

Project Title: Statistical Analysis of Vehicle Crashes in Mississippi Based on Crash Data from 2010 to 2014
Project Abstract (Brief Description): The current traffic safety situation in Mississippi has been of great concerns. The MDOT crash dataset shows that more than 640 thousand traffic crashes on Mississippi highways were recorded over the period from May 2010 to February 2014 only. Each year, traffic crashes caused around 600 fatalities in Mississippi in the past three years in 2011 through 2013. But the fatality rate per capita, assessed at about 20 fatalities per 100,000 people, which is almost twice as high as the US average level, is actually among the highest in the country. The fatality rate per vehicle miles travelled, over 1.5 fatalities per million vehicle miles travelled (VMT), is also much higher than that of the nationwide average. The National Highway Traffic Safety Administration (NHTSA) of the USDOT has identified the following major causing reasons for traffic crashes: 1) DWI (driving while intoxicated); 2) Speedy; and 3) distracted driving. As a typical rural state, Mississippi shares common characteristics with other US states in highway layout, design, and construction, but is quite different from other states in terms of social economic attributes and driving behaviors. Over the past decades, numerous research studies have been conducted in the U.S. through vehicle crash analyses under various traffic and roadway condition, location, population, and social-economic characteristics. However very few similar studies were conducted for the vehicle crashes in Mississippi.
Describe Implementation of Research Outcomes (or why not implemented) - In the first task, characteristics of vehicle crashes in Mississippi were indicated. Initial analysis of the MDOT crash data showed that more than 15% of fatalities occurred in the coastal counties in 2013, which means vehicle crashes in this area call for extra attention. Second task, literature review was conducted to locate effective methods to analyze the crash data. Regression was applied to the crash data analysis by researchers in recent years.
Impacts/Benefits of Implementation (actual, not anticipated) <i>To be determined upon conclusion of the project:</i>
Web Links:
Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): 57.5k USDOT + 28.75k matching = 86.25k total
Project Start and End Dates: 11/01/2015 – 10/31/2017. A no cost 1 year extension was granted.
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