



Bradley Stoke South / Stoke Gifford Great Stoke Way Roundabout Proposed Improvements Feedback Report

Background

The council has investigated options to improve the operation of the Great Stoke Roundabout in Stoke Gifford, at the junction of Bradley Stoke Way and Great Stoke Way with the B4057 Winterbourne Road.

The West of England Combined Authority has approved the outline business case for a preferred scheme.

Purpose of Scheme

This scheme aims to increase vehicle capacity at Great Stoke Roundabout, to accommodate the increase in traffic flows expected from the committed developments in the area and the widening of Gipsy Patch Lane railway bridge as part of the Cribbs Patchway Metrobus Extension. Traffic modelling indicates that the roundabout will operate significantly over capacity during the morning and evening peak periods by 2036, leading to increased levels of congestion with more queueing and delay.

The proposed scheme is complementary to other junction capacity schemes successfully delivered in the northern fringe of South Gloucestershire such as Aztec West roundabout, as part of a package of investment to support the Filton Enterprise Area and sustainable housing growth.

The objectives of the improvement scheme at Great Stoke roundabout are to:

- Reduce levels of congestion;
- Improve journey time reliability;
- Reduce vehicular emissions; and,
- Improve pedestrian and cyclist routes.

Proposed Scheme

The improvement scheme involves the following works to convert the existing roundabout:

- Widening of the approaches to the roundabout and on the roundabout itself, to increase the number of lanes from two to three;
- Installation of Toucan crossings (shared use pedestrian and cycle) across all roundabout approaches; and,
- Relocation of the current cycle access ramp on Great Stoke Way to provide greater separation between this ramp and the proposed crossing to reduce the risk of conflicts between pedestrians and cyclists.

The estimated cost of the scheme is around £2.3 million. This would be provided by the West of England Combined Authority.

Summary of the consultation

The following information was made available on the council's consultation webpage;

- A statement of reasons, explaining the background and the proposals;
- Consultation scheme drawing;
- Consultation letter (sent to residents and businesses in the local area);
- An online questionnaire

The public consultation was open from 6 February to 29 March 2019. During this period two public exhibitions were held where officers were available to discuss the scheme. There were a total of 62 attendees at the exhibitions.

The consultation was also communicated by the following means:

- Contacted a wide range of stakeholder organisations and representative groups, as well as statutory consultees;
- Sent letters to all property addresses within a defined local area;
- Advertised the consultation and exhibitions via the council's main Facebook page, StreetCare Facebook page and Twitter accounts;
- Located traffic signs promoting the consultation on all of the roads leading to the roundabout.
- Issued a press release on 6 February, complemented by news items regarding the consultation in the local press during the consultation period; and,
- Emailed everyone who had responded to previous online South Gloucestershire Council transport and environmental consultations and who asked to be kept informed of similar consultations.

In addition, town and parish councils and several local groups advertised the consultation and encouraged attendance and feedback.

What are the results of the consultation

Feedback was submitted to the council in a number of ways:

- Questionnaires submitted via the council's website and in hard copy, 125 in total;
- Emails and letters, 17 in total.

Questionnaire

The online consultation questionnaire contained four principal questions.

Question 1 asked respondents to state whether they support the scheme as a whole. If they agreed with the principle of the scheme (i.e. think that changes do need to be made, but not necessarily in the way that is proposed) they were asked to choose 'Yes' for this question and indicate the changes they feel are needed in the comments box (these are included in Section 3).

The result is shown in the table below **Error! Reference source not found.** It demonstrates that three in four respondents support the scheme as a whole, with a further 22% stating 'No' and 3% 'Don't know'.

Response	Number	%
Yes	94	75%
No	27	22%
Don't know	4	3%
Total number of responses to this question	125	

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Question 2 asked respondents to state which mode of travel they normally use to travel round the roundabout. The result is shown in the table below. Just over two-thirds (68%) normally travel round it by car (single or multiple occupancy), 18% by bicycle and 7% by bus.

Mode of travel	Number	%
By bicycle	23	18%
By bus	9	7%
By car (single occupancy)	52	42%
By car (multiple occupancy)	32	26%
By foot	3	2%
By lorry/van	3	2%
Other	3	2%
Total number of responses to this question		125
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Further analysis has been undertaken of the level of support for the scheme as a whole by mode of travel they normally use to travel round the roundabout. As shown in the table below, the proportion of respondents stating 'Yes' varies little by their main mode used. Excluding by foot, lorry/van and other (each representing only three respondents), most are around the overall 75% however there is a slightly lower level (69%) of support by those who normally travel by car (multiple occupancy).

Mode of Travel	Response to Question 1						Total	
	Yes		No		Don't Know			
By bicycle	17	74%	4	17%	2	9%	23	100%
By bus	7	78%	2	22%	0	0%	9	100%
By car (multiple occupancy)	22	69%	9	28%	1	3%	32	100%
By car (single occupancy)	39	75%	12	23%	1	2%	52	100%
By foot	3	100%	0	0%	0	0%	3	100%
By lorry/van	3	100%	0	0%	0	0%	3	100%
Other	3	100%	0	0%	0	0%	3	100%

Question 3 asked respondents to say if they think that – given the information contained in the statement of reasons – the scheme will improve the journeys that they make here in future years. The majority (52%) of respondents agree that the scheme will improve future journeys, compared to 33% who disagree and 15% who don't know. The result is shown below.

Response	Number	%
Yes	65	52
No	41	33
Don't know	19	15
Total number of responses to this question		125
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Question 4 asked which roads served by the roundabout the respondent most commonly uses; note that more than one road could be selected. The result is shown in the table below. Around two thirds (65-68%) of respondents use Bradley Stoke Way or Winterbourne Road, with nearly half (48%) using Great Stoke Way.

Road	Number	%
Bradley Stoke Way	85	69%
Great Stoke Way	60	48%
Winterbourne Road	81	65%
Total number of responses to this question		124
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Comments provided by email, letter and the questionnaire

We received a total of 17 emails or letters providing comments on the consultation. In addition to this, approximately 80% (101 of 125) of respondents to the questionnaire made use of the comments box.

A summary of the main points raised is provided below.

General

- Support for the scheme for reasons including cycle/pedestrian safety concerns, current difficulties in crossing, speed of traffic, increasing traffic levels, and being involved in road traffic accidents here in the past

Response: These comments have been noted.

- High cost of the scheme; money could be better spent on sustainable travel options

Response: We are taking the opportunity to make use of a (WECA) funding stream available now to make the roundabout fit for the future. The new design will accommodate the higher levels of traffic in 2036, caused by planned growth in housing and jobs. The scheme has a high value for money and will minimise the need for further works in the next 15-20 years.

The scheme is in line with South Gloucestershire Council's transport strategy, as set out in the JLTP3 (Joint Local Transport Plan) and Core Strategy. The pedestrian and cycle improvements being delivered at this junction, in addition to the capacity improvements, are part of a wider transport package covering all modes.

- Highway capacity improvements favour private motorists and encourage more of these trips

The scheme provides a balance between maintaining traffic flows and improving safety for pedestrians and cyclists. The pedestrian, cycle and bus improvements being delivered at this junction, in addition to the capacity improvements, are part of a wider transport package covering all modes.

Accident data for the roundabout demonstrates a safety issue for cyclists here. Therefore, existing pedestrian and cycle facilities are being improved as part of this scheme, making the junction more accessible to less confident and new cyclists. Enhancing active travel facilities may help encourage a switch to cycling/walking for local trips.

- Current delays/problems are only experienced during peak hours

Response: The proposal is designed to accommodate current demand but also to future proof the roundabout for 2036, by which time planned growth in housing and jobs will result in higher levels of traffic. We are taking the opportunity to make use of a (WECA) funding stream available now to make the roundabout fit for the future. The funding for this scheme is specifically for transport improvements and cannot be redirected elsewhere.

- Greater priority required for buses approaching and using the roundabout

Response: No bus priority is being planned as part of this scheme although buses will benefit from the capacity improvements made to general traffic lanes. Existing bus lane provision will not be removed - bus lanes will continue to be provided on Bradley Stoke Way and Great Stoke Way to give priority to buses approaching the roundabout.

Toucan crossings

- The toucan crossings will slow down traffic and cause more delays/queuing

Response: The scheme provides a balance between maintaining traffic flows and improving safety for pedestrians and cyclists. The temporary minimal delay on traffic flow will only occur when a toucan crossing is activated by a pedestrian or cyclist. Traffic modelling (to 2036) of the scheme shows an overall reduction in delays to vehicular journeys using the roundabout and signalling will be adjusted to minimise delay where possible. We looked at options using normal traffic signals, but these caused more delays to traffic, impacting on the value for money of the scheme.

- Close proximity of the toucan crossings to the roundabout causing safety issues and queuing across the roundabout

Response: The distance between the roundabout and toucan crossings meets current design standards and operate safely where in place elsewhere. Locating them further away may cause safety issues since the crossings will be further than the desire line of pedestrians and cyclists, who may therefore choose to cross elsewhere.

- The toucan crossings should be a single staged crossing or operate together to enable faster crossing and hence ensure their use

Response: Signal timings will be designed to provide attractive and safe crossing for pedestrians and cyclists. They will have the capability to trigger the operation of the second toucan crossing in a pair being crossed, and can be adjusted as required once in place.

- Consider bridges or underpasses rather than toucan crossings

Response: Bridges and underpasses are significantly more expensive and require more land than toucan crossings. They are often a barrier to the less able bodied and can prove unpopular with users, resulting in pedestrians and cyclists still crossing the road at surface level. The constrained nature of the site means that it will be difficult to construct these at the junction without impacting more on neighbouring land.

Shared use footways / cycleways

- Conflicts between cyclists and pedestrians on shared use cycleways / footways; sufficient width required including waiting area between toucans

Response: Shared use cycling and pedestrian facilities are commonplace in South Gloucestershire and other areas, and do not generally have safety issues. The shared use cycle/footway will meet current design standards to ensure that pedestrians and cyclists can share the space in a safe manner. Providing a segregated cycleway will increase land take, impacting on adjacent vegetation and increasing scheme costs.

The design of the waiting area between the toucan crossings meets design standards for the expected demand at this location.

- Off road cycling facility will be less convenient and slower than existing arrangements

Response: The design provides an alternative safer way to use the roundabout on a bicycle, making the junction more accessible to less confident and new cyclists. Cyclists are able to return to the carriageway via dropped kerbs soon after clearing the toucan crossings. Advanced directional signage and markings will make it clear to cyclists how to use the roundabout and leave/rejoin the off-road cycleways.

Signal timings will be designed to provide attractive and safe crossing for pedestrians and cyclists; they will have the capability to trigger the operation of the second toucan crossing in a pair being crossed, and can be adjusted as required once in place.

- Raises the expectation from some drivers that all cyclists should use the off-road facilities

Response: The existing pedestrian and cycle facilities are being improved as part of this scheme, making the junction more accessible to less confident and new cyclists. Cyclists will have the option to remain on the road and circulate the roundabout. Sustrans guidance recommends that any on-carriageway cycle lanes are terminated in advance of the roundabout give way (see question below for more detail).

Safety

- Retain or extend the existing (advisory) on road cycle lanes for safety and driver awareness of cyclists

Response: Sustrans guidance recommends that any on-carriageway cycle lanes are terminated in advance of the roundabout give way. Should a cycle lane be extended up to the give way, it would produce a confusing situation where road users may expect that cyclists could use the nearside lane to make all movements, which would create a dangerous conflict. By terminating the cycle lane in advance of the roundabout the situation is clear that cyclists wishing to use the carriageway to circumvent the roundabout would need to position themselves accordingly within the approach lanes in accordance with the lane designation.

Within the proposed scheme cyclists are able to return to the carriageway via dropped kerbs soon after clearing the toucan crossings; the proposed design will be amended slightly to incorporate a gradual protected entry back onto the Winterbourne Road carriageway.

- Poor driver behaviour including lane discipline and speeding issues in the local area

Response: The introduction of toucan crossings is expected to reduce the speed of traffic using the roundabout. Also, the extent of the current 30mph zone on the approaches to the roundabout will be slightly increased. Traffic speeds in the area, and the need for any additional measures, will continue to be monitored in partnership with the police who are responsible for enforcing traffic offences.

Construction

- Concerns regarding construction works taking place simultaneously with other schemes in the area including the Cribbs Patchway Metrobus Extension on Gipsy Patch Lane

Response: We will aim to complete the work as quickly and efficiently as possible, but a realistic timetable has been prepared taking account of the need to co-ordinate this scheme with other works and complete utility diversions. The exact schedule of the construction works is yet to be determined. Should a decision be taken for the work to coincide with the Gipsy Patch Lane closure then the temporary traffic management of the schemes will be carefully considered in order to minimise disruption to the travelling public.

- Impact of works on local residents; one year seems excessive for the scheme

Response: We will aim to complete the work as quickly and efficiently as possible and, where practical, off peak working will be undertaken to minimise congestion. Information regarding the roadworks will be available in advance of the start of construction. Pedestrian and vehicle traffic management will be varied throughout the works to maximise safety and minimise delays.

- Lack of co-ordination of works following the recent completion of metrobus improvements

Response: The WECA funding stream was not available when the earlier improvements were planned and constructed. There will be very limited wasted work through delivery of this improvement.

Highway design

- Consider a slip lane from Winterbourne Road (east) to Great Stoke Way

Response: Traffic modelling (to 2036) of the scheme shows an overall reduction in delays to vehicular journeys using the roundabout, therefore a slip lane for left-turn movements is not necessary alongside the proposed capacity improvements. It would also have cost implications and require further vegetation removal. In addition, retaining structures may be required as the slip lane would cut into the existing embankment slope.

- Clear signage/markings to assist drivers; consideration of yellow boxes to prevent blocking back

Response: Highway design standards prohibit the use of yellow box markings on roundabouts unless the entry of traffic is under full time signal control (rather than toucan crossings) on that part of the roundabout where the marking is to be provided. South Gloucestershire Council and other authorities have applied such markings on roundabouts in the past and may consider this as a solution if a significant issue of blocking is observed following construction. However, this approach is a departure from guidance and we would not consider it unless there was evidence to suggest that there is an issue.

Additional signage and road markings (in advance and on the circulatory lanes) will clearly show motorists which lane to use. The road markings at this junction are correct for large multi-lane roundabouts.

Outside of scope

- The signalised Old Gloucester Road creates queuing problems backing into the roundabout; this junction also needs attention

Response: Traffic modelling (to 2036) of the scheme shows an overall reduction in delays to vehicular journeys using the roundabout. The additional capacity eases the current issues caused by the Old Gloucester Road junction. Should the council receive complaints regarding exit blocking at Old Gloucester Road after the scheme is completed the issue will be investigated and mitigation measures will be taken as necessary.

- Need for a footway on the west side of Great Stoke Way towards Trevelyan Walk

Response: There is insufficient width in the verge to be able to provide a shared use facility along this length.

- Difficulty of pulling safety out of The Worthys onto Bradley Stoke Way

Response: A detailed assessment of the operation of this junction would be required to determine if any treatment is required. This assessment is outside the scope of the current scheme.

What happens now?

A Full Business Case has been submitted to the West of England Combined Authority, a decision is expected in October 2019. Should funding be approved, we will start clearing the site and commence work in November 2019. Prior to any work starting on site, we will notify stakeholders, residents and the general public via similar communication channels to those used in the consultation.

The consultation report will also be available on our web page.

<https://consultations.southglos.gov.uk/consult.ti/GtStokeRbt/consultationHome>