

Cycling issues at Euston Circus (version 3)

Version 1 presented arguments for a separate signal for north and southbound cyclists across Euston Circus together with a proposal for two-way cycling between Euston Circus and Gower Street. Following discussions between Mike O'Callaghan and LCC, we proposed a bus and cycle contraflow between Gower Street and Euston Circus. These two options (known as 1 and 3) were modelled by Hyders and now appear as TfL's options 3 and 5 for the junction review. The latter is LCC's preferred option and this report concentrates only on that one.

Vehicle flow statistics near Euston Circus for 2010

The table below gives the annual average daily flows, which represent the number of vehicles passing through the count point on an average day of the year. From DfT at <http://www.dft.gov.uk/matrix/>.

	cycles	P2W	car	bus	van	HGV	motors
TCR	2908	1982	16659	967	4398	961	24967
Hampstead Rd	1834	1854	23319	1790	5073	961	32997
Euston Road	2091	3170	48619	2145	8134	2211	64279

North-south cycle movements

The main support required by cyclists at Euston Circus is in their north-south movements across this junction. The following factors are relevant:

- To avoid conflict between left-turning vehicles and straight-ahead cyclists, these need to be separated either in space (in separated lanes or tracks) or in time (in a separate signal stage – an advance cycle signal would not provide separation, once the vehicles get a green).
- Traffic flows on either side and across the junction are very high, implying that cycle lanes or tracks are required on both the approach and exit roads.
- The width of the junction between Hampstead Road and TCR is about 60m. There will be no intermediate stop line. At 12 kph it would take 18 secs to cross – so plenty of inter-green time is required.
- When TCR becomes two-way, the southbound straight ahead movement will be made by buses and cycles only and enter a southbound bus+cycle lane on TCR. These cycles would be vulnerable to conflicts with vehicles traveling towards Gower Street.

Bus movements

In a two-way TCR southbound, three bus routes (24, 29 and 134) will enter from Hampstead Road; three more routes (10, 73 and 390) will join it at Grafton Way.

TCR northbound will have general traffic. The above six routes travel northbound on TCR. Their Warren Street bus stop is just north of Grafton Way.

Three routes (18, 30, 205) use Euston Rd EB and Grafton Way WB with a bus stop on Grafton Way, then turn right into TCR and left into Euston Road. Route 14 also runs on TCR to Warren Street.

Addressing these issues – see the illustration on the next page

Northbound

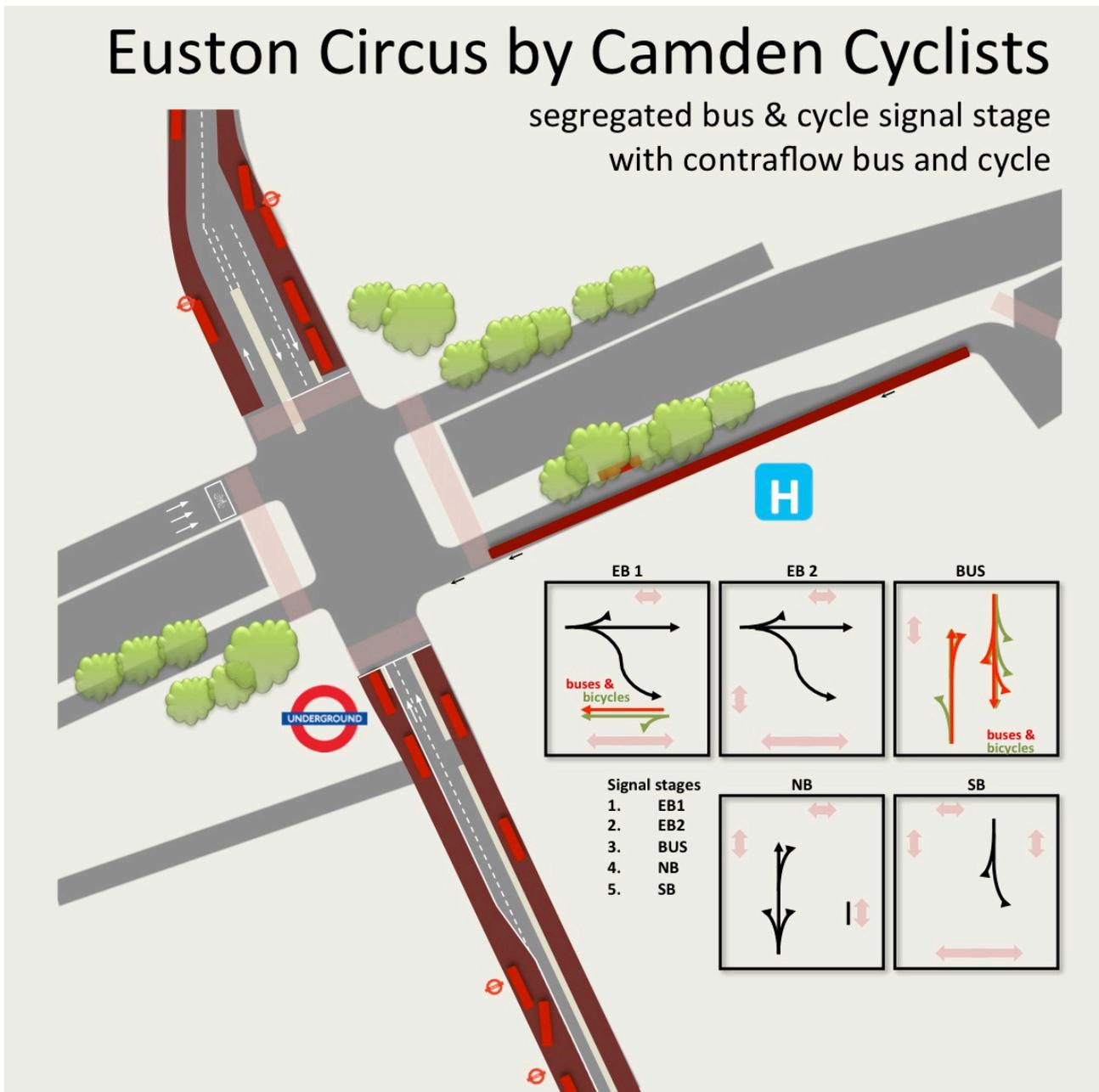
- A 4.5 m bus+cycle lane on TCR north of Grafton Way.
- An 8 m bus+cycle lane past the bus stops (or move bus stops south of Grafton Way);
- Buses and cycles to share a separate signal stage which allows them to go straight ahead or turn right into Euston Road eastbound. They are then held during the general traffic stages to avoid conflicts, particularly with the vehicles turning left into Euston Road.
- 4.5 m bus+cycle lane on on Hampstead Road south of Drummond Street.

Southbound

- A 4.5 m bus+cycle lane on Hampstead Road south of Drummond Street.
- Buses+cycles to share a separate signal stage which allows them to go (towards Gower Street / *straight ahead when TCR two-way*) or turn right into Euston Road westbound. They are then held during the general traffic stages to avoid conflicts – with vehicles turning towards Gower Street when TCR two-way.
- Southbound bus+cycle carriageway in TCR (*when TCR two-way*).

Euston Circus by Camden Cyclists

segregated bus & cycle signal stage
with contraflow bus and cycle



Contraflow cycling between Euston Square Station and Euston Circus: cyclists were concerned about TfL's proposal that cyclists should have to cross without signal support into an ASL that may be blocked. In addition, this would involve waiting for three signals and mixing with pedestrians on the footway outside UCLH. Our current preferred option (referred to as LCC Option 3 and TfL Option 5) is shown in the figure above:

Westbound contraflow for buses and cycles between Euston Square Station and Euston Circus:

This will run on the south side of the road, outside the hospital. It benefits bus passengers as it avoids the detour round Grafton Way. No buses would need to turn left from TCR into Euston Road which eliminates conflict with northbound cyclists. The signal stage EB1 would permit both buses and cycles to proceed westbound as well as the movements permitted in stage EB2. This concurrency of EB1 with the first part of EB2 led to better results in the modelling than the original option.

Our original proposal (referred to as LCC Option 1 and TfL Option 3) was for:

Westbound contraflow (and with flow) cycle paths between Euston Square Station and Euston Circus

In addition, we suggested an eastbound cycle path that joins Euston Road on the approach to Gower Street (after crossing the other path).

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Notes on the signal stages

- The north and southbound bus+cycle signal stages run concurrently. Stage *BUS* above shows bus and cycle movements in orange and green respectively, allowing for before and after TCR becomes two-way);
 - buses+cycles turning right must wait for a gap in the opposing traffic or for the end of the stage. Flows will be low e.g. about 2,000 per day each of cycles and buses. With TCR two-way, this would separate the conflict with pedestrians across TCR from the main *SB* stage.
 - Cyclists (but not buses) will be allowed to turn directly left into Euston Road both westbound and eastbound.
 - The *BUS* stage should not include any general motor traffic movements or taxis.
- To avoid conflicts between left turning buses and cyclists going straight ahead we have omitted from stage *BUS* the bus left turn from TCR into Euston Road; in option 3 buses that might be affected (18, 30, 205) would use the contraflow from Gower Street and cross Euston Circus directly – not going via TCR.
- A long signal stage and inter green time are needed to allow cyclists to complete the crossing.

General

- Marked cycle transits across the junction (e.g. elephants feet) northbound, southbound and westbound.
- No taxis in the bus+cycle lane on TCR north of Warren Street and on the Hampstead Road approach.
- No parking in the bus+cycle lane – any drop off or delivery points should be offset.
- ASL box and lead-in lane on the Euston Road approach to the junction.

Complementary measures

- Consider east-west cycle routes that avoid this junction, for example via Warren Street.
- To reduce the number of vehicles crossing the Tavistock Place cycle track (See Link 30 CRISP Report, 2009), provide a point closure at Gordon Street junction with Euston Road prohibiting motor traffic. Access for pedestrians and cyclists is to be maintained. Link this idea with a cyclists' right turn from Euston Road into Melton Street as mentioned above.

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