



A Study of the Effects of Road Deficiencies on Traffic Accidents in Iran

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Received: 17 June 2017 ; Revised: 22 August 2017; Accepted: 23 August 2017; Published: 23 August 2017

Abstract: Many researchers have studied different factors effective on traffic accidents. This is, however, among all the factors, road deficiencies have got little attention. In this study we use the results from 'Order Logit' model to review the accident tension model. Based on the results, the existence of the studied factors has been effective of the accidents. Among the road deficiency factors, lack of safety, has been the most important one. Also, non-standard slopes, lack of standard pavement safety, a sudden change in the road shoulder and the tarmac, sharp road bents, lack of proper signs, lack of parking or road shoulders, bad blacktop, lack of vertical signs, lack of light posts and speed humps are among the factors that increase the possibility of car accidents.

Keywords: Traffic, Accident, Order Logit model, Safety.

1. Introduction

Traffic accidents in Iran are counted as the third factor for people's death, which is 5 times higher than the world's medium [1]. Indeed, the number of death from car accidents in Iran equals huge earthquake casualties such as the biggest one in Iran that was Bam's earthquake. The accidents also bring about huge financial loss, which is estimated over 100,000 million rials, being 7 percent of GNP [2]. This is while in developed countries the loss from car accidents is 1.4 to 2 million dollars, which is 1 to 2 percent of GNP [2].

Reduction of traffic accidents has always been the aim of researchers in road safety studies. Therefore, focusing on these issues has attracted a lot of attention. Contrary to many other studies which have focused on the general factors causing traffic accidents, this study tries to care about the road deficiency factors as well. Paying attention to some factors that increase the accident possibility besides other factors can be significant and can help managers decide better.