

## **Main areas of concern from stakeholders about the latest design for The Plain Roundabout**

### **Impact of design changes on traffic flow**

Bus operators in particular were adamant that reducing the High Street approach from two to one lane should not be taken any further because of the delays that would cause.

Officers accept that tightening the junction a lot could have an unacceptably negative impact on traffic flow. However, tightening up too little could result in insufficient benefits for cyclists. To help strike the right balance, the design process has involved detailed modelling of possible changes to the junction.

Traffic modelling has become increasingly sophisticated in recent years but it is still best used only as a guide to the possible impact of design changes on traffic performance.

Initial modelling showed that reducing the High Street approach to one lane significantly increases queues in the Longwall Street direction. The preferred design therefore keeps two lanes but includes a central cycle lane and cycle symbols on the road to give more confidence to cyclists turning right – the difficulty of this right turn was a commonly identified problem by stakeholders.

Modelling of the latest proposed design estimates that in the morning peak hour there would be an average additional delay of approximately 29 seconds to each of the 80 inbound buses as they travel through The Plain and Longwall Street. The model estimates an average journey time saving of 22 seconds for the 80 outbound buses in the morning peak.

In the evening peak hour the model estimates there would be an average additional delay of approximately 14 seconds to each of the 85 inbound buses as they travel through The Plain and Longwall Street. The model estimates an average journey time saving of 50 seconds for the 85 outbound buses in the evening peak.

A significant increase in cycling flows as a result of the scheme could increase delays to traffic, although the scale of this is very difficult to predict. Given the numbers of buses travelling through the roundabout in the peak periods, the delay to each would still be small. Officers believe a small element of delay for buses would be justifiable given the benefits that should be achieved for cyclists (and pedestrians).

**Will the proposed design be fully inclusive, particularly for people with severe visual impairments?**

Concerns were raised about whether the design would be inclusive for those with visual impairments - areas in the design where footways were proposed to be flush with the carriageway would be difficult for people with visual impairments to detect.

In response to feedback from OXTRAG the only kerbs in the design that will be flush with the road will be at crossing points where tactile paving will make them detectable by people using white sticks or accompanied by guide dogs.

**The design should include facilities to segregate cyclists from vehicles**

Some felt that to cater properly for less confident cyclists, the design should provide a route around the Plain that was at least partially off road or that included some facilities for cyclists segregated from vehicular traffic.

There is insufficient space to provide facilities for cyclists completely off the carriageway around the roundabout. Off carriageway cyclist provision would overly compromise pedestrian amenity. In any case, there would be a high level of conflict between cyclists and vehicles at crossing points. The impact of this on traffic flow would be unacceptably severe.

As an alternative, it has been suggested that two specific movements could be provided for by semi-segregated cycle lanes on the carriageway - from the roundabout onto High Street and from High Street onto St Clements.

Officers believe that the latter movement is already relatively easy for cyclists with little or no conflict or potential conflict with vehicles. Any form of segregation for cyclists on this movement will therefore offer very little new benefit. For the former movement, in approximately 50m, there are two crossing points for pedestrians and two accesses to Magdalen College School which would break up the continuity of the semi-segregation. For such a treatment to be most effective it should give cyclists uninterrupted protection over a longer distance. In any case the design team are concerned that the semi-segregation delineator (some form of edging or kerb) would be overrun by vehicles sufficiently frequently in this location for it to present a maintenance liability to the county council.

However, given that this scheme is stage one of a two stage scheme (when funding allows) that would address the wider approaches to the junction, the concept of some sort of semi-segregated cycle lanes on the roundabout could be revisited at a later stage .

**Are the proposals sufficiently ambitious?**

Some stakeholders felt the proposed changes were not ambitious enough and will have a limited impact on the number of cyclists using the junction; particularly

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inexperienced or nervous cyclists. The omission of segregated facilities (considered above) is used as evidence of lack of ambition in the design.

Officers believe that put together, the proposed design elements will significantly change the nature of the junction and improve the experience of people cycling through it. In particular, reducing the amount of road space on the roundabout from St Clements all the way through to and including the High Street exit will help calm driver behaviour and generally mean existing or new cyclists will feel less intimidated than now.

The changes to the Longwall Street junction have allowed the county council to apply to the Department for Transport for special use of a green cycle traffic light to give cyclists a head start on their way to The Plain. This is an element of the scheme that is further evidence of ambition and innovation.

Stage two of the scheme to improve the wider approaches to the roundabout will see even greater incentives to higher cycle use. How to improve the wider approaches is something that the county council will be keen to engage with cycling stakeholders and local people in developing proposals to make the wider area much more welcoming to cyclists of as wide a range as possible of experience and abilities - particularly those who don't currently cycle.