South Carolina
Department of Transportation

CLEMSON UNIVERSITY

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SUMMARY REPORT

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South Carolina
Department of Transportation
955 park Street
P.O. Box 191
Columbia SC 29202

THE RELATIONSHIP OF SOUTH CAROLINA DAMAGE CLAIMS AND LAWSUITS TO ROADWAY ENGINEERING SAFETY ISSUES

Tort liability is of concern to public agencies, especially transportation agencies, because money spent defending tort claims and lawsuits and compensating crash victims is money that cannot be spent improving the safety of state highway systems. Consequently, it is of importance how state transportation agencies manage risk relating to claims and lawsuits filed against them for crashes on their highway systems. The South Carolina Department of Transportation (SCDOT) processes approximately 1000 such damage claims per year and is engaged in about 100 lawsuits per year.

Through an analysis of SCDOT's claims and lawsuits, it is possible to discern a pattern or gain information about the frequency and types of claims and lawsuits, and the corresponding crash or incident that gave rise to them. The desired result is to provide SCDOT with a proactive approach for eliminating or ameliorating the types of highway conditions that are alleged by plaintiffs as contributing causes of crashes or incidents. Through such an approach, future lawsuits and claims can be reduced.

The objectives of this study include:

- Analyzing factors associated with claims and lawsuits that are important for risk identification and management;
- Identifying methods to respond to claims and lawsuits in a consistent manner statewide and prevent claims and lawsuits by identifying and reducing the perceived and real hazards that generate them; and,
- Identifying proactive measures, such as reducing risk factors, and reactive measures that include handling claims and lawsuits and amounts paid to claimants to increase the effectiveness of the risk management system.

A multitude of tools (i.e., spatial analysis, descriptive statistics, a nationwide survey, regression trees, SCDOT employee interviews, and fault trees) were employed to achieve these objectives. While the initial expectation of the project was to focus on engineering countermeasures that could be implemented to reduce the frequency and extent of damage claims and lawsuits, many of the analytical tools utilized in this study revealed more pressing problems related to:

- Need for documented and standard operating procedures (SOPs) for processing, handling, investigating, and making recommendations on whether or not to pay or deny claims;
- Inconsistencies in handling of claims across districts and counties in the state;

- Redundant data entry and excessive record handling between the county and legal services office;
- Limited ability to track claims and lawsuits by the DOT during the handling process;
- Insufficient data capture, which does not allow for proper identification of the location of claims or matching of claims to crash records or for informed decisions on claims; and
- Absence of performance measures and associated processes to evaluate the SCDOT risk management program on a regular basis.

The following list represents the prioritized recommendations identified in the project as a result of the completed research tasks.

- Establish a SCDOT Tort Liability/Risk Management Committee-There are several pressing needs (detailed in the "Claims avoidance strategies" of the final report) to which this committee will dedicate a significant amount of time, including: approval of a standard claims handling process, establishing SOPs for all steps in that process, identifying all personnel responsible for carrying out SOPs at all levels of the agency, establishing performance measures and targets for the tort management system as a whole that can be reviewed and used to refine the system, conducting quarterly meetings to review performance reports and making necessary changes or adjustments to procedures, policies, and practices.
- Implement Enhanced RMIS Enterprise-wide-This recommendation includes expanding the current Risk Management Information System (RMIS) to develop and utilize a system-wide electronic database for claim and lawsuit handling. Benefits include reduction in redundant paper work, efficient data sharing, effective claims tracking and the potential to improve data completeness and accuracy that will lead to more informed decisions on claims.
- Conduct training on SOP and RMIS-Training the county level employees responsible for handling claims will be very effective at improving the quality of claims data and consistency of claims procedures and recommendations. Training for the proper use of RMIS will also be required for effective implementation.
- Establish Quarterly Meetings with IRF Representatives, Retained Counsel, and SCDOT Counsel-Since all decision-making with regard to litigation rests with the IRF and its retained outside counsel, at the very least, there should be quarterly meetings to address recent and ongoing litigation and how strategies are in line with long-term goals set by the SCDOT.
- Implement Countermeasures to Reduce Claims and Lawsuits-The top ten causal factors for claims based on frequency include: 1) Vehicle damage from potholes, 2) Vehicle damage from debris in the road, 3) Vehicle damage from debris thrown from DOT mowers, 4) Vehicle damage from paint splatter, 5) Vehicle damage from manholes, catch basins, drop inlets, or grates, 6) Property damage from mowing, 7) Vehicle damage from debris falling from DOT trucks, 8) Vehicle damage from low shoulder or elevation difference at Edge of Pavement (EOP), 9) Pedestrian personal injury from a trip or fall due to uneven surfaces, 10) Vehicle damage from either potholes at EOP or broken EOP.

  The top ten causal factors for lawsuits in terms of the frequency are 1) Pedestrian personal injury from a trip or fall due to uneven surface, 2) Vehicle crash from water on road surface, 3) Pedestrian personal injury from a trip or fall due to manholes, catch basins, drop inlets, or grates, 4) Vehicle crash due to obstructed sight distance, 5) Vehicle crash due to a vehicle's failure to yield right of way (ROW), 6) Vehicle damage from potholes, 7) Vehicle crash due to a low shoulder or elevation difference at the EOP, 8) Vehicle crash with a DOT or contractor vehicle, 9) Vehicle crash due to fallen tree in roadway, 10) Vehicle crash due to improper intersection design. The report includes a list of countermeasures for the identified top causal factors for claims and lawsuits.

  With these recommendations, SCDOT can improve the effectiveness and efficiency of their tort liability system and provide increased oversight and management to ensure that the long term goals of the system are met.

The study was conducted by Clemson University under the guidance of Drs. Ronnie Chowdhury and Jennifer Ogle. For further details contact the PI, Dr. Chowdhury, at 864-656-3313 or mac@clemson.edu.