Project Title:

Identify High Crash Risk Locations for Rural Roadways: A Systemic Approach to Reduce Severe and Fatal Traffic Crashes in Louisiana and Mississippi

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TRB Keywords:
Highway safety, risk analysis, risk assessment,

Funds Requested:
$27,500 requested from UTC, $27,500 matching funds from UL Lafayette, for a total of $55,000.

Project Summary:
While identifying and treating "black spot" or "sites with promise" can increase significant safety benefits at treated locations, some crash types and facility types cannot be adequately addressed by these methods. These crash types and facility types are characterized by high number of crashes across the roadways with low traffic volumes, such as roadway departure crashes, and fatal and injury crashes on almost all rural highways. These types of locations do not lend themselves to the site-specific detection methods. An FHWA publication "Using "Risk to Drive Safety Investment" pointed out that "fatal and other life threatening crashes often are distributed widely across state and local highway systems with few individual locations experiencing a high number or sustained occurrences of severe crashes". For example although about 80% of crashes happen on urban roadways rural and more than half of the fatalities and injuries happen on rural and local streets while traffic volumes are low each year in Louisiana as shown in Figure 1. These fatal and injury crashes scatter at all high risk locations that are hard to be identified by the commonly used methods for improvements. Identifying, diagnosing and targeting high crash risk locations at rural and local roadways are critical to have a sustainable crash reduction progress for the state "Zero Death Destination" objective.