

Project title

Development of a Tool for Documenting, Tracking, Recording, and Analyzing Improvements to Intersection Sites and Roadway Departures in Curve Locations

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Project description

Intermodal transportation system planning, design, improvement, performance evaluation or economic assessment include wrote safety improvements because they lower the overall cost of transportation. State Departments of Transportation (DOT) are charged with the development and implementation of Strategic Highway Safety Plans (SHSP) as required by the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). Strategic Highway Safety Plans (SHSP) have broader impacts on passenger and freight transportation to the impact on the overall cost of the transportation system. Many states' SHSPs, as Louisiana's, include an infrastructure focus area that addresses the locations of the majority of serious injury and fatal crashes specifically intersections and roadway departures in the vicinity of curves. Specifically, the Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP) states that "Intersection safety is a national, state and local priority. Intersections represent a disproportionate share of the safety problem. As a result, organizations such as the FHWA, NHTSA, the Institute of Transportation Engineers (ITE), the American Association of State Highway and Transportation Officials (AASHTO), the American Automobile Association (AAA), and other private and public organizations are devoting resources to help reduce the problem. Louisiana has previously been recognized as a "focus" state for intersections by the Federal Highway Administration which was the result of a number of factors including a higher than the national average of crashes at intersections. Subsequently, Louisiana's SHSP implementation strategy calls for the "aggressive deployment of low cost safety treatments in a systematic manner based on both historic data and roadway characteristics."

Many states are at a similar stage of their deployment of the SHSPs and have the same problems with respect to intersection crashes and road departure crashes. Thus, evaluating road safety improvements is a common challenge among all states DOTs. To assess the effectiveness of the deployed improvements a system is required that includes a data tracking capability and an analysis tool. Such a system that tracks and analyzes the effectiveness of the safety improvements will allow the DOTs to make better decisions in the future based on crash frequencies at the treated locations. The specific objectives and scope of the project are to provide a software tracking tools to improve decision-making for highway safety. This will be accomplished by a review of the existing software available on the market and the process of adapting the software or build a new software to meet specific requirements and needs of DOTs.