

Input by Bristol Walking Alliance to policy decision on Cycle Lane Legibility



Bristol Walking Alliance (BWA) would like to make the following contribution to the Transport and Connectivity Policy Committee's deliberations on drawing up a Policy Decision on Cycle Lane Legibility and on temporary improvements to the legibility of the cycle lanes in the Centre.

BWA is pleased to see that the Transport and Connectivity Policy Committee will be determining a policy on **Cycle Lane Legibility** at its meeting on 20th March 2025. We offer our input to the development of this policy.

Summary

We have heard that consideration of **what colour to paint cycle lanes** is the only thing being considered for increasing cycle lane legibility. We have no specific views on the choice of colour.

Whilst having a consistent way of distinguishing cycle lanes by surface colour would be useful, there are other significant considerations for cycle lane legibility which should be considered in any policy. We set out what we see as the **general principles** when considering legibility of cycle lanes in predominantly pedestrian areas.

There is already the desire to improve the experience for pedestrians and cyclists in Bristol Centre where **cycle lanes are indistinct and lead to conflict**.

We suggest a detailed set of temporary measures that could be used to **increase the legibility of the cycle lanes in the Centre**. We include some illustrations of how this might look.

General principles

Many pedestrians, particularly those who have mobility, cognitive, visual or hearing impairments, can be afraid to use spaces which cyclists may enter and cross unexpectedly.

There are certain locations in Bristol, the Centre being one of them, where cycle lanes run through areas that are otherwise free of motorised traffic and would normally be reserved for pedestrians. These general principles should apply to all such locations.

1. Whenever possible, cycle lanes should be **segregated** from other modes, including pedestrian footways.
2. In exceptional circumstances, where segregation is not possible, a degree of **separation** may be better than shared use, to avoid cyclists and pedestrians having to share the same space.
3. Unless cycle lanes are **easily distinguishable**, pedestrians and cyclists may not be aware of the designated lanes. This may cause pedestrians to stray into cycle lanes and cyclists to stray into pedestrian areas.
4. Legibility (visual distinction) could be improved by using a **consistent colouring** for all cycle lane surfaces in the city, not just those that cross pedestrian spaces. Consistency is required to enhance recognition for both pedestrians and cyclists [LTN 1/20 section 6.2.7].

5. The purpose of using different colouring should be to maximise **contrast** between cycle and pedestrian areas, to particularly assist those with visual impairment. Contrast should still be maintained as far as possible under night-time street lighting or when surfaces are wet.
6. Consistent colouring and contrast should be in addition to the **symbols** that denote a cycle lane. These should occur at regular intervals along the length of the cycle lane, not just at the beginning or end of a lane. They should be easily distinguishable from the surface on which they are imposed.
7. Where a cycle lane is adjacent to a pedestrian area, legibility can be improved by **delineation**, such as a white line along the side of the cycle way [TSRGD diagram 1049B].
8. Legibility in itself does not necessarily enable those with visual impairment to recognise the location of cycle lanes. Consideration should be given to **tactile distinction** as well, such as a profiled edge to cycle lanes that run parallel to pedestrian areas with no grade separation. In the latest regulations, a raised strip of trapezoidal cross-section is suggested to be better than a thermoplastic raised white line [TSRGD diagram 1049.1, LTN 1/20 section 6.2.8]. However this may cause a trip hazard in locations where pedestrians may approach the cycle lane from the side and may be a barrier to those using wheelchairs, mobility scooters or pushchairs.
9. Special consideration must be given to cycle lane **crossing points**. There are established standards for pedestrian crossings of segregated cycle lanes, using zebra markings [TSRGD Schedule14-Part1-Para25, LTN 1/20 section 6.2.32]. We suggest similar markings should apply to those areas where pedestrians desire lines cross cycle lanes within pedestrian areas. Pedestrians should be given priority at such crossings and cyclists should give way.
10. In some cases, cycle lanes in pedestrian areas may need to be suspended for significant lengths. In this case, cyclists should be required to dismount if there is significant pedestrian traffic. These are effectively shared use areas where pedestrians and cyclists must co-exist. There should be consistency in how the **transition from cycle lane to shared use** is indicated to cyclists so that they know they must give way to pedestrians.

Cycle lanes in the Centre

The Centre is an important city centre space. It has been apparent for some time that the cycle lanes across the Centre in Bristol are a problem. The cycle lanes are not easily distinguishable from the pedestrianised areas, leading to conflict between pedestrians and cyclists.

A permanent solution would be to create segregated cycle lanes that have a level difference from the footway and do not cross pedestrian areas except at well-defined crossings. This would be possible where the cycle lanes run alongside the roadway.

Although there may be a strong cycle desire line between Broad Quay and Park Street, across the top of the Cascade Steps, it is not an appropriate place for a cycle route. Consideration should be given to improve the safety of cyclists along Broad Quay, given its use as a bus hub.

Until funding is available for segregation, temporary measures should be taken to improve the legibility of the existing cycle lanes in the Centre.

Use of colour in the Centre

We are not convinced that simply changing the colour of the cycle lanes in the Centre will resolve the current built-in conflict between pedestrians and cyclists. We are aware of the civic and historic importance of the city centre space. Any redesign needs to balance the needs of place and

movement, and some of us are sympathetic to concerns that a coloured cycle lane cutting through the paved areas will undermine place making.

It may be more appropriate to acknowledge that this busy space inevitably mixes pedestrians and cyclists, all of whom must take particular care. At the top of the Cascade Steps, ideally cyclists would dismount or cycle at walking speed.

Instead of the use of colour, we propose low-cost temporary improvements that improve legibility through the use of white edging lines, explicit crossing points and more visible use of symbols.

Proposed temporary improvements to the Centre

Our suggestions vary according to which section of the cycle lane must be improved (see Figure 1).

1. Where the cycle lane is alongside a road

This applies to the section of cycle lane alongside St Augustine's Parade (A) as well as the section alongside Colston Avenue South between St Stephen's House and Quay Street (B).

These sections would have been better built segregated, with level separation from road and footway. However, as a temporary measure to increase legibility we suggest using a white thermoplastic raised white line each side of the cycle lanes as well as any surface treatment to increase contrast.

2. Where pedestrian desire lines cross the cycle lane

This applies mainly where the cycle lane running parallel to Baldwin Street passes the Toucan crossing of Baldwin Street (C). Currently there are many pedestrian and cycle movements here, and there is nothing to indicate that pedestrians approaching the road crossing have right of way. There should be zebra markings at this crossing of the cycle lane to give pedestrians priority.

There are additional pedestrian desire lines along Broad Quay (D), towards the puffin crossing of St Augustine's Parade (E), along St Augustine's Parade towards the junction with Colston Street (F), leading to Prince Street (G), on the approaches to the C6 bus stop on Broad Quay (H1, H2) and to the C7 bus stop on St Augustine's Parade (I1, I2). By introducing zebra markings it

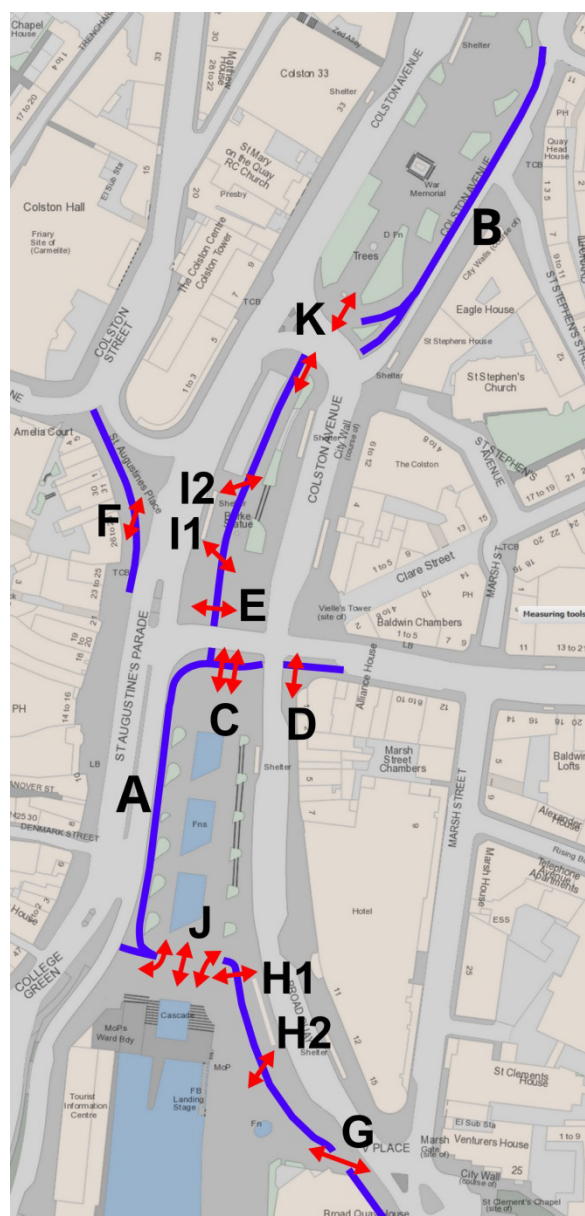


Figure 1: Key pedestrian desire lines (red) and where they cross cycle lanes (blue)

[Underlying map from BCC Pinpoint]

becomes clearer to pedestrians that there is a cycle lane crossing and to cyclists that they must give way to pedestrians.

We have illustrated below how our proposals might look in the area adjacent to Baldwin Street.

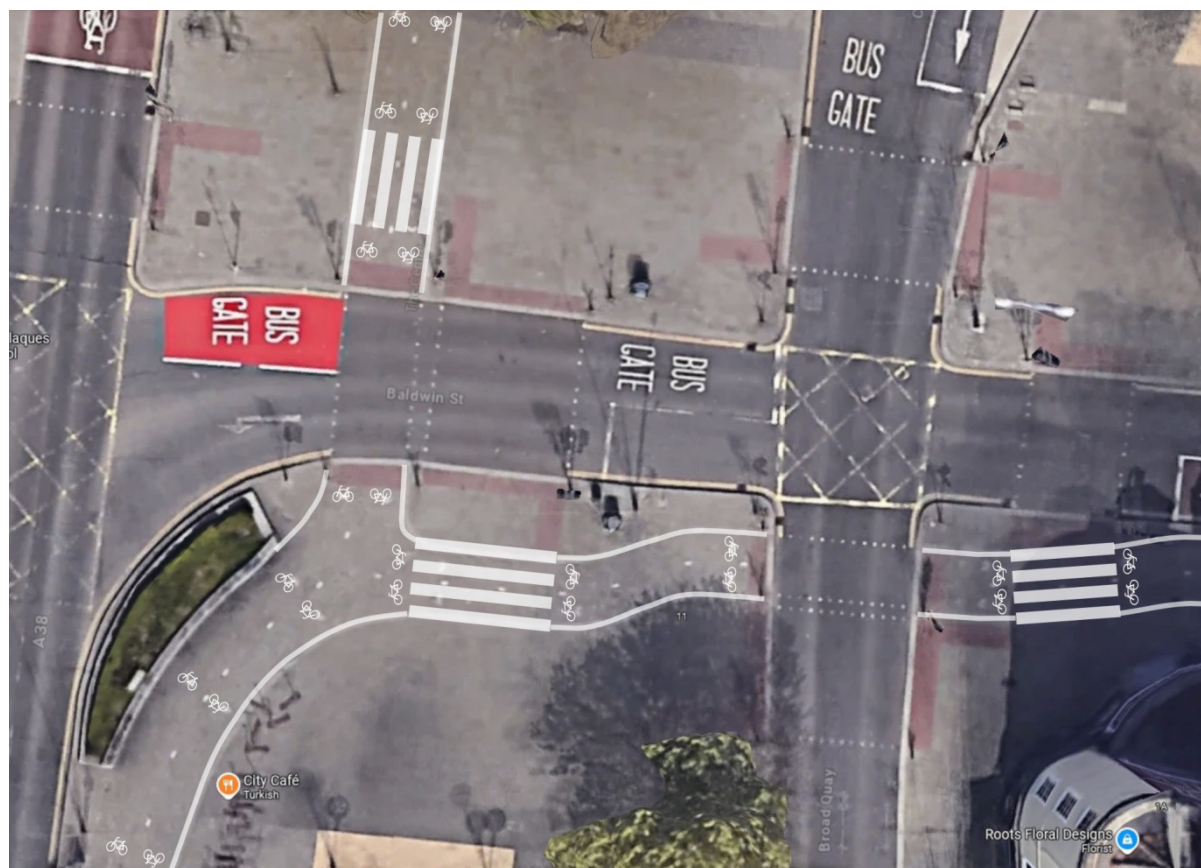


Figure 2: Adjacent to Baldwin Street

[Underlying image from Google Maps]

This illustration shows white lines along the edges of cycle lanes, more distinct and regular cycle symbols and zebra crossings on key pedestrian desire lines.

3. Where cycle lanes are suspended to give pedestrians priority

The most significant area where the cycle lane is suspended in order to allow pedestrian priority is at the top of the Cascade Steps (J). This is an area that is well-used by pedestrians and is a popular gathering point in the summer months. However, the current surface treatment, though not sufficient to be noticed by most pedestrians, implies the cycle lane continues through this area, with only some 'give way' surface markings to indicate cyclists should give way to pedestrians.

The other such area in the Centre is on the north side of the wide crossing of Colston Avenue (K) which joins the main north and south pedestrian areas in the Centre and where there is the additional hazard of cyclists switching from one side to the other of the pedestrian desire line.

Within BWA we have differing opinions on how to treat such areas. Some would like there to be no markings at all on the basis that, in a shared use area where pedestrians predominate, cyclists must give way to pedestrians anyway, and the lack of markings encourages all users of the space to be cautious. Others believe there needs to be a stronger indication of the transition markings to show

cyclists where they are entering a shared use space and must be prepared to dismount if there are pedestrians in the space.

We suggest that in these areas there would be no white line edges and that the end of the cycle lane would be marked by a solid white line with 'STOP' lettering (familiar from the equivalent road markings).

The following illustration shows how this proposal might appear in the area at the top of Cascade Steps.

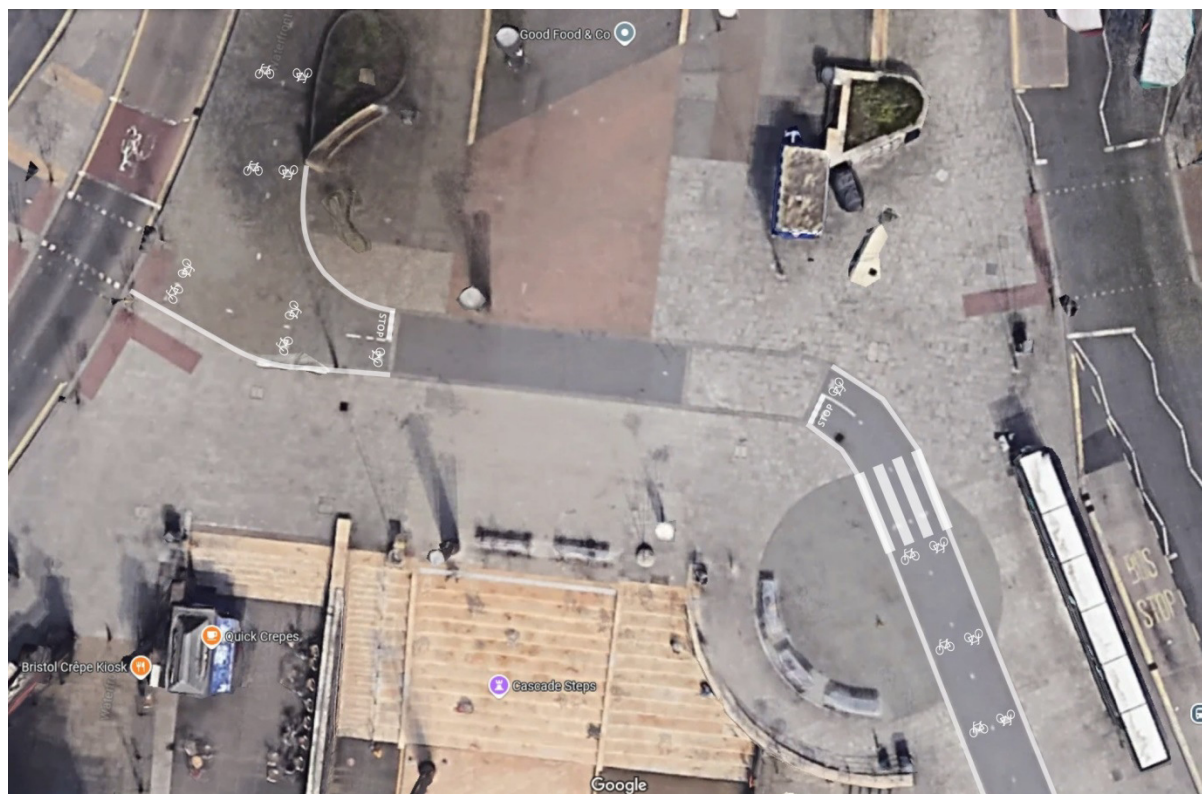


Figure 3: Top of Cascade Steps

[Underlying image from Google Maps]

This illustration shows white lines along the edges of cycle lanes, more distinct and regular cycle symbols and a zebra crossing on the key pedestrian desire line to the bus stop. It also shows a suspension of the cycle lane in the busy pedestrian area at the top of the Cascade Steps, with 'STOP' markings showing where cyclists should dismount or proceed with great caution into the shared use area.

References

- [TSRGD] *Traffic Signs Regulations and General Directions*, DfT Circular 01/2016, May 2016
- [LTN 1/20] *Cycle Infrastructure Design*, Local Transport Note 1/20, July 2020

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