Highbury Corner Traffic Modelling

Explanatory note

MAYOR OF LONDON

TRANSPORT FOR LONDON

EVERY JOURNEY MATTERS

Overview

The proposals for Highbury Corner would change the one-way roundabout into a two-way traffic system and pedestrianise the western side of the roundabout, and include segregated cycling facilities. They aim to reduce conflicts between cyclists, motor vehicles and pedestrians, and to balance the needs of all users more effectively whilst transforming Highbury Corner into a high quality public space.

The proposals would mean changes to journey times for road users. This note explains the impacts we expect our proposals to have and is accompanied by a data table. A selection of journeys through the scheme area has been modelled to determine any predicted changes in journey times for cyclists, general traffic and buses, and predicted changes in maximum wait times for pedestrians. The table shows the current on-street situation, the 2021 situation without the scheme, the 2021 situation should the scheme be built and the difference between the two future scenarios.

We would actively monitor traffic conditions on the roads following the delivery of the scheme, to manage demand. We are investing in advanced traffic signal technology to allow us to better manage traffic depending on differing conditions at any given time, and we are working to improve road user information so people can make informed journey choices before they travel.

General Traffic

We anticipate changes to journeys through the scheme area. Some journeys for general traffic would get longer at the busiest times of day and some would get shorter.

The traffic modelling analysis looks at predicted journey times at the busiest hours of the peak periods in the morning and evening. The predicted changes to journey times are summarised as follows:

Traffic travelling southbound between Holloway Road and Upper Street is predicted to experience an increase in journey times of between 1 and 2 minutes in both the morning and evening peaks. Southbound journey times between Holloway Road and Canonbury Road would be 1 to 2 minutes longer in the morning peak and 2 to 3 minutes longer in the evening peak.

When travelling northbound between Upper Street and Holloway Road, general traffic journey times are forecast to increase by up to 1 minute in both the morning and evening peaks.

Northbound journey times between Canonbury Road and Holloway Road are forecast to be 2 to 3 minutes longer in the morning peak and up to 1 minute longer in the evening peak.

Westbound journey times between St Paul's Road and Upper Street and St Paul's Road and Holloway Road are forecast to decrease by up to 1 minute in the morning peak. Eastbound journeys between Upper Street and St Paul's Road would also experience a decrease of up to 1 minute in the morning peak. Evening peak journey times are predicted to increase by up to 1 minute for all three of the above routes.

Journey times in both the morning and evening peak are forecast to be 1 to 2 minutes longer for traffic travelling eastbound between Holloway Road and St Paul's Road. For westbound journeys between St Paul's Road and Canonbury Road, there would be up to a 1 minute decrease in the morning peak and between 1 to 2 minutes increase in the evening peak.

Buses

Traffic modelling has been undertaken for the bus routes which go through the scheme area to understand the potential impact of the scheme on bus journeys. The journey time impacts below relate to the section of the bus journeys through the Highbury Corner area and not to the whole bus route.

In the southbound direction, routes 4 and 19 running from Highbury Grove towards Upper Street are forecast to experience an increase in journey times of up to 1 minute in both the morning and evening peaks. Northbound, running towards Highbury Grove, journey times would increase by up to 1 minute in the morning peak and between 1 and 2 minutes in the evening peak on routes 4 and 19.

Routes 30 and 43 running northbound through Highbury Corner from Upper Street are both predicted to experience an increase in journey times of up to 1 minute in the morning peak and an increase of between 1 to 2 minutes in the evening peak. Heading southbound towards Upper Street, journey times for route 30 would decrease by up to 1 minute in the morning peak and increase by up to 1 minute in the evening peak. Journey times for route 43 in the southbound direction are predicted to increase by up to 1 minute in both the morning and evening peaks.

Southbound, route 271 running towards Canonbury Road would see journey times increase by up to 1 minute in both the morning and evening peaks. The northbound 271 route would also experience increased journey times of between 2 to 3 minutes in the morning peak and between 1 and 2 minutes in the evening peak.

Heading westbound towards Holloway Road, journey times on routes 263 and 393 are forecast to reduce by up to 1 minute in the morning peak and increase by up to 1 minute in the evening

peak. The eastbound routes 263 and 393 would experience an increase in journey times of up to 1 minute in the morning peak and a decrease of up to 1 minute in the evening peak.

It is proposed that daytime route 277 would no longer run through Highbury Corner, instead terminating at Dalston Junction bus station.

Cyclists

Our proposals provide segregated cycle tracks in both directions on all three remaining sides of the proposed road layout.

We are proposing segregated cycle lanes through the junction for journeys with the highest cycle flows. In most situations, cyclists would receive a green signal at the same time as other traffic travelling in the same direction and would progress though the junction in a similar way to motor vehicles undertaking the same journey. In situations where cyclists' journeys conflict with other traffic streams, we would separate them using traffic signals. Cyclists would have to wait at a red signal whilst other traffic receives a green signal. However, this would allow cyclists to move through junctions separately to other vehicles, maximising cyclists' safety.

Journey times for a selection of cycle routes that travel through Highbury Corner are shown in the data table.

For cyclists travelling northbound from both Upper Street and Canonbury Road towards Holloway Road we predict a slight journey time increase of up to a minute in both the morning and evening peak. Southbound cyclists heading towards Canonbury Road are predicted to experience a decrease in journey times of up to 1 minute in the morning peak and an increase of between 1 and 2 minutes in the evening peak. There would be an increase in journey times in the morning peak of 1 to 2 minutes for cyclists travelling southbound towards Upper Street, and a decrease of up to 1 minute in the evening peak.

Eastbound cyclists heading towards St Paul's Road are predicted to see their journey times decrease by between 1 and 2 minutes in the morning peak and increase by between 1 and 2 minutes in the evening peak. Journey times for cyclists travelling westbound from St Paul's Road towards Upper Street would increase by between 1 and 2 minutes in the morning peak and up to 1 minute in the evening peak. For westbound cyclists heading towards Holloway Road, a slight increase in journey times of up to 1 minute is expected in both the morning and evening peak.

Pedestrians

The scheme proposes improvements to pedestrian provision at junctions, including the realignment and simplification of existing crossings and a potential new crossing (dependent

upon the preferred public space option). Pedestrian crossings at all approaches, except St Paul's Road, would be widened.

At the junction of Holloway Road/Highbury Place, the maximum wait time would increase by up to 26 seconds in the morning and 22 seconds in the evening peak. The junction of St Paul's Road and Corsica Street would see an increase in the maximum wait time of 34 seconds in the morning peak and 63 seconds in the evening peak.

Crossing Highbury Corner at Canonbury Road, there would be an increase of the maximum wait time of up to 86 seconds and an increase of 50 seconds at the junction with Upper Street in both the morning and evening peaks.

Explanatory note on accompanying traffic modelling data table

TfL has used traffic modelling techniques to calculate the expected average journey time changes at the busiest hour in both the morning and evening peak. This data table outlines the expected average journey times for the following three situations;

- Base Model - Situation on street as of 2014
- Future Base Model - Situation on street in 2021 without the proposed scheme at Highbury Corner.
- Future modelled journey times with scheme – Expected on street conditions in 2021 if the Highbury Corner scheme is built.

If you have any further questions concerning the traffic modelling for this scheme please contact our traffic modelling team at trafficmodelling@tfl.gov.uk.