

Committee(s):	Date(s):
Streets and Walkways	16 July 2012
Subject: Aldersgate St / Beech St – Junction Review	Public
Report of: Director of the Built Environment	For Decision
<u>Summary</u>	
<p>In July 2011, Members of the Streets & Walkways Sub-committee approved the implementation of improvements to the Aldersgate St./ Beech St. junction including proposals to allow Transport for London to revise the traffic signal timings and operation as part of a three month trial and the installation of the City's first Pedestrian Countdown Timers.</p> <p>This report seeks to update Members on the outcome following the recently implemented junction improvements. The results of post-implementation monitoring and feedback indicate that the trial has been successful.</p> <p style="text-align: center;">Recommendations</p> <p>It is recommended that Members agree to retain the changes.</p>	

Main Report

Background

1. On 26 March 2010, Members of the Planning and Transportation Committee requested that Officers investigate the operational safety and efficiency of the Aldersgate Street / Long Lane / Beech Street junction following complaints from nearby residents and users of this junction.
2. Officers, in partnership with Transport for London, conducted initial traffic modelling investigations resulting in a number of improvement options. Consideration was given to all road users including vehicle drivers, cyclists, pedestrians and vulnerable users such as the elderly and disabled. Through a series of meetings, officers consulted neighbouring residents including members of the Golden Lane Residents Association and residents of the Barbican.
3. Towards the end of 2010, officers undertook initial investigation work, in partnership with Transport for London, and in consultation with neighbouring residents including members of the Golden Lane Residents Association and residents of the Barbican.
4. The main concerns raised by residents were insufficient time allocated for pedestrians to cross, and poor cyclist provision and safety concerns, particularly for vulnerable users such as the elderly and disabled. Other concerns included cyclists mounting the narrow footway on Beech Street and excessive traffic queues.
5. On 18 July 2011, the Streets & Walkways Sub-committee approved officer recommendations to implement a number of improvement options.

6. The overwhelming majority of residents who participated in a follow up consultation were in favour of Option 3 (*reducing Beech Street to one lane by removing the dedicated right turn lane and provision of a cycle feeder lane and Advanced Stop Line, and Long Lane and Beech Street Traffic will be discharged (have green lights) at the same time*) as well as measures such as Pedestrian Countdown Timers, SCOOT (Split Cycle Offset Optimisation Technique) and further junction layout improvements.

Current Position

7. The main package of measures was implemented on 31 January 2012 on a three month trial basis with a view to them becoming permanent at the end of the trial.
8. Officers have been conducting various surveys to monitor the effects of the revised traffic signal operation and timings on the junction's operational performance, safety and convenience for all road users.
9. On 24 April 2012, Members of the Planning and Transportation Committee considered Orders of the Court of Common Council of 19 April 2012,

(i) From the Ward of Aldersgate

"To review the traffic lights at the Aldersgate Street/Beech Street junction as regards the safety of pedestrians in the light of traffic light phasing, timing and the resulting traffic flow and the effect it appears to have had on undisciplined cyclists"

10. The above is addressed under the 'Pedestrians' and 'Cyclists' headings of this report.

Traffic

11. Officers commissioned a survey company to undertake 'before' (beginning December 2011) and 'after' (March 2012) traffic surveys to monitor vehicle queue lengths, to undertake manual vehicle classified counts and record directional movement. Surveys were undertaken over seven days covering 24 hours each day.
12. The traffic survey was complicated by a southbound road closure of Moorgate (between Ropemaker St and London Wall introduced on 27 February to accommodate Crossrail carriageway works resulting in daily traffic volumes increasing by up to 10%. Over a 24 hour period the number of buses along the Beech Street approach increased from an average 95 per day to an average of 700 per day, while medium to heavy goods vehicles increased from an average 170 per day to an average 230 per day.
13. The results showed a decrease in the number of queuing vehicles in all time periods surveyed. This was in spite of the significant increase in traffic using the junction as a result of the diversion.
14. So it can be concluded that the junction operation would more than adequately cater for normal traffic conditions.

Pedestrians

15. The amount of crossing time for pedestrians at this junction has not been changed and remains at 6 seconds green invitation (green man), followed by a 15 second inter-green (8 seconds blackout and 7 seconds red man before the traffic signals change). These timings are based on standard TfL guidance on pedestrian phasing, where 6 seconds green invitation is now standard across London, whilst the inter-green period is based upon the crossing distances at the junction.
16. Although the timings will be unchanged, the provision of Pedestrian Countdown Timers at this junction will clearly indicate how much time is available to cross. This is useful at junctions like these where pedestrian flows are heavy, and where the time available for pedestrians is necessarily tight, and where a blackout phase (when crossing is still permissible) gives no positive indication. Thus a timer would help in reassuring pedestrians about how much time they have available to complete the crossing. TfL intends to install the Pedestrian Countdown Timers towards the beginning of October 2012. These will be the first Pedestrian Countdown Timers installed in the City of London.

Cyclists

17. Removal of the dedicated right-turn lane in Beech Street has created the space to allow a cycle feeder lane and Advanced Stop Line (ASL) to be installed, allowing cyclists to safely negotiate their way to the front of queuing vehicular traffic.
18. Visual observation confirms a significant reduction in cyclists mounting the narrow footway in Beech Street.
19. City of London Police confirm they have not received any complaints from pedestrians in relation to cyclists mounting the footway at this location since the scheme was implemented.

Safety

20. A Stage 3 Road Safety Audit was undertaken by the City's Road Safety Team following the implementation of Option 3.
21. The audit team welcomed the changes to the traffic signal operation. They also recommended that the existing pedestrian crossings be widened to complement the new junction operation but to do this would necessitate a wait for suitable funding to be identified.
22. City of London Police confirmed there has been one slight incident since the changes to the traffic signal operation but the contributing factors were unrelated to the junction improvement.

Air Quality

23. In order to monitor air quality changes at the junction, air quality monitoring was undertaken from the start of February until the end of April. The City of London pollution team measure two types of air pollution at Beech Street, fine particulates (PM10) and nitrogen dioxide (NO2).

24. Unfortunately, at the end of February 2012 the air quality monitoring was affected by the introduction of the diversion in Moorgate explained earlier in this report. A review of the data measured for the month of February did not identify an increase in either pollutant. However, following the introduction of the traffic diversion, March and April saw significant increases in the level of NO₂, particularly from diesel buses, which emit higher levels of NO₂.
25. However, the fact that the figures for February showed no increase, and the fact that the air quality at the junction only started to deteriorate when the traffic diversion started would strongly suggest that the deterioration was not in any way linked to the changes to the Aldersgate Street / Beech Street junction.

Consultation

26. Members of the Aldersgate, FarringdonWithin and Cripplegate Wards were informed once the improvement measures were implemented and invited to provide feedback.
27. Feedback received from Ward Members, nearby residents representing drivers of vehicles, pedestrians and cyclists, City Police, and lobby groups such as 'Cyclists in the City' have been very positive, signifying that the changes are welcomed.
28. Feedback received specifically noted the substantial reduction in vehicle queues whilst cyclists are able to safely negotiate their way to the front of vehicular traffic without having to mount the footway.
29. The City has since not received any requests for the implemented improvements to be removed.

Further Measures

30. TfL is set to install the City of London's first *Pedestrian Countdown Timers* at this junction towards the beginning of October 2012.
31. Officers have on-going discussions with TfL in relation to a request for this junction to be included as part of their *SCOOT* programme. The installation of *SCOOT* links signals to a TfL central control and would permit effective smoothing of traffic flow variations and responses to disruptions caused by accidents, events, diversions and unplanned incidents.

Conclusion

32. The results of post-implementation monitoring confirm that the junction improvements have been successful as the new junction operation proves to be safer for all road users, vehicle queues are substantially reduced and cyclists rarely mount the footway on Beech Street. Based on the post-implementation feedback received, these changes are welcomed by the local community while clearly contributing positively towards the Transport Objectives contained within the City's 2011 Local Implementation Plan (LIP2011.3, LIP2011.4, LIP2011.5, LIP2011.6)

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