

Summary

This project aims to address issues for cyclists on the three city centre bridges (Skeldergate, Ouse and Lendal). The project will focus on safety and amenity concerns for cyclists, specifically focusing on reducing conflicts between cyclists and vehicles; for example, close overtaking.

Highway Code Definition and Legal Standing

Motor vehicles close overtaking of cyclists is intimidating and potentially dangerous. Passing too close is often a contributing factor to cyclist / vehicle accidents and is seen as a contributing factor preventing people to consider using their bike. Reducing close passes is an important requirement to improve cycling within the UK.

The Highway Code states that when overtaking a cyclist, drivers should give, 'as much room as you would give a car'. It doesn't specify a minimum distance that drivers must leave between the cyclist and their car, but 1.5m is widely assumed as a reasonable distance.

Drivers can be prosecuted for passing too close to a cyclist under careless driving legislation but evidence of the criminal behaviour needs to be provided for example:

- Having video footage, for example dash cam/cycle cam footage.
- Have independent witnesses
- The incident been witnessed by a police officer

Some police forces in the UK have been running educational campaigns to alert drivers of the dangers of passing too close to cyclists. This would look to be a useful first step to try and reduce poor driver behaviour and the number of close pass incidents.

Site Review

The design team has reviewed the accident data (last 5 years 1/1/17 to 31/12/21), traffic flows and the existing facilities at each of the three bridges. Site visits were undertaken to review the sites and observe the traffic. Each site was also reviewed against the Cycling Level of Service Tool (CLoST) criteria. The following information provides a summary of the data gathered.

Lendal Bridge

There have been a total of 5 accidents over the last 5 years, with a total of 6 casualties. All of these casualties are classed as slight. This is considered to be an average number of accidents per year. Two of the accidents involved cyclists, and three involved pedestrians, with 2 pedestrian casualties reported from on accident.

The two cyclist accidents:

- One was when a cyclist undertaking traffic had a car door opened into them.

- One was when a cyclist overtaking on the right of traffic got hit by a car suddenly doing a U-turn.

No injury accidents have been reported in the last 5 years involving close overtaking of cyclists by motor vehicles.

Lendal Brige has approximately 13,300 two-way trips per day over it. It is estimated that approximately 2,400 cyclists use the bridge each day. This is approximately 18% of the 24 hour 2 way mix for all vehicels. Cyclists make up 26.5% and 25.5% of vehicles crossing the bridge in the AM and PM peak hour respectively. This is showing a large proportion of the daily cyclist traffic is during commuting hours.

The carriageway for Ledal Bridge is 6.5m wide divided into two 3.25 general traffic lanes. No cycle lanes are provided. The carriageway surfacing is in a poor state of repair and has recently received emergency repairs to improve it. It is planned to undertake full resurfacing of the carriageway over Lendal Bridge in the near future but currently dates are not available for delivery.

This bridge often has stationary traffic due to queuing from the Museum Street / Duncombe Place / St Leonard's Place junction. This can lead to cyclists under / over taking stationary vehicles as they try to navigate the bridge.

The bridge score poorly against appropriate CLoST criteria with several safety key requirements scoring "critical" given the high flow of motor vehicles and the lack cyclist segregation on the bridge.

Ouse Bridge

It is noted that Ouse Bridge is in close proximity to bars/clubs/places serving alcohol, therefore a number of these accidents have involved pedestrians under the influence of alcohol. This could then impair their judgement, and is a contributing factor to the cause of these accidents.

There have been a total of 9 accidents, with 10 casualties. 8 of these have been classed as slight, with 2 serious casualties. Each of the serious casualty incidents were likely to have involved pedestrians under the influence of alcohol.

Out of the 9 accidents 2 involved cyclists and it appears that both resulted from malfunction with their bike.

No injury accidents have been reported in the last 5 years involving close overtaking of cyclists by motor vehicles.

Ouse Bridge has the least amount of daily traffic flow of the three bridges, approximately 10,000 two way trips per day, but has a high proportion of cyclist use 1,300 per day, (12.8% of users). Cyclists make up an even larger percentage in the AM and PM peak periods, 30.4% and 32.8% respectively, this is the largest peak percentage of cyclist users over the three bridges. It is noted that Ouse Bridge also has by far the highest number of large vehicles due to the high number of bus movements (over 1,250 per day).

The carriageway for Ouse Bridge is 7m wide and for the majority of the bridge there is no central lane marking. No cycle lanes are provided either. The carriageway surfacing to the north of the bridge near Nessgate Corner is in a poor state of repair. It is planned to undertake full resurfacing of the carriageway in this area sometime in 2023 / 24.

The bridge score poorly against appropriate CLoST criteria with several safety key requirements scoring “critical” given the high flow of motor vehicles and the lack cyclist segregation on the bridge.

Skeldergate Bridge

There has only been one reported accident on the bridge over the last five years. The one accident occurred when a cyclist was undertaking stationary traffic in the middle of the bridge and a car door was opened in their path, causing a collision.

No injury accidents have been reported in the last 5 years involving close overtaking of cyclists by motor vehicles.

Skeldergate Bridge has the highest traffic flow of the three bridges with approximately 22,000 vehicles travelling over the bridge each day. Skeldergate has the lowest volume and percentage of cycling using the bridge (680 cyclists in 24 hours at a percentage of 3%).

Skeldergate already has on carriageway advisory cycle lanes installed. These are however substandard and do not meet the existing best practice minimum of 1.5m. The carriageway is 7.25m in total and generally the carriageway condition is acceptable. There are no plans for carriageway maintenance of this bridge.

The bridge score poorly against appropriate CLoST criteria with several safety key requirements scoring “critical” given the high flow of motor vehicles and the lack cyclist segregation on the bridge.

Options

Cycle Infrastructure

Local Transport Note 1/20 - Cycle Infrastructure Design (LTN 1/20) says that roads with a two way daily traffic flow of over 6,000 vehicles should separate vehicle and cyclist traffic to make the route suitable for most people cycling. This would be in the form of a fully kerbed cycle track, stepped cycle track or some form of on-carriageway light segregation. Any of the above would need to be 1.5m minimum in width per direction (3.0m absolute minimum in total of the bridge).

Each bridge has a carriageway cross section of 7.25m or less. Any addition of cycle lanes to current LTN1/20 guidance is not possible without removal of traffic lanes or substantial changes to the bridge. These options were specifically excluded from the scope of this commission and so have not been considered.

Although Skeldergate Bridge does currently have cycle lanes, these are below the current LTN 1/20 minimum width guidelines of 1.5m as they are less than 1m wide.

The bridge is the widest of the three at 7.25m but it would not be recommended to implement 1.5m cycle lanes on the bridge given this would lead to substandard vehicle lane widths (say 2.1m).

Given the high flows over the bridge and limitation within the scope to undertake major works all proposals below are looking at minor safety improvements and would not improve the bridge environment in line with LTN1/20 core principals of design.

Double White Lines / No overtaking orders

Double white line systems are used to prohibit drivers from encroaching on that area of carriageway used by the opposing flow of traffic. However, there are legal exclusions to this and the passing of slow moving vehicles is still allowed. Within the standard double white line systems have specific uses and requirements and it is the designers assertion that they are not suitable for this application. Double white line systems are not encouraged to be used in built up areas. This is as per Traffic Signs Manual Chapter 5 Section 3.1.

Alternatively to double white line systems a “no overtaking” restriction was considered by the designers. This would need approval through a Traffic Regulation Order in order to be implemented. No overtaking restriction are used only in exceptional situations and the designer does not believe they are suitable or enforceable on the city centre bridges.

It is not believed that the signing for “No Overtaking” would suitably identify no overtaking of cyclists even with use of a auxiliary plate.

Agreement with North Yorkshire Police would be required to implement either of the above solutions. However, the designer does not recommend further investigation of this option.

Speed limit reduction

The designer considered if speed reduction from the current 30mph limit to a 20mph limit would be appropriate over the bridges. LTN 1/20 – even at 20mph - recommends segregated cycle facilities to make the route suitable for all cyclists.

Any change in speed limit would require careful consultation with North Yorkshire Police, appropriate Traffic Regulation Orders, effective enforcement and legible signing. Given this, it was not believed that short sections of 20mph zones over the bridges would make a significant difference to speed or behaviour of traffic. As a wider consideration area 20mph may be a more useful application to reduce speed through whole areas and benefit cyclist. The scoping and delivery of this is currently outside that of this commission.

Narrow Lane Do Not Overtake Cyclists Signs

The use of “Narrow Lane Do Not Overtake Cyclists” at roadworks has been used by City of York Council and by other Authorities throughout the UK. These signs are temporary and for advice purposes only. The signs themselves do not hold any legal standing, are not an approved sign by the DfT that appear in Traffic Signs

Regulations and General Directions 2016 (TSRGD 2016) and are thus not enforceable.

The Traffic Signs Manual states:

“Care should be taken to ensure that traffic signs are used only as prescribed in the Regulations, and in accordance with any relevant directions, and that no non-prescribed sign or signal is used unless it has been formally authorised in writing. Failure to do so may leave an authority open to litigation, or make a traffic regulation order or traffic regulation order or traffic control measures unenforceable.”

As such, it is the designers view that the use of permanent signs to warn drivers of the dangers of overtaking cyclists would need to have formal authorisation by the Department for Transport (DfT) and should not be erected without this authorisation. A review of the Department for Transport's non-standard approved signs did not find any signs similar to “Narrow Lane Do Not Overtake Cyclists”. However, Transport for Scotland have approved signs to “Give Cyclists Space” and other unapproved signs have been trailed in the UK.

Options for using existing approved standard regulatory signs, which are within the TSRGD 2016, were looked at with the addition of supplementary plates. Drivers generally understand these signs and heed the warning. The use of text heavy warning signs is not seen as effective for drivers as they find reading text difficult while driving and do not understand the directions in a busy urban highway environment. As such a regulatory sign with a simple custom supplementary text sign was seen as an option to consider.

The choice of appropriate regulatory warning signs is limited to those that would be appropriate to the hazard. This would then have a custom supplementary plate added to improve effectiveness and highlight the issue of close passing of cyclists. This supplementary plate will need to have Signs Authorisation by the DfT for its use. Installation of any unauthorised signs is not recommended by the design team due to the potential risk of litigation.

Types of signs that have been considered for use are:
Regulatory Signs:

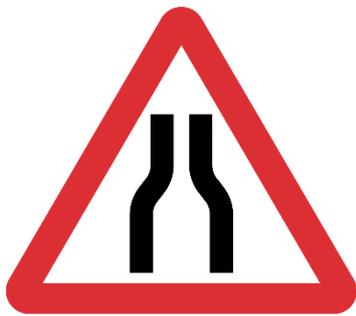


Diagram 516
Narrow Road



Diagram 632
No Overtaking



Diagram 650
Cyclists

Custom Supplementary Plate Signs:



The recommended sign would be a combination of the Diagram 516 "narrow road" warning sign and the custom "Do not overtake cyclists" sign.



Regulations stipulating the minimum distance from the hazard that the warning sign can be placed and the minimum distance for visibility need to be adhered to. Given the nature of the environment round the three bridges it is difficult to place the signs within the highway in suitable locations. Minimum distances / visibility thresholds are not met for Ouse Bridge. Signs on the approaches to Lendal Bridge would need to be suitably consulted on as they would need to be erected close to the City Walls or in front of historic buildings.

Signs on the approach to Skeldergate Bridge could be able to be installed at appropriate locations, however, the road does not actually significantly narrow over the bridge and the above proposed sign would not seem appropriate for use. The provision of cycle lanes and the sign together may also provide motorists with conflicting information and this is not seen as beneficial.

Because of some of the sign sites not meeting the regulations, any application to the DfT for use of a special custom sign in these locations is likely to be denied and is thus not recommended.

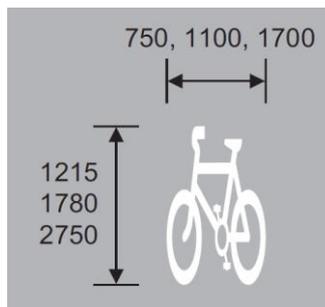
The alternative to this approach was to design a custom sign as per that recently approved by Transport Scotland which would, instead of preventing overtaking of cyclists, remind drivers of motor vehicles how to do so safely. This is seen as a more likely solution to gain authorisation given the legal issues regarding preventing overtaking cyclists.

The following information sign was created to provide drivers information on the distance to give cyclists when overtaking in a 30mph area. As this is an information sign the requirements for its location as not as strictly defined as that of a regulatory sign and thus provides more scope for its deployment on the approach to the City Centre Bridges.



Road Markings

As detailed above, actual cycle lanes to current best practice, advised or mandatory, are not possible due to lack of space. However, bicycle markings to Diagram 1057 could be installed, without cycle lanes, to give more awareness of cyclists. This has been done in other locations in York to some effect i.e. Tadcaster Road.



Diag 1057: Cycle Route Road Marking

These road markings provide reinforcement that cyclists are present and they should be given ample room.

A review of removal of the centre lines was undertaken for Skeldergate and Lendal Bridge but due to the high number of vehicles using the bridge this is not considered appropriate following review of best practice. Ouse Bridge already has the centre line removed for the majority of its length and it is not proposed to change this.

Skeldergate Bridge already has, sub-standard, cycle lane markings. However, to remove the cycle lanes would seem counter intuitive for a scheme looking to improve cyclist provision. Furthermore, to remove these effectively would likely require the resurfacing – or at least partial resurfacing of the carriageway. This would have a considerable cost associated with it. Given that no injury accidents have been reported and there are currently no plans to resurface the carriageway it is not recommended that the road markings be changed on Skeldergate Bridge.

The carriageway surfacing on Lendal Bridge is in need of repair. It is likely that carriageway resurfacing will be undertaken in the near future as part of a wider bridge maintenance scheme. It is not recommended to install new markings until the

resurfacing is completed given the poor condition of the carriageway and additional costs incurred for installing the road markings when resurfacing is scheduled.

Ouse Bridge may benefit from the installation of cyclist symbols on the carriageway. This would highlight the presence of cyclists and may provide some minor safety benefit.

Recommendations

Following the review of the options available the following recommendations are made by the designer to take the City Centre Bridges project forward:

- 1) Liaise with North Yorkshire Police to carry out a driver education programme on the dangers of close passes to cyclists.
- 2) Apply to the Department for Transport for Signs Authorisation to use the "Give Cyclists Space" sign for all bridges. If authorisation is granted, then the design of these signs will be taken forward.
- 3) Design road markings using cyclist symbols (Diag 1057) for Ouse Bridge and Lendal Bridge. The Lendal Bridge road markings would be installed following the maintenance and resurfacing works of the bridge.

Budget

Subject to approval for the use of "Give Cyclists Space" signs. A budget of £15,000 will be required to undertake the signing and lining works associated with the recommendations. Additional budget may be required for undertaking road safety education programmes and this will need to be investigated following further discussion with North Yorkshire Police.