Joe Wooldridge

From: Simon Swanston (JCT Consultancy Ltd.) <consultancy@jctconsultancy.co.uk>
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Joe

LinSig does not deal with individual vehicles, and therefore cannot specifically deal with an individual HGV blocking a movement that a car would not. However, to account for HGV's, flows are entered as PCUs rather than vehicles, with a PCU factor of 2.3 pcus commonly used for HGVs and 2.0 for buses. So, assuming traffic flows have been converted to PCUs, then the higher number of HGVs will result in a higher flow being input into the model. If there is a large number of HGVs turning right, then the right-turn flow in the model will be higher, and the non-blocking storage area will fill more quickly.

It is unlikely that the model is over-estimating capacity due to this blocking issue, and there may be an argument that it may just as likely be under-estimating capacity. This is because, once the storage area fills up, then it immediately blocks ahead traffic the next second in the cycle, as a small proportion of a right-turn arrives and cannot get into the storage area. In reality, as vehicles arrive in whole numbers and not fractions, blocking will happen immediately if the next vehicle is a right-turner but not if it is going ahead. So, as long as a reasonable non-blocking storage length is used in the model, the model should usually provide a robust assessment.

Regards

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