STATE OF NORTH CAROLINA
# DEPARTMENT OF TRANSPORTATION
## DIVISION OF MOTOR VEHICLES

ROY COOPER
GOVERNOR

JAMES H. TROGDON III
SECRETARY

**Date:** April 30, 2018

**To:** Chairs, House of Representatives Committee on Transportation Appropriations
Chairs, Senate Appropriations Committee on Department of Transportation

**From:** Torre J. Jessup, Commissioner, North Carolina Division of Motor Vehicles

**CC:** Secretary James H. Trogdon III, Secretary, North Carolina Department of Transportation
David L. Howard, Chief Deputy Secretary, North Carolina Department of Transportation
Frank Winn, Chief Information Officer, North Carolina Department of Transportation

**Subject:** Crash Reporting Modernization

The North Carolina Division of Motor Vehicles' crash data has market value to private industry such as insurance companies and has been a reliable source of revenue for the Division. However, its highest value is to the public when it is used to improve the safety of our roads and highways. Such data is of utmost importance to the successful implementation of highway safety projects such as North Carolina's Vision Zero campaign. The NC Vision Zero initiative is a statewide program being led by the Institute for Transportation Research and Education (ITRE) at North Carolina State University. NC Vision Zero's goal is to eliminate roadway deaths and injuries using data-driven prevention strategies designed to eliminate all traffic fatalities and severe injuries, thus increasing safe, healthy and equitable mobility for all citizens.

The National Highway Traffic Safety Administration (NHTSA) conducts peer evaluations of the Division's Traffic Records Section's system capabilities every five years via the Traffic Records Assessment. NHTSA provides coordinated guidance, outreach, best-practices, training and technical assistance designed to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of state crash, driver, vehicle, roadway, citation and adjudication, and injury surveillance databases. NHTSA helps states improve their traffic safety data collection, management and analysis capabilities through evaluation, training and technical

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assistance. North Carolina's 2017 assessment of the Division's Crash Program did not meet expectations in three of the six areas that were reviewed. This report aims to provide a summary of the Division's path toward modernizing the current crash reporting system to enhance its ability to support highway safety efforts while meeting private market demand for the data under the Driver Privacy Protection Act.

**Request for Proposal Process**

The North Carolina Department of Transportation requires a modern crash reporting system that is compliant with Session Law 2016-94 (2016 Appropriations Act). This law mandated that the Division of Motor Vehicles seek to procure a contract with a private vendor for the statewide maintenance of the Crash Reporting Program.

Pursuant to the above referenced Session Law, a Request for Proposal (RFP ITS-300129) was issued on October 31, 2016. Four vendors responded to the solicitation and all were removed from consideration due to non-responsiveness or non-compliance of the RFP specifications and the solicitation was cancelled.

**University Collaboration approach to Modernize the Crash System**

One of the highest responsibilities of the Division of Motor Vehicles is to promote highway safety. Moving forward with modernizing IT systems requires a commitment to finding solutions that align with that responsibility. The Division is committed to identifying opportunities to collaborate with organizations that align with its mission, vision and values. Such an opportunity exists with the University of North Carolina at Chapel Hill's Highway Safety Research Center (HSRC) which is prepared to lead a collaborative, intra-institutional team to modernize the Division's crash system. The collaboration is comprised of the HSRC, the Renaissance Computing Institute, the Odum Institute and Dr. Bob Scopatz:

- HSRC has a long history of supporting the Division's efforts to improve safety on the state's roadways and a successful track record of helping the state's transportation organizations envision and develop new tools to support its important work. For example, Click It or Ticket, Watch for Me NC and the NC Governor's Highway Safety Program's STEP Reporting database all started with HSRC support.
- Renaissance Computing Institute (RENCI) is a leader in data science that develops and deploys data science cyberinfrastructure, analytics and decision support systems. The organization brings together communities of domain scientists, data scientists, technology

practitioners and end users who apply data to catalyze innovation and knowledge discovery. Facilities wise, RENCI has a 2,000 square foot data center in Chapel Hill that has room for 40 racks of High Performance Computing, Storage, and Networking equipment.

- The Odum Institute has unique capabilities that can be leveraged to aid the UNC community in its support of these datasets and their management and delivery; particularly data archiving. In developing a repository of crashes back to 1990, Odum is well positioned to address an important aspect of the proposed crash reporting system. Odum also assists in data management planning and helps researchers develop data management plans and cyberinfrastructure to carry out those plans during their projects.
- Dr. Bob Scopatz is a nationally recognized safety data expert and has worked in the area of crash data systems and data improvement for over three decades. Dr. Scopatz worked with the State of Connecticut to develop a law enforcement data business plan, review their crash data system redesign, and create a project for university-based assistance at the University of Connecticut (UCONN) with safety analysis and a spatial and statistical analysis platform.

The modernization project will likely span five years from planning and design to full deployment. Costs are estimated to range from five to eight million dollars while current revenue is approximately one million dollars per year. The current funding for this project is $1,769,097. The project also has support and funding potential from the Governor's Highway Safety Program and NCDOT's Transportation Mobility and Safety Division. Ongoing predictive analytic support may be provided through a separate effort with SAS Institute.

The Division is enthusiastic about this collaboration with the Highway Safety Research Center at UNC Chapel Hill and working toward a state-of-the-art crash system. The system's development will provide real-world experience for UNC students. This well-developed system will be utilized for highway safety research while also fulfilling private industry demand for crash data.
Please let me know if you need additional information regarding this effort.