

ABSTRACT

The present disclosure relates to a system and method for determining a traffic condition. The systems may perform the methods to: obtain a length of a road segment, where an upstream intersection and a downstream intersection is linked by the road segment; determine a first queue length of a queue on the road segment at a first time point and a second queue length of the queue at a second time point; determine a duration of the second queue length, based on a cycle length of the first traffic light corresponding to the downstream intersection, a cycle length of the second traffic light corresponding to the upstream intersection, a free-flow speed corresponding to the road segment, a back-propagation wave speed corresponding to the road segment, and the first queue length; and determine whether the second queue length exceeds the length of the road segment.

(Fig. 6)