appendix 4.</p>
Air quality	<p>89. Nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}) are reported as these are the main pollutants of concern and road transport contributes to a significant proportion of these pollutants.</p> <p>90. Local air quality monitoring by Enfield Council includes one automatic station within the project area adjacent to the A406</p>

North Circular Road by Bowes Primary School, and diffusion tubes located on Brownlow Road and Warwick Road. Additionally, Haringey Council has a diffusion tube adjacent to the project area at Bounds Green Primary School. Monitoring is long-term, and national objectives are an annual value, due to the natural variation in air quality meaning measurements from a short period of time cannot be directly compared to others. NO₂ concentrations were below national objectives at all locations in 2019, and PM₁₀ concentrations as measured at Bowes Primary School, have been well below objectives since 2014. PM_{2.5} is not measured at this location.

Air quality assessment

91. An air quality assessment was carried out by an external agency. Their report was conducted using measured traffic data and calculated changes in traffic attributable to the project to estimate the associated impacts on local air quality.
92. The assessment takes into account the volume and behaviour of traffic which directly impacts air quality, including vehicle speeds, time of the day, fleet composition (e.g. light vehicles/cars through to heavy vehicles/trucks), vehicle emissions and junctions (due to congestion and the combined effect of several road links).
93. The assessment shows that the project led to slight decreases in nitrogen dioxide concentrations on some roads and some slight increases in concentrations on some roads. However, based on industry standard guidance, the scale of these changes is associated with negligible impact at all locations, with the exception of one location with a slight adverse impact at the junction of Truro Road and the A105 High Road in Haringey, and one location at the intersection of the A105 Green Lanes and the A406 North Circular Road with a moderate adverse impact. The latter location is however associated with uncertainties in the model, as addressed in Appendix 5 paragraphs A4.8 and A4.9.
94. The trends of PM₁₀ and PM_{2.5} concentrations are similar to those of nitrogen dioxide, but because concentrations are influenced by a wider range of sources, the changes observed due to the project are smaller. The predicted changes in annual mean PM₁₀ and PM_{2.5} concentrations are associated with negligible impacts at all locations in the study area.
95. Reasonable assumptions were made in adjusting the data for the air quality assessment, including for impacts of Covid-19 on the traffic data. Sensitivity testing, which tested the boundaries of the Covid-19 assumptions, predicted negligible impacts for all PM₁₀ and PM_{2.5} concentrations, and for all nitrogen dioxide concentrations with the exception of one location on the A105 Green Lanes near its junction with the

A406 North Circular Road, where a moderate adverse impact is predicted, and one location on York Road, where a slight beneficial impact is predicted.

96. The full report on air quality is included in Appendix 5.

97. The project is set within the context of a wider programme of work and takes a long-term view of improving air quality. The assessment does not indicate that the project is having a broad negative impact on air quality. This is relevant to note as the perception of a very negative impact on air quality has been a particular cause for concern of residents.

Update following air quality assessment report

98. The assessment report included in Appendix 5 was carried out informed by data collected in November 2020. Council has sought a review of the traffic data collected in September 2021 against the November 2020 traffic data.

99. The outcome of this review is that at locations where the traffic flows collected in 2021 are lower than that collected post-implementation in 2020, the conclusions of the original assessment still stand. In some cases, the positive impacts of the scheme may be increased. At locations where traffic flows increased in 2021, in comparison with the post-scheme data collected in 2020, at most locations large increases would be required to trigger a change from negligible to 'slight adverse'. On this basis, conclusions at all locations were considered unlikely or very unlikely to be affected by the difference in traffic flows, except for one location on Durnsford Road. At this location, there is potential for a slight adverse impact but this would not change the overall conclusion that the scheme does not have a significant effect on air quality.

100. One of the borough's permanent monitoring sites is located at Bowes Primary. Average monthly readings for NO₂ are presented in Figure 4. The horizontal line shows the annual mean objective set by the government²⁰. The objective is a 'standard' below which the pollutant concentration, averaged over a year, shall be.

²⁰ Objectives for use by local authorities are prescribed within the Air Quality (England) Regulations (2000) and the Air Quality (England) (Amendment) Regulations (2002).

	<p style="text-align: center;">NO₂ average monthly concentrations Bowes Primary Automatic Station (A406)</p> <p style="text-align: center;">Figure 4 NO₂ average monthly concentrations at Bowes Primary monitoring station 2019-2021, and the annual mean objective</p> <p>101. Figures 3 shows that since the implementation of the Bowes QN, concentrations of NO₂ at the Bowes Primary monitoring station have been below the annual mean objective. Further details are included in Annex 4 which presents NO₂ and PM₁₀ concentrations at Bowes Primary and diffusion tube data for Brownlow Road and Warwick Road.</p>
Road collisions	<p>102. Personal injury collision data is collected when the police attend an incident; this data is then collated by Transport for London and passed on to boroughs six monthly. The data available at the time of report preparation is up to 30 June 2021.</p> <p>103. Typically for area wide schemes such as a Low Traffic Neighbourhood (LTN), personal injury collision data for the most recent three-year period is considered adequate to identify collision patterns that engineering measures could address.</p> <p>104. A personal injury collision search for the three-year period prior to implementation shows that there were 28 personal injury collisions within the Bowes Primary Area QN, excluding those on the A406 and Green Lanes²¹. Of these 28 collisions, 24 involved slight injuries and 4 serious injuries.</p> <p>105. If the A406 and Green Lanes are included in the analysis, the number of personal injury collisions increases to 119 during the same three-year period, with particular clusters at the A406/Green Lanes and A406/Bowes Road junctions. Of these 119 collisions, 100 involved slight injuries, 17 serious injuries and 2 fatal injuries.</p>

²¹ The table and plot in Appendix 6 show 30 collisions, two of which actually occurred on the A406 (one fatal and one slight).

	<p>106. A personal injury collision search has been completed post-implementation. Data is available up to 30 June 2021 providing 10 months of data. The results of this search indicate there have been 9 personal injury collisions within the QN area post implementation (excluding the A406 and Green Lanes). Of these collisions, eight involved slight and one involved serious. 40 personal injury collisions are recorded if those on the A406 and Green Lanes are included, 36 involving slight and 4 involving serious injuries.</p> <p>107. Whilst a trend cannot be established based on just 10 months of data, the information available to date does not suggest the Bowes Primary Area QN has had a significant impact on personal injury collisions.</p> <p>108. A summary of the personal injury searches and associated plans are included in Appendix 6.</p>
Healthy Streets Indicators	<p>109. The Healthy Streets check for designers has been utilised to review the Healthy Streets score for several roads in the QN. The tool is designed for use on a corridor, so a sample of streets within the QN and boundary roads have been assessed.</p> <p>110. Several streets within the QN have increased their Healthy Streets score. Key to improving the score is an improvement on several roads of the 'reducing private car use' metric by introducing access restrictions for motorised traffic. This metric contributes to a higher score in seven out of the 10 indicators.</p> <p>111. Further details of the assessment are included in Appendix 7.</p>

Alignment against project objectives

112. The project had a number of objectives and an overall assessment of how these have been achieved is set out below.

Table 2: Alignment against project objectives

Project Objective	Project Outcomes
Create healthier streets in the Bowes Primary Area in line with the Healthy Streets Indicators as set out in the Mayor's Transport Strategy.	Several streets within the QN have increased their Healthy Streets score. Key to improving the score is an improvement on several roads of the 'reducing private car use' metric by introducing access restrictions for motorised traffic. This metric contributes to a higher score in seven out of the 10 indicators.

Significantly reduce the volume of through motor traffic on minor roads within the project area	Traffic volumes have decreased on monitored local roads within the QN by an average of 16%, without a significant impact on boundary roads.
Enable a longer-term increase in the levels of walking and cycling within and through the scheme area	<p>Monitoring data indicates an overall increase in pedestrian and cycling activity within the area.</p> <p>At the three monitored sites within the QN, overall pedestrian movements increased by 14%. At the monitored sites on local roads within the QN, cycling activity increased by 20%. With the further improvements identified to improve the east/west cycling provision and the proposals for future LTN areas in Haringey, there is the potential to maintain and build upon this upward trend.</p>

Community engagement

113. Enfield Council has heard concerns from residents in the Bowes area for many years about the impact of motor traffic passing through the area. In November 2018 a number of Bowes area residents petitioned the local MP²². He took this petition to parliament. In his speech he talked about speeding, road danger and high levels of air pollution affecting children at Bowes Primary School.
114. In October and November 2019, a perception survey was conducted with residents in the area to gather perceptions on traffic speeds and volumes in response to ongoing traffic concerns raised by residents and Councillors.
115. Following the release of funding for active travel in response to the Covid-19 pandemic, communications with the community regarding the project included:
- A project flyer detailing the project background, a plan of the project, and information on the consultation delivered in July 2020
 - A notification letter with details of the construction delivered in August 2020
 - Launch of Let's Talk project page in October 2019, hosting information on the project, FAQs, documents, the electronic consultation survey, and project updates posted to the page
 - A letter inviting residents to participate in the consultation and providing details of how to do so, delivered in September 2020
 - The Deputy Leader and Healthy Streets Programme Director met with the following community groups as part of the ongoing engagement and consultation process, to provide an opportunity to listen to different perspectives on the project:

²² <http://betterstreets.co.uk/bowes-ward-petitions-for-a-low-traffic-neighbourhood/>

- Bounds and Bowes Voice (2/12/2020)
 - Bounds and Bowes Together (7/12/2020)
 - Warwick Road Action Group (15/12/2020)
 - Friends of Brownlow Road (21/12/2020)
 - Healthy Streets Bounds Green (6/1/2021)
- A letter inviting residents to join an online public webinar delivered in March 2021
 - A letter advising residents of the closing date of the consultation, delivered in April 2021. This letter was delivered to a larger distribution area in response to feedback provided
 - The Deputy Leader and Healthy Streets Programme Director answered questions from the community at the Bowes Ward Forum on 17 June 2021
 - A letter detailing information on plans by the London Borough of Haringey to introduce a Low Traffic Neighbourhood adjacent to the Bowes Primary Area QN, delivered in August 2021
 - A letter advising residents of a further period to provide feedback delivered in November 2021.

116. Notice of the making of the ETO was published in the London Gazette and Enfield Independent newspapers on 22 July 2020. Any person may object to the making of the permanent Orders, within a period of six months beginning with the date on which the experimental Orders came into operation. The six-month statutory period for objections ended on 31 January 2021. The Council extended the period of consultation to continue to consider objections and representations made to 2 May 2021.

117. The Council received feedback during the consultation period via two means:

- As per the instructions regarding objections or representations written in the ETO; in writing and must state the grounds on which any objection is made and be sent to the Head of Traffic and Transportation, or by email to traffic@enfield.gov.uk quoting the reference TG52/1454
- Participating in the consultation survey hosted on the Let's Talk Enfield website. A paper copy of the consultation survey, or in an alternative language, was available upon request. Feedback could also be sent to healthystreets@enfield.gov.uk or in writing to the Council.

118. Statutory consultees were sent notice of the traffic order and invited to provide an objection or representation on 17 July 2020. A formal response was received from the Metropolitan Police who shared concerns about the introduction of a 20mph speed limit on Brownlow Road, namely the enforceability of this limit. No further formal responses were received on the final designs²³ however stakeholders such as the London Fire Brigade and London Ambulance Service were engaged and communicated with during the design phase and their input helped to shape the designs. Communication has continued throughout the trial period.

²³ An objection was received from the LAS earlier in the process, but further discussion clarified that this was based on potential travel time for employees and was not with regard to LAS operations.

119. Grounds for objections that were raised have been extracted from the consultation report and listed in Annex 5. The Council has carefully considered these and provided a response to each objection.

120. A further opportunity to share comments was provided in November 2021. Feedback has been reviewed and objections received collated into Annex 5. This opportunity was communicated through a letter delivered to the area, the publishing of a notice in the London Gazette and Enfield Independent newspapers, a website update on the Let's Talk Enfield site and social media posts on the Council's social media channels.

121. Consultation responses received up to 2 May 2021 have been analysed by an external company and consolidated into a report which is at Appendix 7. An overview of the September 2020 – May 2021 consultation report is discussed in Table 3. Responses received between 1-21 November is discussed in paragraph 135.

Table 3: Overview of the consultation report

Number of responses	122. There were a total of 1756 responses from 1301 unique respondents to the online consultation, plus 24 responses received via a paper copy of the survey. In addition to this, 863 emails were received by the Council (this includes letters sent as attachments within an email) from 563 unique email addresses.
Car ownership	<p>123. Overall, car owners were much more likely to report negative impacts on the scheme than non-car owners. Conversely, non-car owners were much more likely to report positive impacts than car owners. This is evidenced by Figure 4-9 of Appendix 8:</p> <ul style="list-style-type: none"> • 53% of non-car owners perceived the impacts of the QN positively, compared to 20% of car owners • 28% of non-car owners perceived the impacts of the QN negatively, compared to 56% of car owners <p>124. Car owners were over-represented in the consultation survey, based on the 2011 Census as shown in Figure 5.</p>

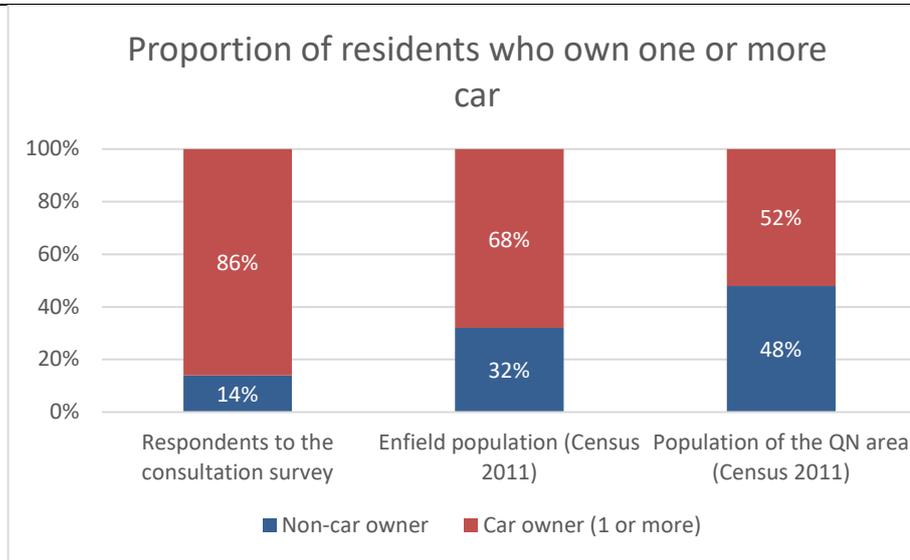


Figure 5 Proportion of residents who own one or more car

125. The overall responses are therefore influenced by the higher proportion of car owners who participated in the survey. This should be considered in the context of a project where a key aim is to reduce the dominance of the private car.

126. Perceptions about the effectiveness of the scheme varied by car ownership (Figure 6-2 of Appendix 8). Responses to these questions, for example about the perceived scheme's effectiveness on 'creating a general feeling of safety' showed a significantly larger portion of non-car owners reported a somewhat or very positive effect compared to car owners. 'Maintaining visitor access', and 'improved air quality' had the fewest respondents perceiving positive effects out of the questions asked for both car and non-car owners.

127. The importance of 'slower speeds of vehicles travelling in the area', 'feeling safe to walk and cycle in the area', and 'improved air quality throughout the area' were considered 'somewhat important' or 'very important' by the majority of respondents indicating support from respondents for these aspirations. When broken down by car ownership, fewer respondents who own one or more cars considered the aspiration 'somewhat' or 'very important' compared to those who do not own a car, indicating non-car owners place higher importance on these aspirations than non-car owners.

Location	<p>128. Of the respondents, 940 (71%) live within the scheme area. There were a further 353 respondents from people living outside the area, and 38 who did not provide the relevant information. There is an estimated population of 25,256 based on the 2011 Census living within the project area and surrounding roads. The 940 respondents living within the scheme area represent approximately 4% of those residents. These numbers do not include the emails received from 563</p>
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unique email addresses as demographic information was not available.

129. Some questions received significant variation in responses depending on whether the respondent was inside or outside the scheme area. Examples of this can be seen in Figure 6-2 of Appendix 8. In contrast to those outside the area, who reported significantly more negative perceptions than positive perceptions, those inside the area reported similar levels of positive and negative perceptions of the scheme on:

- 'Reducing motor vehicle volumes': 50% positive, 41% negative
- 'Reducing traffic noise': 41% positive, 46% negative
- 'Enabling more walking and cycling': 37% positive, 42% negative
- 'Creating a general feeling of safety': 34% positive, 33% negative

130. Whilst there are a range of views of residents living within the area, it is clear that those residents living outside of the area were typically more dissatisfied with the trial.

131. An underlying reason for this is evidenced by only 43% of respondents outside the area considered it 'somewhat' or 'very important' to 'reduce the number of vehicles cutting through the area'. This shows many respondents outside the area do not support the primary mechanism of the trial, and therefore their responses are reflective of that. This is further evidenced by 74% of respondents outside the area considered it 'very important' or 'somewhat important' to 'drive right through the area'. Preventing this is a direct objective of the project, and as a result is likely a key factor for those who object to the scheme.

132. The importance of 'slower speeds of vehicles travelling in the area', 'feeling safe to walk and cycle in the area', and 'improved air quality throughout the area' were considered 'somewhat important' or 'very important' by the majority of respondents indicating support from respondents for these aspirations. When broken down by location, fewer respondents outside the area considered the aspiration 'somewhat' or 'very important' compared to those inside the area, indicating respondents inside the area place higher importance on these aspirations than those outside the area.

133. The perceived effectiveness of the scheme on 'maintaining visitor access' and 'improved air quality' was reported negatively by both those who live outside and within the area. These indicate that maintaining the existing visitor access has been a challenge for all residents in the area. With regards to air quality, it is clear this is an important focus area for

	residents. Accordingly, this report includes air quality monitoring data for the area in addition to the modelling report.
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134. A letter to Blue Badge holders was sent to residents in the area on 26 February 2021. The letter invited residents to participate in a survey, separate to the main consultation survey. This survey aimed to find out more about how people with disabilities and carers perceive the scheme to help inform the Equalities Impact Assessment for the scheme. A paper copy of the survey was included in the letter delivery. Additionally, all respondents to the main consultation survey who indicated they have a disability, receive care, or provide care to someone in the area, were sent an email advising them of the additional survey and how to participate. Outcomes of this survey is discussed in 'Equality Considerations' in paragraphs 143 to 169.

135. During the November 2021 period for feedback 533 emails and 5 letters were received. These numbers include several responses which were submitted more than once, or multiple responses by the same respondent. Given this was a further opportunity to comment, it is understood that a number of the responses received during this period were from respondents who had also provided a response during the statutory consultation period detailed above. The purpose of this further opportunity to comment was to ensure all grounds for which respondents had made objections and representations had been captured for consideration in this report following periods of COVID-19 restrictions being lifted. Analysis focused on understanding different or new themes raised in addition to those captured during the statutory consultation period.

Safeguarding Implications

136. None identified.

Public Health Implications

137. The Bowes QN project as outlined in this report can help make transport in the area more health-promoting by increasing physical activity through encouraging walking and/or cycling as a normal, everyday transport mode. Data from the trial appears to support this with general increased levels of physical activity and cycling observed in the area—although there is some variation by street and the data is slightly limited, as it was collected during the COVID-19 pandemic which may have impacted the observed trends.

138. The positive effects of increased physical activity on health and wellbeing are well documented; it can help prevent and/or ameliorate a range of lifestyle related conditions, e.g. obesity, type 2 diabetes, heart disease, stroke, some cancers, musculoskeletal issues, and poor cognitive and mental health. Prevention of lifestyle related conditions can also lead to significant cost savings within health and social care services.

139. Achieving a modal shift towards active travel can also help reduce the health-damaging effects of motorised transport e.g. road traffic injuries, air pollution, community segregation, noise and other crime or antisocial behaviour.
140. Climate change been named as one of greatest threat to human health in the 21st century. Reducing motorised traffic and promoting forms of active travel can help lower local greenhouse gas emissions that contribute to climate change and will lead to improvements in the health of residents and the environment in the long run.
141. This report highlights that the Bowes QN project has had limited impacts on the journey times of emergency services. The London Fire Brigade and the Metropolitan Police Services have confirmed that the project has not impacted on their ability to carry out services and responsibilities. The London Ambulance Service indicated that there were three episodes of a delayed ambulance trip during the trial, although the cause of the delays was not clear; this needs to continue to be monitored moving forward to ensure there are no significant impacts on the travel time of ambulances.
142. An Equality Impact Assessment was carried out and findings are detailed in the relevant section below. The potentially disproportionate negative impacts of the project on disabled groups, older individuals, and the Asian and Gypsy Roma Traveller Communities, needs to be carefully considered and addressed as per the assessment and recommendations.

Equalities Impact of the Proposal

143. The Council is required to abide by the Public Sector Equality Duty under the Equality Act 2010 which states;
- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act.
 - Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - Foster good relations between people who share a protected characteristic and those who do not.

These can be referred to as the three aims or arms of the general equality duty. The Act explains that having due regard for advancing equality involves:

- Removing or minimising disadvantages suffered by people due to their protected characteristics.
 - Taking steps to meet the needs of people from protected groups where these are different from the needs of other people.
 - Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.
144. A full Equality Impact Assessment is attached at Appendix 9 and the scheme has been presented to the Enfield Council Members Equalities Board. A bespoke survey for blue badge holders was undertaken and focus groups have been run with disabled people to understand their needs better and delve deeper into the consultation responses. Protected characteristic data was

collected during the consultation and breakdowns are included in the associated report.

145. The Equality Impact Assessment does not consider that there are particular impacts on groups with the following protected characteristics;
- Gender reassignment
 - Religion and belief
 - Marriage and civil partnership
 - Sexual orientation.
146. The predominant theme for other protected characteristic groups is concern around increased journey times. These journey times are particularly relevant to disabled people who may have limited travel choices as a result of their disability.
147. It should be noted that the current position in relation to congestion and journey times is not static. In the 12 months before the implementation of the scheme, open source data from Uber shows that journey times had increased by over 3% between the centre of Bowes and Enfield Town Centre. Traffic volumes are growing year on year and the current position will not remain static. Without a significant change in trend, congestion and therefore journey times will increase irrespective of whether the quieter neighbourhood is in place or not. In that respect, some of the matters raised will present themselves over time in both cases.
148. Getting a representative sample of all age groups in consultation has proved to be challenging with persons under 29 representing only 4% of the sampled responses against a 2011 Census value that they represent 25% of the population with ages between 40 and 69 having double the volume of responses than the proportion of the population.
149. Younger people are more likely to benefit from the scheme long term as they are likely to adopt more active travel behaviours on a long-term basis and less likely to drive.
150. Older people are more likely to have age related mobility issues which do not qualify as disability but may result in less likelihood of taking active travel choices owing to the discomfort experienced in extended periods of walking.
151. As a group, disabled people felt that the scheme had negatively impacted them significantly more than other protected characteristic groups had indicated. It is also important to note that the scheme was in place during Covid lockdown measures which affected disabled people significantly more than non-disabled people, potentially amplifying feelings of frustration or anxiety. People who were shielding reported that they avoided public transport and had reverted to car journeys in many cases.
152. In the survey for disabled residents, respondents reported an increase in journey times, congestion and a difficulty in accessing appointments with healthcare providers.

153. Carers in focus groups indicated that as the people charged with delivering goods or services for the benefit of disabled people, they were concerned about journey times to and from the person they care for. This was particularly true when people had multiple carer responsibilities and other responsibilities such as work or children.
154. Disabled people and carers also described difficulties in getting services such as caring services (formal and informal), ride hailing services and social visits to come to them inside the scheme area. In some cases, ride hailing services or taxis cancelled pickups at short notice. Recent articles in London Cab trade publications identified that although a pickup may be a short distance as the crow flies, it could take several minutes to get to the pickup point owing to the route required to be taken. Discussions were held with the local RMT representative for cab drivers who indicated that their members may not understand the exact nature of restrictions and may assume locations to be unreachable.
155. Carers reported that commercial care providers were changing a package of care delivered to them by reducing the number of daily visits or reducing the duration of appointments. In many cases, carers pay commercial providers directly and are apportioned a care budget to spend on these services.
156. These impacts increased feelings of social isolation, anxiety and increased frustration in that community who were in parallel dealing with the impact of the pandemic.
157. Disabled residents and carers living outside the area also reported increased journey times for appointments as a result of increased traffic on roads outside the area. Where respondents had a condition which resulted in discomfort when travelling, they reported experiencing this discomfort for longer which meant some journeys were cancelled rather than taken.
158. Some disabled people and by association their carers are uniquely impacted by the scheme and the EQIA has recommended that an exemption system be considered as described in the early part of the report to alleviate the impact on those people and those providing care for them.
159. In respect of pregnancy and maternity, expectant mothers and mothers who have recently given birth may have increased numbers of medical appointments. Where this travel is made by car it may take slightly longer, but where the journey is walked or cycled through the experimental area, it is likely to be less polluted and have reduced volumes of traffic. The Royal college of Midwives recommends exercise such as brisk walking for new and expectant mothers are safer and quieter in the scheme area.
160. In respect of race, the consultation analysis showed that responses from people who identified as having an Asian background stated that the scheme affected them 'very negatively' at a rate of 70%, versus an average of 51%. Around half of the Asian respondents were also disabled with an average age of 50 yrs.

161. In addition, the number of respondents identifying from black backgrounds was only 1% of the responses against a 2011 census proportion of 14%. The average age of this group was around 53 years with around 10% of that group identifying themselves as disabled. Some comments in the survey related to a fear of using public transport during Covid which disproportionately affects people in this group.
162. The scheme will benefit ethnic groups who are disproportionately likely to walk ('Asian or Asian British', 'Mixed or multiple ethnic groups' and 'Other Ethnic Groups'), as well as 'Black and Black British' and 'Other Ethnic Groups' who are disproportionately likely to use public transport (as every public transport journey starts or ends on foot or cycle).
163. In respect of gender, females are more likely to use the bus, but less likely to drive or cycle. The scheme will improve access to bus stops on foot by reducing motor vehicle traffic in the area but there will be a slight negative impact in respect of bus journey times which have increased slightly.
164. There has been an increase in concern around public safety particularly for women. A study of the impact of Low Traffic Neighbourhoods on crime rates in Waltham Forest over several years indicated a 10% decrease in total street crime with further significant decreases in violent crime and sex offences. The effect increased with the passage of time. Females have reported feeling vulnerable with lower traffic volumes in the scheme area.
165. Car usage in Enfield is high, particularly for Gypsy or Irish Travellers. For this reason, the scheme may disproportionately affect this ethnic group – such as causing slightly longer journey times for trips made by car.
166. In terms of socio-economic status, over half of respondents did not disclose their income. From that information, we can see that within that cohort people in the lower income brackets also had higher instances of being disabled.
167. The equalities impact assessment indicates impacts on several characteristics both positive and negative. Negative impacts are predominantly concerned with increases in journey times by bus or car in and out of the area, which the monitoring report has assessed.
168. The positive effects are based around groups who already use active travel more readily. Improved safety for vulnerable people, improved access to public transport
169. It is recommended that work be undertaken to implement an exemption system for disabled people. The challenges faced by disabled people travelling are significant and limited travel choices are available for some disabled people.

Environmental and Climate Change Considerations

170. In the longer term, as part of a wider programme to encourage active and sustainable modes of travel, the project is expected to reduce the negative environmental impacts of private motor vehicle use through reduced carbon

emissions, lower rates of road traffic collisions and improved public realm. It should also be noted that the project area is now part of the Ultra Low Emission Zone as of 25 October 2021. It has therefore been identified as a priority for the installation of electric vehicle charging infrastructure, which should further reduce localised emissions.

Risks that may arise if the proposed decision and related work is not taken

171. Several risks have been identified:

Table 4: Risks that may arise if the proposed decision and related work is not taken

Risk	Risk Description
Motor traffic returns to previous volumes on the unclassified/ local roads within the project area	Without the protection of the modal filters preventing traffic cutting through this residential area, volumes will return and subject to historic trends of increasing motor vehicles on unclassified/ local roads, traffic volumes are likely to continually increase.
Reduction in walking and cycling levels	With a return to traffic dominated unclassified/ local streets, the early indications of uptakes in walking & cycling could stall or be reversed.
Failure to provide a contribution to tackle the climate crisis	Risks associated with this include continued traffic volume increases on unclassified/ local roads within the area, restricting the opportunity for mode shift to more sustainable transport options. Transportation emits 39% of the borough's emissions, making it the largest source of emissions of all sectors.
Reputational damage with regards to project assessment	The Council has committed to considering a series of factors when measuring the impact of the trials. Whilst a number of residents have demonstrated that they do not support the interventions, on balance, the view of the Council is that the benefits outweigh the dis-benefits, particularly when taking a longer-term view. Whilst the views of residents are a key consideration, the views of those participating in the engagement and consultation do not necessarily become a deciding factor. The Council needs to demonstrate that it is able to objectively assess the broad impacts of projects and be willing to make decisions, in the context of a climate crisis and in the interest of public health, that may not be universally popular.
Reputational damage with regards to action on the climate emergency	The public's confidence in Enfield Council's ability to deliver on its Climate Action Plan may be reduced.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

172. Several risks have been identified:

Table 5: Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

Risk	Risk Description and mitigating action
Negative impact to some people with disabilities	The Council will work with groups to develop options to improve access for residents with disabilities by means of an exemption from the camera enforced filter. In addition, the Council will look to adjust the Maidstone Road filter so that it is camera controlled rather than through the use of a bollard, this will create further options for those with exemptions.
Potential for further incidents of navigational issues with the LAS	Whilst the Council has not received reports from the Police or London Fire Brigade, three reports have been received by the LAS over the trial period from August 2020. Other anecdotal reports from members of the public have been received but are unable to be verified with the LAS. The Council will continue to work with the LAS to gain greater insights into the causes of any delays and will respond to any further measures that are identified, beyond the work already done, to ensure that LAS navigational systems have access to the latest data. Furthermore, the Council will look to adjust the Maidstone Road filter so that it is camera controlled rather than through the use of a bollard, this will increase the permeability of the area for the LAS and other emergency services.
Traffic volumes significantly increase	The 'new normal' of motor traffic volume is currently uncertain. Should the worst case occur and traffic volumes continue to increase then this could lead to more significant impacts than those outlined in this report. The Council will therefore continue with some monitoring activity in the area to be able to identify any significant changes.
Active travel trends will not continue to increase	A key objective of this project was to enable a longer-term increase in walking & cycling levels. Whilst the early trend indicates an uplift, the Council needs to continue to take a comprehensive approach to enabling a shift to sustainable travel. This will include the continued provision of cycle parking, cycle training, Dr Bikes along with continuing to grow the network of safe cycle routes through a combination of segregated cycling facilities and linking together a network of quiet roads where the volume of motor traffic is not hostile to walking & cycling.

Reputational damage with regards to suggestions that the Council does not listen to residents	The Council is often accused of not listening when it makes a decision that may not have universal acceptance. The Council has ensured that consultation feedback has been carefully analysed and collated into a report by an external organisation. This report is fully published in Appendix 8 and the key themes have been discussed. The range of objections have been listed in Annex 5 and a response provided to each, demonstrating that all the issues raised have been considered. The Council has a responsibility to balance up these views with long term benefits to the local and regional areas and how these contribute towards national and global challenges.
Some minor roads continue to see an increase in vehicle volume	Further investigation of minor roads has been recommended to address the increase in traffic volumes identified on Palmers Road to the west of the QN area. Enfield is continuing to work with Haringey as they consider plans to implement measures on Haringey controlled streets within the QN and adjacent to the area.
Traffic volumes as a whole increase more than anticipated over the coming months as London continues to move forward following Covid-19 restrictions on travel	Data from TfL indicates that traffic volumes have been relatively consistent since summer 2021. The data shows flows are down an average of 4% in Outer London compared to the same period in 2019. A post-project monitoring plan will be developed to continue to carry out some high-level monitoring in this area of the Borough.
Haringey amend or withdraw their planned scheme	Council would work with Haringey to review the outcome of their decision and Enfield's monitoring data to identify next steps.

Financial Implications

173. The cost of implementing initiatives in the Bowes Primary Area Quieter Neighbourhood capital scheme (project code C201710) has been £215,263 in 2020/21 and £121,268 as at 6th December 2021. A further £19,732 is expected to be incurred by 31 March 2022. Total cost for 2021/22 is anticipated to be £141,000. This will bring the total cost of implementing the respective initiatives to £356,263, which has been capitalised.

174. Costs incurred in 2020/21 were financed by external grants: a £100,000 grant from the Department for Transport (DFT) Emergency Active Travel Fund; and £115,263 was financed from Transport for London grants.

175. Costs that have been, and projected to be, incurred in 2021/22 will be financed by a £141,000 grant from Transport for London.

Legal Implications

176. Section 122 of the Road Traffic Regulation Act (RTRA) 1984 places a duty on the Council to exercise its functions, so far as practicable having regard to certain specified matters, to secure, as far as reasonably practicable, 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'. The specified matters are Council must also have regard to such matters as the desirability of securing and maintaining reasonable access to premises, and the effect on the amenities of any locality affected, the national air quality strategy, 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 other relevant matters. In taking a decision as to whether to make the experimental measures permanent, regard needs to be had to this duty.
177. Section 6 of the RTRA enables experimental traffic management orders made under section 9 to be made permanent by the Council.
178. A decision as to whether to make the trial measures permanent must also be consistent with the Council's network management duty under section 16 of the Traffic Management Act 2004 ("the 2004 Act"). That is, the duty "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".
179. Procedures for making the experimental traffic orders permanent are set out in the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 ("the 1996 Regulations"). Regulation 23 of the 1996 Regulations provides that where the provisions of an experimental order are reproduced and continued in force indefinitely, it is not necessary to carry out further consultation, provide further notice, or allow for further objections.
180. Regulation 9 of the 1996 Regulations provides that the Council may cause a Public Inquiry in reaching a decision on whether to make the Orders that are the subject of this report, permanent. This is not mandatory but due consideration has nevertheless been given as to whether or not the Council will hold an Inquiry in the main body of this report.
181. Section 149 of the Equality Act 2010 requires the Council to pay due regard to public sector equality considerations in the exercise of its functions. Such due regard should be had when taking the decision as to whether or not to make the experimental traffic orders permanent.
182. The recommendations contained within the report are in accordance with the Council's powers and duties as the Highway Authority.
183. In arriving at the recommendations set out in this report, Officers have sought advice from Legal Services and Queen's Counsel.

Workforce Implications

184. None identified.

Property Implications

185. None identified.

Other Implications – Network Management

186. S122 of the Road Traffic Regulation Act 1984 requires the Council to exercise the powers provided by the Act, so far as reasonably practical, to secure the 'expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians). Section 16 of the Traffic Management Act 2004 also places a specific network management duty on local traffic and highway authorities:

“It is the duty of a local traffic authority or a strategic highways company (“the network management 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”

187. Guidance on this duty was originally published in 2004 and has been more recently updated in light of the coronavirus pandemic to place emphasis on active travel and reallocating road space for pedestrians and cyclists.

188. The guidance sets out techniques that have proved effective in improving the management of road networks, recognising that not all will be applicable to all local traffic authorities, including:

- Identifying and managing different road types
- Monitoring the road network
- Identifying locations where regular congestion occurs
- Co-ordination and direction of works
- Dealing with planned events
- Management of incidents
- Making the best use of technology
- Managing parking and other traffic regulation
- Enforcing road traffic regulation
- Accommodating essential service traffic
- Regular reviews of the network
- Consultation and engagement with stakeholders
- Provision of travel information to road users and the community

189. The guidance acknowledges that management of demand can play a role in helping meet the network management duty. In particular, paragraph 38 states:

"Government and local authorities have been looking at ways of reducing the demand so as to moderate or stem traffic growth even when the economy is growing. This has resulted in changes to land use plans, the establishment of school and workplace travel plans, and the promotion of tele-working amongst other things. More directly this has led to the desire to make cycling and walking safer and more attractive and the encouragement of public transport through ticketing schemes or better information, bus priority and quality initiatives, and congestion charging. These can all help to secure the more efficient use of the road network and successful measures can have an impact on its operation. They should not be seen as being in conflict with the principles of the duty and it is for the LTA to decide on the most appropriate approach for managing demand on their own network." ²⁵

190. Further network management guidance was published by the Secretary of State in July 2021 in response to the Coronavirus pandemic. This makes it clear that local authorities should continue to reallocate road space to people walking and cycling. A range of measures are highlighted to maintain this 'green recovery', including:

- *"modal filters (also known as filtered permeability); closing roads to motor traffic, for example by using planters or large barriers. Often used in residential areas, when designed and delivered well, this can create low-traffic or traffic-free neighbourhoods, which have been shown to lead to a more pleasant environment that encourages people to walk and cycle, and improved safety"* ²⁴

191. Table 1 above summarises the results of the monitoring carried out before and after implementation of the scheme, with Appendix 2 and Addendum 1 providing further details. From a network management perspective, some of the key point to note are:

- TfL are the traffic authority for the North Circular Road and Haringey Council for Bounds Green Road. Both have been closely involved with the scheme and neither have raised objections to the scheme being made permanent.
- Traffic flows on the strategic roads bounding the QN area have seen a reduction in traffic in 2021 compared to 2020 on Green Lanes and Bounds Green Road, with a slight increase (1% over a 24 hour period) on the A406 Bowes Road. Whilst the long-term impact of the Covid pandemic on traffic patterns may not be known for some time, there is no clear evidence that the QN scheme has had a negative impact on the functioning of these strategic routes.
- The increase in westbound bus journey times on certain sections of Bounds Green Road roads needs to be considered as this may indicate

²⁴ <https://www.gov.uk/government/publications/reallocating-road-space-in-response-to-covid-19-statutory-guidance-for-local-authorities/traffic-management-act-2004-network-management-in-response-to-covid-19>

additional points of congestion. However, there is likely to be no single cause of these additional bus delays, with some potentially due to other network changes, such as Haringey’s upgrade to the cycle lanes in Bounds Green Road.

- Most but not all of the ‘internal roads’ have seen a reduction in traffic flows. The changes in Brownlow Road are particularly significant from a network management perspective as it is currently classified as a B road, carrying traffic between Bounds Green Road and the North Circular Road. In the northbound direction, bus journey times have increased by 27 seconds on Brownlow Road in the morning peak, suggesting some additional congestion. During the evening peak, flows have not increased on Brownlow Road and bus route journey times appear to have reduced.
- Changes to conditions on the wider network also need to be considered, with particular attention paid to roads with a more strategic function, including Durnsford Road (part of the B106) and Bowes Road (part of the A1110) where flows have increased.

192. Weight also needs to be given to the recently published network management duty guidance undated by the Secretary of State for Transport in July 2021. This does not replace the original guidance published in 2004 but provides additional advice that needs to be taken into account. In particular, it helps guide traffic authorities in how to meet the ambitions set out in the Department for Transport’s vision for cycling and walking set out in ‘Gear Change’, published in July 2020. The 2021 guidance stresses the need for local authorities to ‘continue to make significant changes to their road layouts to give more space to cyclists and pedestrians and to maintain the changes they have already made’.

Options Considered

193. The following alternative options have been considered:

Table 6: Options considered

Option	Comment
Removing the trial	Removing the trial would return the network to the situation prior to implementation, seeing the return of through traffic across the unclassified/ local streets within the project area and therefore prevent the opportunity to realise the benefits that the project objectives can deliver. There could also be further traffic impacts should Haringey continue with their LTN proposals without the Bowes QN scheme in place.
Holding a Public Inquiry prior to a decision	Consideration was given to referring this project to a Public Inquiry however it is recommended that no Public Inquiry into this project takes place on the basis that there has been significant opportunity for all views to be canvassed during an extended consultation

	<p>period, including objections to making the orders permanent, and for these views to be presented to the decision-maker for consideration; the proposal does not contain issues which are particularly complex. Therefore, a Public Inquiry, where the decision would ultimately be returned to the Council, would add no further value to the process.</p>
<p>Residents only access, for example via ANPR</p>	<p>One of the aims of the project is to enable a longer-term increase in the levels of walking and cycling within and through the scheme area. Allowing residents exemptions from the modal filters, via ANPR or other means, could restrict the level of changes in travel behaviour by those residents who drive and live within the project area. Furthermore, the additional motor traffic within the area from trips made by residents would 'dilute' the benefits to others in the area and potentially limit the potential for growth in walking and cycling in the area.</p> <p>However, the Council is committed to developing an approach to improve access for residents with disabilities by means of an exemption from the camera enforced filter.</p>
<p>Relocating the modal filters from their current location to the junctions at the A406 North Circular Road</p>	<p>This option was considered in detail. In principle this would involve the relocation of the Warwick Road filter to its junction with the A406, and new filters would be implemented on Ollerton Road, Highworth Road and Natal Roads at their junctions with the A406.</p> <p>Figure 5-2 of Appendix 8 shows there is a slight preference for access in and out of the area via Bounds Green Road (81% of respondents considered access 'somewhat' or 'very important') over access via the A406 (72% of respondents). Reasoning provided by those who suggested relocating the filters generally provided reasoning that they more regularly access amenities and carry out visits to the south than to the north of the area. Some expressed feeling uncomfortable driving on the A406.</p> <p>The recommendation in this report to improve access for residents with disabilities by means of an exemption from the camera enforced filters, would enable access for these residents to and from the area from both the A406 and Bounds Green Road.</p>

	<p>The current design has the following advantages over this option:</p> <ul style="list-style-type: none"> • Residents have had time to adjust to the changes implemented. • There are currently four entry points to this area within the QN²⁵, (noting the implementation of a School Street on Highworth Road may change this). This disperses the local access traffic across these streets. The relocation of filters to the A406 would reduce the number of access points concentrating traffic entering/exiting the area onto fewer roads. • Warwick Road at the A406 is signal controlled, providing a controlled exit from the area, and management of traffic flows at the junction. <p>These advantages are not considered to be fundamental flaws in a design that relocates the filters to the A406. However, following consideration of these factors, the limited preference displayed by respondents, and recommended exemptions for disabled residents, on balance it was considered that the current layout offered the best solution at this time.</p>
<p>Other changes to the modal filters, such as removing one or more modal filters</p>	<p>Removing one of the modal filters, for example York Road or Maidstone Road, would create an additional access point for residents, but it would also create an opening for through traffic to pass, channelling all through traffic onto that particular route. It may also induce traffic demand for through trips, which isn't currently travelling through the area. It has therefore been discounted.</p>
<p>Removing the trial and implementing an alternative treatment, such as one-way streets, traffic calming, or more speed enforcement</p>	<p>This would not be in line with the project objective to significantly reduce the volume of through motor traffic on minor roads within the project area, which has been achieved through the trial. York Road, for example, has speed cushions along the street, however traffic volumes remained high prior to the trial. This project is aimed at generating longer-term changes in travel behaviour, rather than simply managing the flow and speed of motor traffic through a particular neighbourhood.</p>

²⁵ This is the area which includes the streets bounded by the A406 and the filters on Warwick, Maidstone and York Roads. Access roads to this area are Natal, Warwick, Highworth and Ollerton Roads.

<p>Timed access restrictions</p>	<p>Timed access restrictions would have the following benefits:</p> <ul style="list-style-type: none"> • Improved motor vehicle access for journeys outside of camera operating times • Improved motor vehicle access for work based trips into the area, such as deliveries <p>Changing the camera enforced filter(s) to a timed restriction would however result in through traffic travelling through the area outside of the camera operating hours, which is not in line with the project objectives. There is also potential for vehicles to queue whilst waiting for the end of the restriction time.</p> <p>However, the Council is committed to developing an approach to improve access for residents with disabilities by means of an exemption from the camera enforced filter.</p>
<p>Removing the trial and implementing other access restrictions, for example banning the right turn from Warwick Road onto the A406, or various width / weight restrictions.</p>	<p>This project is aimed at generating longer-term changes in travel behaviour, rather than simply managing the flow of motor traffic through a particular neighbourhood.</p>
<p>Remove the trial and rely on the electrification of motor vehicles.</p>	<p>Electric vehicles are an important part of Enfield's plan to be a carbon neutral borough by 2040, and efforts are being made in accordance with the Enfield Climate Action Plan 2020 to increase electric vehicle charging provision. They however are not a solution on their own.</p> <p>As much as 50% of particle pollution from vehicles comes from brake wear, tyre wear and road surface wear²⁶. These particles contribute to what is known as 'non-exhaust emissions' particulate matter. Non-exhaust emissions increase with vehicle mass and electric vehicles tend to be heavier than their petrol/diesel counterparts due to the battery mass. An effective way to reduce these emissions is to reduce traffic volumes.</p>

²⁶ https://uk-air.defra.gov.uk/assets/documents/reports/cat09/1907101151_20190709_Non_Exhaust_Emissions_typeset_Final.pdf

	Further, other problems associated with motor vehicle use, for example collisions, congestion and parking availability, will not be solved by a transition to electric vehicles.
Removing the banned right turn at the A406 / Bounds Green Road junction	An external report investigated the feasibility of re-introducing the right turn from Bounds Green Road into the North Circular, which was introduced in 2012 by TfL. The outcome of this study concluded that the junction operates at absolute capacity in both the AM and PM peak periods and has a relatively efficient method of control. Adding a right turn movement could be done in theory but this would reduce the junction capacity, generating significant queuing that would likely result in vehicles re-routing to other local roads and the peak periods would be significantly extended. No feasible physical changes to the junction could be identified and introducing the right turn is not considered to be viable.

Conclusions

194. The Bowes Quieter Neighbourhood project has been delivered against a challenging backdrop. The pandemic has brought its own challenges in which to introduce a comprehensive traffic management scheme. The criteria and pace of delivery, set out by the Department of Transport, led to less community engagement pre-implementation than the Council has delivered for other similar projects. Lockdown and the impacts on travel patterns has created further challenges in measuring the impacts of the project.
195. This project has elicited strong views from the community, and this is reflected in similar projects across London. Views are often polarised between those who fundamentally disagree with a Low Traffic Neighbourhood approach and those who are extremely strong advocates. This is not necessarily untypical in active travel projects and this theme can be seen in other projects that are consulted on prior to implementation. In a project that is still at conceptual stage, it can be challenging for decision makers to understand the views of the many people who have not contributed to the consultation process. This is not dissimilar in this project, although here the Experimental Traffic Order process enables the community to provide feedback in light of their actual experiences post implementation. Feedback to this consultation remains low when looking at the overall population, with approximately 4% of residents living within the Bowes QN area making their voices heard through the consultation survey (approx. 1300 responses). Whilst the pandemic has impacted the ability to hold in person events, the level of communication to homes in the area has been high with a series of letters delivered to homes. Community groups with different perspectives on

the trial have also actively encouraged people to participate in the consultation.

196. We have seen strong levels of engagement from an older demographic, suggesting that a digital first approach has not led to under-representation from older people, indeed the opposite is the case. Conversely, the views of younger people have been underrepresented. Naturally views vary between those living inside and outside the area, it is to be expected that those who live outside the area and who now have to take alternative routes during car journeys, are more likely to be unsupportive of the plans. Views from inside the area are more mixed, with resident views dependent upon the balance of benefit vs dis-benefit that they perceive from the project. For example, a car owning resident on an already filtered road within the area is likely to perceive more dis-benefit than a non-car owning resident who lives on a road which was previously carrying lots of through traffic. The core aims of this project are to contribute towards a longer-term shift away from an overreliance on the private motor vehicle and a move towards more active forms of travel. It is inevitable that there will be some resistance to this. Whilst it is crucial to carefully consider the full range of community views, there are also other aspects of the impact assessment that also need to be considered.
197. The report sets out a summary of the other monitoring categories, with further detail contained within a series of annexes and appendixes, which form a vital part of the reading when making an overall assessment on this project. The reality is that we remain unclear on what a 'new normal' looks like in terms of motor vehicle volume. With lockdown fully lifted, the volume of motor traffic has returned to a rate of approximately 96% of pre-pandemic levels. Within this context, this report has outlined that there has been limited impact on the emergency services, bus impacts across the routes are not deemed to be significant, noise impacts are mostly positive and there are no significant issues in terms of air quality. Close collaboration continues with the emergency services to ensure that the Council does everything it can do to ensure changes to the network are effectively communicated and that emergency service colleagues are involved in the design process for this and similar projects.
198. The primary objectives of the project were to create healthier streets in the project area, significantly reduce the volume of motor traffic and enable a longer-term increase in walking and cycling levels. The Healthy Streets score assessment and the reduction in motor vehicle levels within the area illustrates the improvements on the internal roads, without significant detrimental impacts on the surrounding roads. The early indications of an uptake in cycling and larger increases in people walking provide a foundation upon which levels can increase into the longer-term. The Council should continue to align other services such as continued Dr Bike provision, cycle training and continued delivery of residential cycle hangars along-side the delivery of Quieter Neighbourhood intervention. Building further active travel links in and out of the area, such as a stronger east/west link, will contribute towards the ongoing development of a wider active travel network. Collectively, this approach should help build upon the increased walking and cycling trends identified in this report.

199. This report and the associated annexes and appendixes set out a wide range of information relevant to this project. It is acknowledged that a number of objections have been raised on making these changes permanent. These objections and the assessment of the wider impacts need to be carefully considered against the context of a climate emergency and ongoing national and international concerns about lack of action. Transportation accounts for 39% of the Borough emissions. In order to enable longer-term change and to create an environment where many more people can walk and cycle, we need to take bold action. Minor local roads cannot continue indefinitely to be used as an overflow for the primary network, encouraging private motor vehicle use to continue to grow unabated. The opposite approach is believed to be necessary, bringing forward projects and services that will enable an increasing number of people from a wide cross section of the community to choose to walk and cycle more of their journeys.

200. This report also sets out a number of further measures that should be taken forward as quickly as possible which include increased permeability at Maidstone Road, a School Street on Highworth Road and most importantly exploring mitigation measures for residents with disabilities alongside considering the needs of carers. Furthermore, a series of ongoing monitoring measures should continue to help inform whether any future changes are appropriate. On the basis of these further recommendations and balancing the nature of the objections with the impact assessments from the monitoring of the trial, it is recommended that the Bowes QN traffic orders should be made permanent.

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Date of report: December 2021

Annexes

Annex 1 Plan of interventions

Annex 2 Feedback from London Ambulance Service, November 2021

Annex 3 Response from LBE to London Ambulance November 2021 feedback

Annex 4 Air quality monitoring data

Annex 5 Responses to objections

Appendices

Appendix 1 Department for Transport letter Emergency Active Travel Fund

Appendix 2 Traffic, bus journey times, pedestrian and cycle analysis

Appendix 3 Crime analysis

Appendix 4 Noise assessment

Appendix 5 Air quality assessment

Appendix 6 Personal collision search and reports

Appendix 7 Healthy Streets Indicators assessment

Appendix 8 Consultation analysis

Appendix 9 Equalities Impact Assessment (EqIA)

Addendum

Addendum 1 Bowes Primary Area Quieter Neighbourhood Post Scheme
Monitoring Addendum to Appendix 2

Background Papers

None