Assessment of M5 Junction 9 and A46 (Ashchurch) Transport Scheme Options

Gerald Kells

For the Teddington and Alstone A46 Advisory Group (TAAG)

November 2024

1. Introduction

1.1 My name is Gerald Kells. I am a Campaign and Policy Advisor with a particular interest in Transport, Housing and Strategic Development. I was asked by the Teddington and Alstone A46 Advisory Group (TAAG)[1] to review the options for the M5 Junction 9 and A46 (Ashchurch) Transport Scheme to inform their response to the Public Engagement Exercise with Gloucestershire County Council which closes on 2 December 2024.

1.2 In particular they wanted me to consider the potential transport impacts of the three options 1,2 and 3 and the sub options A and B, addressing particularly the relevant section of the A435 to Teddington Hands Roundabout.

1.3 They did not ask me to review the overall need for the road, although my previous work suggested the need for some interventions to address issues in Ashchurch.

1.4 They also did not ask me to comment specifically on either the adequacy or deliverability of sustainable transport improvements within Ashchurch. I have previously expressed concern about the need to improve pedestrian, cycling and public transport links and this is something which I consider should be an on-going priority alongside any road changes.

1.5 I understand there are also external issues relating to environmental factors, most notably the impact on the adjacent Cotswold National Landscape AONB. In the case of Option A, I understand that it would need some incursion into the AONB, for which the scheme would require exceptional circumstances (NPPF Para 183). However, both Option A and B would have some impact on the setting of the AONB, and it is unclear at this stage what mitigation would be put in place.

[1] http://taagroup.co.uk/

2. Context and Limitations

2.1 The first issue in assessing the traffic impact of the options, is the level of published detail in relation to transport impacts provided for the consultation.

2.2 The current Analysis of Shortlisted Options[2] includes limited transport outputs. In particular it does not include modelled 2-way traffic flows, HGV traffic flows or the assumed 2041 traffic flows.

2.3 TAAG has requested those figures from Gloucestershire County Council as well as the technical transport modelling report which underpins the conclusions in the Options Analysis. They and I have not seen that material prior to this report but will review it as necessary.

2.4 Equally importantly, the Scheme Context and Existing Conditions Report relies heavily on old data. For example, the average weekday traffic flows are from 2017. Most other data is from 2019. Para 3.5.1 explains this has been done because the impact of COVID between 2020 and 2022 will have impacted traffic patterns.

A46 Count Point 2023 (2019 in brackets)	All Vehicles (2-way AADT)	LGV	HGV
37191 (A435 south of Oxenton)	14130 (13947)	2289 (1826)	459 (505)
17100 (A46 into Tewkesbury)	15967 (17109)	2594 (2446)	711 (746)
90334 (A46 Ashchurch)	21427 (20013)	4155 (2983)	1873 (1264)
73531 (A46 Teddington Hands)	18719 (18763)	2860 (2465)	1496 (1433)
99321 (A46 After Beckford Road)	18719 (18763)	2860 (2465)	1496 (1433)
800714 Ashchurch To Fiddlington (2019 only)	(932)	(163)	(25)
3532 M5 North Of Jn 9	86772 (82648)	13401 (11113)	11216 (11452)
36018 M5 South of Jn 9	94353 (110253)	14581 (13103)	11872 (10962)

Fig 1. Count Point Traffic on M5, A46 and A435

[2] All current consultation documents available at: M5 Junction 9 and A46 (Ashchurch) Transport Scheme- Potential Route Options Engagement | Have Your Say Gloucestershire

2.5 This is clearly true, but equally one should not assume pre-COVID data represents the 'new normal' that will emerge post-COVID, both in terms of overall traffic and (as importantly) heavy goods vehicles.

2.6 Figure 1 compares the local traffic counts from 2019 and 2023[3], albeit some are estimates.

2.7 Traffic levels on the M5 south of Ashchurch are still lower than 2019 (both manual counts) but it is also noteworthy, that traffic counts on that stretch were variable before 2019. Also noteworthy is the large increase of HGVs and other commercial vehicles (which occurs in both directions) on the A46 through Ashchurch.

2.8 The Context Report does include a breakdown of two-way weekday traffic from 2017 (Figure 2) which shows higher levels of traffic generally and of HGVs in particular. This is not surprising, given that it excludes weekends, but it would have been useful to understand if these figures have increased since, as well as the most congested conditions in the peak. Having said that, it is consistent with the 2031 scheme figures given in the Options Report (12-hour weekday) which I consider further on.

Figure 3-4 - 24-hour Average Weekday Traffic flows (July 2017)

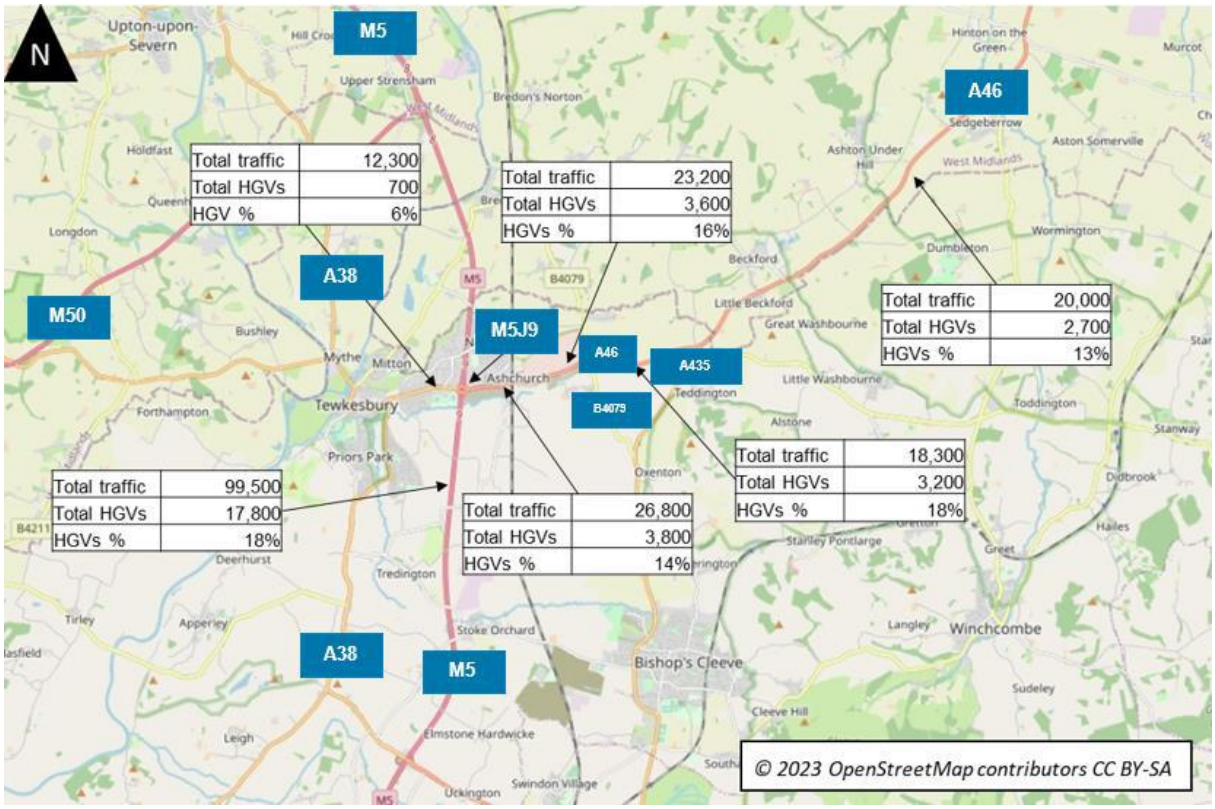

Fig 2. Context report. Weekday Traffic Flows

[3] Taken from: Map Road traffic statistics - Road traffic statistics

2.9 The Context Report also includes a more up to date table of ANPR data east of the Aston Cross junction on the A46 entering Ashchurch (Figure 3). This confirms that 65% is accessing the M5 either south or north but critically does not include data on HGVs. Given the location of significant HGV destinations within Ashchurch, this limits the ability to assess how much HGV traffic is associated with local businesses (so would not change to the new road).

Table 3-2 - A46 ANPR analysis showing proportion of traffic travelling to M5 or local destinations

Destination	Proportion of traffic travelling from the A46 east of Aston Cross junction
To M5 southbound on-slip	49%
To M5 northbound on-slip	16%
To M5 (either on-slip)	**65%**
To A438 (towards Tewkesbury)	18%
To Ashchurch (before M5 J9)	17%

Fig 3. Context Report. Traffic Mix

2.10 To complicate matters the assumptions behind the traffic generation from the proposed Tewkesbury Garden Communities[4], particularly south of the current A46, are unclear. This includes, in particular, the level of traffic generation per unit, the destination of that traffic (to Evesham, Ashchurch itself or to the motorway) and what kind of junction would be provided to link the southern Garden Communities to the new link road.

2.11 The Options Analysis acknowledges that there is uncertainty relating to the Garden Communities, and particularly beyond 2031 up to 2041. In this regard, I note that the Garden Communities are proposed as part of a Joint Plan between Tewkesbury, Cheltenham and Gloucester (up to 2041) which has currently not reached the formal Regulation 19 stage[5].

2.12 The Options Analysis assumes 10,000 new homes and 120 hectares of new employment land being delivered in the Ashchurch area by 2041 (Para 9.4.1). However, this could change, and particularly if the housing requirement for the Plan changes.

2.13 The Government is consulting on a New Standard Methodology (NSM) to establish the housing need calculation for a local authority. This dramatically increases housing need across the country, and, importantly, in all the local authorities in this Joint Plan as I set out in Figure 4.

2.14 Assuming the NSM is adopted, or something similar, an increase of approximately 400 dwellings per annum could mean 6-8,000 more homes needing to be found by the three authorities during their Plan Period, which could include expanding the Garden Communities.

[4] Latest details at: Tewkesbury-Garden-Communities-Charter.pdf
[5] Details at: strategiclocalplan.org

2.15 In other words, at this stage I consider the risk is greater that the Garden Communities will be expanded than contract and this would increase traffic on the route.

Annual Housing Need (2024)[6]			
	Current Standard Methodology	New Standard Methodology	Change
Cheltenham	545	827 (833[7])	282
Gloucester	660	718 (732)	58
Tewkesbury	549	612 (635)	63
Total	1,754	2,157 (2,200)	403

Fig 4. Selected Housing Need Comparisons for Gloucestershire

2.16 It also seems reasonable to assume that a new road will be seen by would-be developers as a development boundary for the expansion of Ashchurch which could, itself, influence the eventual size of the Garden Communities as I discuss later when I consider the options.

3. Previous Assessments

3.1 I previously wrote two reports for TAAG on traffic issues at Ashchurch.

3.2 In October 2019 I provided a detailed assessment on proposals for a new or upgraded A46 link from M5 junction 9 past Ashchurch, and for additional proposed improvements past Beckford following an earlier site visit to Ashchurch on 27 March 2019.

3.3 My assessment was updated in July 2021 to consider additional material provided to TAAG, including in particular Highways England A46 M5-Teddington Hands Options Assessment (September 2018). That included a map of the options considered at that stage[8].

3.4 What is most notable is that Options 1 and 2 of that Assessment (Figure 5), which most closely resemble the current options, would have gone only as far as the existing A435.

[6] This is using 2023 based affordability figures and 2024 base year for the Stock and 2014ONS calculation

[7] The figures in brackets are the Government figures given on the NPPF consultation website as opposed to my figures based on the New Standard Methodology. I am not clear why they vary slightly.

[8] My previous reports can be downloaded from https://taagroup.co.uk/taag-newsletter-and-reports/

Figure 20: Location of proposed scheme options

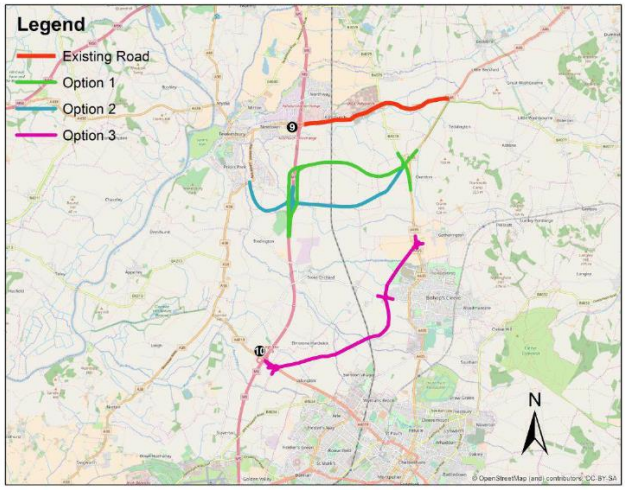

Fig 5. Scheme Options (2018)

3.5 One conclusion of that Assessment which is worth noting was that the accidents projections suggested all options would increase accidents, largely because they transfer traffic from the relatively safe motorway environment to more local roads (See Fig 6). In particular, this would mean the transference of large amounts of traffic onto the A435.

Table 11: 'Do Minimum' and 'Do Something' accident numbers

	Do Minimum	Option 1	Saving	Option 2	Saving	Option 3	Saving
2026	79	67	12	66	14	76	3
2041	72	73	-2	75	-4	74	-3
Total (60 years)	4,350	4,385	-35	4,469	-119	4,490	-140

Fig 6. Accident Modelling (2018)

3.6 In other words, there was an accepted case that decanting traffic onto the A435 would raise safety concerns. I consider later the extent to which simply upgrading the road (as in Option A) might alleviate these.

4. Current Options

4.1 The current options consultation includes three options for access to the motorway (1-3) and two options (A-B) for the section from the 'Seven Bends' (B4097) junction to the Teddington Hands junction. These are set out in the diagram showing the Scheme Options (Figure 7).

4.2 The Options Analysis also includes a diagram setting out the modelled traffic in 2031 (Figure 8). This shows 20,000 using the new road for Option 1 and 24,000 for

Option 2. What is also noticeable is the reduction through Ashchurch is only about 6,000 vehicles.

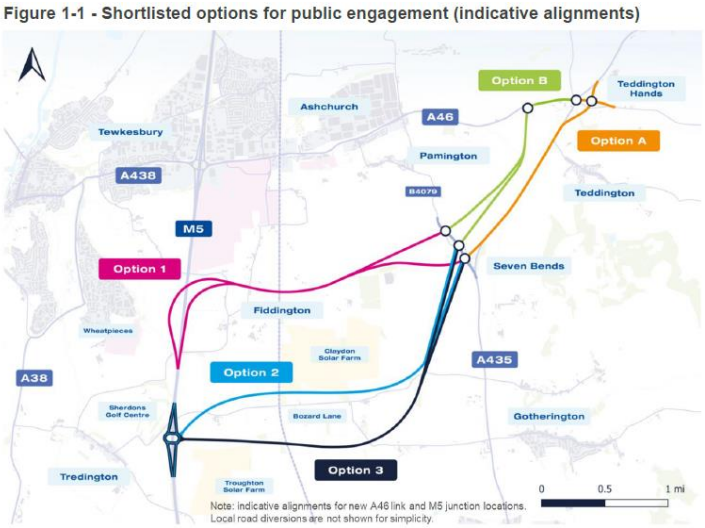

Fig 7. Current Options

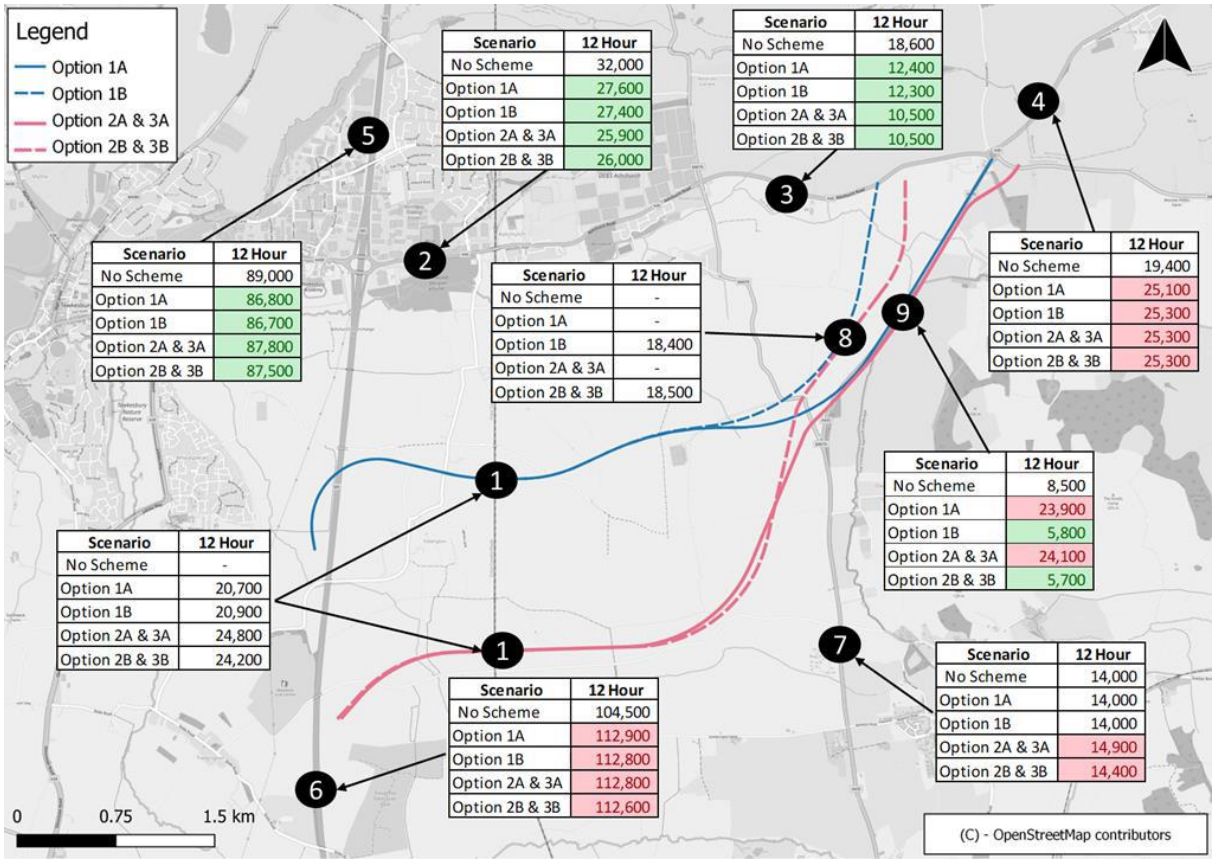

Fig 8. Option Analysis, Traffic Modelling 2031

4.3 On the face of it this presents an anomaly as there is a significant difference between the traffic on the new route and the reduction on the existing route, some 15,000-18,000 vehicles.

4.4 The Analysis explains that this is at least partly due to the route being attractive to other users of the network, with traffic reassigning back onto the existing A46 (para 9.3.1).

4.5 The increase in traffic on the M5 and A46 beyond the scheme supports this view, although it does not appear to be coming from the A435 which carries similar levels of traffic in all scenarios. However, without more modelling detail it is hard to be sure what is actually going on.

4.6 Nevertheless, one can see why both of these effects might well happen if one considers the significant journey time-savings given in Fig 9-5 and 9-6 of the Analysis.

4.7 Having said that, the M5 south of the junction only carries 8,000 more vehicles and the A46 beyond Teddington Hands 6,000. It is unclear to me why this is. It may be, for example, that the increase in traffic on the M5 which uses this route displaces other M5 traffic going to other routes.

4.8 The report also says that for all options, the scheme would result in a significant reduction in traffic using the existing A46 between the M5 and Teddington Hands roundabout. Between the Aston Cross and Teddington Hands roundabouts this varies from around a 30% reduction for Option 1 to over 40% for Options 2 and 3. Given that the absolute reduction on those routes is below 20% (See Figure 8) this suggests other local traffic re-routing onto the existing A46.

4. North of the new route the M5 traffic reduces by 4,000 for Option 1, but only 3,000 for Options 2 and 3. This is presumably because Option 2 and 3 draw some through traffic to the new junction to avoid Ashchurch. Option 2 and 3 also lead to a larger increase on the scheme itself, some 4,000 vehicles, which reduces to only a few hundred beyond the Seven Bends junction.

4.10 This could suggest that significant amounts of traffic from the Garden Communities and other developments south of Ashchurch are being assumed to direct towards the M5 not the A46.

4.11 The other noticeable thing is that Option A would lead to significant increases of traffic on the A435, some 15,000 vehicles, while Option B would reduce that traffic by 3,000 vehicles.

4.12 This is, of course, the opening year and there is only scattered commentary in relation to the design year of 2041. The Assessment suggests 40% traffic will divert from the existing A46 in Options 2 and 3 and 30% in Option 1 but Garden Communities traffic will grow. In both cases it refers to a 50% reduction in Heavy Goods Vehicles (2041 Core Scenario). It also suggests time-savings will continue between the M5 and A46 but not in peak periods on the Tewkesbury-Teddington Hand Roundabout.

4.13 It is not unreasonable to assume that traffic (including HGVs) would grow even further on the A435 under all Option A Scenarios.

4.14 One thing I could not find anywhere was the traffic impact on the B4079 (Seven Bends) road. Obviously, some of the bends will be replaced in all scenarios with a roundabout.

4.15 However, the road remains in a similar configuration between that island and Aston Cross.

4.16 One might expect an increase in traffic on that route as it is a rat-run to Ashchurch. This could be exacerbated further if there were development south of the new route (particularly under the most northerly Option 1) and if congestion emerged on the A435 under Option A.

4a. Options 1, 2 and 3

4.17 In terms of the impact of Options 1-3 on Teddington and the A435, the modelling shows little difference in the opening 2031 diagram (Figure 8). However, as traffic increases after that, especially with the introduction of the Garden Communities, the level of traffic could be expected to increase going north. I would expect the additional traffic in Options 2 and 3 to begin to cause a widening in the gap on those sections when compared with Option 1.

4.18 As said above, the new road may also be seen as a development boundary. This would mean that Option 2, and particularly Option 3, could lead to increases in development which would generate additional journeys above those currently being considered.

4.19 Equally, if under Option 1 development was allowed South of the route that could lead to more local traffic using the new A46 and either the Seven Bends or A435 route.

4.20 There is clearly a direct impact of Option 1 on Fiddington and its setting, and in all cases, local road diversions which I have not considered.

4.21 On the other hand, it seems more likely to me that Fiddington would be swallowed up by development if it were north of the new road, as in Options 2 and 3.

4.22 While some aspects remain speculative, it is evident that Options 2 and 3 would generate more traffic on the new route. In the initial years, this increase seems to have less impact on the A435 end of the route. However, this may well worsen over time, particularly with the addition of traffic from the Garden Communities.

4.23 It is also likely that, unlike cars, the additional HGVs using the route would almost all be travelling all the way from the M5 to Teddington Hands. I would, therefore, expect that Options 2 and 3 would generate more HGVs on the A435 section of the route than Option 1 where long-distance HGVs from the M5 north would all continue to travel through Ashchurch.

4.24 Based on the limited available information, my initial view is that Options 2 and 3 would likely increase traffic on the A435 compared to Option 1, with a particularly noticeable rise in HGV traffic. As a result, the difference in impact between Options A and B would be even more significant under Options 2 and 3.

4b. Options A/B

4.25 The layout of Option A and B are similar for all the Options 1-3 except that 1A includes a wider roundabout at Seven Bends. This is I assume because of the angle the new route is coming in from.

Option A

4.26 Option A maintains the existing A435 route but would upgrade the standard of the road although the extent of that is not set out in detail.

4.27 In that Option the junction with the B4079 (Seven Bends) road is replaced with a roundabout which would then continue along a single carriageway upgrade to the A435, veering off between Teddington and Teddington Hands to a new roundabout east of the current Teddington Hands roundabout.

4.28 The Teddington Hands roundabout would remain in place but would only provide access to a short section of the existing A435 leading to the truck stop and pub. As a result, users of these facilities would no longer be able to access them directly from the A435 and would instead need to use the new roundabouts. This change would also inconvenience local residents if accessing the facilities by car.

4.29 The Teddington Hands Roundabout is also much closer to the new roundabout than would be the case for the two roundabouts in Option B and this may lead to some additional traffic issues, for example queuing between the roundabouts.

4.30 Traffic on the A435 would increase dramatically in the opening year to between 22,000 and 24,000 vehicles during the 12-hour weekday period. This would then further increase from both traffic growth and new development.

4.31 This is a very significant rise. In the past, Congestion Reference Flow, (In this case approximately 22,000-23,000 Average Annual Daily Traffic (AADT)) was used to assess road width. The opening widths for road categories recommended in the old Design Manual for Roads and Bridges, (Fig 13 from DRMB TA46/97) would have suggested a maximum below 21,000 AADT on the A435.

4.32 Those are fairly crude approaches, and no detail is given using a more up to date approach so we have little evidence as to the extent of congestion and delays anticipated on the A435, particularly as traffic grows up to 2041. Importantly any additional congestion would be likely to lead to increased diversion of traffic onto the seven bends route to avoid that section.

4.33 There may also be some rat-running through Teddington itself for traffic wishing to reach the B4077 but avoid the Teddington Hands Roundabout.

4.34 Noticeably the section of the new road from the M5 to the B4079 junction is considered to require dual carriageway standard and carries a similar level of traffic which suggest a single carriageway may prove inadequate, (especially given that it also carries traffic from the A435 in the south.)

4.35 In terms of access from the village of Teddington, that would be maintained. However, the A435 would be considerably busier so this would require an upgraded junction arrangement.

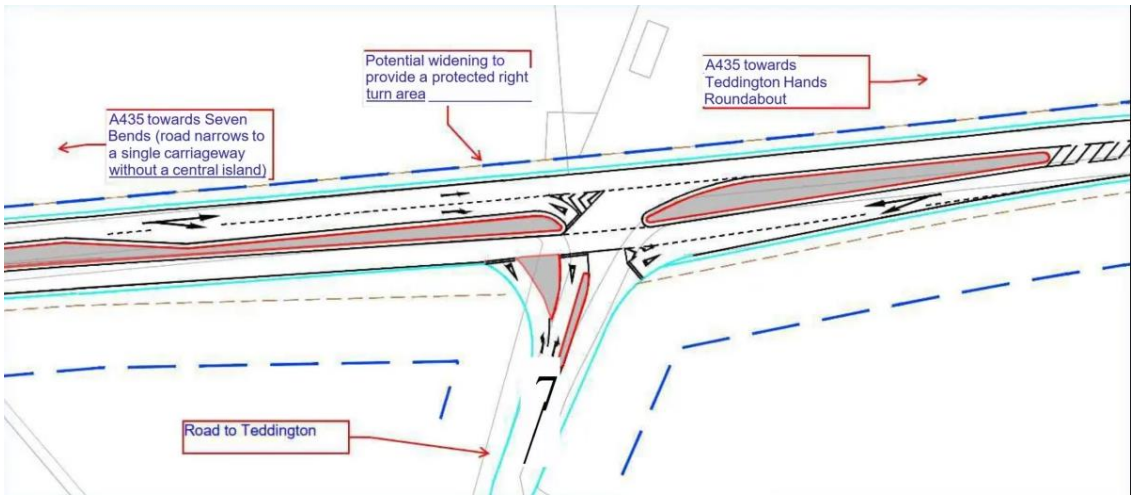

Fig 9. Indicative Option A Junction (A435 Teddington Village)

4.36 An indicative junction arrangement was provided to TAAG by Gloucestershire County Council. I assume further detailed work would be expected if Option A were developed so this is not finalised.

4.37 What I can't find is an assessment of the resulting disruption to users of the junction. One would expect delays and safety issues simply because of the rise in traffic.

Option B

4.38 Option B provides an alternative single carriageway route which would carry 18,000 vehicles at opening with just under 6,000 still using the A435. This would separate traffic going from the M5 to the A46 from more local traffic via Teddington Hands.

4.39 The new road starts with a roundabout on the B4079, but would still retain some form of junction between the A435 and the B4079 at the same location as currently.

4.40 It would meet the existing A46 between Aston Cross and Teddington Hands where a new dual carriageway would be created on the existing A46 between the two roundabouts allowing for the traffic through Ashchurch and the traffic on the new route to share the road.

4.41 The current Teddington Hands Roundabout would be upgraded and would still access to the A435.

5. Safety

5.1 As said above, the conclusion on safety in this consultation material seems somewhat different to that presented in 2018.

5.2 It seems to me that all Options add significant new traffic into the area, albeit this leads to some improvements and opportunities within Ashchurch.

5.3 Given the extent of proposed new development and the inevitable redirecting of traffic onto these routes, safety concerns should in my view be a major factor weighing in the Option choices.

5.4 The Scheme Context document includes a table of accidents from 2015-2019 (Fig 3-12).

5.5 To review these I considered the most up-to-date figures from CrashMaps (2018-2022)[9].

5.6 They are not dissimilar and I have used the CrashMaps data as the most up-to-date.

5.7 That shows a notable cluster of accidents at the junction of the B4079 (Seven Bends) with the A435, 6 in all, of which 5 are close to the northbound exit onto the A46. There is only one crash on the A435 as far as Teddington Hands. In particular there are no recorded accidents at the turning to Teddington village. However, there are 4, including a fatal accident at the entrance to the lorry park.

5.8 There are also 8 accidents associated with the B4079 (I have excluded the area replaced in the scheme by the new roundabouts) and another 1 at the Aston Cross junction.

5.9 If one takes a longer period on CrashMaps (1999-2024) these clusters become, if anything even more evident which suggest this is a long-standing issue.

5.10 The Scheme Context document compares its 2015-2019 figures with national rates (Figure 10,) We can see that the collision rate is already very significantly higher on the A435 than the national rate, albeit the detailed map suggests specific locations where clusters of accidents occur.

[9] https://www.crashmap.co.uk/Search

Table 3-4 - Collision rates per billion vehicle kilometres comparisons by route

Section	Length (km)	Collisions	AADT (2019)	Collision Rate	National Comparison
M5 south of Junction 9	3.9	13	110,253	17	44
M5 north of Junction 9	3.4	9	82,648	18	44
A46 (M5 to Teddington Hands)	4.8	23	20,013	130	244
A46 (Teddington Hands to Evesham)	11.1	40	18,079	109	244
A435 Teddington Hands to Seven Bends	2.6	12	13,947	184	135
A435 Seven Bends to Gotherington	2.5	10	13,947	155	135
A438 (M5 to High Street)	2.3	16	16,207	149	457

Fig 10 Context Report, Collision Comparison

5.11 Absent from that table is the B4079. I assume this is because it is not directly on the route. The Options Analysis (Table 5.1) says:

Single carriageway section between Seven Bends roundabout and existing A46 may be used by farm traffic and therefore increases the risk of collisions (although for Option B, farm traffic could be encouraged to use the parallel A435 route instead).

5.12 I am concerned that this underestimates the extent to which the Seven Bends route is used as a rat-run into Ashchurch and the risk that this will be exacerbated, firstly by higher speeds on the new dual carriageway route as traffic approaches the B4079 and then, over time, because the new northern route becomes congested.

5.13 I also note that the Options Analysis when comparing Option A and B particularly emphasises businesses at Teddington Hands when contrasting safety impact on the A435 (Table 5.1).

Option A: A46 and A435 traffic diverted onto new A46 road east of Teddington Hands, reducing traffic flows and risk of collisions at the business accesses

Option B: No change in layout of A435 business accesses, so may not provide a safety improvement

5.14 While any opinion on this issue will to an extent be subjective and involve some crystal ball gazing, that comparison seems to me to exclude other aspects of the scheme that could impact on safety.

5.15 Most importantly, while on the face of it Option A seems preferred in Table 5.1 that does not take into account the significant reduction of traffic on the A435 (and perhaps especially HGVs) that occurs under Option B.

5.16 Nor does the analysis consider the additional risks of extra crashes resulting from the significant increase in traffic under Option A at other locations on the A435. Of most concern to Teddington residents in this context will be the junction to

Teddington from the A435 where the junction realignment (see Fig 9) is required precisely because of the increase in traffic (and risk) created at this junction under Option A.

5.17 As well as additional traffic, the upgraded road could lead to increased speeding and there would be reduced visibility north on the A435 from the Teddington junction because the junction would be close to the curve which starts the approach to the new A46 roundabout.

5.18 Table 5.1 also assumes that no additional safety improvements would be made to the existing A435 under Option B. It seems to me that the reduction in traffic and the removal of longer distance traffic would allow for additional safety measures to be added, even the downgrading of the existing A435.

5.19 One other issue I noted is that at the southern end of the B Option the Summary of Options shows the current junction between the A435 and B4079 maintained (e.g. Figure 4.1). On the maps it does not appear to include the slip road from the B4079 going north onto the A435 (as currently). It says details are to be confirmed.

5.20 My view is that, if the B Option is adopted, the design of this junction is particularly important both in terms of configuration and where traffic is directed.

5.21 In my view, a main line to the new route, not the existing road, could be preferable as it would encourage more drivers to use the new road and so may address some of the current safety issues at that location.

6. Walking and Cycling

6.1 There is a Summary of walking, cycling and horse-riding opportunities provided as part of the consultation.

6.2 It is at a pretty high level with little detail and some of this will be down to detailed design. However, it does seem reasonable to me that as Option B would reduce traffic on the A435, this would provide a safer route for cyclists which would be lost in Option A.

6.3 I also note that all Options would impact on Public Rights of Way, notably the Gloucestershire Way and routes between Ashchurch and Teddington. The current consultation does not deal with what would happen to these in any detail, but I consider it would be important that rights of way were maintained and enhanced wherever possible.

7. Value for Money

7.1 The Analysis of Options includes forecast outturns for each of the Options as well as an economic appraisal. There is a significant additional cost for Options 2 and 3, but notably Option B adds 3% to Option 1 and between 5-6% to Options 2 and 3 (Table 8-1).

7.2 The economic appraisal (Table 10-2) gives Benefit Cost Ratio (BCR) of 1.5 for both Option 1A and 1B, 2.0 and 1.9 for Option 2A and 3A and 1.8 and 1.7 for Option 2A and 3B respectively. All Options, therefore, would provide positive value for money.

7.3 The Analysis specifically concludes that:

There is only a small difference in economic performance between Options A and B, due mainly to differences in costs.

7.4 This would suggest the small differences in cost should not be the determining factor in Option choices.

7.5 However, any meaningful comparison relies on all Options being effective, and as discussed further on, I have doubts about whether Option A represents a long-term solution and, as a result, I consider it is likely to lead to further work being required to address problems it causes. If that were the case, the small BCR advantage in Option A could be undermined.

8. Commentary

8.1 Unfortunately, the extent of the likely increase in traffic cannot be gauged up to 2041 from the current material, nor in particular the rise in HGVs using the new route.

8.2 However, on the evidence supplied, I consider the rise in traffic on the A435 under Option A is of such a scale it is likely to create on-going congestion and safety issues, especially if:

a. Option 2 or 3 is chosen, which would add traffic from the M5 North,
b. More development is added to the Garden Communities.

8.3 I would recommend Option A is not progressed.

8.4 In terms of Options 1-3, Option 1 leads to less traffic on the new route. Vehicles from the M5 North (and particularly HGVs) would still access the A46 via Ashchurch, as well as local traffic, including from the Garden Communities. It would also create a tighter development boundary for Ashchurch, provided that is adhered to.

8.5 Option 2, and particularly 3, could create a wider development boundary with more likelihood of additional traffic, as well as increasing traffic on the new route.

8.6 While the modelling for 2031 does not show this choice impacting significantly on traffic levels beyond the Seven Bends junction, over time I consider that Option 2 and 3 would be more likely to increase traffic on that section and so the choice between Option A and B would become more important.

8.7 In all cases Option A would place very significant additional pressure on the A435. Given the likelihood of further traffic growth to 2041, as well as additional housing, and also the uncertainty where the traffic from the Garden Communities would go, I would be concerned about traffic conditions deteriorating on that link.

8.8 This would lead to safety concerns, particularly at the Teddington village junction.

8.9 It would also lead to a deterioration in amenity resulting from that traffic growth. Access to Teddington Hands in particular would be more difficult.

8.10 I also think there is more likelihood under Option A that traffic congestion would increase rat-running on the remaining section of the B4079 causing additional congestion and safety concerns on that route and at the Aston Cross junction, as well as to a lesser extent through Teddington village.

8.11 Lastly, I notice that the new Teddington Hands Roundabout would be closer to the existing roundabout in Option A and this may cause safety and congestion issues which only detailed modelling could determine.

8.12 I think Option B would provide a more robust and future-proof approach. It reduces traffic on the existing A435 which would have safety benefits and, because traffic levels are lower on the single carriageway section of the new road from the Seven Bends Roundabout, it is less likely to lead to additional rat-running.

8.13 Those benefits could be enhanced if additional safety measures were considered on the existing A435.

8.14 In particular, I would suggest consideration is given to:

a. redesigning the current junction with the B4079 so that the mainline is the new route,
b. reviewing speed limits
c. traffic calming measures at the Teddington village and the Teddington Hands truck stop and pub.
d. whether the Teddington village junction should be realigned.

8.15 In addressing these issues consultation with residents should be central.

8.16 I also believe a case could be made for downgrading that section of the A435.

9. Conclusion

9.1 I would, therefore, on balance recommend TAAG prefer Option 1 and support Option B, noting that the choice of Option B is more critical if Options 2 and 3 are adopted.

9.2 However, acknowledging that there are safety issues which Option A improves but does not itself resolve (at the A435 junction with the B4079 and at Teddington Hands), I would recommend TAAG argue that additional safety measures should be included to resolve those issues on the A435 within the design work for this scheme and that those should be discussed with local residents.

9.3 Furthermore, all versions of the scheme (but especially Option A) are likely to increase rat-running on the remaining section of the B4079. This issue does not seem to me to have got the attention it deserves at this stage and measures should be considered to address this issue as part of the on-going scheme.

9.4 I also consider it is important that public rights of way are maintained and enhanced.

9.5 Lastly, it is acknowledged that all Options would have impacts on biodiversity and landscape, including the setting of the Cotswolds National Landscape AONB. In all cases TAAG should argue for robust measures to be implemented to address the landscape impacts on the AONB and on their own local views.