



**I-95 CORRIDOR COALITION
YEAR 16
SCOPE OF WORK FORM**

Project Title: Study Crash Data Reporting Methods

Project Code: 2-2-16-7C

Coalition Funding Amount: \$125,000

Program Track: 7 (Safety)

Program Year: 16

Project Manager: Lorrie Laing, Cambridge Systematics

SECTION A - BACKGROUND

Description:

Crash data collection and availability has long been very limited, yet is essential to improving safety and efficiency on the Corridor's transportation network. Such data can be used to identify safety hot spots along roadways and reasons for crash occurrences. Results can identify areas which have need of specific safety applications, technologies, programs, practices, enforcement, and other activities. The timely transmission of incident crash data is key to identifying areas and situations particularly prone to incidents and their causes, particularly with respect to commercial vehicles. Frequently, however, this data is not timely received by law enforcement or DOTs and other entities, and oftentimes the data is a year or more outdated. Additionally, original accident reports are frequently illegible.

This project will study current crash reporting systems and procedures in place in the I-95 Corridor, and compare results from states which utilize these systems with those that do not to determine if these systems enable more timely and accurate data provision to law enforcement, departments of transportation, DMVs, and other entities. Supplemented with a literature review, the study also will identify the lead agency currently responsible for crash data collection and dissemination in each of the I-95 Corridor States, along with MOUs and the associated policies and procedures currently utilized. Further, the study will include a review of accident data reporting procedures and forms to determine the viability of a coordinated effort to develop an improved reporting methodology, using technology as practical, so that the multiple agencies (law enforcement, DMV, DOT, etc.) can promptly benefit from the obtainment of accurate accident data. Such technology could include use of GPS on-scene to accurately record accident location as well as other electronic data collections means. In addition to timeliness and accuracy of data collection, impacts on roadway clearance times through the use of such electronic accident data collection technology will be studied.

Resulting from this study will be a report and a presentation identifying, at a minimum:

- Current state of the practice with respect to accident data collection and reporting in I-95 Coalition States, including the process and procedures, methodologies, policies and legislation; lead agencies responsible for such data collection; implementation requirements including costs, training, multi-agency/multi-disciplinary reporting requirements and procedures; and other such pertinent information;
- Benefits and downsides of electronic data accident reporting systems and procedures currently in place;
- Recommendations as to Best Practices for accident data reporting including methods for timely and accurate data collection, transmission, dissemination, and utilization.

Objective:

The objective of this project is to identify the current state of practice and best practices in I-95 Corridor Coalition States' crash data collection and reporting systems to improve the timeliness, accuracy, and accessibility of crash data among the Corridor states.

SECTION B - TASKS AND DELIVERABLES

Task 1: Obtain current state crash collection and reporting systems and procedures.

Task 1 Description

The objective of Task 1 is to obtain comprehensive and detailed information about the present status of each state's crash data collection and reporting system. The information will be collected from the states, from various online databases, and other sources as deemed necessary. To gain a comprehensive understanding of the present status of crash data systems in each state, the following information will be collected at a minimum:

- Key contact information - lead agency responsible for maintaining the state's crash database, state police accident report (PAR) data manager, lead Fatality Analysis Reporting System (FARS) analyst, TRCC members.
- Legislation, regulations, policies and procedures - impacting crash report collection, submission, accessibility; includes state crash data repository policies and procedures; and multi-agency/multi-disciplinary reporting requirements, procedures and memorandums of understanding (MOUs).
- Crash report forms(s) - basic form and supplementary forms, number and description of fields, number of fields compliant with the Model Minimum Uniform Crash Criteria (MMUCC), documented instructions for completing the form(s).
- State planning documents - Traffic Records Strategic Plan, Strategic Highway Safety Plan, and Highway Safety Plan, most recent Section 408 grant application, and most current Traffic Records Assessment report.
- Crash data related performance measures -used by the state agency responsible for maintaining the crash database (e.g., days from crash to report submission, number of reports missing key data fields), and law enforcement agencies (e.g., time to complete PAR, roadway clearance times, PAR quality control review time, number

of reports returned for incomplete/illegible information); and related benchmarks, statistics and trends.

- Process descriptions - for crash report collection, reporting, and distribution to end users (e.g., type, distribution frequency, and audience for existing data compilation reports).
- Technology used - type of technology and software, agency/personnel using the technology, per unit and system costs, state or private vendor provided software, and project details and evaluations of pilot projects conducted to deploy crash data technology.
- Training - type of training offered, topics covered, targeted audience(s), entities providing training, requirements, number of individuals trained; instructor requirements and compensation; and cost per participant, per course, and cost of overall training program.
- Evaluations - results of crash data system evaluations and information on evaluations currently in process.

The state planning documents are available through the state highway safety offices, Traffic Records Coordinating Committees, and other sources. These documents will help ensure that critical system and process information can be obtained when it is unavailable from the agency responsible for the state crash collection and reporting system. Telephone interviews will be conducted with appropriate personnel and others that they recommend in each state to verify information, and ask follow-up questions. On-site visits to conduct interviews and observe processes will be conducted on an as needed basis, be limited to one per state, and occur only if it will add value to the scope of the project. Attendance at Coalition Program Track meetings or with NHTSA to collect project information will also be considered if appropriate. Where practical the information collected will be entered into a series of spreadsheets for ease of use.

Task 1 Deliverable

- Technical memorandum providing a compilation of current states' laws, regulations, and policies; procedures and forms; sample MOUs relating to crash data collection and reporting; training programs; and a list of key crash data contacts by state. Information from this technical memorandum will be included in the project's Final Report.

Task 2: Compare state crash data systems to identify the impact of technology on the data collection and reporting processes.

Task 2 Description

The objective of this task is to compare key elements of the states' crash data systems and related processes to determine the impact of technology on data collection and reporting. Both the benefits and disadvantages of technology will be studied.

Law enforcement has a significant roll in the crash data collection process and therefore may benefit from the use of technology. In those states where law enforcement has deployed technology, its use both on-scene and through the agencies' administrative

process will be studied. As an example, the impact on PAR completion times, roadway clearance times, and PAR quality control review times will be included when data are available from the states.

Another area of focus for the study will be at the end of the process. The ability to provide more timely and accurate final crash data to law enforcement agencies, DOTs, DMVs, and other key stakeholders through the use of technology has resulted in some states providing access to crash data within one week of the crash or sooner. “Real-time” data allows law enforcement and transportation safety professionals to respond more quickly to escalating trends and “hot spots” and helps ensure that limited resources are allocated to the areas with the greatest need.

To focus on the demonstrated impact of technology from collection through reporting two comprehensive flowcharts and process timelines of crash data will be developed for each state. The first set will begin with the crash and end with submission of crash data to the designated state crash data repository. The second set will start with receipt of crash data by the state data repository and end with dissemination of finalized data to end users. These flowcharts and process timelines will allow the impact of technology on each part of the process to be identified and quantified.

Task 2 Deliverable

- Technical memorandum summarizing the findings and conclusions regarding the impact of technology on crash data collection and reporting processes. Information from this technical memorandum will be included in the project’s Final Report.

Task 3: Compare state crash data systems and processes to identify best practices.

Task 3 Description

The objective of this task is to compare key elements of the states’ crash data systems and related processes to identify efficiencies and best practices.

The information collected in Task 1 will be used to analyze and compare the various state crash data systems. Key elements of the data collection and reporting processes will be identified and cross-referenced with NHTSA’s six data quality performance measures (timeliness, accuracy, completeness, uniformity, integration, and accessibility). The information will be added to the spreadsheets compiled in Task 1 and presented in a series of charts. Costs will be included when applicable. Combined with the two comprehensive flowcharts and process timelines of crash data developed in Task 2, these activities will allow us to identify best practices and quantify the impact each has on their part of the process.

A review of the various state strategic plans will reveal what plans states have to improve crash data collection and reporting methodology. A gap analysis will be conducted to identify funding sources associated with planned data improvements and gaps where states will need additional funding to implement solutions identified in this project.

Task 3 Deliverable

- Technical memorandum comparing the state crash data collection and reporting systems, and summarizing the findings and conclusions regarding best practices, cost efficiencies and potential funding source for crash data collection and dissemination improvements. Information from this technical memorandum will be included in the project's Final Report.

Task 4: Develop a project marketing plan.

Task 4 Description

The purpose of Task 4 is to produce a brief "marketing" plan and one-page project description/synopsis to effectively communicate the information derived through this project to all of the I-95 Corridor Coalition States.

Task 4 Deliverables

- "Marketing"/Project Results Dissemination Plan in electronic form; and
- One-page Project Description/Results Synopsis in electronic form and 50 color copies.

Task 5: Produce draft and final project reports.

Task 5 Description

Under this task, a draft and final report for the project will be produced summarizing the objective, approach, findings, conclusions, and recommendations of the study. The report will include an executive summary and a technical report. A draft report will be compiled and provided to the appropriate Coalition staff for comment. Feedback received from the draft review will be used to revise and finalize the report.

The Final Report will provide the Coalition States a comprehensive and easy-to-use reference tool which identifies:

- Current state of the practice with respect to accident data collection and reporting in I-95 Coalition States, including the process and procedures, methodologies, policies and legislation; lead agencies responsible for such data collection; implementation requirements including costs, training, multi-agency/multi-disciplinary reporting requirements and procedures; and other such pertinent information;
- Benefits and downsides of electronic data accident reporting systems and procedures currently in place; and
- Recommendations as to Best Practices for accident data reporting including methods for timely and accurate data collection, transmission, dissemination, and utilization.

Upon Coalition staff approval of the Final Report, the brief Marketing Plan produced under Task 4 will be implemented. A PowerPoint presentation, that can be adapted for use before general or technical audiences, will be provided detailing the objective, approach, findings, conclusions, and recommendations of the study. A trip within the Coalition states to provide project results and identified best practices at a Coalition meeting is included in the budget. At the discretion of the Coalition, an optional webinar can be conducted in place of the meeting presentation if meeting travel is limited due to state travel restrictions.

Task 5 Deliverables

- 50 color copies of each report;
- Electronic copy of all reports;
- Copy of final report for posting to I-95 CC website;
- Execution of the brief Marketing Plan produced under Task 4;
- PowerPoint presentation; and
- Project result/best practices presentation or webinar to Coalition members.

SECTION C - BUDGET

General Budget Information:

Total Project Costs: \$125,000

Total Coalition Funds: \$125,000

CONTACT INFORMATION

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