Transport Modelling

Item 3.6: This is a very interesting point [REP3-031]. In a north direction at peak times, congestion and queues will start to form on the approaches to Cowley Roundabout, irrespective of what is happening further along towards the Air Balloon roundabout. This is purely due to the volume of traffic approaching the end of the dual carriageway element of the A417, where the road filters down into a single carriageway. Noting that the traffic model forecasts an increase in traffic on the A417 it would be logical to assume that this problem will be compounded in the future a few miles further down the A417, as eloquently raised at [REP3-031]. This then raises the issue of increased environmental effects, in an area of higher population density than that surrounding Birdlip.

- a) What modelling has been carried out to understand the impact of having a reduced speed limit from the Cowley Roundabout to the end of the dual carriageway at the Barnwood junction. Would it be correct to say this would reduce the risk of congestion and queues at the junctions further along the route of the A417?
- b) Would it be correct to assume that Option 12, with its reduced speed due to highway design departure from standards, would naturally control the volume of traffic approaching the end of the A417, and thus assist in reducing the risk of congestion and queues?

There is a need to get a clearer understanding of the A417 Missing Link traffic model that was developed for the purposes of assessing scheme options.

- a) Is it correct to say that the model is representative of average weekday traffic for March 2015, and is used for estimating travel costs and identifying the routes travellers may choose through the road network?
- b) Is it accurate to state that there are only 4 roads that join the proposed section of road (A436, B4070, Cowley Lane, and Cowley Roundabout) and that the traffic flow on these roads would be about the same for either Option 12 or 30? If not, why not?
- c) If that is the case, why when the two Options went to Consultation, Option 30 only needed one junction at Shab Hill, whilst Option 12 requires 3 junctions at Barrow Wake, Birdlip and Cowley Roundabout? Why is this? What traffic factors drove the requirement for these 2 fundamentally different designs?
- d) Finally for Burges Salmon do you still stand by the Applicants response to the question about junction layouts prior to Consultation detailed in TR010056 Summary of Applicant's Oral Submissions at Issue Specific Hearing 2 (ISH2) (February 2022), Page 2, Para 3.1.12, specifically the quote 'Junction layouts differed between the two schemes for engineering reasons related to level differences and geology'.
- e) I think it is very clear that level differences and geology were not reasons for omitting a junction at the Cowley Roundabout at the time of Consultation, as the current Option 30 has a junction in the same location as that for Option 12.

Weather

There is a requirement to get a clearer understanding of how the weather has been built into the traffic models, and any effects on travel times.

- a) Can you confirm that the Met Office Regional Climate Data for the Midlands Region was used for the climatic environmental constraints? Was any other climatic data used, and if yes, is it possible to see it?
- b) Can you elaborate as to how this climatic data was used in the models used to forecast journey times?

- c) Is it a reasonable assumption to say that forecast journey times would in general be longer in an area that is prone to a "volatile microclimate" (dense fog, ice and heavy snow), due to a reduction in the speed in which the traffic would be able to travel at?
- d) Is it a reasonable assumption to say that accidents are more likely to occur on a road with a speed limit of 70mph compared to that of 50mph, when prone to a "volatile microclimate"?

<u>Unaccompanied Site Inspection (USI2)</u>

As a resident of Cowley, I thank the ExA for taking the time to travel the many lanes around the village of Cowley, in order to understand the suitability (or not) of these narrow lanes.

Could the ExA confirm that they drove along both Cowley Wood Land and Cowley Lane, and whether they will have the time to drive through Cowley village out to the A435 (to note the narrow road around Cowley Manor and the bridge both of which are in a Conservation Area), and to drive the lane out of Cowley in a northerly direction which joins the A436 at Ullenwood.