

# Evaluation the effect of some traffic characteristics on the safety performance of intersections.

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## **ABSTRACT**

Traffic accidents and traffic delay have a negative impact on the mobility traffic flow due to their huge costs on the transport system. Thus one of the main primary aims for transport policy makers are reducing the negative ef-fect of traffic accidents and traffic delay on the road network. In this study, fixed and random parameters Tobit models have been developed to model the accident rates from 20 intersections in Al-Karakh district in Baghdad City, Iraq. The safety significant of logarithm of annual average daily traffic, the percentage of heavy vehicles and the delay time for both major and minor directions for each intersection on the accident rates were evaluated. The main finding of this study shows that delay has an important effect on traffic accident rates of intersections. Regarding to the effect of other factors on traf-fic accident rates, the result of the model shows that the logarithm of annual average daily flow, the percentage of heavy vehicles for both major and minor directions of the intersection are positively associated with more accident rates.

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