

Appendix 4: Progress to date and technical information

Baseline study

1. A comprehensive baseline study has been undertaken on the existing conditions in Beech Street and the wider study area. The baseline report contains information on the history of Beech Street, various assessments as well as present data collected over the last year or so, including traffic movements, public transport air quality, noise, collisions and the public realm. The baseline study will be used as a reference point to compare the effects as a result of any changes.

Traffic and statutory approvals

2. The team continue to liaise with Transport for London (TfL) and Islington Council on obtaining the necessary approvals via the TMAN process.
3. Strategic traffic modelling was completed in November 2019, with significant traffic displacement forecast on the surrounding road network including Aldersgate Street/Goswell Road, London Wall, Moorgate, Finsbury Park/Finsbury Pavement and Old Street, as a result of the two-way Zero Emission restrictions. A traffic impact report has been completed, based on the strategic modelling outputs, and included in Appendix 4.
4. Additional traffic is also expected on local roads, in particular in Islington along Bunhill Row, Banner Street and Fortune Street. Traffic is also predicted to increase along Moor Lane.
5. Under the proposed zero emission restrictions, bus 153 – the only route servicing Beech Street – will continue to use the street as before as the 153 fleet is electric and therefore compliant.
6. The displaced traffic is expected to affect bus journey times of services in the immediate vicinity, including route no's 4, 56, 76 and 100.
7. A monitoring strategy has been developed in consultation with TfL and Islington Council, for the purposes of checking the effects of the scheme during the initial stage (i.e. until a decision has been made to make the scheme permanent) and respond/mitigate as necessary
8. Traffic (flow) along the affected streets, as well as bus journey times will be monitored during the monitoring period.
9. An audit of all relevant signage in the study area was undertaken to understand the requirements for providing advanced information to drivers and direct traffic accordingly.
10. A new sign to enforce the scheme was approved by the Department for Transport (DfT) in September 2019 – a copy is included in Appendix 5.

Air quality

11. A specialist consultancy was appointed to undertake air quality modelling and this task was completed in September 2019. The air quality modelling is based on traffic data collected as part of the baseline and the strategic traffic modelling outputs.

12. Under the two-way ZES scenario, air quality is set to improve significantly along Beech Street with some minor improvements also expected in the immediate vicinity. Conversely, some worsening of air quality is expected on the surrounding road network as a result of traffic being reassigned. The locations of the modelled air quality receptors are shown in Figure 1, with results presented in Table 1.

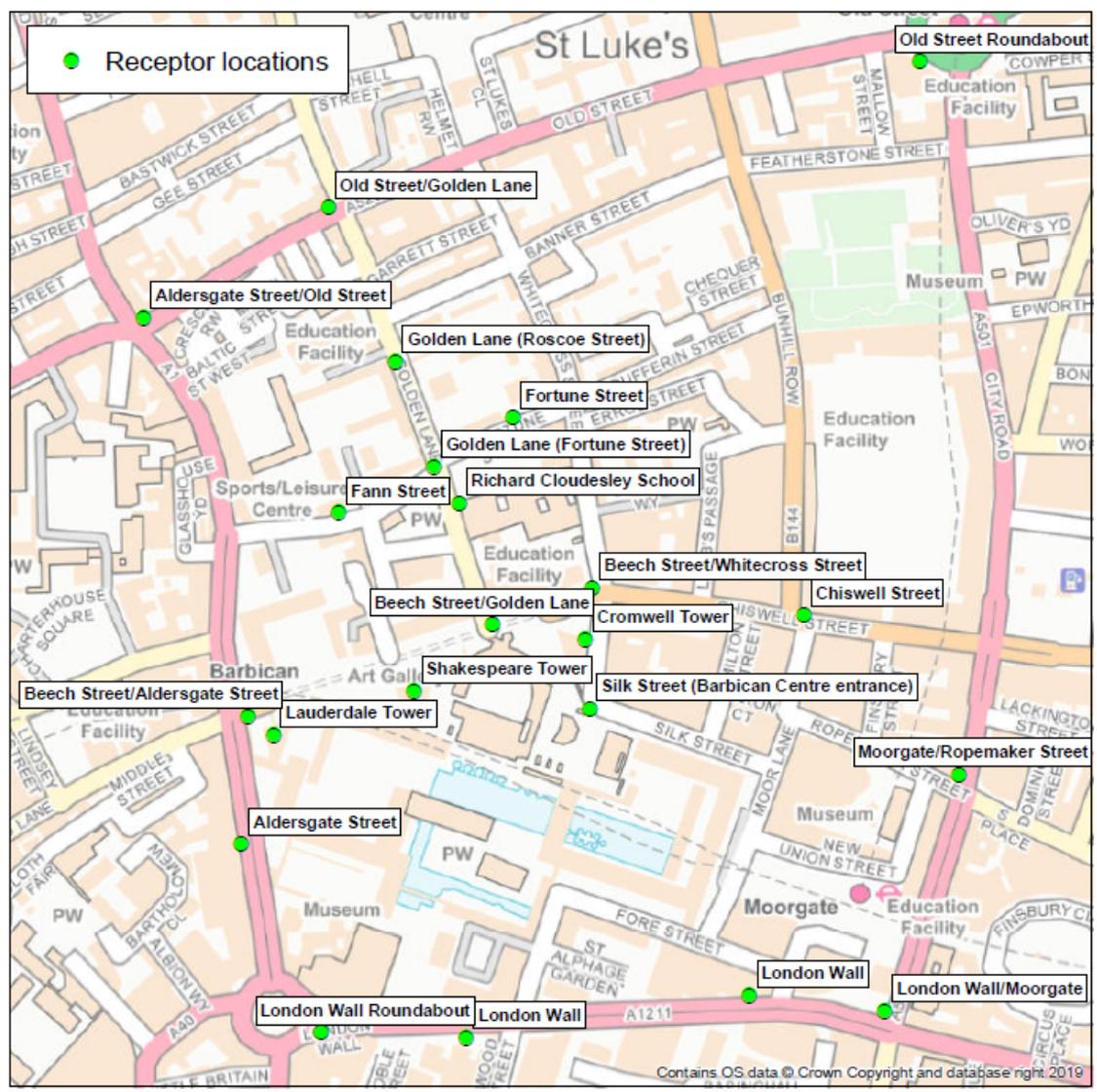


Figure 1: Air quality receptor locations

Table 1: Modelled annual average concentrations at receptor locations

Receptor name	2021 Baseline	Two-way ZES	
	Concentration ($\mu\text{g}/\text{m}^3$)	Concentration ($\mu\text{g}/\text{m}^3$)	Change (%)
Aldersgate St/Old St	41.6	45.6	10%
Old St/Golden Ln	40.9	45	10%
Old St Roundabout	34.8	34.6	-1%
Golden Ln (Roscoe St)	32	33.8	6%
Golden Ln (Fortune St)	30.9	29.9	-3%
Fortune St	29.6	30	2%
Richard Cloudesley Sch	28.8	28.6	-1%
Beech St Whitecross St	50.4	29.3	-42%
Beech St/Golden Ln	54.9	33.3	-39%
Beech St/Aldersgate St	52.7	31.6	-40%
Silk St (Barbican entrance)	31.2	35.2	13%
London Wall Roundabout	46.6	51.3	10%
Aldersgate St	45.4	45.4	0%
London Wall	29.8	29.9	1%
London Wall	39.7	43.7	10%
London Wall/Moorgate	44.6	45.5	2%
Moorgate/Ropemaker St	43.2	46.7	8%
Chiswell St	40.6	36	-11%
Fann St	29.3	29.2	0%
Lauderdale Tower	32.6	30.5	-6%
Shakespeare Tower	30.1	29.1	-3%
Cromwell Tower	29.5	28.7	-3%

Design and layout

13. Only ZEVs will be allowed to use Beech Street as a through road and a 'point' enforcement approach has been taken to managing the ZES, by creating a zone within the covered roadway where enforcement will take place.
14. The accesses to the existing car parks and servicing areas (e.g. the Barbican Trade Centre and Lauderdale Place) falls outside of this zone, ensuring non-compliant vehicles may continue to use these. To allow for this the central reservation will be amended to accommodate right turn movements to/from the various accesses – essentially this means a behavioural change that will result in the entry and exit movements to/from Beech Street are from the same direction (i.e. either east or west).
15. A new sign to enforce the scheme has been approved by DfT and these will be installed at the enforcement point, as well as at either end of Beech Street – a copy of the sign is included in Appendix 6. Advanced warning signs will also be installed in the wider area, both for information purposes and to

guide drivers. All of the signs will be able to be covered up if needed, e.g. if Beech Street would need to be reopened to all traffic under an emergency diversion scenario.

16. Currently, the right turn movement (for northbound vehicles) is prohibited from Silk Street into Chiswell Street and instead vehicles execute a left turn, entering Beech Street and continue their journey in the westbound direction.
17. So as to avoid non-compliant vehicles entering the ZES various options for removing the right turn ban were explored, including the introduction of a mini roundabout and changing priorities at the junction. However, these changes will result in cyclists (travelling in an east–west direction) coming into conflict with vehicles and was therefore dismissed as a safe choice.
18. A stage 1/2 road safety audit will be carried out on the final layout to ensure safety of all road users have been taken into consideration.

Enforcement

19. Siemens was appointed in October 2019 as the City's preferred supplier for ANPR cameras and will also be used to supply the required technology for this scheme.
20. The project team has been working closely with other teams and departments, as well as Siemens and Saba (who will be supplying resources to enforce the scheme), in establishing an enforcement regime.
21. A grace period will apply after the scheme goes live, where warning letters will be sent to those who contravene the restrictions, in lieu of PCNs.
22. A 'whitelist' will be developed that will include details of non-compliant vehicles that will be exempt from the restrictions.

Legal

23. As previously reported, progressing a closure or restrictions on Beech Street without the necessary approvals in place, are not recommended due to the requirements of the decision-making framework, for the following reasons:
 - a. A full or partial closure of Beech Street will require a traffic order, which must be consulted on. Neighbouring authorities likely to be affected must be consulted. Objections from all stakeholders must be carefully evaluated (sometimes involving an Inquiry)
 - b. In making traffic orders and carrying out its traffic authority responsibilities, the City Corporation has duties to secure the expeditious, safe and convenient movement of traffic (having regard to effect on amenities) (S.122 Road Traffic Regulation Act 1984), and to secure the efficient use of the road network, avoiding congestion and disruption (S.16 Traffic Management Act 2004). These duties require the impacts of proposals to be fully understood and mitigated. The TMAN process has been put in place by TfL to ensure that the impacts on traffic movements on strategic roads can be properly assessed, and therefore that the decision-making process is robust.
 - c. Officers do not recommend proceeding with implementing any form of vehicle restriction before completing the TMAN process, as successful

completion of this process helps to ensure compliance with the traffic authority duties outlined above.

24. Independent legal (Counsel) opinion on the scheme proposals have been sought to ensure there is a high degree of certainty that the City is acting within its statutory powers, with the following reviewed: the traffic order; Gateway Reports; and the advice given by the Comptroller and City Solicitors team.

Public Realm and Culture Mile considerations

25. Introducing the ZES will limit the scope for public realm improvements, as the street layout will not change under this scenario.
26. A workshop with Culture Mile partners were held in September to gather views on conceivable public realm interventions for Beech Street as result of the Interim Scheme.
27. A specialist consultant will be appointed during the initial phase (i.e. the experimental period) of the Interim Scheme to engage with stakeholders and the wider public to gather views on the ZES changes and the future possibilities of this street and how this relates to the wider Culture Mile aspirations. The costs associated with this will be limited to ~£50,000 to save on potentially abortive spending.
28. Should the decision be taken to make the ZES permanent, more extensive public realm interventions will be introduced, using the outcomes from the above engagement process.
29. The proposed changes will be reported back to Members via the Issues report planned for later in 2020.

Engagement

30. A number of face-to-face meetings were held with representatives from the taxi trade and private hire trade. Views on the scheme and input to the monitoring process were sought as part of this process. It is intended to continue to liaise with these and other groups, including the freight industry, going forward.
31. Street user perception surveys were completed in August 2019. The surveys collected views on how various individuals/groups use and perceive Beech Street in its current form. The surveys also sought information on possible changes/improvements that individuals would like to see in the area. The results have been included in the baseline report.

Other

32. An Equalities Impact Analysis (EqIA) and Health Impact Analysis (HIA) was completed by an independent consultant in November 2019, with the results incorporated into the final design. A copy of the EqIA and HIA report is included in Appendix 8.
33. A graphic design specialist was appointed to create a series of maps that will assist in communicating the scheme – these are included in Appendix 6.