A14 CAMBRIDGE TO HUNTINGDON IMPROVEMENT SCHEME

DEVELOPMENT CONSENT ORDER - EXAMINATION

Comments on Local Traffic Impact Testing Report

By

Cambridgeshire County Council

Shire Hall, Castle Hill, Cambridge, CB3 0AP

19 August 2015
1.1.1 These comments relate to the Local Traffic Impact Report (REP6-002) submitted to the Examining Authority on 3 August 2015.

1.1.2 As set out in the County Council’s written representations (REP3-006), the County Council considered that the modelling done by Highways England did not give sufficient confidence in the forecast changes in traffic on the local road network.

1.1.3 The Local Traffic Impact Report (LTIR) reports a number of changes to Highways England’s traffic model (CHARM3A). These correct a number of issues that CCC had drawn to the attention of Highways England after Highways England had provided model files to the County Council in March 2015, including:

- Revisions to the allocation and distribution of Base Year demand;
- Correction to tidal permitted movements on Silver Street, Cambridge;
- Revisions to future year infrastructure assumptions;
- Revisions to the coding of Spittals Interchange; and
- Revisions to scheme coding in the vicinity of Dry Drayton.

1.1.4 These changes were carried out as Local Impact Testing as until the work was done it was unknown what effect the changes would have on local traffic predictions. The changes made result in altered forecasts for the local road network. As such, the County Council considers that CHARM3A + Local Impact Testing (LIT) is core modelling that supersedes CHARM3A considered alone.

1.1.5 The CHARM 3A + LIT modelling, except for journey times on the existing A14, now correctly represents the base network, trip allocations, and future schemes.

1.1.6 However, concerns remain over the use of median as opposed to mean journey times on the existing A14. In the opinion of the County Council, the use of median journey times under-estimates delay and the effects of congestion on the existing A14. In consequence, the existing A14 is a more attractive route, and the model routes traffic in the baseline model via the A14 rather than via the local road network. In consequence, there is an under-estimation of the volume of traffic using local roads to avoid congestion on the existing A14.
1.1.7 The County Council asked Highways England to run a sensitivity test of using mean rather than median journey times on the existing A14. It was agreed with Highways England that this would be done by manipulating the speed flow curves to increase journey times. The effect of this test was as the County Council expected, there is a greater flow of traffic on local roads in the base year. The County Council is therefore of the opinion that the CHARM3A + LIT + Sensitivity Test 2 is more representative of local road changes resulting from the Scheme.

1.1.8 The County Council remains concerned over the matter of apparent growth in trips into and out of Cambridge City Centre. It appears that there is insufficient congestion and delay within the model, this appears to cause traffic to route through central Cambridge in preference to using orbital roads such as the M11. This is counter-intuitive based on local knowledge and experience. The County Council has satisfied itself that this appears to be a feature of the model, rather than a real predicted change.

1.1.9 With respect to validation, this remains a concern in respect of the local road network. However, the County Council is satisfied that the routing changes post A14 are predictable and the proportionate change reasonable. Less reliance should, however, be placed on the exact quantum of change in areas with weak validation.

1.1.10 On balance, the County Council is of the opinion that the modelling reported in Highways England’s Local Traffic Impact Report can be used to assess the traffic impacts of the A14 on the local road network, provided account is taken of the Sensitivity Test 2 output. These impacts will be considered in the revised Local Impact Report for Deadline 8.

1.1.11 In consequence the view of the County Council is that the impact of the A14 on the local road network should be assessed using CHARM3A + LIT + Sensitivity Test 2. The County Council will update the local impact report for Deadline 8 based on the CHARM3A + LIT data as core modelling, with a sensitivity test for the effects of mean journey times.
1.1.12 The County Council notes that the model has been constructed specifically for use with the A14 Cambridge to Huntingdon project. It is primarily a strategic road model and detailed modelling has been confined to a narrow strip along the A14. In view of the weak validation on the local road network, the CHARM3A model should not be used for any other road project or development without further work. In particular, the use of mobile phone data is an innovative area where rapid progress in data processing and accuracy is being made.