

Query/challenge: I recognise that Camden Cyclists were disappointed that the current ideas presented in our engagement phase indicate that Bloomsbury Way would have no cycle segregation. As we discussed, the ideas at this stage are that there will be no other traffic other than buses and cycles, but appreciate that CC felt this was insufficient. I believe your main challenge was: it's three lanes now; the proposal is to take it down to two lanes, and therefore what are Camden proposing we do with the remaining space and why could that spare circa 3m not be a cycle lane in each direction? CC felt this was particularly important because the proposed segregated cycle lanes on Theobald's Road will effectively "end" if we don't carry them on through Bloomsbury Way.

Response: The reason for the idea of a bus/cycle only stretch here with no segregation (like TCR) is that this provides a balance of delivering more footway space in a constrained area (with pedestrians being the top of our road user hierarchy) whilst also providing a level of cycling service (ie only sharing the carriageway with buses). If we introduced segregated cycle lanes they would also be compromised because they would (i) be only maximum 1.5m wide – narrower than the flows demand here and (ii) we wouldn't be able to provide bus stop bypasses, so the cycle lanes would end at the bus stops. In addition, the "Pedestrian Comfort Level" for Bloomsbury Way has been assessed as currently offering a very poor environment for pedestrians, and adding the widened footways and associated public realm (including new street trees etc) significantly enhances the PCL score (this would not be possible were we to have segregated cycle lanes). Unfortunately there are also a high number of pedestrian accidents on this stretch - 27% of pedestrian collisions in the Holborn LN study area having occurred on Bloomsbury Way in the data we analysed. For all these reasons we feel our proposed approach at this stage – effectively of eliminating all through traffic except buses, providing better cycling conditions and much enhanced pedestrian provision/public realm amenity – is the best balance.

Above is Camden's response to our challenge.

In our response we make the case for considering the feasibility of implementing a central two-way cycle lane on Bloomsbury Way. We do have some reservations, mostly related to the difficulty of leaving the cycle lane to reach the road side and to cyclists' fear of being undertaken by buses.

Our response is on pages 1-3 below, followed on page 4 by a note on connecting to the cycle network at the western end of Bloomsbury Way. Finally on pages 5 and 6 we outline examples of central two-way cycle lanes in Nantes, Barcelona and Washington DC and Tolworth, Surbiton.

CCC response in which we use a few illustrations to show the comparative advantages of two different ways of sharing the road width

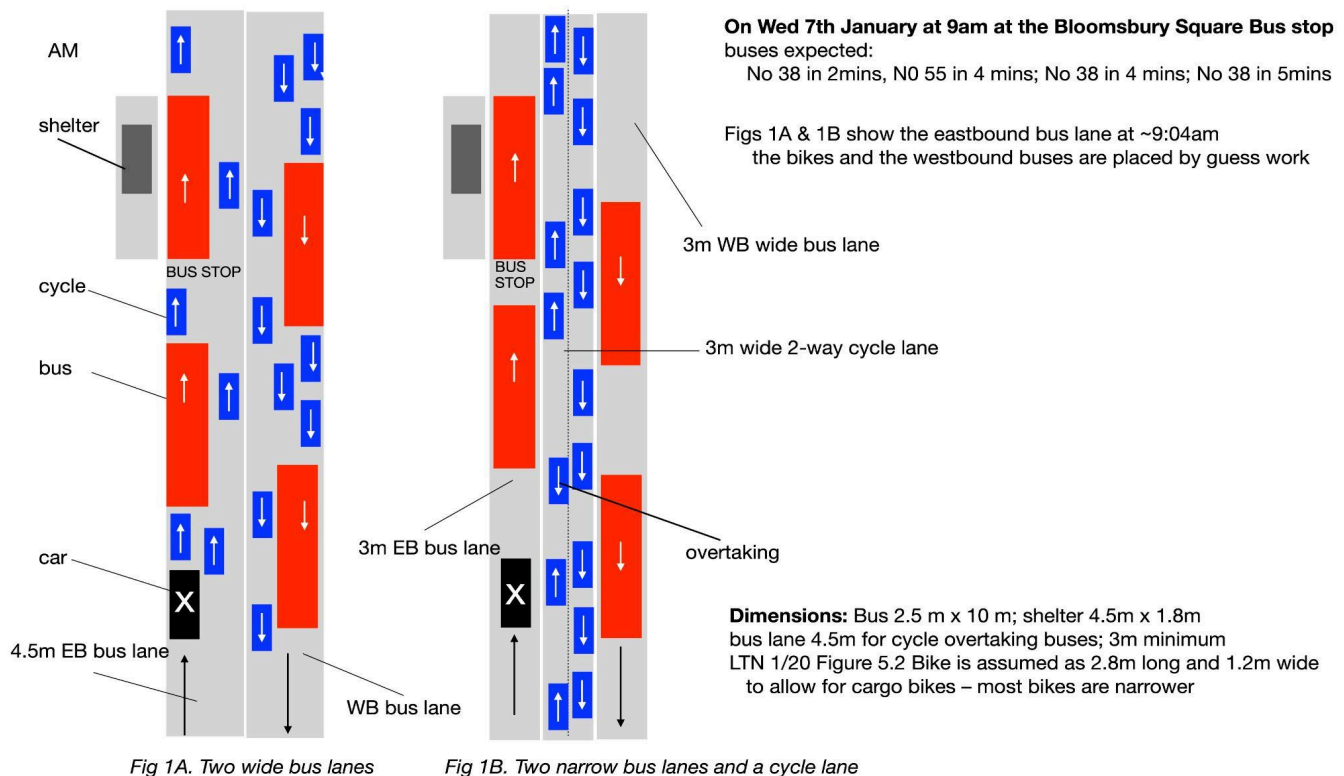


Figure 1: Alternative uses of 9m of road width

In **Fig 1A** there are two 4.5m wide bus lanes “to enable buses to pass cyclists with sufficient room and allow cyclists to pass buses at stops”¹. We haven’t shown a bus overtaking a cyclist as that would be unlikely with the number of cyclists on this road².

The Highway Code (66) advises “Be very careful when overtaking a bus”. Many cyclists are afraid that the driver can’t see them and that the bus may move off while they are overtaking. If all types of people are going to cycle on this road then some may get stuck between two buses, preventing the one behind from getting nearer to the Bus Stop.

At peak times, Bloomsbury Way carries a total of ~50 buses in each direction (100 buses per hour). Using DfT/TfL guidelines of 1 bus = 2 PCU this is just on the threshold for segregation.

Also note LTN 1/20 6.6.1: “bus lanes can offer some degree of segregation for cyclists as they significantly reduce the amount of interaction with motor traffic. However, they do not provide an environment attractive to a wide range of people and should therefore not be regarded as inclusive”.

In **Fig 1B** there are two 3m wide bus lanes with a 3m wide 2-way cycle lane between them³. The buses are free to proceed along their lanes without the consequences of sharing with cycles, while the cycles are free to proceed along their lanes without the consequences of sharing with buses. Most cycles are only about 0.5m wide and should be able to overtake without leaving their side of the cycle lane (the diagram shows a cargo bike width of 1.2m). This arrangement has the advantages that buses and cycles are able to proceed without delaying one another.

New Project Ideas in the 2025 engagement include for Bloomsbury Way: “Making the road open only to buses and bicycles between Bury Place and New Oxford Street ...”; in other words there will be cars east of

¹ Bus Priority Design Guidance TfL 2025

² Vivacity counts: peaking at 9000 per day now with average ~7000; on Fri 16 Jan the AM and PM peaks were (EB:230, WB:150) and (EB:220, WB:430) - the counter is just east of Museum Street.

³ LTN 1/20 Figure 5-2 specifies a desirable minimum width of 3m (and absolute minimum of 2.5m) for peak cycle flow between 300 and 1000

Bury Place. For this reason we have shown one average size car on most of our diagrams. In Fig 1A if a car overtakes a bus at a stop it will overlap the opposing lane and put at risk any cyclists overtaking buses on the other side of the road. In Fig 1B it could be made impossible for a car to overtake a bus or to turn right across the central cycle lane.

Segregation for the central 2-way cycle lane

Stepped tracks would avoid using up road width but we feel that a narrow (~25 cm) raised kerb would provide better protection; see the examples in [Crowndale Road](#) and [Oakley Square](#).



Issues to be resolved with a central two-way cycle lane

A central cycle lane could solve problems associated with cycles and buses mixing. The arrangement creates the following new issues each of which could be addressed for the scheme to work successfully:

- Virtually untried: a few examples are in Nantes, Tolworth, Barcelona and Washington DC (see P5 & 6).
- Motor vehicle right turns across the cycle lane need to be banned – on Bloomsbury Way the buses continue straight on anyway so the possible presence of other motor vehicles is the only issue.
- At any junction, people entering from another road to a central cycle track will need to be aware that they have to go to the centre; on the other hand they will have the advantage of being separated from buses.
- Access to and from non-signalised side road junctions (Barter Street and Bloomsbury Square) is going to be more difficult from a central lane than from the bus lane: even for left turns it is necessary to wait for a gap in the flow of buses on the left (see Figs 2A and 2B).

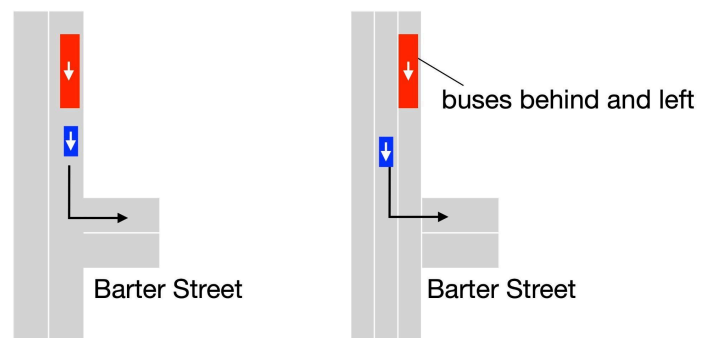


Fig 2A

Fig 2B

Figure 2. Turning left into Barter Street

• Signalised junctions

- **Between the ends i.e at Bury Place or Southampton Place. E.g. Bury Place.**

Figure 3 shows the Bury Place junction with two 4.5m bus lanes. In Fig 3A Bloomsbury Way has the green signal. It is clear that it would be very difficult for cycles to turn right safely into Bury Place. In Fig 3B Bury Place has the green signal. With the two-way cycle lane on the offside⁴ it will be safe to cycle in both directions on the C52 alignment. The presence of a car (that

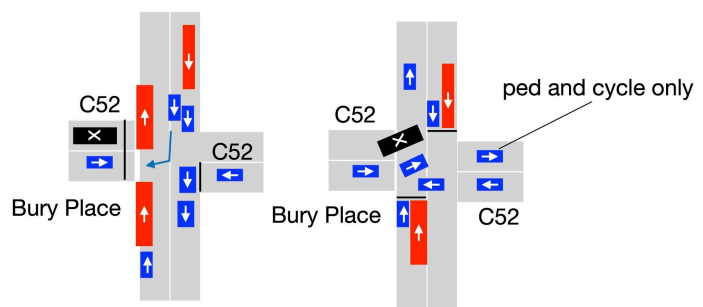


Fig 3A. B Way green

Fig 3B. Bury Place green

Figure 3. Signals at Bury Place with 4.5 m bus lanes

⁴ But if cars access Bury Place from a side road e.g. Gilbert Place a 2-way offside cycle lane would be unsafe.

must turn left) would make it hazardous for cyclists to turn left or right to cycle up Bloomsbury Way.

- Figure 4 shows more complex signalling for the central cycle lane. Cycles and buses on Bloomsbury Way proceed in separate stages (to prevent potential conflicts between them). In Fig 4A the cycle lane on Bloomsbury Way has a green signal and the bus lanes red signals; cycles can go ahead or safely

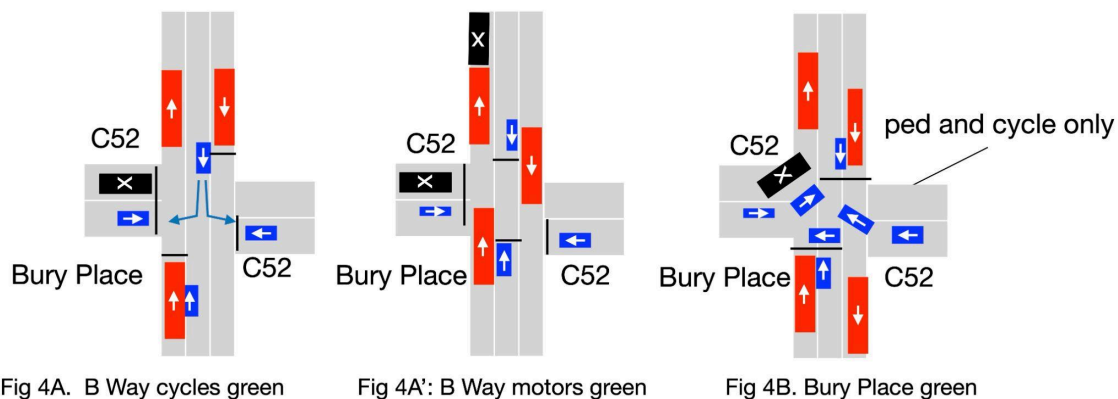


Figure 4. Signals at Bury Place with a central cycle lane

turn left or right into Bury Place. In Fig 4A' the bus lanes have green signals and the cycle lane red signals. In Fig 4B Bury Place has the green signal.

- At Theobalds Road (east end) and at Museum Street (west end). We will look briefly at the east end.**

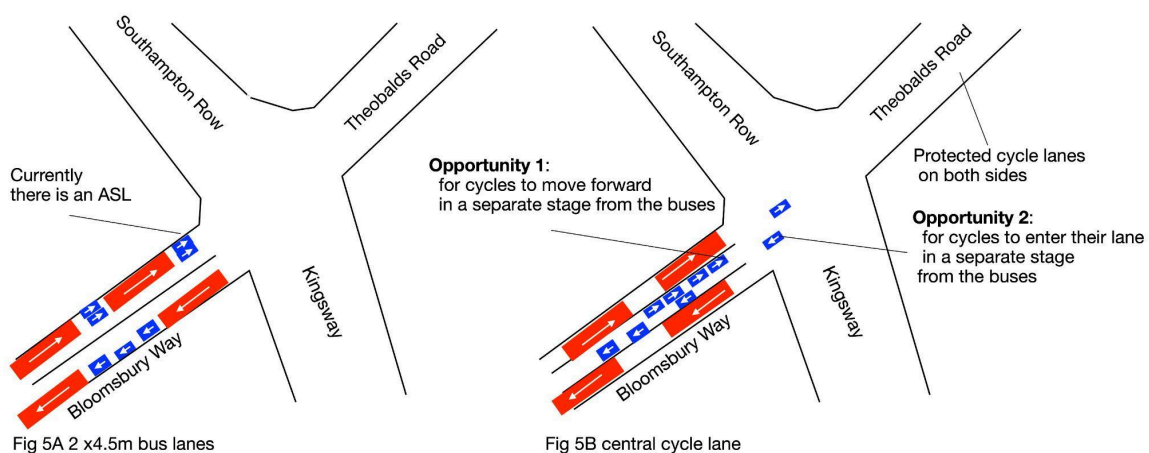


Figure 5 The junction at Theobalds Road

We certainly don't plan to attempt to redesign this very complex junction! Fig 5A shows the two 4.5m bus lanes (there is currently an ASL on Bloomsbury Way). The banned left turn eliminates any left hook risk but cycles arriving late at the signals will cross the junction with the buses – not ideal. Fig 5B shows the central cycle lane, providing an opportunity for cycles to leave the junction in a separate stage from the buses (e.g. with a dedicated cycle stage or as part of another design such as a circulating cycle stage junction); cyclists entering the junction will not have to jostle with buses. Vernon Place is very wide at this junction, leaving plenty of room to install islands for separate signals for cyclists.

Summary

LCDS Chapter 4 Page 19 (page 6 below) says that central cycle tracks are likely to need certain motor vehicle movements to be banned and more complex signalisation:

- In a bus and cycle only street the buses don't need to make any turns so the issue of banning movements does not arise. Cars in this section must be banned from overtaking and turning right.
- Separating cycles into their own central lane provides an opportunity for designing safer junctions in which people on bikes are separated from motor vehicles on approach, while crossing the junction and on exit from the junction.
- Segregation reduces the available cycle lane width.

Connection to the Cycle Network at the western end

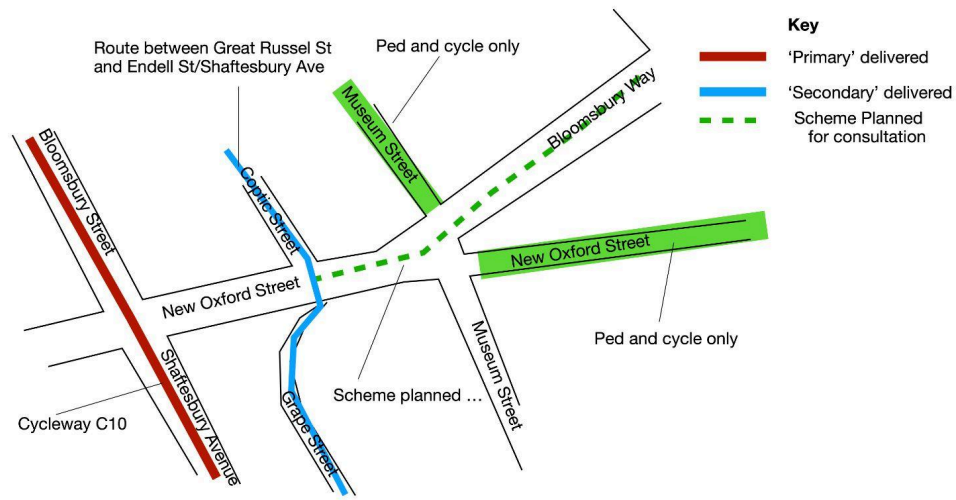


Figure 6: Access to cycle routes at the western end of Bloomsbury Way

The section west of Museum Street is not addressed in the LN proposals but is critical to joining up the network. The cycle routes are copied from Camden's latest Cycle Network Map and imply that the connection will reach the Coptic Street/Grape Street route. But it should reach the more useful C10 route.

Central two-way cycle lanes in Nantes, Barcelona and Washington DC and Tolworth

Nantes



The **Cours de 50 Otages** has three sections each about 130m long. In each section the central two-way cycle lane is a stepped track (about 4m wide). The bus lanes are about 3m wide and are used by other traffic none of which can overtake.

<https://maps.app.goo.gl/wg8ioymmYKp93As97>

Barcelona

See [this page](#) for Barcelona City information on bike routes



The **Passeig de San Joan** has four sections each about 100m long. In each section the central two-way cycle lane is about 4m wide, reduced to under 3m by kerbed grassy verges. There are two motor traffic lanes on each side of the cycle track.

<https://maps.app.goo.gl/KPedFhLToVDGVkDMA>.



The **Avinguda del Paral·lel** has four sections each about 100m long. In each section the central two-way cycle lane is about 4.6m wide, reduced to about 3.8m by a kerbed grassy verge on one side and short sections of kerb on the other side. There are three motor traffic lanes and one parking lane on each side of the cycle track.

<https://maps.app.goo.gl/L3QA6NrbtYrK4gtNA>

Washington DC



Pennsylvania Ave NW has about 1.25km of central two-way cycle lane with about six intersections. The central two-way cycle lane is about 5m wide, reduced to about 3m by white lines and white spotted rubber strips. There are four motor traffic lanes on each side of the cycle track.

<https://maps.app.goo.gl/uGFstAwaJ9aXZwH6A>

Tolworth



Tolworth, Surbiton has about 350m of central two-way cycle lane on Tolworth Broadway between Tolworth Roundabout and Ewell Road. The central cycle lane is about 4m wide and is stepped above road level. In places it is partially occupied by trees and bins and it doesn't look much like a cycle lane – there's no visible signage

<https://maps.app.goo.gl/tSj2afZyWeA8EPD79>

London Cycling Design Standards Chapter 4 page 19

This refers to the above example in Nantes.

London Cycling Design Standards

[Chapter 4] Full separation on links 19

Central cycle tracks

International practice also shows occasional use of two-way cycle lanes/tracks in the centre of the carriageway, often using light segregation (see below) to separate from adjacent general traffic lanes and heavier forms of segregation at points of potential conflict. Cyclists in both directions have space to overtake yet remain in an expected position in the carriageway, and there is no interaction with kerbside activity to manage so it may be a treatment suitable for bus and cycle priority routes. However, central tracks are likely to need certain vehicle movements to be banned and more complex signalisation than would otherwise be required. At time of writing, there is no UK practice to draw on and no standard design details.



Central two-way cycle track, Cours des 50 Otages, Nantes (with bus-only lanes on either side)