Variability of departure headways at signalized intersections

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Abstract

Departure headways at signalized intersections are defined as the time interval between two consecutive vehicle passages over a stop line or any predetermined reference line in the intersection. Departure headways are important parameters in the capacity analysis and signal timing of intersections. Inaccurate headways can create congestion, delays and accidents. Employing a microcomputer and interactive programs to collect, retrieve and analyze data, this study suggests a set of reliable and unbiased departure headways for different queue positions at signalized intersections in the state of Nebraska.
and departure headways at 13 signalized intersections in Los Angeles and proposed a formula for computing the arrival headways at signalized intersections in Ames, Iowa. He found that, on the average, the first straight-through car in each traffic lane enters the intersection 2.6 sec after the beginning of the green period. The second, third, and fourth cars were observed to enter the intersection with average headways of 2.5, 2.5, and 2.3 sec, respectively. Headways for the fifth and subsequent vehicles were found to average 2.3 sec. Following an approach similar to that.