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Evaluation of Intersection Performance Under Atc System in Wuhan

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ABSTRACT

In order to accurately evaluate the implementation of Area Traffic Control (ATC) system, two situations were compared in this paper, i.e., comparison of intersection performance under two different operation conditions before and after the application of ATC system. Based on floating car theorem, this paper investigated the average intersection delay and the average vehicle stop times. During the traffic investigation, ArcGIS, GPS, VC++ and other technologies have been applied. In addition, the evaluation indices of intersection performance average intersection delay and average vehicle stop times (Guiyan Jiang et al., 2006) were selected and compared. The results showed that both average intersection delay and average vehicle stop times have been reduced after the implementation of ATC system. Improvement of traffic condition is more obvious under cooperative control status. This paper provided a reference for testing the performance of intersections under ATC system.

KEYWORDS

ATC System, Intersection Performance, Performance Evaluation, Intersection Delay, Vehicle Stop Times

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