

## 9.7 *Software Requirements*

9.7.1 All modeling software used, other than the listed below, must be approved by the Reviewer.

9.7.2 AA Sidra Intersection is the preferred software for the analysis of separate signalized intersections and roundabouts. For the analysis of networks of signalized intersections the software Trafficware Synchro should be used. However, either Sidra or Synchro must be used and must be set to use HCM algorithms.

9.7.3 Weaving analysis for ramps and merges should be undertaken using HCM procedures. The methodology applied must be clearly explained in the report. The Reviewer may require the Consultant to use micro-simulation to assess weaving and merges.

9.7.4 Where micro-simulation is required/ requested this should be done using PTV VISSIM or S-Paramics. For small networks a SimTraffic simulation may be sufficient. Validation data needs to be provided for the existing scenario, including GEH comparison of the traffic flows, a comparison of LOS and drawings showing the selected locations for the GEH test and the LOS comparison. 85% of the measurements must achieve a  $GEH \leq 5$ .

9.7.5 Emme/3 is currently being used for strategic modeling in Abu Dhabi and should be used for all strategic modeling required.

9.7.6 Modeling outputs shall be provided in the appendix. Depending on the number of intersections analyzed, a softcopy of the outputs may suffice to avoid unnecessary prints (to be agreed with Reviewer). All modeling files must be provided as softcopy to the Reviewer.