

Abstract

The present invention discloses a method of boundary flow limiting control strategy of a road network based on MFD and a queue length under telematics; firstly, obtaining traffic parameters, installing all GPS vehicle equipment to vehicles, and sending information in real time, such as latitude, longitude and speed; secondly, delimiting satisfying conditions of the vehicles in a road network area, and determining whether moving vehicles belong to the road network area based on the conditions; thirdly, calculating a distance of each vehicle on each road section arriving at each entry stop line, and finally obtaining a maximum queue length to be compared with a safe queue length to determine whether the vehicles cause a traffic congestion at an upstream intersection or not, the safety queue length is set to be 95% of a length of the road section; finally, performing the flow limiting control on a boundary traffic; when the road network tends to be congested, carrying out a simple boundary flow limiting control on the road network, an inflow rate of the road network is instantly adjusted to avoid an overflow situation on boundary road sections.