Level of service model for exclusive motorcycle lane.

ABSTRACT

The concept of level-of-service (LOS) is meant to reflect the trip quality a traveler will experience on a roadway or other transportation facility. The present paper illustrates a statistical model for estimating motorcycle level-of-service (LOS) at exclusive motorcycle lanes in order to predict riders' perceptions about the service quality. 261 motorcycle riders contributed in a survey and rated the service quality of 500 m segments of exclusive motorcycle lane as it is shown on the scenes which are videotaped from the rider's perspective. Participants were asked to rate (using predefined scores) the service quality of clips on 6 point scale ranging from excellent to very poor after watching 10 video segments. The resulting linear regression model shows that the mean rider rating from motorcyclists' survey had statistically significant correlations with operational and design characteristics ($R^2=0.62$). This method is hoped to provide the means required in order to develop a procedure resulting in specific feedbacks to be effective for exclusive motorcycle lane level-of-service criteria and thresholds.