



first stages in a wide-ranging programme of actions that we, as an organisation, are taking now and over the coming years.

TfL provided a report to the Coroner to assist with his investigation (please find attached the report). TfL explained in the report that the proposed Safer Junction scheme at Great Eastern Street/Shoreditch High Street/Commercial Street will incorporate the Road Safety scheme at the junction at Great Eastern Street/Curtain Road. One proposal put forward was a new layout for this junction. This would seek to align and widen pedestrian crossings to the desire line and implement physical measures to slow speeds around this junction.

The original timescales for the Safer Junction scheme incorporating the junction of Great Eastern Street/Curtain Road were for feasibility, concept design and consultation to be completed by November 2021. Detailed design was due for completion by the end of October 2022 and construction complete by April 2023.

The onset of the Covid-19 pandemic in early 2020 and subsequent lockdowns devastated TfL's fares income and meant TfL required emergency Government support to run its day-to-day transport services. Therefore, the proposals referred to above to investigate feasibility proposals for the junction at Great Eastern Street/Curtain Road, as well as the wider Safer Junction scheme, were paused pending a long-term funding deal.

On 30 August 2022, TfL reached a long-term agreement with the Government on funding until 31 March 2024. This has allowed TfL to recommence feasibility and design proposals for various schemes which were paused due to funding constraints during the pandemic.

TfL will now be progressing the scheme for the Safer Junction scheme at Great Eastern Street/Shoreditch High Street/Commercial Street, with an expected completion date within the 2026/27 financial year. As part of this, TfL have formally included the Great Eastern Street/Curtain Road junction within the scope of this scheme, with final approval granted from the DfT.

The Coroner noted the above timescales for this long-term project in the PFD report and considers that '*changes to the signal timings would amount to urgent safety improvements*'. TfL considers these concerns below.

### **Clarifications in the PFD report**

The PFD report refers to evidence, received both in the form of a report and orally in court, from [REDACTED], a Traffic Management Officer in the Road Safety Engineering Unit of the Metropolitan Police Service. [REDACTED] completed two site visits, where he observed the operation of the signals at the crossings at this junction and the behaviour of pedestrians.

The PFD reports states that;

*'The current timings of the signals, both at the pedestrian crossing where Ms Boulia died (at the North West side of Curtain Road), which he refers to as crossing 1) and the crossing over Great Eastern Street at the South East side of Curtain Road (by the Old Blue Last pub), which he refers to as crossing 2) do not allow enough time for pedestrians to cross the road safely.*

*The inter-green period (the period when the road traffic's signals are not at green) at crossing 1 is only 10 seconds, made up of 6 seconds when the pedestrian signal is at green man and 4 seconds of "blackout" or "clearance" period. 10 seconds is insufficient time to allow pedestrians to cross the road safely before the road traffic's signals change to green.*

*Although at crossing 1, the 10 second inter-green period extends to 16 seconds when there is no road traffic filtering from Curtain Road to Great Eastern Street, in practice this is rarely the case. There is no filtering traffic at crossing 2, but the inter-green period is still insufficient to allow pedestrians to cross safely.*

*Pedestrians routinely cross on the red man at the crossings at the junction of Great Eastern Street and Curtain Road, probably due to the inadequate inter-green periods.*

*There have been 21 collisions involving injury at this junction over a recent three-year period, 9 of those involving injury to pedestrians. Of particular concern is that the number of collisions at this junction of a similar nature to that in which Ms Boulia died, is unusually high.'*

The PFD report also states that: [REDACTED] gave evidence that improvements to signal timings (including increasing the inter-green periods) can be made much quicker than installation of new signals (such as signals including countdown timers).'

There are some clarifications to make with regard to the timings as stated in the PFD report. With regard to the statement;

*'The current timings of the signals, both at the pedestrian crossing where Ms Boulia died (at the North West side of Curtain Road), referred to as crossing 1) and the crossing over Great Eastern Street at the South East side of Curtain Road (by the Old Blue Last pub), which is referred to as crossing 2) do not allow enough time for pedestrians to cross the road safely.'*

I have clarified below the timing periods for both crossing 1 and 2 across Great Eastern Street (as annotated in the map at figure 1) as indicated in the table below.

<b>Period</b>	<b>Timing (seconds) identified in PFD report</b>	<b>Actual on street timing (seconds)</b>
Green man	6	6
Black Out	4	5
All Red	4	5
Starting Amber	2	2
<b>Total Intergreen</b>	<b>10</b>	<b>12</b>

**Figure 1**



The timings which are operating on street are therefore longer by two seconds than those set out in the PFD report. The timings on street are in accordance with the National Standards as written by the Department for Transport within 'Traffic Signs Manual Chapter 6 – Traffic Control'. The timings on street have been operating since March 2012.

By way of clarification, the length of the crossing at point 1 is 11.2m. The length of the crossing at point 2 is 11.2m. These lengths produce timings which are in accordance with the DfT and TfL design guidance, based upon the 1.2m/s walking speed.

With regard to the statement:

*'Although at crossing 1, the 10 second inter-green period extends to 16 seconds when there is no road traffic filtering from Curtain Road to Great Eastern Street, in practice this is rarely the case. There is no filtering traffic at crossing 2, but the inter-green period is still insufficient to allow pedestrians to cross safely.'*

By way of clarification, the crossings have the same inter-green periods following the Green Figure, irrespective of what vehicle movement follows the pedestrian movement.

### **Site visits and work to be undertaken**

It is our standard practice and part of our wider commitment to Vision Zero to organise a site visit to the location of every fatal incident that occurs on TfL's road network. This is to identify any issues and actions that can be taken immediately to prevent future loss of life.

In this case the site visit took place on 4 February 2022 and was attended by TfL to inspect the immediate area. The condition of the assets, including the traffic signals, were checked and no defects were found (please find attached the report).

A further site visit took place on 8 December 2022 and was attended by TfL officers, across a number of teams and range of specialisms. This further inspection also considered the

condition of the assets, the traffic signals, and how the junction was functioning, in particular for vulnerable road users including pedestrians. This determined no defects.

At the site visit, checks were made to the operation of the junction and whether all waiting pedestrians could establish themselves onto the crossings safely within the invitation period. Secondly, we observed and confirmed that the safety clearance periods for the crossings and traffic movements were appropriate.

It was observed that a number of pedestrians would cross in gaps against the red signal and therefore a planned review of the operational timings at the junction (see below) will seek to minimise the waiting time for pedestrians as much as practically possible. TfL's own studies into pedestrian crossing behaviour have shown that compliance with the crossing signals reduces as wait time increases. The wait time at this junction is typical for a major central London junction with similar signal controls (a maximum of 89 seconds and an average of 45 seconds.)

The site visit therefore determined that when observing how people were using the junction, there were opportunities to make improvements for vulnerable road users.

TfL is therefore committed to undertake a design review of the junction to explore if the signal operation can be further improved to provide additional crossing time for pedestrians to cross Great Eastern Street, such as when the left turn from Curtain Road is not demanded by a vehicle. This could also include the addition of pedestrian countdown on all crossing points at the junction. Resources have already been identified and it is anticipated that this review will commence at the start of March 2023. Given this junction links to other junctions along Great Eastern Street, such a review may take six months or more to complete. For example, if the design review recommended installation of pedestrian countdown signals, these could then be procured and installed after the review.

TfL will also conduct a review of the operational timings for all traffic signals within the Shoreditch triangle, which includes the location of this tragic fatality. The purpose of this review will be to optimise the green times each traffic, cycle or pedestrian movement (otherwise known as a 'phases') receives at each junction. The review will also consider how adjacent junctions are coordinated with each other (known as 'offsets') and the waiting times between each successive green signal (known as the 'cycle time'). All of the signals in this network operate an adaptive signal control system, known as 'SCOOT' and TfL will review all of the settings for that system with an objective to minimise the pedestrian waiting times as much as reasonably possible. It is anticipated that this will commence at the start of March 2023.

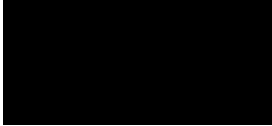
It is anticipated that the Shoreditch Triangle review will run in parallel with, and complement, the signal design review for the junction at Great Eastern Street/Curtain Road which I've described above.

## **Conclusion**

This junction is a high priority for TfL and the signal design review will be completed in advance of progressing the wider scheme.

Please do let me know if you require further information on any of the detail in this letter.

Yours sincerely



**Director, Investment Delivery Planning  
Surface Transport**