Response to Transport for London's consultation on pedestrian improvements at Bow interchange April 2015

London Cycling Campaign is a charity with more than 40,000 supporters of whom 12,000 are full members. We speak up on behalf of everyone who cycles, or wants to cycle, in Greater London. Our aim is for London to be a world class cycling city. Founded in 1978, our organisation campaigns for every street in the city to be cycle friendly so millions more Londoners, whatever the age or ability, can enjoy the benefits of cycling, helping to create a cleaner, healthier and less congested capital.



We welcome the opportunity to comment on Transport for London's proposals for Bow interchange.

Introduction

LCC welcomes the opportunity to comment on the Bow Roundabout proposals. London Cycling Campaign has long called for a full overhaul of the junction to bring it up to highest standards of road layouts on the continent including removal of the flyover and to fully integrate with the cycling and walking routes that currently exist in the area (such as the towpath) and those required for safe access to the QE Olympic Park and Stratford. We welcome the recognition of the need to "improve connectivity between Bow and Stratford" and to integrate the "north-south pedestrian and cycle link offered by the River Lea towpath".

The current road design is no longer fit for purpose. Since the structure was opened in 1973 the traffic flows at Bow junction between central London and the A11 and A12 trunk roads have been transferred from west to east, to west to north. In addition rail passenger capacity has more than doubled in the past 15 years, reducing east-west traffic movements.

London Cycling Campaign believes that that interventions made to date represent a flawed compromise, intended to fit cycling in around the margins of motor traffic flow. As a Mayoral cycle superhighway LCC would expect the route to prioritise cyclists using cycle facilities and give them an advantage in terms of safety and convenience over general traffic. We support local cyclists who have called for the continuation of the cycle superhighway, built to the highest standards, to Ilford.

We have major concerns with the latest proposals which we do not feel are good enough for us to support. A junction of this importance requires a more fundamental transformation to properly address current problems of safety and severance. We would also expect to see robust measures to reduce motor vehicle use.

Early Start

We share Tower Hamlets Wheelers' concern that this is the major concern for cycling traffic and why we oppose these proposals overall.

We are disappointed that these proposals retain the early start at Bow Road exit and Stratford High Street exit and that TfL continues in the opinion that such facilities are a 'safety benefit for cyclists'

(Better Junctions review summary report 2014). We understand that TfL is monitoring the early-start facility but have yet to publish findings.

We raised the following issues with the use of early start in a letter to Leon Daniels in September 2012.

- Confusion of both drivers and cyclists: the layout is not intuitively understood and is therefore likely to lead to hazardous situations caused by people who actually want to do the right thing.
- Size and nature of the junction: cyclists have to cover a relatively long distance to get to the other side. Therefore the early start only works for the faster cyclists positioned at the front of the 'bike box.' We have observed many manoeuvres where drivers caught up with a cyclist further back in the queue and posed a 'left hook' risk. It is evident that cyclists at this junction need their own signal phase. We have identified considerable slack in the junction cycle. It should be possible to provide a cycle phase during the dead time when traffic from the next (clockwise) arm enters the junction. Early start may be better suited on smaller intersections as used on the European continent.
- Guaranteed red: cyclists face a red light almost 100% of the time whereas drivers have a long green phase. It is important to note that stopping and starting is much more difficult for cyclists than for drivers, which is why the concept of 'minimum stopping chance' has been applied in the Netherlands, acknowledging that cyclists need momentum to reduce effort.
- Lack of space: the feeder lane funnels cyclists through one by one. This does not cater for anticipated higher volumes of bicycle traffic and would create problems even now if all cyclists used the junction instead of the flyover. The problems of inadequate provision for growth in demand are evident along Cycle Superhighway 3.
- Junction exit: Cyclists remain at considerable risk when exiting the junction: this is not addressed by the current scheme.

Early start is included in the Dutch 'design manual for bicycle traffic'. One of the factors to be considered noted in 'application' is the length of the distance to the mutual conflict point, as the speed difference between a cycle and motor vehicle otherwise results in the motor vehicle reaching the left turn before or at same time as the cycle. Amongst the 'considerations' is that the facility is of 'no benefit to cyclists who do not set off immediately when given the green light'. (CROW, 2007)

The fundamental problem with the early start facility is that it does not separate in time or space cycling traffic from drivers making a left turn. At Bow roundabout the cycling traffic is crossing on a west-east axis whilst almost all the motor vehicle traffic will be turning left or taking a third exit. With the result that on every traffic light phase there is the potential for drivers to 'left hook' a person on a bicycle as there will always be bicycles still clearing the junction as the first wave of motor vehicles reaches it.

The phasing of the lights of the early start means that there are always cyclists who have not 'set off immediately when given the green light' (ibid) as the change to red on the segregated lead-in track occurs simultaneously with the change to green on the carriageway lanes.

This particular design, funnelling cyclists into the annular kerbed track, further invites cyclists to be in the worst possible place for such an eventuality and is contrary to the good practice taught for cycling at roundabouts. Needing to squeeze into the annular kerbed track also militates against use of the full width of the early start box/ASL and hence maximising setting off "immediately when given the green light" (ibid).

The current proposals move the early start facilities back from the junction to accommodate the pedestrian crossing at both exits and increase the depth of the ASL at the Bow Road exit. In our opinion this will further increase the risk of collision between a left turning vehicle and a person cycling across the west-east axis; the most common traffic movement at this junction.

These proposals increase the dangers inherent in the early start facility and therefore, although we support the provision of safe crossings for pedestrians at Bow roundabout, we cannot support them.

Comments on specific proposals

New signalised pedestrian crossings linking Stratford High Street and Bow Road; our view is that moving the early start back from the junction and deepening the SL increases the risk of left-hook collisions.

Unsignalised pedestrian crossings removed; removing the informal crossings across the north and south side slips (the dropped kerb and tactile paving), our view is that these desire lines will still be used by those cycling who feel unsafe with the early start and cross the roundabout on foot.

New signalised pedestrian and cycle crossings on Stratford High Street; we welcome improving crossing Stratford High Street but our concern is that the positioning of the south side crossing will increase use of the service road off Stratford High Street west bound by drivers eager to gain a few extra minutes on the queue. This is already a problem causing the segregated track to be blocked as well as passage along the pavement. A signalised crossing to the east of the exit will act as a traffic light aiding anti-social drivers in this activity. Hence this service road needs closing at its western end. We understand that LB Newham have plans to deal with this problem and we hope that TfL will work with LB Newham to facilitate a solution.

Existing traffic islands on Stratford High Street merged into one large kerbed island; eastbound contra flow lane removed; we have no view on the removal of the eastbound contra flow.

Bow Roundabout kerb line cut back to widen carriageway; our view is that increasing capacity for, and therefore speed of, motor vehicles on the carriageway is to the detriment of those cycling on it who take the 3rd exits. People on cycles exit west bound continuing north to access routes to the east of the borough/Hackney or having exited east bound from Bow Road then continue south (Tesco, Three Mills etc)

Public realm improvements are welcome.

We suggest:

Replacing the pedestrian lights with toucans; giving those on bikes the alternative of crossing in line with those on foot. We would welcome use of the central and eastern islands to include a parallel cycle lane to the footpath provision to enable cycling traffic to take this route

Creating a shared footpath on the south-east pavement enabling cyclists to access the canal exit/entry to the south of the roundabout; although we would not usually advocate shared space use without appropriate pavement width this is a route that is currently used. Either from the eastbound segregated track onto the towpath or exiting the towpath to gain the west bound track at Bow Road.

Installing cameras on the traffic lights on the roundabout to deter and punish drivers jumping the lights on red.

The problems for people using this junction by bicycle created by this anti-social practise are common knowledge. It is a frequent complaint by those using the early start that they are unable to move away quickly on the green because drivers are still crossing from the right, thereby defeating the stated purpose of the facility. Drivers continuing to cross the traffic lights on red contribute to the congestion that also blocks safe exit from the early start box.