

Local traffic network formulation and Signalisation via benchmark webster model

ABSTRACT

Traffic models have been widely studied for general traffic understanding and transportation variable relations, but unready to exert for real time transportation decision and planning. With the present advancement in computer technology, the used-to-be-lengthy and complicated modelling technique is now more computable and executable than ever for putting into good use. This paper discusses extensively on the formulation of local traffic network in Kota Kinabalu, Malaysia and the signal settings as referred to the Jabatan Kerja Raya (JKR) using benchmark Webster Model. This paper is crucial for bridging the current traffic network modelling towards advanced modelling techniques and transportation network optimisation strategies to be incorporated in intelligent transportation systems. The traffic responses and results from the Webster model simulation and signalization were reported in this paper as a realistic reference under different case studies including normal traffic and congested traffic scenarios, besides when traffic delays occurred.