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## **Modeling of Traffic Turning Movement**

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**Abstract :** Pedestrians are the most vulnerable road users as they are more exposed to the risk of collusion. Pedestrian safety at road intersections still remains the most vital and yet unsolved issue in Addis Ababa, Ethiopia. One of the critical points in pedestrian safety is the occurrence of conflict between turning vehicle and pedestrians at un-signalized intersection. However, a better understanding of the factors that affect the likelihood of the conflicts would help provide direction for countermeasures aimed at reducing the number of crashes. This paper has sorted to explore a model to describe the relation between traffic conflicts and influencing factors using Multiple Linear regression methodology. In this research the main focus is to study the interaction of turning (left & right) vehicle with pedestrian at unsignalized intersections. The specific objectives also to determine factors that affect the number of potential conflicts and develop a model of potential conflict.

**Keywords:** potential, regression analysis, pedestrian, conflicts

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