

1.4.1 TDOT's Answer to Evolving Highway Safety Emphasis

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The Tennessee Department of Transportation has been analyzing highway crash data for over forty years. This data is used to identify highway locations that have safety issues that can be addressed in many ways. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU) created several new emphasis areas for highway safety. The existing tools available to Tennessee Department of Transportation Safety Planners were not adequate to address all of these areas. TDOT needed a comprehensive, flexible tool for analysis of highway safety data. TDOT planners determined that they needed a program that could use the existing highway inventory database to find problem areas that would address the changing areas of emphasis. SAFETEA-LU emphasized Intersection Safety, Local & Rural Road Safety, Pedestrian & Bicycle Safety, Roadway Departure Safety, and Speed Management Safety. Existing tools could not address all of these concerns.

This led to the development of a program that could create a base data set that combined highway data and crash history. Instead of just adding up the number of crashes for each location, crash attribute data is stored on these records. This allows planners to query this data for specific data both singularly or in combination with other attributes. This flexibility of being able to change the way locations are queried lets potential projects evolve as criteria changes.

The new program does not stop at just finding potential safety projects. As candidate projects are put on lists for further investigation, each list can be managed to allow tracking of the disposition of the potential projects. As the status of potential projects changes throughout the analysis and evaluation process, status codes and comments can change to reflect these developments.

This has been a valuable tool in the Highway Safety Planning area of TDOT. Flexibility is the key to its success. Because of this flexibility, TDOT is making better choices for how its safety funds are spent to get the best results for the safety of its drivers.