

Report to Norwich Highways Agency committee
20 September 2018
Report of Head of city development services
Subject Transport for Norwich – Earlham Fiveways Roundabout

Item

7

Purpose

To consider the responses from the consultation and approve installation of the Earlham Fiveways safety scheme.

Recommendation

To:

- (1) approve installation of the scheme as shown in Appendix 2 including:
 - (a) upgrading three existing signalised pedestrian crossings to Toucan crossings;
 - (b) connecting all crossings with a shared path facility;
 - (c) building splitter islands on the four arms of the roundabout;
 - (d) resizing the central island to reduce the width of circulatory lanes;
 - (e) building a new raised table on Gypsy Lane near to the roundabout;
 - (f) installing new street lighting on the central island;
 - (g) implementing a 20mph speed restriction order on Gypsy Lane (part), Gypsy Close, Beverley Road (part) and Beverley Close.
- (2) ask the head of city development services to carry out the necessary statutory procedures to proceed with the scheme.

Corporate and service priorities

The report helps to meet the corporate priority to provide a safe, clean and low carbon city

Financial implications

Scheme cost £750,000*

*£65,000 of this from Norfolk county council local safety scheme and £685,000 from Department for Transport (DfT) Cycle Safety Funding

Ward/s: University and Wensum

Cabinet member: Councillor Stonard - Sustainable and inclusive growth

Contact officers

Ed Parnaby, Transport planner 01603 212446

Joanne Deverick, Transportation and network manager 01603 212461

Background documents

None

Report

Background

1. The Earlham Five Ways roundabout is a busy five arm junction adjacent to the University of East Anglia (UEA) and City Academy with an undersized, oval shaped central island and inadequate facilities for cyclists and pedestrians to make crossing movements. In addition to the two Earlham Road arms of the roundabout, the remaining three arms of the roundabout (Bluebell Road, Earlham Green Lane and Gypsy Lane) are designated neighbourhood cycle routes. These neighbourhood cycle routes have direct connections to the green, pink and blue pedalways, the strategic cycle routes in Norwich.
2. The junction has appeared as an accident cluster site for several years and there have been a number of low cost interventions aimed at improving the safety record. Most recently, in 2016, Norfolk County Council produced an accident investigation report (AIR) that identified the causes. It proposed a further low cost improvement based on the assumption that only a limited level of local transport plan funding would be available.
3. The five year accident data in the AIR shows 13 accidents at the junction, nine involved cyclists (two serious) and one involved a pedestrian. These accidents cluster towards the eastern and northern arms of the roundabout. The existing geometry gives little deflection for vehicles travelling north and the limited slowing down effect on circulatory speeds is likely a factor in the accident cluster location towards the northern half of the circulatory carriageway. There are a high proportion of collisions involving cyclists, with 75% having occurred at night (unusually high) and 50% on the roundabout circulatory lanes. Two injury collisions involved cyclists on shared use paths being struck by vehicles exiting the carriageway.
4. In February 2018, the DfT released information about funding for cycle safety schemes that the Cycle City Ambition Cities were eligible to bid for. These cities were allowed to submit up to two schemes that address safety where there is an established recorded injury data for cycling. Two schemes were submitted, these being Earlham Five Ways roundabout and a larger scheme for the Earlham Road / outer ring road roundabout through to the Earlham Road / Heigham Road junction. In July 2018 the DfT formally announced that both of funding applications were successful.

Public consultation

5. In June 2018, members of this committee gave permission to advertise and consult on the Earlham Fiveways scheme. This consultation was held from 29 June to 24 July 2018. A copy of the consultation plan is attached as appendix 2.
6. Details of the proposal were advertised in the local press, road notices were erected, statutory consultees and transportation consultees were directly informed. Local residents and businesses were written to and details were posted on the websites of Norwich City Council and Norfolk County Council.

7. Along with press adverts, stakeholder emails, street notices and webpage content; 471 letters were sent to nearby residents and businesses.

Responses

8. In total, 47 responses were received from the consultation, 12 stating support for the scheme, three objecting, stating that the scheme does not do enough for cycling and various concerns were raised; a summary of the responses can be seen attached as Appendix 1.
9. The Royal National Institute of Blind People (RNIB) response welcomed retention of signalised crossings but highlighted concerns with Toucan crossings stating that they should include separation between the pedestrian area and the cycle lane though the use of corduroy paving on the approaches and marked lines through the crossing. The RNIB stated that shared paths present a safety issue to blind and partially sighted people.
10. The Norwich Cycling Campaign welcomed the improved facilities for cycling around this busy roundabout and the extra space being given to walking and cycling, recognising that shared space is a compromise solution. Their response was that they would like to see pedestrians and cyclists given priority across the two junctions with the Tesco filling station as this would improve safety in this area.
11. Via the Labour group, 16 responses were received where residents had completed a questionnaire on a leaflet provided to gather views from residents. Four gave outright support, seven supported some elements of the scheme and four were largely objections.
12. The most frequently cited issue was congestion around the Tesco filling station with nearly half of the responses raising concerns over the level of congestion caused and associated safety issues, 17 responses in total.
13. There was concern regarding emergency vehicle access (although not from the emergency services themselves) with nine responses.
14. Five responses questioned the need and value of constructing a shared use path and upgrading existing signalised crossings to Toucan crossings.

Considerations

15. It is clear from the consultation that the issues surrounding the Tesco filling station on Earlham Road (western arm) and Earlham Green Lane are a key concern at this junction. We have limited powers to control the issue of queuing traffic to and from Tesco. Tesco have previously reversed the entry / exit arrangement of the filling station, which has relieved some congestion on the more major road at the expense of the minor road. Yellow 'no stopping' boxes were suggested in the responses but these are not enforceable on a non-signalised roundabout. Any markings are unlikely to relieve matters, further increasing maintenance spend and require further road closure.

16. The consultation and the response from Norwich Cycling Campaign highlighted some small design changes that would provide additional safety benefit which will be considered the detailed design:
- A build out on Earlham Road (eastern arm) to improve safety for those on bike joining the carriageway;
 - A surface treatment over both entrance and exit of the Tesco filling station to improve awareness of drivers to those walking and cycling and provide a priority movement along the shared path;
17. The response from the RNIB highlighted that shared paths and Toucan crossings create concern for those who are partially sighted or blind. Toucan crossings cannot be installed as segregated crossings, which would leave any users of a segregated shared path inevitably having to cross paths when they reach the signalised crossings. This aspect results in segregating paths offering limited value whilst potentially increasing speed as people perceive they have priority rather than a shared approach. The consultation plans showed only an outline of tactile paving that will be needed to ensure blind and partially sighted people are able to locate crossings and use the roundabout safely. This will need full consideration at the detail design stage and disability groups will be given the opportunity to be involved in that process.
18. Members may be aware that as part of their inclusive mobility strategy the Department for Transport has asked local authorities to pause the implementation of shared space schemes where there is no kerb separation. It is understood that this refers to shared spaces that involve motor vehicles, not shared use footpath cycle paths and shared crossing facilities such as Toucan crossings. .
19. It is clear from the consultation responses that people are concerned over emergency vehicles ability to negotiate the roundabout or that larger splitter islands and narrower lanes may make this worse. The area around the filling station is likely to be the most regular source of localised congestion and it is beyond this scheme to resolve this. It should be noted that the emergency services were consulted and have not voiced concerns over these proposals. Three people suggested making the exit out of Tesco left turn only to avoid congestion. This would be difficult to implement (owing to the need of the fuel lorry to turn right out of the exit due to clearance) and unlikely to be enforced. Marking the surface that clearly prioritises walking and cycling over the entrance and exit will go some way to improving awareness and safety.

Conclusions

20. The proposed Earlham Five Ways scheme should be installed as advertised (and shown in Appendix 2) with small amendments described above.
21. To ensure that the spend profile of the bid is met; construction will take place in 2019.

Integrated impact assessment



NORWICH
City Council

Report author to complete

Committee:	Norwich Highways Agency Committee
Committee date:	20 September 2018
Director / Head of service	David Moorcroft/ Andy Watt
Report subject:	Transport for Norwich – Earlham Fiveways roundabout
Date assessed:	30 August 2018
Description:	To present the results of the consultation and seek approval to proceed

	Impact			
Economic (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Finance (value for money)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Scheme will reduce risk of accidents and is largely funded by the DfT. Scheme is well located to maximise gain in walking and cycling
Other departments and services e.g. office facilities, customer contact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
ICT services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Economic development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improving the access to education and employment along key transport corridor to UEA and housing development
Financial inclusion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improving the access to low cost transport options
Social (please add an 'x' as appropriate)				
Safeguarding children and adults	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
<u>S17 crime and disorder act 1998</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Human Rights Act 1998	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Health and well being	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Increasing safety for walking cycling will promote health and well being

	Impact			
Equality and diversity (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Relations between groups (cohesion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Eliminating discrimination & harassment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See report
Advancing equality of opportunity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lowering speed and offering separation where appropriate benefits all users. A purpose built facility will better cater for walking and cycling.
Environmental (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improves facilities for walking and cycling along key transport corridor close to UEA and new housing development, working towards our transport objectives
Natural and built environment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Waste minimisation & resource use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will encourage use of zero emission transport
Sustainable procurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No specific comments
Energy and climate change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will encourage use of zero emission transport

	Impact			
(Please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Risk management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Close monitoring will be required to ensure delivery within budget

Recommendations from impact assessment
Positive
There are a number of positive outcomes that will be achieved with this scheme and it is largely funded by the DfT with the remainder being funded by local safety scheme budget
Negative
N/A
Neutral
N/A
Issues
N/A

Appendix 1

Objection / comment	Frequency	Response
<p>Something should be done regarding the severe congestion associated with the petrol filling station and associated shop / yellow <i>no stopping</i> boxes needed / replace the old keep clear markings / ask Tesco to stop selling fuel here</p>	17	<p>We have limited powers to control the issue of queuing traffic to and from Tesco. We have previously reversed the entry / exit arrangement which has relieved some congestion on the more major road at the expense of the minor road. Yellow <i>no stopping</i> boxes are not enforceable on a non-signalised roundabout. Any markings are unlikely to relieve matters further increasing maintenance spend and require further road closure.</p>
Support the proposals	12	Noted
<p>Concern over effect of proposals on emergency vehicles / narrow lanes will make congestion worse</p>	9	<p>The emergency services were consulted and have not voiced concerns over the proposals.</p>
<p>What is the cost benefit of constructing a shared use path between the Toucan crossings? / Why not just let cyclists use the existing crossings / people cycle in the road on this roundabout anyway</p>	5	<p>We cannot realistically propose a scheme where cycling is illegal on both crossings and path. Toucan crossings require being connected to the network and there are limited alternative options for safely getting people across this roundabout.</p>
<p>Can't travel this fast / increased pollution /20mph on Gypsy lane not needed as drivers already drive at this speed</p>	4	<p>With existing speed calming in place this element presents minimal cost. If the environment is already suitable then there is little reason not to implement this. Driving consistently at these lower speeds will reduce, not increase pollution and the design encourages driving at a steady speed.</p>

Objection / comment	Frequency	Response
Why are you changing the lighting? / Lighting needs to be around crossings / It is not clear from the plans where the new lighting will illuminate?	4	The accidents were disproportionately represented here outside daylight hours. Current lighting is masked by tree canopies which are likely to remain an issue unless addressed as part of this scheme. The new lighting will illuminate the splitter island crossings and shared paths.
Implementing cycle path / reducing the speed on Earlham Road between the two roundabout schemes should be considered	4	Potentially this could provide a benefit but it must be noted that this does not form part of the pedalway network and outside the scope of the budget at this time.
Object to scheme as it does not do enough for cycling. A fully segregated roundabout scheme like that proposed in Cambridge (Dutch roundabout) with priority for cycling is needed	4	There is not enough space to adequately accommodate a Dutch roundabout design that incorporates both cycle priority crossings on desire lines and pedestrian provision.
Enforce a left turn only out of Tesco to address delays and safety	3	Whilst there is some merit to directing traffic to turn left out of the exit, owing to the geometry of the exit the fuel tanker has to be able to turn right. The area beyond the footway is not highway.
Close proximity of the signalised crossings causes tailbacks / safety issues	3	There is a balance to be struck here. Moving the crossings away from the roundabout is likely to result in more people avoiding them and fewer people choosing to walk and cycling (potentially choosing the car instead)

Appendix 1

Objection / comment	Frequency	Response
<p>Crossing of Gypsy Lane is needed / signalised crossing need over Gypsy Lane owing to increase in car usage along this road</p>	3	<p>The proposals include the building of a raised table to improve compliance with the 20mph. The wide access to the Fiveways public house car park and the verge on the southern side create significant challenge to installing a signalised crossing here.</p>
<p>Will the low level wooden fencing remain to enforce the shared path? / How will you address the parked cars on proposed shared path area by Bluebell Road / Earlham Road?</p>	3	<p>The fencing will likely need to be removed in part or in full. Parking on shared paths is prohibited so can be enforced if this is required. We do not anticipate more than very occasional parking of this type.</p>
<p>Flooding on the crossings on Earlham Green Lane and Earlham Road create a safety issue / will there be changes to improve drainage?</p>	3	<p>Drainage will be fully considered at the detailed design stage to address these issues.</p>
<p>Sweetbriar roundabout design is significant improvement but makes the roundabout larger where this option seems to make the roundabout smaller / narrower lanes won't reduce conflict</p>	3	<p>On the Earlham Fiveways roundabout, the lanes are not currently wide enough to allow safe movement of two lanes of motor traffic. Reducing the lane width will encourage slower circulatory traffic speeds which was a key factor identified in the accident record here.</p>
<p>Eastern arm of Earlham Road should have a build out / filter from shared path to allow those cycling to join carriageway safely</p>	3	<p>This design point looks to provide additional benefit and will be considered</p>
<p>Can a surface treatment be used across the entrance and exit to petrol station?</p>	3	<p>There is benefit to directing drivers to give way to those walking and cycling on the path. When drawing up detailed design this we will consider how best to achieve this.</p>

Objection / comment	Frequency	Response
Why are splitter islands needed where you have signalised crossings, this is unsafe?	2	The splitter islands are there to facilitate more direct crossing for those that wish to. They are particularly useful on the northern EGL arm where the signalised crossing is some distance from the roundabout to align with local amenities. We know that people already cross this way at this roundabout and we wish to better provide for this need. The scheme has been safety audited. Evidence from a similar scheme (Perne Road, Cambridge) showed a reduction from comparable accident levels observed at this junction to zero accidents in the three years following the changes.
Can any end of life replacement costs of crossings be justified within this scheme?	2	The signals are not at the end of life and our funding proposal to the DfT included the relatively low cost of upgrading the signalised crossing to Toucans. At Fiveways, although a few years off the sites are approaching replacement age, typically when this is the case a contribution would be provided from the signals replacement budget.
What will happen to the cobbles on the pavement edge of EGL and Earlham Road? /What will happen to the grass area around the tree between Earlham Road (west) and Bluebell Road?	2	The cobbles here are used as an anti-walking measure and with the new splitter island being installed they would no longer be appropriate. Some of the grass area will become a shared path.

Appendix 1

Objection / comment	Frequency	Response
Shared paths are dangerous / will people on cycles have a speed limit	2	Evidence does not support the premise that shared paths are dangerous. Providing adequate space for walking and cycling, clear signage and a design that encourages a conciliatory approach are required.
Potential flooding due to raised table	2	Drainage will be fully considered at the detailed design stage.
Are ' existing street trees remaining?' / Will the tree be removed for shared path widening?	2	As a rule we aim to keep all existing street trees. The tree on the corner of Bluebell Road / Earlham Road (western arm)
Work needs to minimise noise and disruption	2	All reasonable efforts will be made to minimise impacts including noise and disruption.
The available space between EGL and Gypsy Lane is not sufficient for a shared path / The available space between Earlham Road and Gypsy Lane is not sufficient for a shared path owing to the lack of maintenance to the tree and hedges on adjacent property	2	We are widening the footway here to accommodate this change / The frequency of tree maintenance will need to be considered as to whether it is adequate and viable to increase this.
Work needs to minimise noise and disruption may actually encourage rat running	2	There will be a need for temporary diversions and for work to minimise disruption.

Appendix 1

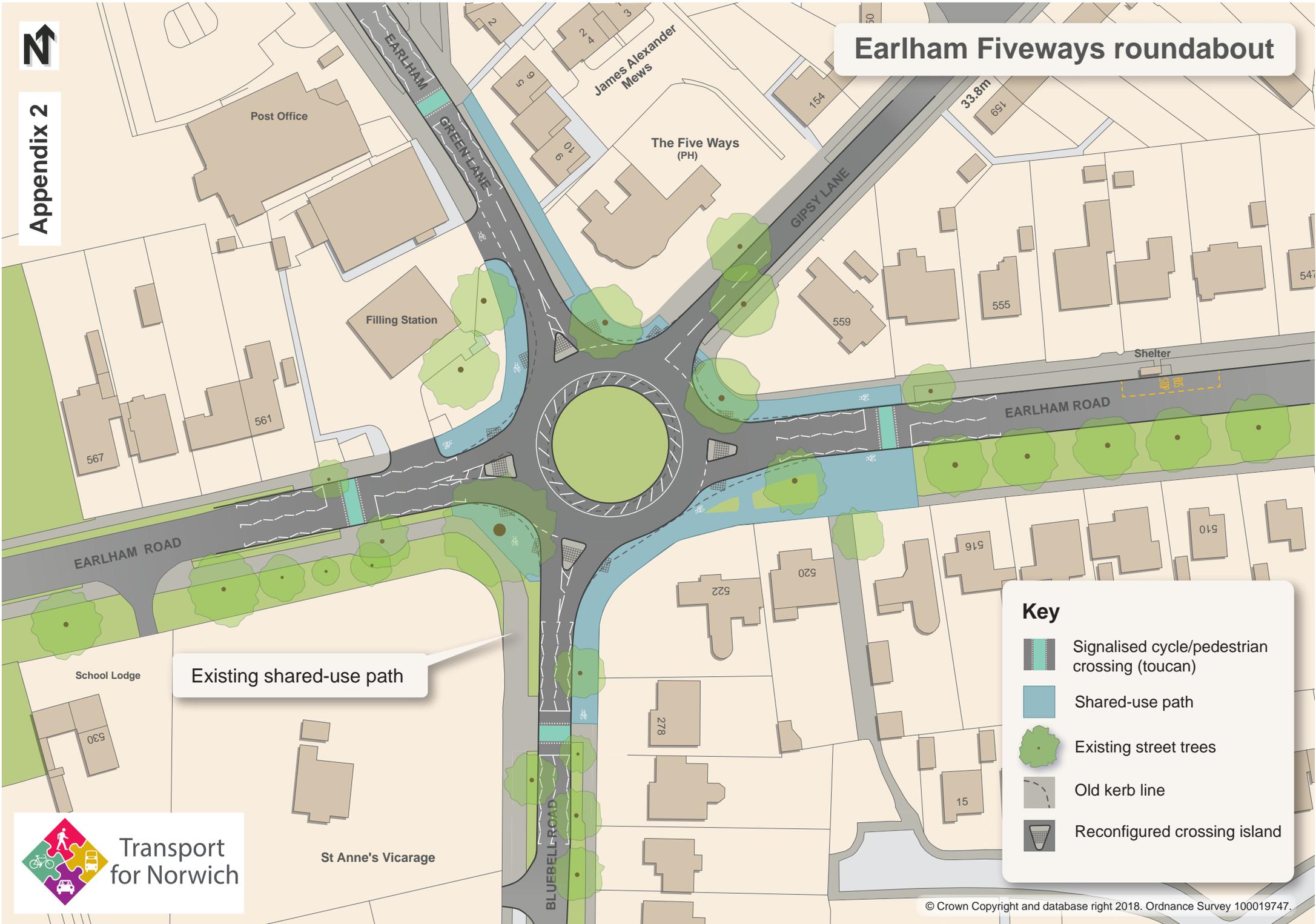
Objection / comment	Frequency	Response
<p>Many cyclists will want to remain in carriageway to maintain momentum and make an efficient journey. They may face intolerance from drivers who think they should not be on the road.</p>	1	<p>We need to increase the proportion of people that walk and cycle and cannot rely on facilities that do not provide for less confident users who are unlikely to take up cycling if the only provision here is in carriageway. Initiatives such as <i>The Mind Out for Each Other</i> campaign work towards a better understanding between different users</p>
<p>Key issue is drivers do not seem to indicate on this roundabout, will the proposals tackle this?</p>	1	<p>This is not possible for the scheme to tackle this issue and the close proximity of the arms may exacerbate this however by slowing circulatory speeds and providing narrower and more defined lanes it will improve safety for all users.</p>
<p>Could some of this funding be used to encourage safer habits by all users?</p>	1	<p>This funding has been awarded for an outlined capital scheme and cannot be spent on education. However Norfolk County Council carry out ongoing casualty reduction work and there is a funded project called Pushing Ahead which includes measures to increase safety awareness.</p>
<p>Are splitter islands large enough for all users (buggies, mobility vehicles)</p>	1	<p>The proposed splitter islands are 2.2m wide at their most narrow and have been maximised to balance all users' needs with the available space. HGVs and buses require access through this this roundabout.</p>

Appendix 1

Objection / comment	Frequency	Response
More needs to be done to make bus travel better and cheaper if 'anti-car' approach is taken	1	The proposed scheme does not introduce any measures that we consider to be negative towards car or bus travel.
Splitter islands will make the roundabout bigger and less attractive	1	Splitter islands will reduce carriageway width and improve facilities for walking and cycling. As a generality these characteristics are less urban.
Can road marking be used to enhance the splitter island crossing of EGL as Toucan crossing is too far from the roundabout	1	Potentially this would increase further the awareness of drivers to those crossing. We will consider whether a viable surface treatment or road marking can be used taking into account the need for closure of the lane to install and maintain.
Changes are only cosmetic	1	Please see description of proposals within report taken to committee in June 2018.
Is the area around the roundabout to be paved?	1	Not on the outline designs owing to concerns regarding large vehicle overrun and ongoing maintenance.
Will non-shared paths be signed accordingly?	1	A signing plan will follow at a detailed design stage.



Earlham Fiveways roundabout



Existing shared-use path

Key

-  Signalised cycle/pedestrian crossing (toucan)
-  Shared-use path
-  Existing street trees
-  Old kerb line
-  Reconfigured crossing island