

## Utah

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**Project Title:** Crash Management Information System

**Project Description (three sentences or less):**

Nominating Person Contact Information:

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**Project Manager Contact Information:** (if different from above)

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Title:

Agency and Office

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**Lead Agency for Project:** Utah Department of Public Safety

**Participating/Cooperating Agencies (if any):**

(Additional members of project team and their contact information may be provided as desired.)

**Which National Agenda goals apply?** (May be numbered 1-6 corresponding to the order given in the original document as well as to the rephrasing of the goals provided on the Best Practices web page).

1

2

3

4

6

**Which steps in the management process does the project support?** (Refer to the steps listed on the Best Practices web page. To avoid confusion with the numbered goals, use the wording provided and not the numbers. For example, say "Identify Problems" instead of just "2")

Establish Safety Goals

Identify Problems

Implement Programs

Monitor Program Operations

Evaluate Effectiveness

**Reference the priority in your traffic records strategic plan to which this project applies:  
High**

**Project Cost:** planned \$: 485595.00                      actual \$: 342113.00

**Extent of Project Implementation:**

The Department of Public Safety, Highway Safety Office (UHSO), has embarked on a program to unify three multi-disparate databases and improve timeliness and quality of traffic records. This includes working with large and small law enforcement agencies statewide to open communication between those agencies and the State and encourage submission of electronic records. Data quality, importance and the uses of the crash data were focuses of training sessions with law enforcement agencies conducted statewide.

**Summary of Project Benefits: What was improved, who benefited, and how?**

Lines of communication have been opened to agencies providing a mechanism of feedback on crash and citation information that has been sent to the State. Regionalized training, to include multi-jurisdictional participation, is in progress to train officers on data integrity issues. Utah has increased the percentage of agencies submitting electronically from 3% to 28% since 2009 to date, showing marked progress towards its 100% goal. Local law enforcement agencies have really begun to “own” their data. Sharing of their data and its high quality has become as important to them as it is to the State partners.

**Project Description:**

**Describe the major process steps for your project, including any unique aspects that enhanced success:**

Historically, Utah has had three disparate crash information systems which has been a long standing issue with the State of Utah’s Crash information System.

- The Centralized Crash Repository, built in 2006, by the Utah Department of Technology Services, receives and holds the electronic crash records.
- The Utah Department of Transportation maintains the Safety Management System. The Traffic Records Division at UDOT maintained staff to enter the paper crash forms into their system. This system also received a copy of the electronic crash records from the Centralized Crash Repository.

- The Utah Department of Public Safety Driver License Division, by statute, receives the paper crashes from the law enforcement agencies. They maintain a document management system, holding the scanned images of the crash records. Driver License Division also has access to the electronic crash records from the Centralized Crash Repository. The Driver License Division maintains their system for public record dissemination.

The Safety Management System uses their system for roadway information. By default over the years, the Safety Management System has become the most complete database in the state.

Timeliness, accuracy and completeness issues certainly have made gains over the past years, based solely on technological advances. However the need for centralized data and one group to manage the crash information has grown exponentially with the technological advances. Business operations of the crash information management system are addressed with this project. Some concerns with the current system are the :

- old system is still in use without edit checks which provides bad data to the new repository;
- lack of monitoring of users on the old system as well as the new system;
- lack of a coordinated process to bring new agencies online;
- lack of data quality management, and
- lack of buy-in from agencies across the state

Because of the scope of this project, there were several implementation steps, some of which occurred simultaneously and quickly. Others took quite a bit longer to complete, encountering their unique set of challenges along the way.

Project deployment began with hiring a database manager/programmer to review, monitor and maintain the Centralized Crash Repository on a full-time basis. This person also acts as a liaison with the vendors supplying crash application to the local law enforcement agencies. The crash applications supplied by vendors must be tested by the State for compliance with Repository standards prior to allowing the local agencies to submit their crash data. The database manager/programmer has the responsibility to work with the vendors during the compliance check. Once a jurisdiction begins submitting electronically, monitoring of the data begins. Initial monitoring reports have been written to locate data issues in “real-time” so that they are corrected quickly. As we learned from previous systems, it is easier to be proactive in data integrity issues than correcting tens of thousands data fields after the fact.

The next step of the project was to hire a Law Enforcement Liaison to work with the local law enforcement agencies on their electronic crash submittal. Up until now, there has not been anyone actively engaged with the local law enforcement agencies. Involving them with their crash submittals, assisting them in data challenges and offering training has been an invaluable encouragement to having agencies transmit their crashes in a timely manner. As law enforcement agencies begin the process of submitting their crashes, the LEL monitors their crash data for errors. Monitoring the incoming data has proven itself very useful. Through a State web-service, the individual agencies data collection vendor can electronically submit and get instant data validation checks. This allows officers real-time notification of data errors which

can be corrected in the field before a final submission of data. Using this process we have been able to identify programming bugs with the vendor's products and the State web front, as well as pinpoint data quality training opportunities with the agencies. One side benefit has been the large increase in electronic citation records which are then electronically sent to the State Office off the Courts for filing. This has also forced officer's to correct data at the time of submission, and learn from their experience of validation errors, rather than relying on records clerks to later correct the data.

To replace the data entry activities previously conducted by the Utah Department of Transportation, the Highway Safety Office hired six data entry technicians. These staff members are responsible for entering the paper crash forms as they are received by the Highway Safety Office. Entering the data directly into the Centralized Crash Repository through the web front provides users such as the Utah Department of Transportation, Highway Safety Office and Driver License direct access to the crash records, in the same way as the electronic records.

Under the direction of the Utah Traffic Records Advisory Committee, a Crash Working Group was created to focus directly with the challenges of collecting crash data. With the recent crash project, membership was expanded to include agencies that are submitting electronically, as well as, representatives from the vendors supplying the crash application forms. Since April 2010, local law enforcement participation at these meetings has grown from 3 to 21. These meetings are a means of providing to the group program updates, agency updates and more importantly to discuss issues that agencies are experiencing with submitting their data. Benefits of an open forum with members of state agency users, local law enforcement, and vendors are group resolutions and group discussions of similar challenges.

Training sessions on completing Utah's crash report were conducted in February 2011. There were 27 sessions conducted in 13 locations across the State. Topics included the uses and importance of the crash data, use of the crash data in their own communities and most importantly the most common errors on the crash reports. Session attendance was mainly by the local law enforcement agencies. This was the first time the State has have ever conducted this type of training with agencies. Several agencies asked the Law Enforcement Liaison to provide the same type of training at their specific location.

**Provide the evidence and reasoning used to determine the success of the project:**

The goal of the project is to encourage local agencies to begin submitting crashes electronically instead of mailing hard copies in for manual entry. As mentioned, prior to this change, there hadn't been a resource fully focused on working with these agencies to see that the data is complete and accurate, much less actively transmitted. In 2009 there were 3 agencies submitting crashes electronically, accounting for 14,248 crashes. There are now, 37 agencies submitting data electronically, these agencies have submitted over 21,000 crashes to the Central Crash Repository, an agency increase of 28%.

Benefits of an open forum meeting with the Crash Working Group with members of state agency users, local law enforcement, and vendors are group resolutions or group discussions of similar challenges. Evidence of success can easily be measured by the growth of participation of the meetings. These meetings are held once a month. Since April 2010, local law enforcement participation at these meetings has grown from 3 to 21. We have been able to discuss the issues

as they occur and work with the vendors or State database manager to find solutions. This has meant less down time for electronic submission.

Open communication has been the best indicator for the success of this project. As with this recent Crash DI9 Training sessions conducted in February around the State. The sessions focused on the local agencies and as can be seen by the following graph.

Crash DI9 Class Participation	
Overview:	
Number of County Sheriff Attendees	118
Number of City PD Attendees	168
Number of UHP (Includes 2 Section Secretaries)	15
Number of School Law Enforcement	11
Number of Other Attendees	7
<b>Total</b>	<b>319</b>

Evaluation results from the training sessions indicated overwhelmingly that the information was helpful and answered their questions. Many stated they felt it was “time the State did this type of training.”

**Why should this project be recognized as a best practice in traffic records?**

Utah’s Highway Patrol has been submitting crash reports electronically for over 6 years. However, working with the local law enforcement agencies has always been a long hard struggle when it came to submitting their records electronically, much less with high quality. Many agencies were hesitant because it just didn’t matter to them how they sent the crash reports to the State, much less the quality of it, because they didn’t get anything out of it for the cost. As technology has progressed, this struggle has lessened, but there was still the idea that they didn’t get anything from the data, so why take the time to make sure it was correct. It didn’t help that funding was tight on the local level for electronic data tools. With time and progression on our side we have finally been able to make some headway, in the last couple years, we have used our LEL, Utah Traffic Records Advisory Committees, face-to-face training, and also by providing them with options to electronically send their crashes. With the Crash Working Group meetings and training sessions, the State stepped into new territory by meeting with the local agencies on their own ground and providing a forum to discuss the challenges and questions they face while completing the state form. Local law enforcement agencies have really begun to “own” their data. Sharing of their data, quality has become as important to them as it is to the State partners. The number of agencies submitting electronically is increasing every month. Now, most agencies are looking to the day they can submit electronically, as they can see the benefits of less time for the officer completing a crash form, less administrative costs and better quality data.