

<b>Committees:</b> Streets and Walkways Sub-Committee <i>[for decision]</i> Operational Property and Project Sub-Committee <i>[for decision]</i>	<b>Dates:</b> 4 July 2023 3 July 2023
<b>Subject:</b> Beech Street Transportation and Public Realm project <i>(Phase 1 – Zero Emission Scheme)</i>  <b>Unique Project Identifier: 10847</b>	<b>Gateway 5 Complex</b>
<b>Report of:</b> Executive Director Environment  <b>Report Author:</b> Kristian Turner – Transport and Public Realm Projects, City Operations	<b>For Decision</b>
<h1>PUBLIC</h1>	

<b>1. Status update</b>	<p><b>Background:</b></p> <ol style="list-style-type: none"> <li>1. In November 2022, Members approved consulting the public on the Beech Street Zero Emission scheme.</li> <li>2. The design of the proposal to be consulted on varied from the previous 18-month traffic experiment by keeping open the junction of Beech Street and Golden Lane.</li> <li>3. All other elements of the proposal including the nature of the restriction, signing, access, enforcement infrastructure, closure of the junction of Bridgewater Street and gaps in the central reservation, remain the same as the previous experiment.</li> </ol> <p><b>This report:</b></p> <ol style="list-style-type: none"> <li>4. The purpose of this report is to: <ul style="list-style-type: none"> <li>• Inform Members on the results of the public consultation;</li> <li>• Seek Member approval for the recommended option.</li> </ul> </li> </ol> <p><b>RAG Status: AMBER</b> (Amber at last report to Committee)  <b>Risk Status: Medium</b> (Medium at last report to Committee)  <b>Total Estimated Cost of Project (excluding risk): ~ £2.4M</b> <i>(for the zero-emission scheme)</i>  <b>Spend to Date:</b> £1,951,951 (of a total approved budget of £2,285,062)  <b>Slippage:</b> ~ 12-18 months</p>
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	<p><b>Funding Source:</b> Community Infrastructure Levy (CIL)/OSPR</p> <p><b>Costed Risk Provision Utilised:</b> £189k (approved Dec 2021)</p>
<p><b>2. Next steps and requested decisions</b></p>	<p><b>Requested Decisions</b></p> <p>Members of the <b>Streets and Walkways sub-committee</b> are asked to choose from the following two options to progress the project:</p> <p>5. <b>Option 1</b> – Subject to the scheme receiving approval from TfL make the zero-emission scheme permanent, implementing the scheme as consulted, with the junction of Golden Lane remaining open to motor traffic.</p> <p>6. <b>Option 2</b> – do <u>not</u> make the zero-emission scheme permanent, Beech Street and Golden Lane will continue to operate as they do now. <b>Recommended</b></p> <p>Regardless of the option chosen we will continue to work with LB Islington to develop the Barbican, Bunhill and Golden Lane Healthy Neighbourhood Plan (also on the agenda for this meeting).</p> <p>In the event that Option 1 is approved, Members of the <b>Streets and Walkways sub-committee</b> are asked to:</p> <p>7. Delegate authority to the Executive Director Environment to give notice of the intention to make the necessary traffic orders</p> <p>For whatever option is chosen, Members of the <b>Streets and Walkways sub-committee</b> and the <b>Operational Property and Projects sub-committee</b> are asked to approve:</p> <p>8. The adjusted project budget (Appendix 2)</p> <p>9. The updated Costed Risk Register (Appendix 4)</p> <p><b>Next steps</b></p> <p>10. If Option 1 is approved, the next steps are to:</p> <ul style="list-style-type: none"> <li>• Seek TfL Approvals under the Traffic Management Act</li> <li>• Draft and advertise traffic orders</li> <li>• Write to any objectors</li> <li>• Report to Committee setting out the details of any objections received (if needed)</li> <li>• Procure new ANPR camera for Golden Lane</li> <li>• January 2024 – make permanent traffic order</li> </ul> <p>11. If Option 2 is approved, the existing infrastructure such as signs and cameras would be removed and decommissioned (with the cameras repurposed elsewhere), and the project would be closed via a Gateway 6 Report later this year.</p>

<p><b>3. Budget</b></p>	<p><b>Funding background</b></p> <p>12. Before the Fundamental Review was undertaken in 2019, provisional funding of £12-£15M had been earmarked for the whole of the Beech Street Transport and Public Realm project, which is one of three elements of the Beech Street Major Transformation which included the Barbican Podiums waterproofing and the refurbishment of the Barbican Exhibition Halls.</p> <p>13. The Exhibition Hall programme has now been subsumed into the Barbican Renewal project, which is currently entering RIBA Stage 2 and the Podium project is programmed to complete by the end of 2026.</p> <p>14. The high level of provisional funding for Beech Street was not confirmed by the Fundamental Review. A Capital bid for £2.5M was therefore approved by RASC in 2021 to fund making the traffic scheme permanent and undertaking public realm improvements, taking the total budget envelope for the Beech Street and Public Realm project to £4.8M.</p> <p>15. No public realm improvements have commenced design due to the uncertainty of progressing the traffic scheme element of the project.</p> <p><b>Option Costs</b></p> <p><b>Option 1</b></p> <p>16. The overall budget allocation would need to be adjusted to communicate and deliver the zero-emission scheme and undertake post-scheme monitoring. See Appendix 2.</p> <p><b>Option 2</b></p> <p>17. The overall budget is sufficient to close down the project with a minor adjustment to the existing budget required, see Appendix 2. A Gateway 6 Report would identify any project underspend.</p> <p>18. The development of the Bunhill, Barbican and Golden Lane Healthy Neighbourhood Plan is funded separately. The delivery of any projects emerging from this plan are currently unfunded and would be subject to availability of capital funding through a future capital bid.</p> <p><b>Option 1 and 2 Costed Risk</b></p> <p>19. The Costed Risk Register (Appendix 4) has been amended and increased to reflect the current stage of the project and possible future risks costed. These include providing for £75k to cover staff costs and legal fees in the event of a legal challenge to either decision in this report or to the statutory traffic order making process.</p>
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#### 4. Design Summary

20. This section of the report sets out the following items to allow Members to draw a conclusion on the recommended option:

- Current levels of walking, cycling and motor vehicles
- The current situation for air quality
- Detail of the layout of the zero-emission restriction
- Public consultation results
- Impacts of the proposal (benefits and disbenefits)
- Equalities Impact Assessment
- Legal implications
- Officer conclusion

#### LEVELS OF WALKING, CYCLING AND MOTOR VEHICLES

21. The previous experimental traffic scheme concluded in September 2021 and Beech Street and Golden Lane returned to their previous unrestricted state.

22. Traffic counts on Beech Street were undertaken in May 2023. These shows that traffic volumes on Beech Street have returned to pre-pandemic levels even though general traffic in the City is approximately 80-85% of pre-pandemic (2019) levels.

Year	Motor Vehicles	Cycles	Walking
2019	9,423	2,645	16,680
2023	9,559	3,455	11,880

23. The data also shows an increase in the number of people cycling on Beech Street (+30%) and a decrease in the number of people walking along Beech Street (-29%). The latter is broadly consistent with City-wide trends.

24. The traffic data is assessed as representing a true picture of the current situation on Beech Street as the counts are consistent with City wide traffic counts undertaken in November 2022.

25. It is unknown why traffic on Beech Street has returned to 2019 levels when overall traffic volumes across the City have fallen. A possible explanation are the significant changes to both the traffic network in the City and Islington (such as Bishopsgate and Old Street roundabout) combined with changes to working patterns and servicing in the Square Mile.

26. We have undertaken origin and destination surveys along Beech Street and Chiswell Street to determine how much of the traffic that uses Beech Street and Chiswell Street is using this as a through route and how much to access the adjoining streets.

27. The survey data indicates that two thirds of traffic use Beech Street and Chiswell Street as a through route and one third uses the corridor (not as through traffic) to access local streets.

28. Traffic counts have also been undertaken at 19 locations on streets in the project area (City and Islington). The traffic data shows a different picture to Beech Street, with significantly less traffic compared to 2019 on most streets. In most instances the reduction exceeds the general traffic reduction across the City.

29. The summary table below shows the main streets of interest, more detail can be found in Appendix 5.

	<b>2019</b>	<b>2023</b>	<b>% change</b>
Aldersgate St	14,250	11,350	-23%
Fore St	5,350	900	-83%
Golden Lane	3,300	2,100	-36%
London Wall	15,200	14,250	-6%
Moor Lane	2,600	1,800	-30%
Moorgate	10,400	8,800	-16%
Silk Street	900	1,350	+50%
Fortune St	1,150	450	-62%

30. There is significantly less traffic on most City and Islington Streets, except for an increase on Silk Street. The reason for this increase is not known.

31. If the zero-emission scheme is made permanent, it should be noted that on occasion unrestricted traffic may be routed along Beech Street, to mitigate the impacts of works elsewhere on the surrounding street network.

## **CURRENT SITUATION - AIR QUALITY**

### **Beech Street**

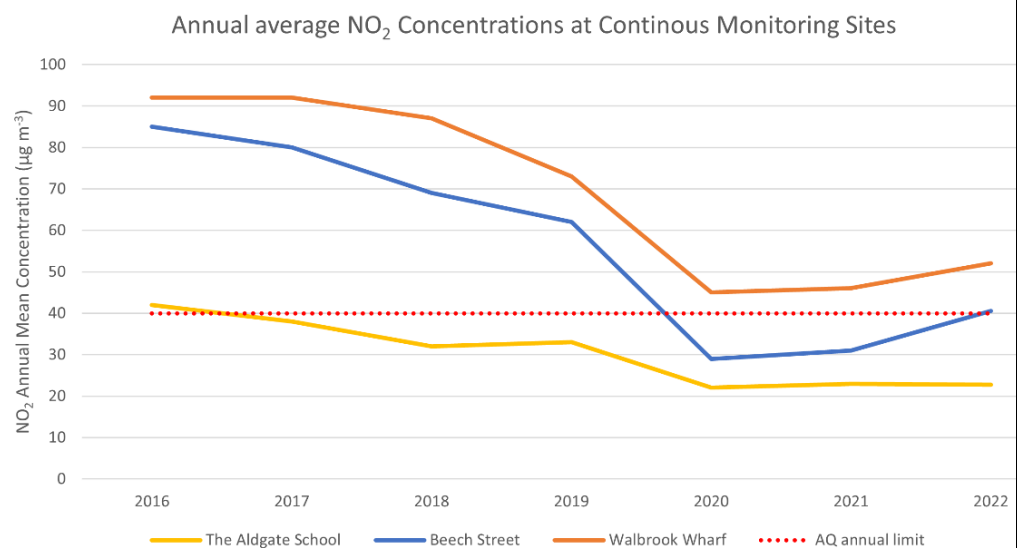
32. Last year, air quality modelling was undertaken to forecast the likely levels of nitrogen dioxide (NO<sub>2</sub>), comparing the zero-emission scheme with doing nothing.

33. It was estimated that under the “do nothing” scenario, NO<sub>2</sub> levels would rise to 39.4 µg /m<sup>3</sup> as traffic returned to Beech Street.

34. We now have one full year of calibrated air quality data for 2022 provided by the continuous air quality monitor on Beech Street. It shows that the annual average NO<sub>2</sub> levels were 41 µg /m<sup>3</sup>, which marginally exceeds the legal limits of 40 µg /m<sup>3</sup>.

35. As forecast in previous reports, as traffic has returned to Beech Street, despite the generally improved levels of background NO<sub>2</sub> in the City since the pandemic and gradual uptake of electric vehicles, the NO<sub>2</sub> level on Beech Street has increased at a slightly steeper rate than the other continuous air quality monitor at Walbrook Wharf.

36. NO<sub>2</sub> levels on Beech Street remains at a significantly lower level than 2019, despite motor vehicle volumes returning to the same level.



37. The graph shows the three continuous air quality monitors in the City and the Beech Street curve rising just above the legal limits in 2022. The background level of NO<sub>2</sub> in the City, measured within the centre of the Barbican Estate, is 20 µg /m<sup>3</sup>.

38. Of 91 locations measured for NO<sub>2</sub> in the City, Beech Street is the sixth worst polluted street after:

- Upper Thames Street (Walbrook Wharf) - 52 µg/m<sup>3</sup>
- Byward Street / Seething Lane junction - 45 µg/m<sup>3</sup>
- Newgate Street / Old Bailey junction - 44 µg/m<sup>3</sup>
- Aldersgate Street - 43 µg/m<sup>3</sup>
- Gracechurch Street - 42 µg/m<sup>3</sup>

39. The more polluted streets are London Access or City Access streets (as defined by our Street Hierarchy) and part of London's strategic road network. As such they carry significantly more traffic than Beech Street, including the three in blue which are managed by TfL (TLRN). The reason Beech Street ranks so highly, despite lower levels of traffic, is due to the pollution not being able to disperse due to the enclosed environment. Within Beech Street, the footways are narrow, so people walking are less able to walk

further away from the kerb where the pollution is most concentrated.

**Surrounding streets**

40. Generally, background levels of NO<sub>2</sub> across London continue to improve.

41. We have been monitoring NO<sub>2</sub> levels on the network of streets across the project area since 2019. Unlike Beech Street, levels of NO<sub>2</sub> are significantly lower on the other streets (with the exception of Aldersgate Street (down just 9%), than before the pandemic.

42. The NO<sub>2</sub> has been collected on a monthly basis using a network of diffusion tubes attached to street furniture. Whilst a “basic” technology, the tubes give an annual indication of pollution trends, but can vary in the results given, for example if attached to a lamp column by the kerb, a sign post at the back of a footway or in proximity to a junction where there are more vehicles accelerating.

43. A summary of the changes in measured NO<sub>2</sub> for key City streets of interest is in the table below, full results can be found in Appendix 3). As can be seen, NO<sub>2</sub> is significantly lower at many of the locations in 2022 compared to 2019. Of particular note is the low level on Golden Lane, which is in line with general background levels of NO<sub>2</sub> in the City.

Location	2019	2022	% change
Aldersgate St	47.6	43.5	-9%
Fore Street	33.5	23.5	-33%
Golden Lane	28.3	19.2	-32%
London Wall	48.7	34.6	-29%
Moor Lane	30.2	23.2	-23%
Silk Street	35.6	23.9	-33%
Wood Street	29.4	20.7	-30%

44. On these unenclosed streets, the pollution disperses quickly, even over as little as one metre, so the pollution people are exposed to in their properties is likely to be lower than at street level. However, the exact rate for the dispersal of NO<sub>2</sub> over distance is not known.

**ZERO EMISSION STREET LAYOUT (OPTION 1)**

45. A plan of the access arrangements and restrictions can be found at Appendix 6.

46. If implemented, the design of the zero-emission street would prevent Beech Street being used as a through route by non-zero emission vehicles in both directions. The 153 bus is an electric bus that would be able to continue using Beech Street.
47. Vehicles accessing a property directly off Beech Street will be able to enter Beech Street from either direction but must access their car park or forecourt and not drive straight through without stopping. This will apply to people with car parking spaces for Shakespeare Tower, Defoe House, Lauderdale Place, the forecourt and ground floor car park for Cromwell Tower and the Barbican Trade Centre servicing area.
48. Any type of vehicle such as a car, taxi or delivery vehicle can enter Beech Street if entering one of the car parks or forecourts on Beech Street to make a delivery, drop off/pick up a passenger or park.
49. Other City and Islington residents, businesses, visitors, taxis and general traffic driving a non-zero emission vehicle will need to use an alternative route, which in some instances may increase the length of their journey.
50. Any vehicle travelling south on Golden Lane would be able to turn left onto Beech Street. This means all vehicle types will be able to use the Beech Street eastbound carriageway between Golden Lane and Silk Street.
51. Zero-emission capable vehicles or any vehicle leaving a car park or forecourt on Beech Street or a will be able to turn left on Golden Lane to travel northbound.
52. The central reservation gaps that were constructed in 2021 will be retained, allowing vehicles approaching from the west (Aldersgate Street) to turn right into Lauderdale Place and the Shakespeare Tower/Defoe House car park.
53. The junction of Beech Street with Bridgewater Street will be closed to motorised traffic.
54. The signing for the restriction will be the same as per the experiment. This remains the signing prescribed by the Traffic Signs Regulations and General Directions and which the City received dispensation from the Department for Transport to use the sign and information plate combination. To realise the scheme objectives it is necessary to be able to legally enforce the sign, which was successfully demonstrated during the experiment. This is not to say that that the signage is universally understood by motorists, taxi and delivery drivers.





55. The enforcement infrastructure will continue to be based on pairs of ANPR cameras linked together which are used to determine if a non-compliant vehicle has travelled through Beech Street as through traffic or if it has accessed properties. Keeping Golden Lane open to traffic means another camera needs to be placed on Golden Lane to record any non-compliant vehicles using Beech Street travelling from Aldersgate Street and turning left onto Golden Lane.

56. Emergency vehicles under blue lights will continue to be able to use Beech Street.

### **LAYOUT UNDER OPTION 2**

56. All streets would operate as they do now and the Beech Street central reservation gaps would remain.

### **PUBLIC CONSULTATION RESULTS**

57. The public consultation for Beech Street and the public engagement for the Bunhill, Barbican and Golden Lane Healthy Neighbourhood six weeks from 20<sup>th</sup> January to 6<sup>th</sup> March.

58. The full public consultation report can be found in Appendix 8.

59. Members had asked Officers to ensure there was high awareness of the consultation and that as many people as possible were reached. We did this by:

- Distributing 17,000 leaflets to properties across the whole project area and adjoining areas
- Placing 40 on street posters across the area to draw attention to the consultation for people on the street
- 6 panel vinyls were stuck to the walls within Beech Street
- Notification of the consultation sent to the Barbican Association and Golden Lane Residents Association

- Articles in the Barbican Estate Office weekly newsletter and City Resident

60. Four public drop-in sessions were held, two at the Golden Lane centre, and two at the Viblast Centre in Islington. People were able to visit and ask any questions about Beech Street and also sit down with City and Islington officers to discuss and raise issues about the area wide Healthy Neighbourhood. Over 80 people attended the Golden Lane sessions.

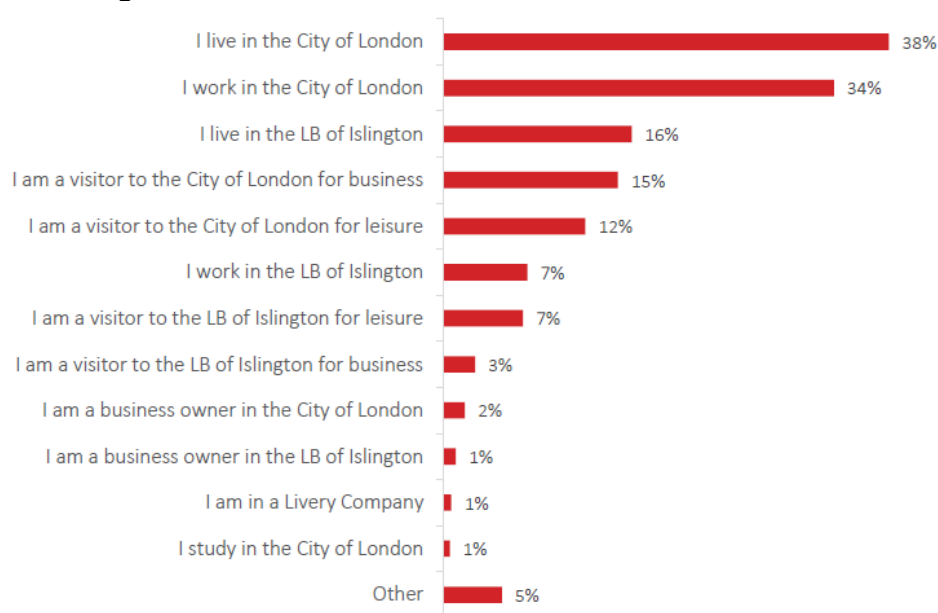
61. The City's Beech Street webpage featured further information and data on the previous traffic experiment including an interactive traffic dashboard.

62. Our consultation consultant created an online portal featuring an interactive map explaining the various elements of the scheme and a number of questions:

- Relationship to the Beech Street area
- How people normally travel around the area
- Overall support for the proposals
- Reasons if not supportive of the proposals

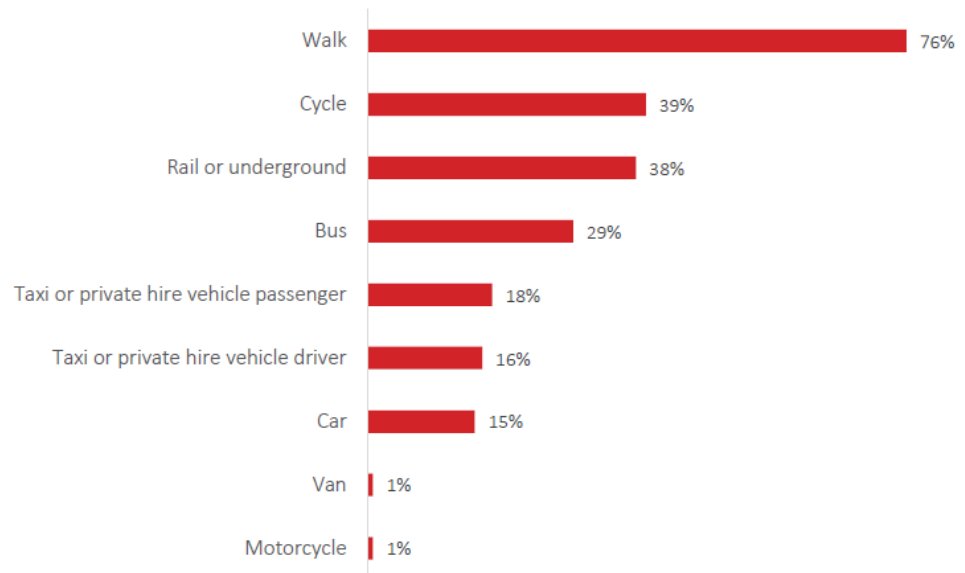
63. Nearly 800 responses to the consultation were received.

64. Two in five respondents (38%) to the consultation survey reported that they live in the City of London, and just over a third (34%) reported that they work in the City of London. This compares to 16% who reported living in Islington, and 7% who reported working in Islington.



What is your relationship to the Beech Street area? (MRQ; Base: 782)

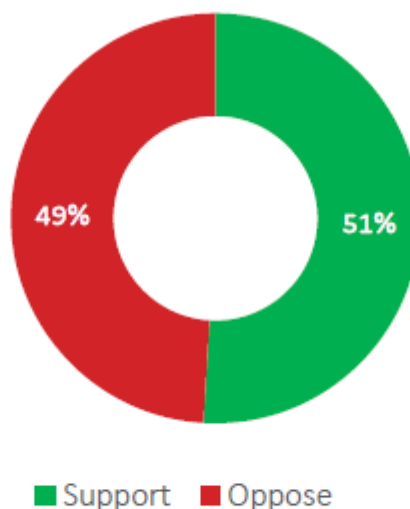
65. Those responding to the consultation survey were asked about their usual mode of travel when travelling around the Beech Street area. Travelling by foot was the most common, reported by three quarters of respondents (76%), followed by two fifths who reported cycling (39%), or using rail or underground services in the area (38%).



How do you normally travel around the area? (MRQ; Base: 775)

66. After being provided with detail on the proposals for the Beech Street Zero Emissions Scheme, respondents were asked whether or not they supported the proposals presented.

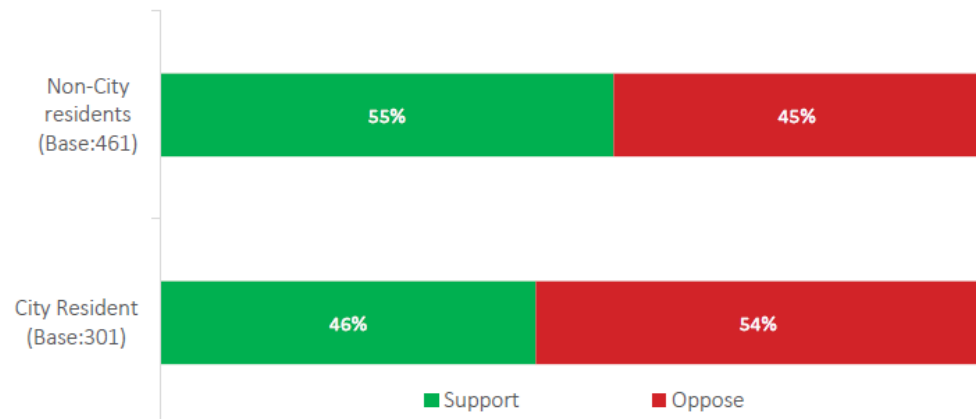
67. Levels of support were essentially evenly divided, with with 51% of respondents supporting the proposals and 49% opposing (49%).



Overall, do you support the proposals as presented? (Base: 789)

68. Level of support varied significantly by area of residence.

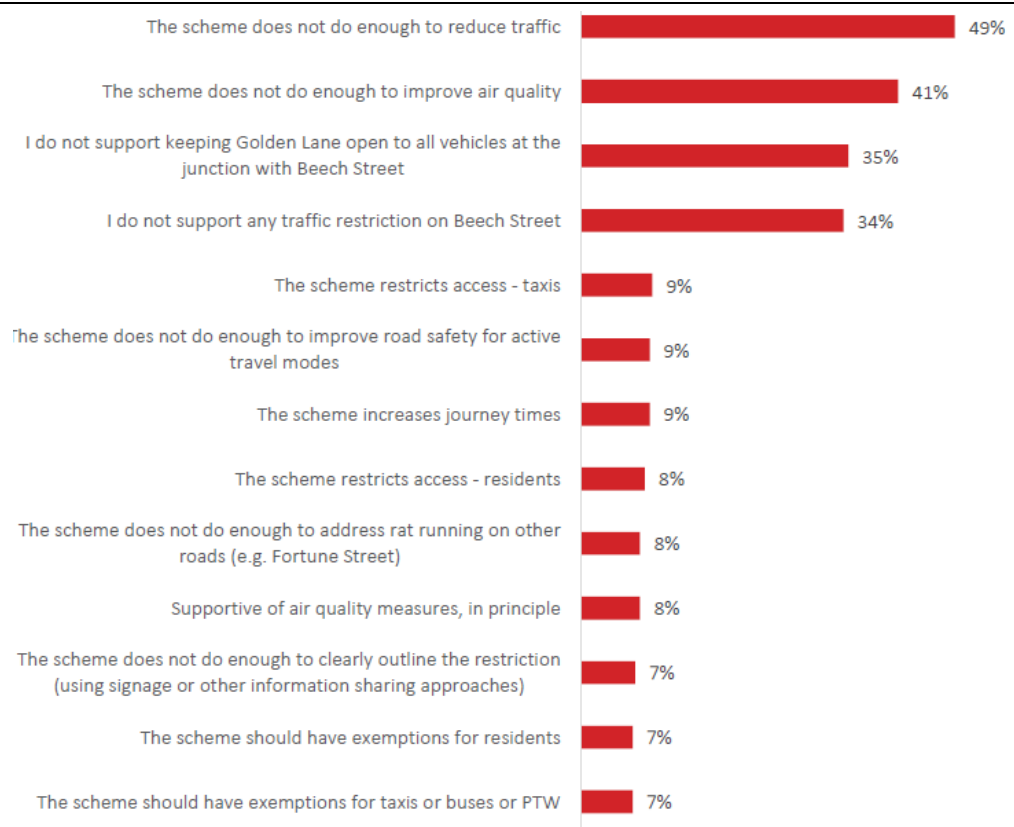
Specifically, those who live in the City were more likely to oppose the proposals, as presented, than those who do not live in the City (54% compared with 45%). Level of support did not differ between Islington and non-Islington residents.



Overall, do you support the proposals as presented?

69. Support for the proposals was highest from people who cycle in the Beech Street area (72%), followed by those who travel by rail or underground (60%), those who walk (55%), and those who travel by bus (49%). Opposition was highest from those who reported travelling by private vehicle or taxi or private hire vehicle.

70. The online survey respondents who reported opposition to the Beech Street proposals (49%) were given the opportunity to provide reasons for their opposition and the majority (80%) did so. Respondents could select as many reasons as they liked and also had the opportunity to add further reasons in a comments box. The chart shows reasons provided by more than 5% of opposing respondents.



If you said you 'Oppose' the proposals, we would like to understand why. What are your reasons for this? (MRQ; Base: 311)

71. From the public drop-in sessions, the main themes raised by residents were:

- A desire to see the zero-emission scheme re-introduced
- A desire to not have a zero-emission scheme re-introduced but to take an area wide approach
- Concerns about keeping Golden Lane open to all traffic and its impact on traffic, road safety and air quality
- General concern that traffic and air quality problems being moved onto other streets that are fronted by residential properties

72. The Barbican Association wrote to the City with their feedback on the consultation, including their views on improvements that could be made to Golden Lane, Fore Street, the scheme signing and offering exemptions to residents. Generally, the BA recognises the complexity of the issues and is supportive of a well thought through approach for addressing air quality across the wider area through the Healthy Neighbourhood approach.

### **IMPACTS – TRAFFIC, WALKING AND CYCLING**

73. The zero-emission proposals have benefits and disbenefits for traffic, walking and cycling. Some of these are quantitative and measurable and some are qualitative.

## **MOTOR VEHICLES**

### **74. Benefits**

- People driving vehicles that are permitted to use Beech Street, and bus passengers on the 153, derive some journey time benefits from having less traffic along the corridor.

### **75. Disbenefits**

- The main disbenefit for people driving non-zero emission capable vehicles is that their journey may be longer. The impact of this disbenefit is highly dependent on the length of journey and its origin and destination. In many instances a journey would not involve needing to use Beech Street, for example a journey from east London with a destination on Silk Street or Moor Lane. Where Beech Street would normally be used it would be possible to adjust the planned route closer to the point of origin to reach the destination without using Beech Street.
- Of the 9,500 vehicles that use Beech Street on a weekday, the majority will reassign to alternative streets with some journeys reassigning from further away, i.e. vehicles originating from the Holborn direction would reassign to Newgate Street rather than use Charterhouse Street and Long Lane
- Our traffic surveys show that 66% of traffic on the Beech Street/Chiswell Street corridor is “through” traffic. This equates to six thousand vehicles which will reassign primarily to London Wall and Old Street as the alternative east/west routes, with parts of Aldersgate Street and Moorgate also taking more traffic.
- Some traffic with a more local destination will also reassign to streets such as Golden Lane, Wood Street, Fore Street and Moor Lane.
- It is estimated that for journeys impacted, taking an alternative east/west route via London Wall or Old Street could add a few minutes onto a journey depending on time of the day and traffic conditions.
- Legibility and understanding of the restriction is a likely disbenefit of the scheme. During the experiment there were instances of missed deliveries during the experiment, challenges getting taxis to agree to enter Beech Street to drop off or pick up and people receiving Penalty Charge Notices.

### **Golden Lane**

76. Currently Golden Lane has 30% less traffic than 2019.

77. At briefing sessions held in June, local Members expressed concerns about the reassignment of traffic onto Golden Lane.

78. Based on the data we have and adjusting pre-scheme traffic counts to account for general lower traffic trends post pandemic, it

is broadly estimated that traffic on Golden Lane would increase to be in the region of ~3,200 veh/day. This is a similar to the pre-scheme level of ~3,300 veh/day.

79. This estimate is based on general traffic in the City remaining at 80% of pre-pandemic levels and assumes that most of the traffic that turns left from Aldersgate Street into Beech Street will reassign to Old Street→Golden Lane→Beech Street. This is approximately 1,000 vehicles per day.

80. The levels of traffic on Golden Lane projected is considered acceptable in traffic management terms. Traffic speeds on Golden Lane are low as both the City and Islington are 20mph areas. The street was considered safe by Islington to grant permission to the COLPAI site without further traffic management measures being required by the development.

81. The feasibility of introducing a School Street on Golden Lane will be investigated as part of the Healthy Neighbourhood Plan.

#### **Aldersgate Street**

82. Currently Aldersgate Street has 23% less traffic than in 2019.

83. At briefing sessions held in June, local Members expressed concerns about the potential for reassignment of traffic onto Aldersgate Street, particularly the northern section where resident flats are close to the traffic and air pollution.

84. Traffic on Aldersgate Street southbound will partially reduce by ~1,000 a day with this traffic reassigning to Golden Lane, but there will be some reassignment of traffic from Long Lane onto Aldersgate Street northbound. 2019 traffic counts for Long Lane that show ~2,000 vehicles per day go from Long Lane to Beech Street. This traffic will have to turn left or right onto Aldersgate Street.

85. Broadly, based on previous studies that estimate splits of traffic reassigning to Old Street and London Wall, we estimate that there would be some increase in traffic on Aldersgate Street but not to levels any greater than the levels of traffic in 2019.

#### **WALKING AND CYCLING**

##### **86. Benefits and Disbenefits**

- People walking and cycling on Beech Street will benefit from the reduced exposure to air pollution within Beech Street
- People walking and cycling on alternate streets which experience an increase in traffic and minor increases in exposure to air pollution.

- The experience and safety of people walking and cycling on Beech Street will be improved as a result of less traffic in Beech Street, but people walking and cycling on some surrounding streets may experience more traffic.

## **IMPACTS – AIR QUALITY**

### **Benefits**

87. The air quality modelling work for Beech Street undertaken by Cambridge Environmental Research Consultants has proven quite accurate for predicting NO<sub>2</sub> levels on Beech Street. Under the “do nothing” scenario was estimated at 39.4 µg/m<sup>3</sup> and the annual measurement recorded as 40.6 µg/m<sup>3</sup>.

88. Under the zero-emission proposal, the modelling done last year indicated that air quality would improve from 39.4 µg /m<sup>3</sup> to 30.4 µg/m<sup>3</sup> on Beech Street.

### **Disbenefits**

89. The air quality modelling suggests some streets in the surrounding area will see minor increases in NO<sub>2</sub> levels under the zero-emission street scheme. These modelled increases are lower than the modelled decreases for Beech Street. See table below.

90. NO<sub>2</sub> would marginally increase on Old Street, London Wall, Aldersgate Street and Moorgate due to the reassigned traffic, however it should be noted that at some locations the base level of NO<sub>2</sub> predicted by the model produced last year in the Scenario 1 column is significantly less accurate when compared to measured actual levels of NO<sub>2</sub> for 2022.



Receptor name	Scenario 1	Scenario 2		Scenario 3	
	Total	Total	Change	Total	Change
Beech Street (AQ monitor)	39.4	30.4	-9.0	30.4	-9.0
<i>Beech Street (AQ monitor) – estimate based on new traffic data</i>	40.6	30.4	-10.2	30.4	-10.2
Beech Street (East of Golden Lane)	35.9	28.6	-7.3	31.0	-4.9
<i>Beech Street (East of Golden Lane) - estimate based on new traffic data</i>	38.8	28.6	-10.2	31.0	-7.8
Aldersgate Street/Old Street	33.3	36.1	2.7	36.6	3.3
Old Street/Golden Lane	32.1	34.8	2.8	35.4	3.3
Old Street Roundabout	31.4	31.4	0.1	31.4	0.1
Golden Lane (Roscoe Street)	28.4	28.3	-0.1	28.8	0.4
Golden Lane (Fortune Street)	29.4	28.9	-0.4	30.0	0.6
Fortune Street	27.6	27.6	0.0	27.6	0.0
Richard Cloudesley School	28.0	27.9	-0.1	28.1	0.0
Beech Street/Whitecross Street	31.5	27.7	-3.7	28.6	-2.8
Beech Street/Golden Lane	34.0	28.9	-5.1	30.0	-4.0
Beech Street/Aldersgate Street	35.8	30.6	-5.2	30.6	-5.1
Silk Street (Barbican Centre)	28.1	28.2	0.0	28.2	0.1
London Wall Roundabout	36.6	39.4	2.8	39.4	2.8
Aldersgate Street	36.0	36.6	0.7	36.6	0.7
London Wall	29.2	29.3	0.0	29.3	0.0
London Wall	32.0	34.1	2.1	34.1	2.1
London Wall/Moorgate	32.4	34.7	2.3	34.7	2.3
Moorgate/Ropemaker Street	31.9	34.4	2.5	34.4	2.5
Chiswell Street	34.2	34.2	0.0	34.2	0.0
Fann Street	28.6	28.6	0.0	28.6	0.0
Lauderdale Tower	30.5	29.9	-0.6	29.9	-0.6
Shakespeare Tower	28.9	28.6	-0.3	28.6	-0.3
Cromwell Tower	28.0	27.7	-0.3	27.7	-0.2

Scenario 1: Roads open  
Scenario 2: BS & GL closed  
Scenario 3: BS closed with GL open

### Golden Lane

91. Golden Lane may see a very slight increase in NO<sub>2</sub> (measured in 2022 at 19.2 µg /m<sup>3</sup>) due to reassigned traffic. However, this current low level of NO<sub>2</sub> its unlikely to increase to anywhere close to its 2019 levels (~28 µg /m<sup>3</sup>).

### Aldersgate Street

92. NO<sub>2</sub> levels on Aldersgate Street have been measured at a variety of locations. The modelling had suggested NO<sub>2</sub> levels of 36 but in 2022 was measured at 43, this is partly explained by the diffusion tube being placed near the junction where vehicles accelerate. At briefing sessions Members expressed a concern that residents in flats on Aldersgate Street would experience more pollution if more traffic reassigned to Aldersgate Street. Additional information on

the NO<sub>2</sub> measured at the facades of buildings is included in Appendix 9.

### **IMPACTS – EQUALITIES IMPACT ASSESSMENT**

93. An independent Equalities Impact Assessment has been undertaken, a copy of the EqIA report is included in Appendix 7.

86. The EqIA identified potential positive impacts of the scheme which are summarised below.

#### *Summary of Road Safety Benefits*

87. Younger people (under 16 and 16-24) who are most likely age group to walk will benefit from the improved pedestrian environment in Beech Street

88. People with mobility impairments, people who are pregnant and racial/ethnic groups where people are more likely to walk will find it easier to cross the road due to reduced traffic on Beech Street.

#### *Summary of Air quality improvements*

86. Younger and older age groups and pregnant women are disproportionately vulnerable to poor air quality. These groups, and disabled people vulnerable to air pollution such as those with stamina and breathing impairments will disproportionately benefit from the cleaner air on Beech Street.

#### *Improved waiting environment at bus stop*

89. The improved air and noise pollution is likely to improve amenity for those more likely to use public transport which include younger and older people, females, disabled users and Black or Black British residents.

90. The EqIA identified potential negative impacts of the scheme which are summarised below.

#### *Increased journey times for non-compliant motor traffic*

91. Re-routed journeys may lead to longer journey times for people who rely on private or hire vehicles. This could include people with protected characteristics such as older people (over-60s), people with mobility impairments and pregnant people.

#### *Reduction in taxi availability*

92. Non-zero emission capable taxis will not use Beech Street. This will likely reduce the availability to hail a taxi although the numbers of LEVC taxi's as a percentage of the fleet is constantly rising. This will affect older and mobility impaired street users.

*Reduced access to adjacent residential streets*

93. The measures are considered likely to disproportionately affect older and disabled residents reliant on family, friends and professionals for daily care. The carers themselves are also more likely to be women and from ethnic groups.

*Perception of personal safety*

94. The significantly quieter conditions and levels of passive surveillance at quieter times of the day may make some groups of people feel less safe, these include people from the LGBTQIA+ community, people with a disability/long term health problem, blind and partially sighted people.

*Worsening of air quality on other streets*

95. Whilst the impact on air pollution on other streets is less than the improvement on Beech Street, younger and older people, pregnant women and disabled people with respiratory and stamina issues are likely to be the most affected groups.

## **LEGAL IMPLICATIONS**

### **If Option 1 is chosen**

93. The Road Traffic Regulation Act 1984 (RTRA 1984) provides powers to regulate use of the highway. In exercising powers under the RTRA 1984, section 122 of the Act imposes a duty on the City to exercise functions (so far as practicable having regard to the matters set out in the bullet points below) to secure the 'expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off the highway':

- the desirability of securing and maintaining reasonable access to premises;
- the effect on amenities of any locality affected and the importance of regulating and restricting the use of roads by heavy commercial vehicles, so as to preserve or improve the amenities of the areas through which the roads run;
- 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;

94. The procedure relating to the making of experimental traffic orders is set out in the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 and, in particular, regulations 22 and 23.

95. Pursuant to Section 122 of the Road Traffic Regulations Act 1984 the City has also considered whether there is another change that could be made to the street to improve air quality to address the air quality problems which still exist on Beech Street. Options considered include:

- a) *Making Beech Street one-way.* This would reduce traffic in Beech Street by approximately half and in all probability allow NO<sub>2</sub> to reach legal limits. Officers have considered the likely impacts of this and judge it as having a greater impact on equalities than the proposed measure as the 153 bus route would need to be rerouted in at least one direction
- b) *Make Beech Street zero emission in one direction and unrestricted in the other direction.* Officers consider that this approach would be confusing for road users in terms of route planning and access.
- c) *Reducing the hours of operation.* Officers consider that whilst this option would improve air quality, pedestrian and residential amenity outcomes would be lesser than the proposed option.

96. Pursuant to Regulation 9(1) of the 1996 Regulations, the City has considered the necessity of holding a public inquiry and whereas the potential restrictions do not fit within a category where it is mandatory to hold a public inquiry, has decided against holding a public inquiry in the exercise of its broad discretion under Regulation 9.

97. The decision to not hold a public inquiry is based on the following evidence:

- a close version of the proposed restriction has been tested previously
- the public have a good understanding of how the scheme would work
- the impacts of the measures on air quality and traffic are well understood

98. In light of these considerations, a public inquiry is not considered justified when taking into account the cost and the knowledge attained from the previous experiment.

**If Option 2 is chosen**

99. The Local Air Quality Management Framework, underpinned by the Environment Act 1995 and the Air Quality Strategy for England, sets local air quality limits put into place through the Air Quality (England) Regulations 2000 (as amended in 2002). The framework requires local authorities to assess the quality of their air and, if it does not comply with relevant concentration limits, put in place a plan to remedy the problem. Local authorities are expected to take preventative action, through a local Air Quality Strategy, rather than waiting for a legal limit to be breached.

100. Local authorities' Air Quality Strategies should be informed by their monitoring and assessments. Air Quality Strategies should

set out a strategy which prioritises reduction of population exposure, including in areas experiencing disproportionately high levels of pollution.

101. It is considered that the air quality issue on Beech Street is now marginal, will likely reduce in the medium term as the uptake of zero emission vehicles increases and that further improvements to Beech Street can be developed as part of the Healthy Neighbourhood Plan.

102. The City has also considered the aspirations of its own Transport Strategy and the London Mayor's Transport Strategy.

103. The recommendations within this report are within the City's powers and duties.

### **CONCLUSION**

104. The public consultation results demonstrate that the zero-emission scheme is a polarising issue with a wide range of views amongst respondents and participants. The project is particularly complex with significant nuances around the traffic, access and air quality information.

105. The split in the levels of support, combined with marginally exceeding air pollution levels make decision making on the right way to proceed very challenging for Officers and elected Members.

106. On balance, after briefing local Ward Members on the traffic and air quality situation and considering the benefits and disbenefits of the scheme, Officers recommendation is that the zero-emission scheme as consulted on should not be implemented for the following reasons:

- The traffic and air quality data shows that even though traffic levels on Beech Street are back to 2019 levels, the levels of NO<sub>2</sub> are now only marginally in breach of legal limits and are significantly below the levels in 2019 when the zero-emission scheme was initiated
- There is a reasonable expectation that in the medium term the background air quality improvements across London will continue on a downward trajectory, thus bringing Beech Street back into legal compliance
- Some drivers did not understand the legally compliant signage and therefore some activities such as deliveries and taxi journeys were negatively impacted
- The scheme has some disbenefits with limited increases in traffic and air quality impacts on some surrounding streets
- There is not majority support amongst City residents for the scheme and support of residents outside the City, whilst a majority was still relatively low at 55%.

	<p>107. Regardless of the option chosen it is proposed to progress at pace the Healthy Neighbourhood project and develop a plan in collaboration with the local community and Islington to address issues and opportunities across the area. This would be more likely to address the consultation responses that pointed to a lack of support because the scheme does not do enough to reduce traffic or improve air quality. The developed plan could include some form of traffic restriction on Beech Street in the future.</p>
<p>5. <b>Delivery Team</b></p>	<p>108. The delivery team for the project is set out below:</p> <ul style="list-style-type: none"> <li>▪ Project management by the Projects and Programmes team in Policy and Projects.</li> <li>▪ Construction Engineering/Design and Construction Supervision to be managed by Highways team</li> <li>▪ Contractor – FM Conway under the highways term contract.</li> </ul>
<p>6. <b>Programme and key dates</b></p>	<p>109. <b>Key dates – Option 1</b></p> <ul style="list-style-type: none"> <li>• July/August 2023 – TfL Approvals</li> <li>• September 2023 – advertise traffic order</li> <li>• October 2023 – objection reconciliation</li> <li>• November 2023 – committee objection report (if needed)</li> <li>• January 2024 – make permanent traffic order</li> </ul> <p>110. <b>Key Dates – Option 2</b></p> <ul style="list-style-type: none"> <li>• September 2023 – Gateway 6 Report to close the project</li> <li>• Remove signing and cameras</li> </ul> <p>Timelines may vary for both Options if Legal Challenges are received.</p>
<p>7. <b>Risks</b></p>	<p>111. This section summarises the main risks to the project if Option 1 or Option 2 is chosen:</p> <p><b>Option 1</b></p> <ul style="list-style-type: none"> <li>• Legal challenge to the Sub-Committee decision to introduce the zero-emission scheme on Beech Street (likely)</li> <li>• Not obtaining the final traffic management approvals from TfL</li> <li>• Likelihood of some negative press and negative feeling amongst residents and respondents who do not support the scheme proceeding</li> </ul> <p><b>Option 2</b></p> <ul style="list-style-type: none"> <li>• Legal challenge to the Sub-Committee decision to not introduce the zero-emission scheme on Beech Street given that the levels of pollution are currently in breach of legal limits (possible)</li> </ul>

	<ul style="list-style-type: none"> <li>Likelihood of some negative press and negative feeling amongst residents and respondents who supported the scheme by not proceeding</li> </ul>
8. <b>Success criteria</b>	112. The success criteria for the project, to reduce NO <sub>2</sub> to legal limits is unlikely to be met in the short term with the recommended option but in the medium term as more vehicles become electric it is likely that legal limits will be reached.
9. <b>Progress reporting</b>	<p>Option 1</p> <p>113. Monthly project vision reports will be made.</p> <p>114. Further issues reports as necessary for timely Member decisions to progress the programme</p>

### Appendices

<b>Appendix 1</b>	Project Coversheet
<b>Appendix 2</b>	Finance tables
<b>Appendix 3</b>	NO <sub>2</sub> (diffusion tube) air quality data
<b>Appendix 4</b>	Costed Risk register
<b>Appendix 5</b>	Traffic counts
<b>Appendix 6</b>	Option 1 – Zero emission scheme layout
<b>Appendix 7</b>	Equalities Impact Assessment
<b>Appendix 8</b>	Public Consultation results report
<b>Appendix 9</b>	NO <sub>2</sub> Goswell Road and Aldersgate Street

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