

## Cycleway 9 Scheme Briefing note

### Introduction

This note has been produced to give an overview of the likely impact on buses of the proposed temporary build of Cycleway 9 along Chiswick High Road between Heathfield Terrace and Goldhawk Road.

### Bus routes along Chiswick High Road

Eighth bus routes are affected by the temporary C9 scheme. Pre-Covid demand along this section is around 10,000 passenger a day.



### Current network conditions

Appendix I shows the level of congestion along Chiswick High Road now compared to pre-lockdown and shows that congestion here has already returned to 'normal' levels.

This return to normal levels is due to returning traffic level (approx. 15% under pre-Covid) and a reduction in the cycle traffic at traffic signals to assisted pedestrians.

### Removal of bus lanes from existing network and the permanent Cycleway 9 design

The follow map shows area of bus lane for the current situation, the permanent C9 design and the temporary C9 design.

In the permanent design, the proposal removed 200m of bus lane, whereas the temporary design removes 760m leaving around 80m on the approach to the Goldhawk Road junction.



### Key:

- C9 temporary design bus lane
- C9 permanent design bus lane
- Existing bus lane
- Scheme extent

### Impact of temporary design on queue lengths

The table in Appendix 4 gives an indication as to what the impact of the temporary build of Cycleway 9 might be on traffic queues (mean max PCUs) on the Chiswick High Road approaches to key junctions in this area. The modelling indicates that there will be significant delays in the morning and evening peaks.

#### Heathfield Terrace Junction

- Westbound an 66% increase in queuing affecting 4 bus routes in both peak periods
- Eastbound queuing will be slightly less in both peak periods.

#### Chiswick Lane

- Chiswick High Road Westbound and Chiswick Lane northbound will run significantly overcapacity potentially resulting in unmanageable queuing without strategies further afield
- Eastbound queuing is expected to be similar to the base scenario.

#### Goldhawk Road

- All approaches to this junction will see significant, potentially unmanageable increases in queuing affecting all 5 routes using this junction
- The eastbound queue is expected to queue past the bus lane, particularly during the AM peak.

These queuing impacts do not consider that some bus stops such as the eastbound and westbound stop by Clifton Gardens will be moved into the running lane with vehicles waiting behind bus services. At peak times, these stops service 37 buses.

It is expected that buses will experience increase in delay through this stretch between Goldhawk Road and Heathfield Terrace.

### Closure of Turnham Green Terrace

Traffic reassignment modelling has been carried out to determine the impact of the London Borough of Hounslow's proposed closure of Turnham Green Terrace to all traffic except buses and cyclists.

The modelling shows that southbound traffic that would normally enter Chiswick High Road from Turnham Green Terrace is likely to reassign westbound along South Parade and enter Chiswick High Road via the Acton Lane junction. This is likely to cause increase delays to the westbound Route 94 on South Parade but will benefit westbound buses on Chiswick High Road, which have higher patronage. This measure and Hammersmith and Fulham proposal to

close Kings Street to all traffic except buses and cycle is likely to some extent mitigate the impacts in the westbound direction.

Traffic that would normally turn left from Chiswick High Road and onto Turnham Green Terrace is likely to reassign mainly via Clifton Gardens and Fisher’s Lane, with some traffic continuing eastbound to the Goldhawk Road junction and turning left onto Goldhawk Road.

Since this modelling was carried out, we have learnt of London Borough of Hounslow’s proposals to close Fisher’s Lane to all traffic except buses and cyclists. We would therefore expect most of this traffic that the modelling showed as reassigning onto Fisher’s Lane, to continue their journey eastbound along Chiswick High Road, and turn left onto Goldhawk Road. This would increase delays for eastbound buses which are unprotected in the temporary C9 proposal.

**Proposed bus gate**

To mitigate against the impact of eastbound general traffic remaining on Chiswick High Road for a longer section of their journey and the loss of most the bus lane, it has been proposed that the implementation of a bus gate on the eastbound Chiswick High Road approach to the Acton Lane junction.

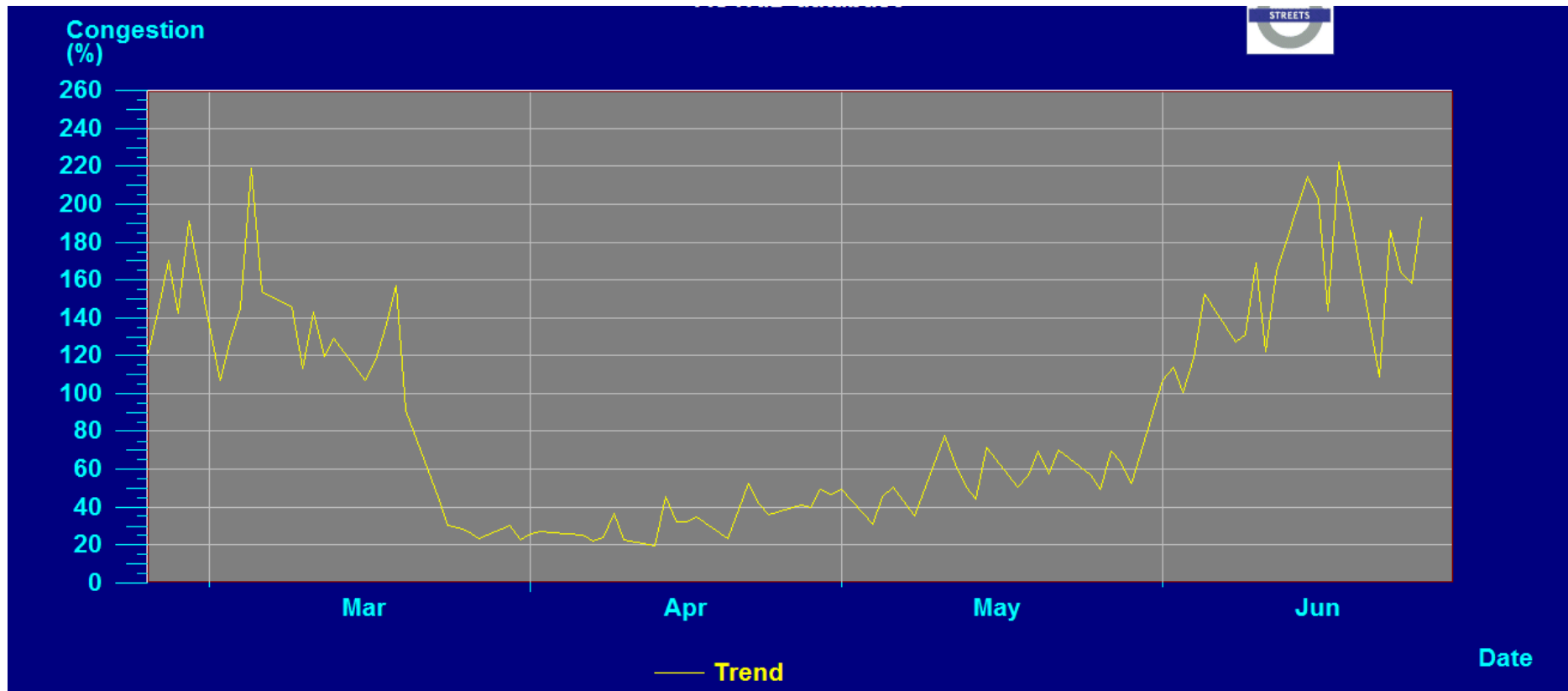
On the approach to the proposed bus gate at Acton Lane, buses are protected by a bus lane. When network condition requires, a signal strategy will be implemented to restrict eastbound traffic to protect bus journey times. Modelling indicated reducing the peak flow at the Goldhawk Road junction by 50-75 vehicles will reduce the average queue so buses can benefit from this bus lane.

	Without Bus Gate	With Bus Gate
Heathfield Terrace	<ul style="list-style-type: none"> <li>- Signal strategy to hold traffic on Heathfield Terrace likely to affect 2 routes</li> </ul>	<ul style="list-style-type: none"> <li>- Possible to give more green time to Heathfield Terrace assisting 2 bus routes</li> </ul>
Chiswick Lane	<ul style="list-style-type: none"> <li>- Eastbound queuing likely to increase due to higher flows</li> </ul>	<ul style="list-style-type: none"> <li>- Ability to manage queuing on eastbound approach</li> <li>- Potential to provide more green time to Chiswick Lane assisting 1 bus routes, if westbound approach allows.</li> </ul>
Goldhawk Road	<ul style="list-style-type: none"> <li>- Buses unable to access bus lane due to queuing particularly in AM peak due to increased flows.</li> <li>- Large queues on SB and WB impacting 6 bus routes</li> </ul>	<ul style="list-style-type: none"> <li>- Reduce queuing provides better access to Eastbound bus lane</li> <li>- Potential for more available green time to assist SB bus route</li> </ul>

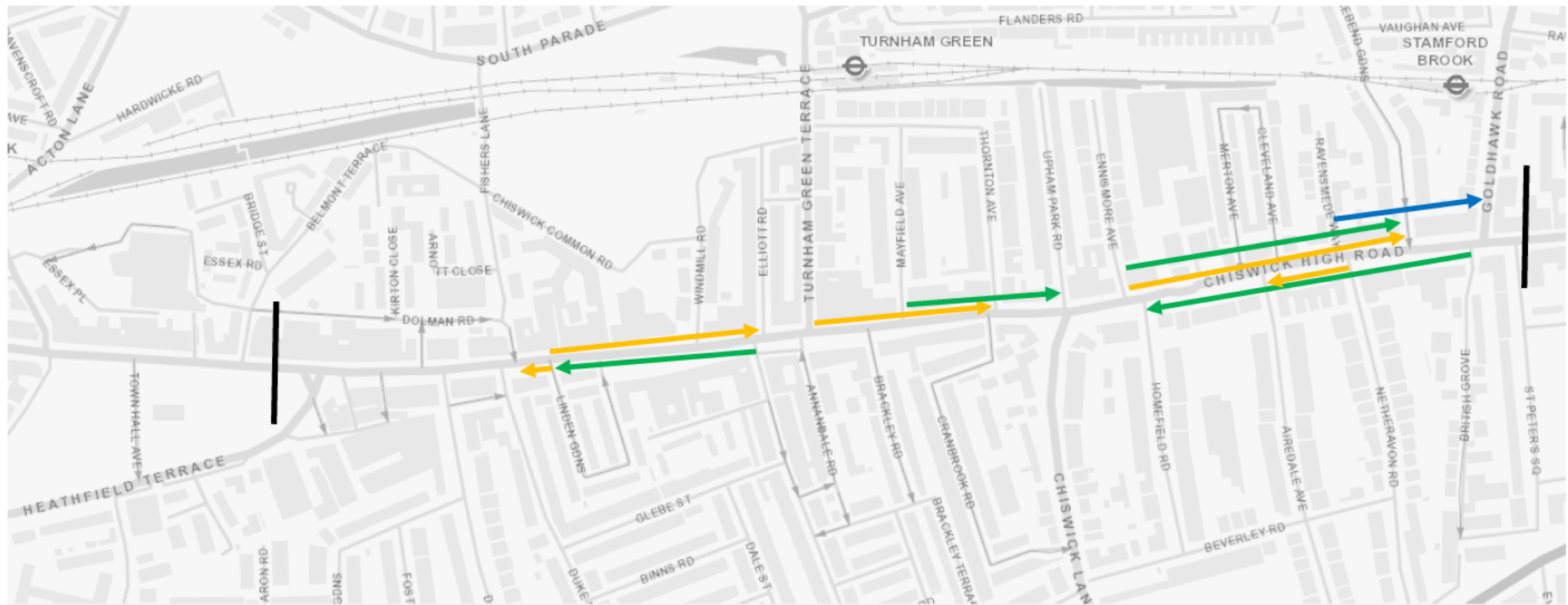
Appendix I – Bus routes along Chiswick High Road



Appendix 2 – Level of congestion along Chiswick High Road (24/02/2020 – 29/06/2020 – 07:00-19:00)



Appendix 3 – Proposed bus lane comparison between temporary and proposed designs, and existing situation



Key:

- ➡ C9 temporary design proposed bus lane
- ➡ C9 permanent design proposed bus lane
- ➡ Existing bus lane

Appendix 4 – Changes in Mean Max queuing as a result of the temporary C9 proposals.

Junction	Chiswick High Road direction of travel	AM Base Queue Length (PCUs)	AM Temporary Proposed Queue Length (PCUs)	AM Difference (PCUs)	PM Base Queue Lengths (PCUs)	PM Temporary Proposed Queue Lengths (PCUs)	PM Difference (PCUs)
Heathfield Terrace	Eastbound	4.9	4.1	-0.8	4.9	4.6	-0.3
Heathfield Terrace	Westbound	5.5	9.3	+3.8	7.7	12.7	+5
Chiswick Lane	Eastbound	9.2	9.0	-0.2	9	9.6	+0.6
Chiswick Lane	Westbound	7.2	139.7	+132.5	7.9	152.3	+144.4
Chiswick Lane	Northbound	11.5	170.8	159.3	10	168.6	+158.6
Goldhawk Road	Eastbound	9.2	52.5	+43.3	8.4	22.6	+14.2
Goldhawk Road	Westbound	5.5	37.7	+32.2	8.9	95.6	+86.7
Goldhawk Road	Southbound	10.7	78.5	67.8	9.4	77.9	68.5