

Tollgate Junction Consultation Q & A

1. Why are SCC consulting about options for the Tollgate Junction

The Tollgate gyratory currently experiences peak hour congestion and queuing. We know that with the additional traffic from Marham Park development, other developments locally such as the Abbeygate Sixth Form Centre and anticipated growth across the town there will be increased pressure at this location.

Our objectives are to improve the junctions to enable better future traffic flow – if we do nothing it is likely that the junction will soon become more heavily congested, further disturbing nearby residents and potentially increasing air pollution levels. The options presented have all been assessed using traffic modelling to ensure that we achieve our objectives of improvements to capacity and to reduce congestion.

2. What other options were considered and rejected?

Two options that were considered in the feasibility stages have been rejected.

The first involved reallocating lanes on the Fornham Road approach to junction A to include a dedicated left-turn lane and a straight ahead and right-turn lane.

The second option involved widening the same approach to three lanes allowing a dedicated lane each for left turn, straight ahead and right turn movements. Both options failed to address the capacity issues at the junction and would have resulted in significant queuing and journey time delays at the A1101 Fornham Road / Tollgate Lane / A1101 Mildenhall Road junction.

The first of these options was one of two proposed by the developer to mitigate the impact of the Marham Park development. It was rejected as it does not achieve the capacity required to accommodate the level of growth in traffic generated by the development. The second option proposed by the developer has been taken forward in the consultation as Option 1.

3. What movements are permitted at the junctions (where indicative arrows are not shown)?

Some restricted movements at the junctions will remain and some will be removed. The right turn movement between Mildenhall Road and Tollgate lane, at Junction A which is currently prohibited, will remain prohibited in Options 1 and 2 but will be removed for Option 3. Traffic exiting Bell Meadow at Junction C will now have the ability to turn right towards Junction B in all three options.

4. What is the cost of the scheme and who is paying?

SCC has secured £306,000 from two development sites – Marham Park and the Abbeygate Sixth Form centre.

The council is obliged to use this funding to mitigate the impact of these developments but, given the strategic importance of the junction, has decided to allocate some of its own funding to ensure the junction is fit for purpose for years to come. Initial estimates (before detailed design completed) suggest the scheme will cost between £600,000 and £1 million depending on the option chosen.

5. What is considered when assessing costs of the options (at this stage)

The scheme costs will be comprised of preliminary costs such as design and traffic management as well the necessary carriageway works, drainage, traffic signals (and associated electrical works), footway works, landscaping and signage. Utility diversions may be required from the north west corner of the greenspace and could form a substantial part of the overall scheme cost.

6. Can you give greater detail on the traffic modelling?

The options have been modelled using nationally recognised software which factors in the junction type, carriageway geometry and traffic signal phasing to determine the 'theoretical capacity' of the junction. This is compared with the predicted traffic flow on each approach and turning movements at the junctions (calculated by a combination of traffic survey data and growth projections).

A percentage figure for the amount of traffic compared to the theoretical capacity . From this, other more tangible outputs can be determined such as queue lengths and journey time delay.

Each junction has been modelled for each option showing the predicted delay

Option 1		
Approach	2024 AM Delay in Seconds	2024 PM Delay in Seconds
A1101 Mildenhall Road North	37	40
A1101 East	4	30
A1101 South	39	35
Tollgate Lane	39	33
B1106 Fornham Road North	4	0
A1101 South	0	0
A1101 West	7	19
Bell Meadow Exit	4	3
Bell Meadow Right Turn in	1	1
A1101 South Minor Arm	8	5
A1101 South Right Turn	1	2

Option 2		
Approach	2024 AM Delay in Seconds	2024 PM Delay in Seconds
A1101 Mildenhall Road North	39	44
A1101 East	19	23
A1101 South	39	37
Tollgate Lane	38	33
B1106 Fornham Road North	7	5
A1101 South	38	57
A1101 West	16	11
Bell Meadow Exit	3	3
Bell Meadow Right Turn in	1	1
A1101 South Minor Arm	10	6
A1101 South Right Turn	1	2

Option 3		
Approach	2024 AM Delay in Seconds	2024 PM Delay in Seconds
A1101 Mildenhall Road North	68	83
A1101 East	60	98
Tollgate Lane	26	70
B1106 Fornham Road North	65	63
A1101 South	12	28
A1101 West	47	21
Bell Meadow Exit	5	5
Bell Meadow Right Turn in	2	2

7. What are the current air quality levels at the junction?

West Suffolk Council monitors air quality throughout the district and reports its findings in the Air Quality Annual Status Report.

There is a diffusion tube sited on the corner of Fornham Road / Tollgate Lane which monitors the level of nitrogen dioxide in the area. A 12-month average is then taken and reported annually. If the average exceeds, or is likely to exceed, the national objective of 40µg/m³, an Air Quality Management Area should be declared.

The readings for 2016, 2017 and 2018 were 36.5, 36.8 and 33.6.

8. What is the impact of the options on the area of green space?

All the options will require a small section of the greenspace, (see below for estimates). The area taken would be kept to an absolute minimum and will not impact on the River of Flowers feature. As part of delivery of the scheme we would try to enhance the greenspace by, for example, adding in further native trees/shrubs to increase the wildlife value and age profile of the existing area.

Greenspace area for each option below:

Existing –	Main island:	2420sqm	Southern island:	237sqm
	Total:	2657sqm		

Options 1 & 2 –	Main island:	2182sqm	Southern island:	189sqm
	Total:	2371sqm		

Option 3 –	Total:	2644sqm
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So Option 1 & 2 have a net loss of 286sqm and Option 3 has a net loss of 13sqm.

9. What about improvements for cyclists?

Through the consultation, we are trying to find out how cyclists use the junction and what their experience of it is.

We know there are constraints with the junction that makes cycling unappealing but we will endeavour to improve facilities where achievable.

We are also improving and promoting routes nearby to avoid the need for cyclists to use the junction. People cycling from Marham Park to Tollgate Lane can use the

cycle access to Clay Road and the footpath on Mildenhall Road will be upgraded to a shared-use cyclepath up from its junction with Marham Parkway to Trent Road. This will allow cyclists to filter through the quieter residential roads and to access the schools, employment sites and local amenities on Tollgate Lane, Beetons Way and Western Way without needing to pass through the junction.

10. How will you ensure that the scheme stays in budget?

We will have a better understanding of the project costs when we have completed a detailed design and we have built in contingency to our initial project estimates. We have preliminary estimates to divert the utilities in the area, which is needed to widen the carriageway at the north west corner of the greenspace. We have a lot of experience delivering projects of this type, including those at the Compiegne Way / Northgate Road Tayfen Road and the Cullum Road / Parkway junctions. We are intending to deliver the project through the Suffolk Highways partnership to reduce overhead costs.

11. How does the work on this junction tie into other growth and highways work in Bury?

The enhancement of Tollgate Junction will help to support the growth ambitions for Bury St Edmunds (included in the Bury Vision 2031 and Bury Masterplan) by improving accessibility to the town centre and between growth areas surrounding the town. Suffolk County Council has identified the junctions severely impacted by the major development sites planned in the town and has secured funding to mitigate their impact on the highway. The Tollgate Junction is one of those identified and the scheme forms part of a longer-term programme of mitigation works.