



**Author/Lead Officer of Report:** Andrew Marwood, Senior Engineer, Scheme Design and Assurance

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**Report of:** Edward Highfield

**Report to:** Councillor Jack Scott (Cabinet Member for Transport and Development)

**Date of Decision:** 11 January 2019

**Subject:** Sheffield Inner Ring Road and Junctions – Scheme Consultation and Officer Recommendations

Is this a Key Decision? If Yes, reason Key Decision:-	Yes <input type="checkbox"/>	No <input type="checkbox"/>
- Expenditure and/or savings over £500,000	<input type="checkbox"/>	
- Affects 2 or more Wards	<input type="checkbox"/>	
Which Cabinet Member Portfolio does this relate to? Transport and Sustainability		
Which Scrutiny and Policy Development Committee does this relate to? Economic and Environment Wellbeing Scrutiny and Policy Development Committee.		
Has an Equality Impact Assessment (EIA) been undertaken?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If YES, what EIA reference number has it been given? 115		
Does the report contain confidential or exempt information?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If YES, give details as to whether the exemption applies to the full report / part of the report and/or appendices and complete below:-		

**Purpose of Report:**

The report sets out the background to the scheme, consultation comments, and unresolved objections together with officer responses and recommendations.

To approve the implementation of the Inner Relief Road scheme.

**Recommendations:**

That the scheme is approved and implemented

**Background Papers:** None

<b>Lead Officer to complete:-</b>	
1	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council Policy Checklist, and comments have been incorporated / additional forms completed / EIA completed, where required.
	Finance: <i>Julie Curry – 27/11/17</i>
	Legal: <i>Richard Cannon - 27/11/17</i>
	Equalities: <i>Annemarie Johnston - 21/11/17</i>
	<i>Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.</i>
2	<b>EMT member who approved submission:</b> <i>Edward Highfield</i>
3	<b>Cabinet Member consulted:</b> <i>Councillor Jack Scott</i>
4	I confirm that all necessary approval has been obtained in respect of the implications indicated on the Statutory and Council Policy Checklist and that the report has been approved for submission to the Decision Maker by the EMT member indicated at 2. In addition, any additional forms have been completed and signed off as required at 1.
	<b>Lead Officer Name:</b> <i>Andrew Marwood</i>
	<b>Job Title:</b> <i>Senior Engineer – Scheme Design and Assurance</i>
	<b>Date:</b> <i>11/10/18</i>

# 1. PROPOSAL

## Background

- 1.1 The Sheffield City Centre Masterplan (2013) specifically set out to establish and grow the Riverside Business District and in particular bring forward the West Bar Development. The Masterplan also recommended the continued removal of general traffic which travels through the city centre by re-directing traffic onto the A61, Sheffield Inner Ring Road. This redistribution of traffic has continued to take up highway capacity, creating congestion which is already significant at peak times.

Sheffield's new long term Transport Strategy to 2035 was endorsed by Cabinet in July 2018. It sets out a new approach to dealing with the transport challenges the city faces and how we can enable development in a more sustainable and equitable manner.

The strategy highlights the importance of '*a better connected Sheffield*' and acknowledges that an '*improved major road network is required to keep Sheffield connected to motorways, airports and other cities*'. Consultation on the 'Sheffield Transport Vision' notes that congestion is the biggest public concern if no action were taken – in terms of its impact on all forms of travel with the effect on business featuring strongly within this. The strategy indicates that '*the Inner Ring Road is key to the Council's plans for the development of the city centre. Its operation is key to creating a more pleasant and attractive environment in the city centre while providing access to it (particularly for visitors to the city)*'. It and congestion on it, also acts as a barrier to the movement of people travelling by public transport, foot or bicycle, and freight.

The strategy indicates that '*we will develop a programme of major improvements on the Inner Ring Road, not only to increase capacity, speed up public transport and improve resilience, but also to mitigate for the severance and adverse environmental impacts on it*'.

Failure to keep the Inner Ring Road moving can result in long tailbacks into the city centre, resulting in severe disruption for public transport, as well as adverse impacts on the safety, comfort and convenience of pedestrians and cyclists in the city centre. If we are unable to clear traffic out of the city centre in the evening peak, we will be unable to provide an environment that enables the expedient, reliable operation of public transport, or provide a safe, comfortable environment for walking and for cycling. This would ultimately cause the approach outlined in the city's Transport Strategy to fall.

## 1.2 **Proposal**

The proposed scheme seeks to reduce traffic congestion in and around the Riverside Business District by adding further capacity and altering and widening key junctions between Corporation Street and Savile Street.

A reduction in traffic congestion and overall journey times will also contribute to a positive impact on air quality in this location and enable better connectivity to and from the city centre for all modes of transport.

This scheme lies entirely within the public highway therefore there are no requirements for additional private land, which makes it achievable in the short term.

## 1.3 The proposals can be seen in full in SD-1992-C1 (appendix 'A' )

They include:

- Moving the right turn facility for traffic from Mowbray Street away from the Bridgehouses junction towards Savile Street.
- Increasing from 2 to 3 lanes, in clockwise direction between Corporation Street and Alma Street.
- Changing the lane usage on the clockwise approach to Savile Street so drivers can either go left or ahead at the junction.
- Providing a new left turn lane into Corporation Street.
- Re-routing the path of traffic heading for Chatham Street at Bridgehouses to the left of the pedestrian island.
- Segregating cycles from other traffic by accommodating them on the footway (segregating them from pedestrians where widths allow).
- Providing a direct and segregated cycle crossing of the Inner Relief Road at Bridge Street, which is to be promoted as a main route into and out of the city centre.
- Replacing the pedestrian crossing east of Bridgehouses with one closer to Savile Street.

- 1.4 The proposed scheme produces a reasonable benefit: cost ratio when just background traffic growth is considered over a 60 year assessment period. However, when the trips associated with a single development in proximity to the scheme are included, the resulting benefit: cost ratio increases significantly, representing very good value for money. Given that the ring road also has strategic regional importance, the cost: benefits are much greater when aggregated and assigned for all development trips in the city.

During existing peak periods, the A61 Sheffield Inner Ring Road experiences the highest level of delay within the entire Sheffield City Region area with travel times commonly being over 30% greater than the off peak period. The average route delay currently is estimated to be almost 70 seconds per kilometre which represents an unacceptably high level of congestion.

The vehicular delay created by new development trips is predicted to increase, resulting in even greater levels of congestion and an increase in vehicular emissions, unless additional highway capacity is added as part of the overall development

The construction of the improvement will therefore provide improved access to new developments, with access to the job opportunities created as a result.

To address the anticipated issues a number of options were tested by officers during the scheme's feasibility stage, and following appraisal the preferred option was selected.

- 1.5 It is unrealistic to expect that all currently committed development will be delivered without addressing the increasing traffic travel times into Sheffield City Centre. It is far more realistic to assume that a point will be reached when the length of time taken to access Sheffield City Centre is simply too long or that journey progress is too slow and that development stagnation will occur due to regular instances of traffic grid-lock. This improvement is therefore important in accommodating a large part of the additional 152,000 trips required to help achieve the required economic growth.

It is therefore clear that by 2026, the additional highway demand will result in severe congestion within the Sheffield City Region road network but specifically on the A61, Sheffield Inner Ring Road. Indeed, the Sheffield City Region Transport Policy reinforces this point and predicts that the change in delay over the period 2007-2026 will be between 100% and 200% in this area.

It is therefore clear that to deliver Sheffield's Economic and Housing Plans, additional highway capacity needs to be added to the A61, Sheffield Inner Ring Road to ensure that congestion is managed and the operation of junctions is improved; this ensures that access on radial routes into the City Centre, particularly for public transport can be effectively managed to allow the delivery of new development sites and jobs.

## **2. HOW DOES THIS DECISION CONTRIBUTE ?**

- 2.1 The project will contribute directly through its interventions to the ambitions set out by Sheffield City Council's Corporate Plan and the overall vision and objectives of the Sheffield City Region.
- 2.2 The proposal contributes towards promoting a '*Strong Economy*' by ensuring that as businesses grow and job opportunities increase, as part of the City's growth; these are supported by delivering the capacity for increased travel demand. The scheme will have a significant impact on the areas ability to realise its economic potential and also contribute to providing the conditions that businesses need to prosper and become more resilient. This ambition is also supported by the Sheffield City Region, with the scheme contributing to many objectives set out by the SCR's Economic Plan.
- 2.3 The scheme supports '*Thriving Neighbourhoods and Communities*' by including an improved crossing facility for pedestrians and cyclists to and from Kelham Island and the City Centre, which has been identified as an important strategic cycle link in the draft '*City Centre Plan 2018*'.
- 2.4 The improvements to this section of the Inner Ring Road also aligns with the current priorities set out in the Corporate Plan by '*Transforming roads and pavements*' and contributing towards '*Better connected transport links to increase travel choices*'.
- 2.5 This scheme is necessary to help deliver SCR's Transport Strategy 2011-2026 in particular the following specific policies:
- Policy F – To improve connectivity between major settlements.
  - Policy G – To deliver interventions required for development and regeneration.
  - Policy L - To reduce the amount of productive time lost on the strategic road network and improve its resilience and reliability.

- Policy V – To improve air quality, especially in designated Air Quality Monitoring areas.

### Sheffield's Transport Strategy

- 2.6 Sheffield's new long term Transport Strategy to 2035 was endorsed by Cabinet in July 2018. It sets out a new approach to dealing with the transport challenges the city faces and how we can enable development in a more sustainable and equitable manner.
- 2.7 The strategy highlights the importance of '*a better connected Sheffield*' and acknowledges that an '*improved major road network is required to keep Sheffield connected to motorways, airports and other cities*'. Consultation on the 'Sheffield Transport Vision' notes that congestion is the biggest public concern if no action were taken – in terms of its impact on all forms of travel with the effect on business featuring strongly within this. The strategy indicates that '*the Inner Ring Road is key to the Council's plans for the development of the city centre. Its operation is key to creating a more pleasant and attractive environment in the city centre while providing access to it (particularly for visitors to the city)*'. It and congestion on it, also acts as a barrier to the movement of people travelling by public transport, foot or bicycle, and freight.
- 2.8 The strategy indicates that '*we will develop a programme of major improvements on the Inner Ring Road, not only to increase capacity, speed up public transport and improve resilience, but also to mitigate for the severance and adverse environmental impacts on it*'.
- 2.9 The scheme aligns with the transport strategy actions by securing additional capacity by making best use of the space available and improving the efficiency of the junction operation at Corporation Street, Bridgehouses and Savile Street. The anticipated results will also provide quicker, more reliable bus journeys for services that cross the ring road at this location. The scheme also provides an improved safe and attractive crossing for people on foot or bicycle between Alma Street and Bridge Street improving connectivity between the City Centre and Kelham Island.
- 2.10 Failure to keep the Inner Ring Road moving can result in long tailbacks into the city centre, resulting in severe disruption for public transport, as well as adverse impacts on the safety, comfort and convenience of pedestrians and cyclists in the city centre. If we are unable to clear traffic out of the city centre in the evening peak, we will be unable to provide an environment that enables the expedient, reliable operation of public transport, or provide a safe, comfortable environment for walking and for cycling. This would ultimately cause the approach outlined in the city's Transport Strategy to fall.

### 3. HAS THERE BEEN ANY CONSULTATION?

- 3.1 Consultation took place for two weeks in October 2017. A total of 12 yellow backed signs, indicating: 'Major Traffic Scheme Proposed Here', were placed at key junctions and crossings of the Inner Relief Road, between Corporation Street and Savile Street. The signs gave a link to the Council's web site where the proposals could be seen in more detail. The signs also provided a telephone number so that questions could be asked to officers. The Sheffield Star ran a front page article on the proposals the day after the consultation started and all statutory consultees were notified of the proposals including Fire service, Ambulance and Police.
- 3.2 Comments regarding the proposals were wide ranging and included views on other congestion hotspots within the City as well as more scheme specific observations and suggestions. All comments received are summarised in 'Appendix B'.
- 3.3 In total 53 comments were received regarding the proposals.

These have been split and addressed in four groups:

1. Cycle Sheffield has submitted a lengthy objection (see Appendix 'C') which includes collated responses from 21 individuals / members.
2. Comments from 18 respondents on the type of proposals the Council are promoting, including discussions on wider transport issues for the City and specific mention of Air Quality.
3. Comments regarding the impact on Kelham Island.
4. Scheme specific requests relating to junction layouts and operations within the proposed changes (these have been investigated and where possible suggestions incorporated into the design).

A total of 49 objections remain for the scheme.

#### Officer Responses Cycle Sheffield / Members / Supporters

- 3.4 See Appendix 'C' for a detailed response to each of Cycle Sheffield's comments. Following the consultation, further details on the proposed cycle facilities as part of the scheme were presented to two representatives of Cycle Sheffield in a meeting chaired by the Cabinet Member for Transport and Infrastructure. Officers included in the design suggestions that were made by Cycle Sheffield at the meeting and further details were then provided to the group as shown in Appendix 'D'. A further response indicating that their objection to the scheme remained was received on 01.03.18 and is detailed below.

*'Thank you for engaging with us on the designs. It is good to see reference to how the cycle routes/infrastructure will link to future projects. This provides very useful context to the designs and we hope this will be included on the designs of all transport schemes from now on. We also welcome the improvements for active travel in the designs such as the crossing from Alma Street to Bridge Street.*

*However, given the volume of motor traffic (more than 200 PCUs per hour) and the speed of the motor traffic (over 20mph) on the Inner Ring Road the carriageway is not appropriate for cycling and will not result in the modal shift towards active travel which SCC requires. The IRR requires protected, continuous, direct provision for cycling which this scheme unfortunately does not deliver. We therefore cannot support this scheme.*

*The designs would be more acceptable if they were presented as part of a larger scheme involving improvements for active travel in Kelham Island (which would require preventing rat running along Green Street and Alma Street along with a resident parking scheme and a 20mph zone).*

*We appreciate that it may be too late in the design process of this particular scheme for a redesign to enable active travel but future transport schemes in Sheffield must include provision for active travel from the very beginning and if it is not possible to create safe and convenient facilities for cycling on-road then alternative, safe, convenient and direct routes must be identified and created as part of that same scheme'.*

### Wider Transport Issues

- 3.5 The proposed scheme recognises the importance of the Inner Ring Road as a key part of Sheffield's Transport Network. Officers are aware of wider issues facing the city, and acknowledge that this scheme (as with any intervention) makes only a limited contribution to addressing these. A failure to address these issues is considered likely to harm the economic development of the city, and harm the City Council's ability to attract sufficient funding to address issues in the medium and long term. Funding for this project is only available for improvements on the Inner Ring Road that can demonstrably uplift the city's GVA (Growth Value Added) through promoting development. Failure to deliver the programmed improvement would be expected to hinder the Council's ability to attract funding for future schemes of any nature (including those aimed principally at, or include for, provisions for pedestrians and/or for cyclists).

This part of the Inner Ring Road was constructed in 2007 with the express purpose of relieving streets in the Castlegate area of excessive amounts of traffic, to enable the improvement and regeneration of the

city. Re-opening such streets in this area would be expected to have adverse impacts in respect of the overall economic objectives. Restrictions in that area are also required to protect buses from the adverse impacts of traffic congestion; removal of these would likely see the public transport service deteriorate, further impacting on economic objectives.

The Council, as identified in this report, is at an early stage of the development of the new Transport Strategy for the city. The strategy was endorsed by Cabinet in July 2018 with a key action to develop a programme of major improvements on the Inner Ring Road, not only to increase capacity, speed up public transport and improve resilience, but also to mitigate for the severance and adverse environmental impacts it and the traffic on it, creates.

The proposed scheme is included in the appraisal undertaken as part of the Clean Air Zone Feasibility Study. The scheme is included within the highway network and development related changes for future years.

### Kelham Island Residents

#### 3.6

A meeting with the members of Kelham Island Community Alliance was held on the evening of 15<sup>th</sup> November, 2017 and was attended by more than 60 residents.

1. The aims and objectives of the scheme were put to the group for their consideration and after a fairly lengthy debate, the group were concerned that the proposals shown to them: Increased the physical separation of the Kelham Area from the City Centre.
2. Did not sufficiently promote mode shift or bring about a significant improvement in Air Quality.
3. Believed that the improvement was aimed at improving journey times for vehicles passing Kelham without improving journey times for trips with origins or destinations within Kelham.

After further discussions, members of the group asked for two measures to be considered as part of the scheme development. The measures are:

1. The installation of a yellow box junction road marking to help keep clear the left turn egress from Alma Street into Corporation Street.
2. The construction of a direct through pedestrian crossing phase between Alma Street and Bridge Street.

Both of these requests will be considered as part of the further scheme development and possible inclusion in the detailed design and consideration within the Road Safety Audit process.

At the meeting an action was also taken away to start up a small working group with Council officers where further discussion on the progress of the Inner Ring Road scheme could be had as well as other schemes proposed in the future. This has subsequently held its first meeting and is due to convene again in January 2019.

- 3.7 A response has been received from SYPTTE who have indicated support for the proposals as they should enable more reliable journey times for buses crossing and travelling on this section of the Inner Relief Road.

- 3.8 There is the potential loss of trees and grassed areas which result from the construction of the additional traffic lanes in what are currently landscaped central reserve areas. However, in mitigation of this, there are other areas of the site where planting could be replaced on a 2:1 basis. Where possible trees will be replanted.

#### **4. RISK ANALYSIS AND IMPLICATIONS OF THE DECISION**

##### **4.1 Equality of Opportunity Implications**

An Equality Impact Assessment (reference 115) has been carried out for the scheme. The conclusion was that the works are fundamentally equality neutral affecting all local people equally regardless of age, sex, race, faith, disability etc. However, some aspects will be positive, e.g. for the young, elderly and disabled as the measures improve accessibility. No negative equality impacts have been identified.

##### **4.2 Financial and Commercial Implications**

The proposed scheme is predominantly funded from the Sheffield City Region's SCRIF programme. Therefore the assessment of the scheme is through the SCR's appraisal which is based on the Department for Transport's appraisal methodology WebTAG.

The appraisal undertaken by SCR has been completed and they have confirmed their support for the scheme and the benefits that it provides. Sheffield City Region will provide £3,787,000 towards the scheme budget of £4,637,000. Remaining funding will be provided by the Council.

The budget also incorporates a project contingency allowance, should there be any unavoidable cost overruns that were not foreseen or expected. This allowance will be managed throughout the construction phase to account for any variances that cannot be afforded elsewhere from the project budget.

#### 4.3 Legal Implications

The Council in exercising its functions under the Road Traffic Regulation Act (including provision of pedestrian crossings and waiting restriction) is required under Section 122 of the Act to (a) secure the expeditious, convenient and safe movement of traffic (including pedestrians) and (b) the provision of suitable and adequate parking facilities on and off the highway, and so far as practicable having regard to the matters listed below.

The matters to be considered before reaching any decision are:

- i) the desirability of securing and maintaining reasonable access to premises;
- ii) the effect on the amenities of a locality and (including) the use of roads by heavy commercial vehicles;
- iii) the national air quality strategy prepared under Section 80 of the Environment Act 1995;
- iv) the importance of facilitating the passage of public service vehicles and of securing the safety and convenience of passengers/potential passengers; and
- v) any other matters appearing to the Council to be relevant.

The Council has received 49 objections to the proposal in response to the consultation. The Council needs to consider whether these objections outweigh the benefits of implementing the proposal. If the Council is satisfied that the benefits of implementing the proposal outweigh the objections, it will be acting lawfully and within its powers should it decide to implement the proposal.

#### 4.4 Other Implications

N/A

### 5. **ALTERNATIVE OPTIONS CONSIDERED**

5.1 General background traffic will continue to grow without there being any increase in traffic capacity. The current 70 seconds of travel delay per kilometre will increase and the Sheffield Inner Ring Road will remain as the route with the highest level of travel delay per kilometre in the entire City Region.

The increase in travel delay will also result in greater traffic emissions which will adversely affect Air Quality. This is not a standstill situation but it is clearly a case of declining traffic and physical conditions.

#### 5.2 Do Something (this proposal)

This option has considered the provision of an additional single traffic

lane in each direction for much of the section of the Inner Relief Road between Corporation Street and Saville Street and alterations to three main junctions. Overall, journey travel time benefits become significant and the scheme delivers a very good benefit to cost ratio. The reduction in travel times will also reduce congestion and as a result vehicle emissions will be improved compared to doing nothing.

Within this option there is also flexibility to reduce the scope of the scheme, but still achieve journey time savings and very good cost to benefit results. This is important should risks such as statutory undertaker diversions prove too much for the budget available. Each intervention has been discretely modelled and therefore changes to the scheme can be easily quantified, should elements have to be removed.

5.3

#### Do Maximum

This option would consider adding additional traffic lanes along a larger section of the Sheffield Inner Relief Road to accommodate the full build out of the city centre development schedule as well as normal background growth.

This analysis would require a huge modelling resource to complete and the traffic generation from the mid to longer term developments would need to be estimated as formal planning applications have not yet been submitted.

Whilst this provides the optimum solution, the cost of this proposal is far in excess of the budget currently available, third party land is potentially required and the proposals could not be delivered within the current programme timescales.

5.4

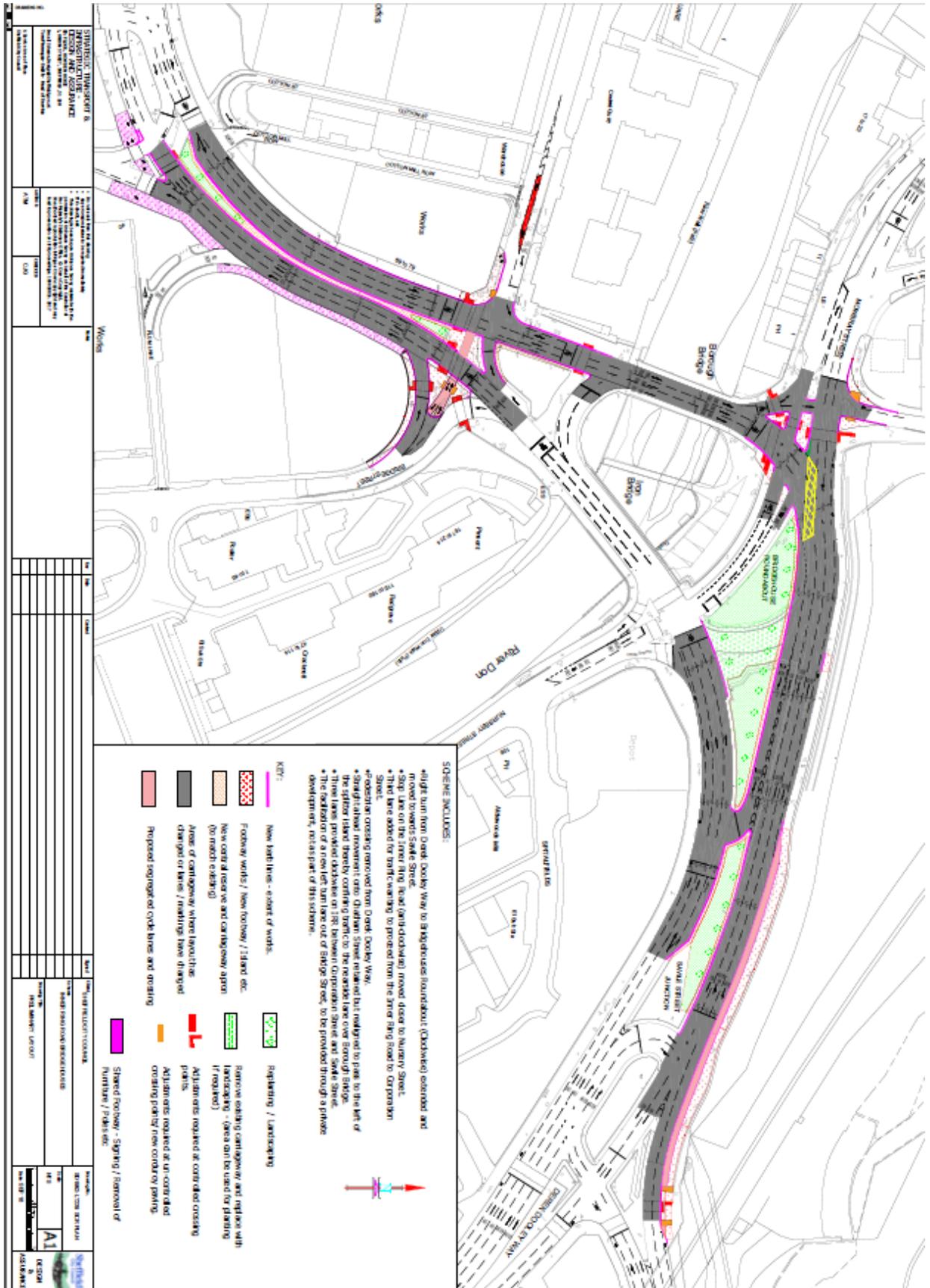
Based on the information provided above the preferred option would be to spend the budget for the scheme on improving one of the worst sections on the ring road between Corporation Street and Saville Street which provides the benefits identified. The 'Do something' approach does not prohibit the development of the Do maximum option should further money be allocated in future to address capacity issues and congestion.

## **6. REASONS FOR RECOMMENDATIONS**

Failure to keep the Inner Ring Road moving can result in long tailbacks into the city centre, resulting in severe disruption for public transport, as well as adverse impacts on the safety, comfort and convenience of pedestrians and cyclists in the city centre. If we are unable to clear traffic out of the city centre in the evening peak, we will be unable to provide an environment that enables the expedient, reliable operation of public transport, or provide a safe, comfortable environment for walking and for cycling. This would ultimately cause the approach outlined in the city's Transport Strategy to fall.

It is therefore recommended that the scheme is approved so that the scheme can be delivered in the necessary timescales.

# APPENDIX 'A' Preferred Preliminary Design



## Appendix 'B' Summary of comments and Issues raised during the consultation.

- *Would like to see the promotion of more sustainable plans. Would like to see bolder plans to tackle transport issues in Sheffield – There is then a list of further congestion hotspots and how to tackle them.*
- *Suggestions on wider congestion issues - not scheme specific (4 others made similar comments).*
- *Against making changes that benefit only public transport, pedestrians and cyclists.*
- *Proposals do nothing to address congestion at Pitsmoor Road / Mowbray Street. Suggests moving the stop lines to get more capacity. Cannot see the positives of moving the loop at Bridgehouses to Nursery Street. Timing of the existing traffic lights is terrible. Co-ordination of lights at the Wicker needs looking at. Suggests better co-ordination of lights at Nursery Street.*
- *Suggestions to improve Pitsmoor Road / Mowbray Street.*
- *Suggests removing the right turn in to Alma Street and re-configure the junction to operate as a give way left in and left out. Suggests removing the Pedestrian Crossing at Cotton Mill Row – this adds to the number of lights in a short section. Suggests removing the traffic signals at Russell Street (as traffic levels are not high enough to require signals). Provide 2 lanes heading towards the IRR and one lane to West Bar (reversing the current layout), also allow two lanes on Tenter Street to be used for going straight ahead at West Bar. Believes these suggestions would be a good addition to the proposals.*
- *Objects to the proposed road widening and thinks the measures are counter productive – they will lead to deterioration in air quality. Increased road capacity will eventually lead to more vehicles. Suggests more provision of alternative / sustainable transport initiatives. The scheme does not help 'realise the full potential of cycling'. (2 others made similar comments).*
- *The scheme doesn't achieve the 'needs' identified by Sheffield City Council. In support of the response by Cycle Sheffield. (21 others made similar comments).*
- *The scheme will just attract more traffic. Need a concerted effort to reduce car traffic, pollution and encourage public transport.*

- *The proposals will be totally ineffective in the short and long term and will only further endanger the lives of pedestrians and cyclists - not to mention the effects on air pollution. The aim should be to reduce the number of vehicles on the road. This is not a sustainable solution.*
- *Strongly opposed to the plan because it is likely only to increase vehicle traffic. Widening only relieves congestion temporarily. Scheme will increase air pollution. Will make cycling more dangerous than it already is. Suggestion of improved walking and cycling routes and infrastructure to enable people to travel by other means.*
- *Suggestion of grade separation to improve traffic flow.*
- *Suggestions on wider congestion / traffic issues. Suggests on the ring road there are excessive amounts of pedestrian crossings which add to journey times.*
- *There is nothing to support any of the proposals. More road space will lead to more vehicles. Cycle and Pedestrian facilities are woefully inadequate. Also does nothing to address the rat run through Kelham.*
- *No vision to address issues within Kelham - Also agrees with the comments made by cycle Sheffield.*
- *Will result in more traffic because of roadworks and will not improve flows. Traffic lights are never in sink. Suggests allowing roads around castle market to be opened up to traffic.*
- *Suggests that the scheme only has a limited life before it attracts more traffic. The money should be used to promote more sustainable means of transport.*
- *Does not provide safe and effective provision for those walking or cycling in that area.*
- *Thinks the money should be used to improve cycling provision.*
- *Does nothing to increase cycling rates in the city.*
- *Should be covered by the 20mph limit. Has an audit been done on the risks associated by cyclists? Suggests advanced stop lines at junctions.*

- *Request to stop excluding non-powered transport from our society. Big roads don't facilitate movement they prevent it.*
- *Not immediately clear how what is being proposed on the plan will achieve the key aims stated by the Council.*
- *Number of solutions to Sheffield's Congestion hotspots but not for the area we are consulting on.*
- *Suggests improvements at Mowbray Street and Borough Bridge, Doesn't see an issue with the left turn to Saville Street. Agrees Ped Crossings need to be moved. Suggests improvements to the flow up Chatham Street.*
- *Suggests improvements at Mowbray Street and Borough Bridge. Doesn't see an issue with the left turn to Saville Street. Agrees Ped Crossings need to be moved. Suggests improvements to flow up Chatham Street.*
- *The proposed scheme does not achieve the 'needs' identified by Sheffield Council. The evidence is that it will not reduce congestion in the medium or long term, it will not provide an economic benefit due to the increased costs of congestion, pollution and inactivity and it does not include safe and effective provision for those walking or cycling in that area. The entire scheme should be scrapped.*
- *Wants to scrap the scheme as it does nothing to tackle the stated target of 10% of all journeys to be made by bike.*
- *Serious concerns about the proposals for cycling.*
- *Planning a safe journey is difficult if not impossible in some cases, especially where road markings are used to denote cycle paths and where these markings are not maintained across the entire road (Queens road being a good example where the cycle marks disappear on a left hand bend). I would hope that any new developments of such significance would do more to improve the lot of cyclists and in doing so hopefully encourage more commuters to take up cycling and leave the cars at home. Can I ask that you respond with the design principles WRT to cycle network for Sheffield and how these are addressed in this design.*
- *Proposals for the Inner Ring Road look to be very one dimensional – trying to expand road capacity to handle anticipated loads – which will only last a few years. Makes walking and cycling difficult. Other locations where the money could be better spent on more sustainable modes.*

- *I am concerned at some of the conclusions drawn upon for the scheme. While the reduction in congestion may improve air quality through the creation of extra capacity you will know doubt incentivise private vehicular travel further through improved journey times and the additional road capacity. What happens once this new scheme is at capacity? The Council has a duty to encourage behaviour change away for private car use.*
- *I do not believe that any of the justifications for the proposal will be achieved and the Council has not provided any evidence to back their assumptions. I have no problem with building infrastructure to aid economic development. However, SCC are claiming that enabling more car journeys will help the economic development of the city centre, reduce congestion and pollution. As is being accepted in many UK cities, the way to reduce congestion and pollution is to have less cars, not more.*
- *What will be done about traffic heading along Mowbray Street to Derek Dooley Way? People use this as a rat run resulting in long delays at the lights where the roads meet. This means resident's movements are restricted and the smaller roads are more dangerous. The short cycle on the traffic lights (if meant as a deterrent) does not work. What will be done about the traffic using Green Lane/Alma Where it joins Corporation Street? This is also used as a rat run resulting in long tailbacks which bring the area to a standstill. Again this blocks residents and presents risk to pedestrians.*
- *The Inner Ring Road design and layout at this location is recent and the road surfaces are in good order and the trees etc are still bedding in. If the current design turns out not to be fit for use how we can be confident that the latest design is fit for use and won't result in further redesign in a few years time. Will the design address serious stationary traffic that backs up very quickly at peak times on the B6539 / West Bar trying to join the A61 / Ring Road. How will the Saville Street junction be made better for cyclists?*
- *Congestion on Green Lane/Alma Street - people use it as a short cut to Brighthouse roundabout. Speeding cars make dangerous to cross the road at Bowling Green/Russell/Alma - getting worse with new development. Kelham Island/Penistone named as one of the air pollution hot spots in Sheffield in May 2017. The problem is too many cars coming in to Sheffield so the strategy needs to limit cars. Make Alma Street one way going towards Green Street. This would decrease traffic on both Green Street and Alma because the turn from Alma going left onto Corporation*

*would no longer be an option. It would effectively make these residential streets for Kelham, with limited access.*

## Appendix 'C' – Objection Received from Cycle Sheffield / Members and Supporters with officer comments / responses.

### Introduction

CycleSheffield oppose the proposed Inner Ring Road (IRR) scheme because it **does not achieve the 'needs' identified by Sheffield Council**. The evidence is that it will **not reduce congestion in the medium or long term**, it will **not provide an economic benefit due to the increased costs of congestion, pollution and inactivity** and it **does not include safe and effective provision for those walking or cycling** in that area.

### The proposal

Sheffield City Council claim that the scheme "...will allow additional trips generated by the predicted future growth in the city centre and its economy to be accommodated."

They stated their scheme needed to:

- increase road capacity
- reduce journey times for all traffic modes
- reduce congestion which will improve air quality
- provide better connectivity to and through the City Centre for all modes
- unlock development sites.

The five aims of the scheme are addressed below followed by the major design flaws and lastly the other failings of this scheme.

### Increase road capacity

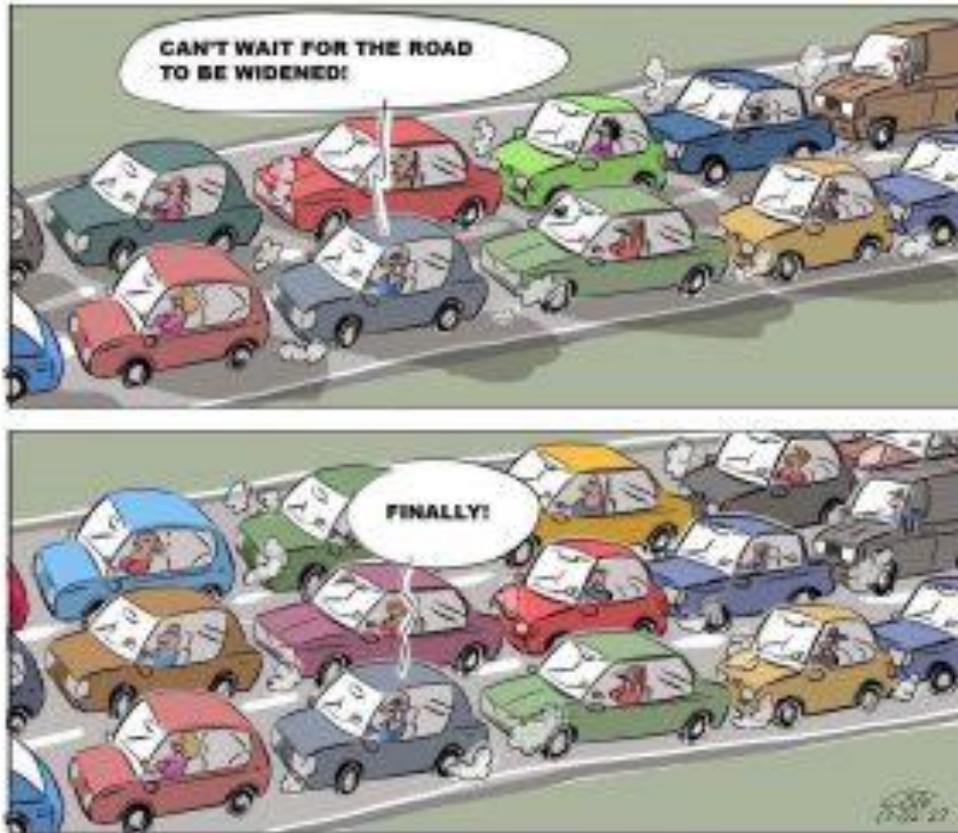
"Building more roads to prevent congestion is like a fat man loosening his belt to prevent obesity" – Lewis Mumford, 1955.

*SCC response - Sheffield's roads are self-contained in that there is very little through journeys, so nearly all of the trips are related to locations within the city boundary. Building more road space will only generate more traffic if those locations generate more demand to travel to and from them. Building new locations will generate new trips, this is what the road space is being created to handle.*

*The Government is promoting a road building programme and supporting similar programmes by other bodies and regions. They have adopted a balanced approach, and also allocate money to support improvements to other modes.*

*The funding for this scheme is to address specific and localised impacts of traffic growth directly related to committed developments in the immediate vicinity, and that it is not intended or expected to address background growth. We currently do not have funding for large scale infrastructure changes for schemes to encourage modal shift to a sustainable and "healthier" transport mode(s).*

*Congestion on the ring road has knock on impacts in the city centre which not only impact on motorists, but also have significant adverse impacts on the operation and viability of public transport, the suitability of the city centre for walking and for cycling, and on the quality of the city centre more generally.*



Sheffield suffers from illegal levels of air pollution, rising obesity, dangerous climate change, and congestion. This scheme will exacerbate these issues by enabling yet more motor vehicles to be driven into and around the city, contrary to Sheffield Council's aim of a modal shift away from private car use towards active travel and public transport. This scheme is one which condemns Sheffield to another generation of congestion, air pollution and health problems caused by inactivity.

It is now widely recognised by transport professionals that road widening and increasing capacity delivers only short term relief, and actually increases the number of motor vehicles, a phenomenon known as *induced demand*. This section of the Inner Ring Road is less than 10 years old and already it is being widened. **Sheffield Council's traffic modelling for this scheme shows that within 5 years the congestion in this area will return to the levels before the scheme was built.** What then?

**SCC response** - *This is a short to medium term scheme, and the modelling shows that it will realise the benefits it has been designed to do for the required time period. The modelling also shows that the improvements to the network will continue to provide resilience beyond 2024 which would not be the case had the improvements did not take place.*

*The Council is at an early stage of the development of a new Transport Strategy for the city. An early stage of this will be the publication of a paper outlining the challenges facing the city, and potential approach for dealing with those challenges. This is anticipated to be subject to public consultation early in 2018.*

*In respect of Air Quality, a Clean Air Strategy is in preparation, and is also expected to be subject to public consultation early in 2018, however as the scheme proposed aims to reduce journey times and congestion there is likely to be localised improvements in air quality.*

*The modelling shows that air quality (NOx's) will improve from its current low level at best but at worse would stay the same even though traffic through the network increase. PM10's are currently at a low level and the Air Quality team have advised that given the outcomes of the improvements this could improve but at worse would remain the same.*

£3.4 million is an incredible amount of money to spend on ineffective short term changes to the road layout on a short stretch of the Inner Ring Road. This money could deliver significant improvements to other services, including enabling more active travel in Sheffield.

**SCC response** - The requirement for SCRIF funding is to achieve Growth Value Added (GVA) uplift by unlocking development sites. The proposed scheme addresses an accepted constraint to development (i.e. highway capacity) in the short term as it is required to do so.

The business case for active travel including cycling schemes, has not been identified.

### **Reduce journey times for all traffic modes**

The scheme totally fails to meet this 'need'. The scheme will only reduce journey times for motor vehicles in the short term. The exceptionally poor quality provision for cycling and walking (addressed below) mean that journey times will increase for these modes. Due to the extra inconvenience and actual danger introduced by the designs it is likely many journeys will not be made these by modes at all. This scheme will further depress active travel in the city, which is contrary to Sheffield Council's targets.

**SCC response** - *The primary output for the scheme is to improve journey times on the ring road for all modes (including cyclists) in the short to medium term. Modelling has shown beyond doubt that this will be delivered and so will not fail to deliver on this criteria.*

*The promotion of and introduction of schemes to enable more sustainable and "healthier" transport systems is the subject of the new Transport Strategy which as mention above is dues to be consulted on early in 2018.*

### **Reducing congestion which will improve air quality**

There is little evidence to suggest that a reduction in congestion will also reduce air pollution. Road widening schemes should only be used when integrated with measure to promote better use of public transport, walking and cycling. This scheme does not address such measures.

**SCC response** - *The scheme will keep traffic moving quicker and for longer and also reduce the number of stops. These are all factors in the level of emissions produced by motor vehicles and so it is reasonable to expect an effect on emissions as a result of this scheme. To do nothing will lead to increasing levels of vehicle emissions.*

*The modelling shows that air quality (NOx's) will improve from its current low level at best but at worse would stay the same even though traffic through the network increase.*

*In the longer term the Government phasing out of oil based technology will bring the greatest benefit and sustainable reductions in vehicle emissions.*

Furthermore, it is now recognised that much air pollution comes from small particles emitted from vehicle tyres and braking systems. Even if all the vehicles on the inner ring road were powered by electricity, there would still be very dangerous levels of particle pollution. An increase in vehicles travelling at higher speeds will therefore increase air pollution. Yet again the proposal will not achieve its stated aims.

**SCC response** - *PM10's are currently at a low level and the Air Quality team have advised that given the outcomes of the improvements this could improve but at worse would remain the same.*

As congestion levels are expected to return to their current levels within a few years there will be no medium or long term improvement in air quality as a result of this scheme.

**SCC response** - *The scheme is not meant to deliver a long term solution, however, being able to operate the network more efficiently and with improved co-ordination of the traffic signals it is anticipated that by regulating the input into this section of the network the improvements in air quality will be maintained or not increase from their current levels for some years beyond 2024.*

If the council were serious about addressing the illegal levels of air pollution in our city they would be designing schemes to reduce motor vehicle use not encourage more of it.

**SCC response** – (see previous response re the new Transport Strategy) *If schemes took away capacity and did not provide an alternative then this would lead to a significant increase in emissions throughout the city as drivers sought alternative routes to make their journeys. A large scale shift away from motor vehicles is problematic, would need prolonged investment over a number of years to achieve with a lot of pain on the way.*

*Strategic modelling indicates that scenarios that worsened congestion as a consequence of growth results in modal shift away from buses into cars. So allowing the ring road to lock up (a key driver of bus delay in the strategic model) would result in a worsening of modal share. This is also an issue with cycling interventions - where in London, cycle routes have resulted in increased delay to buses, the decline in bus patronage may have more than outstripped any increase in cycling (this is not a reason to rule out cycling per se, but the consequences of it need to be thought through to ensure public transport is not undermined in a manner that worsens outcomes).*

### **Provide better connectivity to and through the City Centre for all modes**

The scheme fails entirely to meet this 'need'. The exceptionally poor quality provision for cycling and walking in the current design (addressed below) will make it harder and more dangerous to both travel north / south along the Inner Ring Road and to cross it east / west. It will make it more difficult to access the various

developments in the area, such as Kelham Island or the upcoming West Bar Square, and sever these communities from the city centre and each other.

**SCC response** – *details of the pedestrian and cycle routes within the scheme can be seen on the plan in Appendix E, this also shows how this will benefit pedestrians and cyclists in the local area.*

*In essence, pedestrians will have the same signalised crossings of the ring road and side roads they have currently, increasing the number of lanes they cross at some crossing points will not make these crossings any less safe. The scheme does not therefore fail to meet pedestrian needs.*

*Cycling provision does change and it is not possible within the constraints of the scheme (i.e. no land take) to maintain all the on street facilities or replace them with a segregated alternative, however, for the most part they can be provided for with shared facilities with pedestrians.*

The scheme will act as a barrier to the area, particularly to the most vulnerable road users, and so put pressure on Sheffield's already low cycling modal share in direct conflict with the Council's stated aim of increasing cycling numbers.

**SCC response** – *The ring road is already a barrier that has controlled crossing points to get across it. This does not change under this scheme. Concentrating traffic onto the Inner Ring Road is a key and long held part of the City Council's strategy to managing levels of motor traffic in the city centre. The severance posed by the ring road is the price to be paid for providing a pleasant city centre environment that supports walking, cycling and public transport.*

The scheme will also only temporarily improve connectivity for motor vehicles before congestion returns to its previous levels in a few years time.

**SCC response** – *This is a short to medium term scheme, and it will realise the benefits it has been designed to do for the required time period. But it is acknowledged further interventions will be required in the future, and these will include cycling where (and only where) there is an evidence base and business case to support it.*

### **Unlock development sites**

Building motorways through our city will not help its economic development. As previously stated they sever development sites, making it harder to travel between them, the city centre and residential areas. In the medium and long term this scheme will lead to more journeys being made by car, increasing air pollution, congestion and health problems related to inactivity.

**SCC response** – *This is not a motorway, the development sites are served by the ring road with crossing points at frequent intervals to provide connectivity and access.*

Jamming our streets and communities with motor vehicles makes our city a less attractive place to live, work, study and invest.

**SCC response** – *Traffic is generated in response to increased development and economic activity, if Sheffield was not an attractive place for business then traffic would not be generated.*

### **Serious design failures**

Painted lanes and Advanced Stop Lines (ASLs)

Guidance in countries with high levels of cycling, as well as from UK organisations such as Highways England and Transport for London, state that motor traffic volumes have to be very low for cycling on carriageway to be acceptable even in low speed environments. The Inner Ring Road is clearly not suitable for cycling in its current form, yet there is no separate cycling infrastructure in the design and painted lanes and ASLs are proposed.



Sheffield City Council stated in March 2016 that:

“In light of the 2014 cycle inquiry, and the resulting target of achieving 10% of journeys by bike in the next 10 years (and 25% by 2050), we have concluded that installing infrastructure such as narrow cycle lanes or Advanced Stop Lines will not assist in achieving this modal share.”

Why then are these still be included in new transport schemes contrary to their own conclusions?

These painted lanes on the Inner Ring Road serve no purpose. They do nothing to enable more people to cycle and they do nothing to make it safer or more convenient for existing cyclists. If the council persist with these antiquated highway designs they will never achieve their cycling targets, as they have acknowledged. Protected cycleways along and across the Inner Ring Road need to be included to provide comfortable, inclusive Space for Cycling which would enable more people to cycle.

The measure of good cycle infrastructure is whether it is suitable for a child to use, the IRR design clearly fails.

The inclusion of painted lanes and ALS's mean the design fails to meet the 'need' to 'reduce journey times for all traffic modes' and 'provide better connectivity to and through the City Centre for all modes'.

**SCC response** – *the advisory cycle lanes and ASLs are simply the maintenance of existing provisions we are unable to improve at this time within the limitations of this project.*

*The cycle lanes and advance stop lines were installed in 2007 at the request of cyclists. These are being retained as a legacy; there is not funding or business case to remove or replace these at this time.*

### **Shared use footways**

In order to widen the carriageway, space is being taken from footways, reducing the comfort and amenity of pedestrians. These narrowed footways will become shared use, increasing conflict with people cycling. Using shared use footways to get cycles out of the way of increased capacity for motor vehicles is at odds with the council's aim of dramatically increasing cycling and of enabling active travel.

***SCC response** – footways have only been reduced in width at one location, i.e. on the Kelham side of the ring road approaching Alma Street, however, only at the “pinch point” does this fall to 2.5m. Some sections of footway will be shared but where possible we will increase width, e.g. northern footway approaching Savile Street.*

The consultation states that the scheme will “segregate cycles from other traffic by putting them on the footway where possible (segregating them from pedestrians where widths allow)”. We have asked for clarification on where exactly this will be done as the designs are unclear, however, the council were unable to provide any details.

***SCC response** – see plan in Appendix E for more detail on cycle provision within the scheme.*





Sharing this limited space will be uncomfortable and frustrating for all users, create unnecessary conflict and could be hazardous, especially for visually impaired people.

It is unclear from the designs how wide the shared use footways will be but they will need to be at least 3m to meet the UK guidance for a minimum shared use area and this is without any obstructions from signs, posts and other street furniture which they are currently littered with.

It is not clear from the designs but it is likely that the footways will give way at every side road which will make walking and cycling less convenient and more dangerous.

The inclusion of shared use footpaths mean the design fails to meet the 'need' to 'reduce journey times for all traffic modes' and 'provide better connectivity to and through the City Centre for all modes'.

**SCC response** – see plan in Appendix E for more detail on cycle provision within the scheme. Your comments are however useful and will inform the design process.

### **Cycle crossing from Alma Street to Bridge Street**

This is described as “to be promoted as one of the main routes into and out of the city centre”. The plan does not give the impression of a main route. It involves awkward and dangerous road crossings at both ends, Alma Street and Bridge Street, and is accessed across a shared-use footway.

**SCC response** – see plan in Appendix E for more detail on cycle provision within the scheme. Your comments are however useful and will inform the design process.



As the only element of cycle infrastructure in this scheme this crossing is a superficial tidying up of the very poor cycleway currently here. It is not suitable for or attractive enough to enable high volumes of cycle traffic as a “main route”.

This poorly designed crossing fails to meet the ‘need’ to ‘reduce journey times for all traffic modes’ and ‘provide better connectivity to and through the City Centre for all modes’.

The crossing could be improved by removing the general traffic turning off into Bridge Street. This would remove the need for a pedestrian crossing on Bridge Street and allow people using the cycle crossing to enter Bridge Street safely.

There is also conflict between the IRR design of the cycle movement from Alma Street into Bridge Street and planning application 16/02518/OUT which was approved on 16th February 2017 and included under condition 20a, the requirement to complete “amendments to the Bridge Street Junction with the Inner Relief Road to enable two way traffic”. This is incompatible with the designs in this scheme.

**SCC response** – see plan in Appendix D for more detail on cycle provision within the scheme. Your comments are however useful and will inform the design process. Removing access to Bridge Street would affect the planning approval for West Bar Development. The requirements for access have been taken account within the modelling and we have an outline design for the junction that promotes this route and crossing point.

### **Rat running through Kelham Island**

This scheme does not address the problem of motorists using Kelham Island as a rat run to bypass sections of the Inner Ring Road. This is likely to mean that whilst significant sums are wasted increasing capacity on the IRR, motorists will continue

to bypass it – an ongoing issue that is affecting the attractiveness of Kelham Island as a community and destination for visitors and investment.

This could be solved by a modal filter between Green Lane and Alma Street, to allow cycling through but preventing through motor traffic. This would stop rat-running and make Kelham Island safer, quieter, more attractive, suitable for a non-segregated cycle route or cycle street.

*SCC response - The brief for the scheme did not ask for “rat running” to be looked at. However, it is being looked at as part of another piece of work. See response to Kelham Island Action Group (Kica) in 3.6.*

### **No Economic Benefit**

There is a wealth of evidence that demonstrates the fallacy that building new roads will provide economic benefit.

Excessive dependence on motorised road transport imposes significant economic costs on society. These include: congestion; road casualties; physical inactivity and the ill health caused by it, such as obesity, and air pollution. More walking and cycling could substantially reduce these risks, while strengthening the city centre economy by supporting local businesses and property values; boosting the economic productivity of a healthy and satisfied workforce; and enabling disadvantaged groups to gain skills and access employment opportunities.

Department for Transport research has demonstrated that cycling schemes have significantly higher economic benefit than old fashioned road widening schemes such as the current proposal. Cycling scheme have a benefit to cost ratio in the the range of 5:1 to 19:1 – with some as high as 35.5:1.

Investment in infrastructure to enable more people to cycle would have a far greater benefit compared to a road widening scheme that will only reduce congestion for a few years.

*SCC response - We are not building new roads, we are re-configuring what we already have to make the road network more efficient and better able to cope with increased demand resulting from general traffic growth and that generated as part of new developments. Our modelling has shown that the proposals will do this.*

*Strategic modelling indicates that trips to the proposed West Bar developments are spread throughout the city and beyond, often over distances such that most trips could not be reasonably expected to accommodate by bicycle even in a most optimistic scenario. Those trips that might be suitable are dispersed such that their facilitation requires much more widespread work than could be afforded by this scheme, particularly given the limitations of the currently available funding.*

### **Summary**

Continuing a pattern

This scheme continues Sheffield Council’s trend of major redevelopment / transport schemes failing to include useful, accessible cycle infrastructure. Other examples are Penistone Road, Chesterfield Road, Grey to Green phase 1 and the Knowledge Gateway scheme.

Sheffield Council cannot pretend to be serious about improving access for all or achieving its cycling targets whilst these failures continue.

**SCC response** - *We are always serious about our responsibilities to all residents of Sheffield as well as the visitors to our city. We are aware of the difficulties involved in making significant changes to the infrastructure of the city to facilitate movements away from motor vehicles on to more sustainable modes of transport. This will not be achieved overnight and the magnitude of the money needed to do so cannot be underestimated. However, we are making small steps within the constraints we have to operate.*

#### Cycle Audit

As usual a cycle audit was carried out at the very end of the process when it is likely too late to address the major flaws in this scheme. Cycling and walking audits should be carried out at the very beginning to ensure that all new transport schemes in Sheffield deliver improvements for active travel.

**SCC response** - *This is simply not true. The audit process for road safety and cycles is carried out at every step in the design process. This is the very first step and all the concerns raised in each audit will be answered and mitigated/accommodated within the detailed design work to follow.*

#### Poor quality consultation and information

The design provided by the consultation is of poor quality and lacking in detail. More information about the scheme, such as the brief, the traffic modelling etc, would mean that people could see and understand the costs and benefits of the scheme and could provide more useful feedback.

**SCC response** - *There is a balance to be made between the amount of information included in the consultation of a scheme. In this case the design is only at outline stage and so will be lacking in detail in some areas. However, we had to consult now otherwise we would not be able to meet the timescales for the scheme. This was not a risk we could take.*

*The costs are still only budgetary and will remain so until the scheme is finally determined.*

Sheffield Council spent £160,000 just on the feasibility study for this scheme. Is a poor quality plan and a few lines of text the best they could come up for the public consultation (which was not included on the council's [consultation portal](#))?

**SCC response** - *The £160k is in the budget to take the scheme from its mandate up to the start of detailed design. This is not what has been spent so far. There are a lot of tasks that have been carried out to reach the stage where we had a preferred option to take forward into consultation. See Feasibility Report in Appendix B. The consultation material is just a small part of the material that has been generated as part of the design process.*

#### Recommendations

- The proposed scheme is not progressed.
- Sheffield City Council urgently reviews its transport strategy to include substantial investment in walking and cycling infrastructure.
- Sheffield City Council works with the Sheffield City Region to ensure that walking and cycling is given higher priority than private car use and this is reflected in the design of all transport schemes.

- The council adopts minimum cycle design standards to ensure that all new transport / redevelopment schemes include useful cycle infrastructure.

# APPENDIX 'D' – SCHEME CYCLE PROVISIONS AND BENEFITS

