



Real-Time Traffic Signal Timing for Urban Road Multi-Intersection

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ABSTRACT

this paper develops a real-time traffic signal timing model which is to be integrated into a single intersection for urban road, thereby solving the problem of traffic congestion. We analyze the current situation of the traffic flow with release matrix firstly, and then put forward the basic models to minimize total delay time of vehicles at the intersection. The optimal real-time signal timing model (non-fixed cycle and non-fixed split) is built with the Webster split optimal model. At last, the simulated results, which are compared with conventional model, manifest the promising properties of proposed model.

KEYWORDS

Traffic Signal Control, Traffic Flows, Real-Time Signal Timing, Release Matrix, Split, Passion Distribution

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