

# ***Analysis and Evaluation of Pedestrian Accidents in the Highways of Puerto Rico***

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Pedestrians represent one of the highest percents of fatalities in the highways of the United States and Puerto Rico. According to FARS, the maximum percentages of pedestrian fatalities in the United States for the year 2000 were in the District of Columbia (36.7%) and New York (23%). In comparison, Puerto Rico has 32% of pedestrian killed in highways, excluding minor and severe accidents. It is essential to characterize the typical pedestrian been injured or killed in the roads of Puerto Rico. Drivers and pedestrians in the island have different characteristics and safety perceptions that require specific considerations in transportation engineering. Is possible that the typical driver expects pedestrians on day light but do not expects them in night times creating a safety problem during this time. Also, the lack and discontinuity of sidewalks, changes on land uses from rural to suburban, lane widening or priorities for the automobile could affect pedestrian behavior and safety on highways. In addition, the combinations of speed, inadequate sight distance and illegal or inadequate pedestrians' crossings could be affecting drivers' expectations of the pedestrian behavior increasing fatality probabilities. In order to suggest improvements to the highway safety in Puerto Rico is important to design a guide or educational campaign to reduce the accidents with pedestrians in the island. To achieve the goals of this research, the basic tools include but are not limited to the accidents database of the Traffic Safety Commission, Department of Transportation and FARS; surveying and/or interviews in high accidental zones; historical data of the accidents location from the police headquarters and public; and statistical methods. Phase I of this research is limited to the West Region of Puerto Rico (from Añasco to Guánica). This phase is fundamental to provide basic information and experience in order to continue with other phases. Next phases will incorporate North, South and East Regions of Puerto Rico.