Risk Factors for Highway Construction Work Zones in Georgia

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Highway or roadway work zones represent a significant hazard not only for construction workers but also for drivers. Yearly hundreds of construction workers are killed and thousands are injured in accidents associated with passing motorist, construction vehicles, and equipment within construction work zones. This paper studies the uniqueness of car accidents occurred in Georgia construction work zones from January, 2008 to December, 2009 using a database of crashes in Georgia provided by Georgia Department of Transportation (GDOT) and identifies the important accident factors. The most important findings of this study are: Fulton, Gwinnett, and Cherokee County registered the highest number of accidents; Cherokee, Richmond, and Burke County occurred the highest number of accidents for each 10,000 population; males were the riskiest gender since they were responsible for over 60% of the crash accident; drivers between 25 and 34 years old were responsible for 21.8% percentage of car accidents; the highest number of car accidents (37.6%) occurred between 10 am and 4 pm; adverse weather conditions represent a higher risk on work zones than on non-work zones; and work zones represent a higher risk on interstate roads than on other type of roads. The finding of this study can be useful for the highway contractors for their preplanning to avoid or minimize work zone accidents.

Key Words: Construction, Risk, Accident, Work Zones, Safety