The Team that Swoops In

by Dr. Robert Scopatz.

Recognized at the 2016 Forum with the ATSIP Distinguished Achievement Award!

A team of experts swoops in and examines the roadway, the people, and the vehicles (and all their interactions) and figures out what things would have stopped that particular crash from happening.

Turns out we ARE that team that swoops in. And we have shown that we can make a difference. So, thank you for this award, but most of all thank you for doing your jobs. We don’t always win, and it’s horrible when our efforts fall short. But we are better today than we were when I started, and that does feel good.

Doctors Collaborate

Offering their different perspectives on the importance of Partnerships and Collaborations to Traffic Records!
* We must re-evaluate the role that each of us can play and reach out to our partners
* A culture of partnerships and collaboration around data is key to a successful traffic records program
* To fully understand the impacts of safety improvement programs you need access to the entire picture, or else you will potentially be missing the forest because all you can see are a few trees

Making a Dent in Crash Data Collection - What’s Next?

by James Donnelly

Director of Public Safety Telecommunications
City of New Britain, CT

The possibility of speech to text data collection seems entirely possible. Can Siri be an accident scribe? Can drones be used to survey crash scenes economically before, during and after police are dispatched? Can we eliminate paper correspondence with the public and send crash and citation data to them electronically so that it appears on their smartphone or tablet device almost contemporaneous to the crash investigation? Can we support graduated fines based on prior crash occurrences and driver history? The answer is of course we can. But can we afford to? That is the real question that we seek an answer to.

State Spotlight

Minnesota’s TRCC …
* Established a full time TRCC Coordinator/Chair
* Actively assists in improving the State’s crash records system
* Demonstrates a successful example of a small Executive TRCC
* Accumulates funding over multiple years to pay for large scale IT projects
* TRCC Leadership values building relationships and trust

Louisiana’s TRCC …
* Executive Committee and Technical Level TRCC function as a singular TRCC
* A Cooperative Partnerships between State agencies and universities expands the reach of the TRCC
* A full time TRCC Coordinator oversees the TRCC and fosters cooperation between agencies
* Maintains TRCC communication and materials through online resources

Forum Returns to the Big Easy

SAVE THE DATE
3rd International Forum on Traffic Records & Highways Information Systems
New Orleans
August 6-9, 2017
Sheraton New Orleans Hotel

Meeting the Leaders of ATSIP

ATSIP Executive Board - 2016 Traffic Records Forum - Baltimore
Forum Returns to the Big Easy

The 2017 Traffic Records Forum (TRF) will be going back to New Orleans where it all began in 1974! We are hosting the Forum on August 6-9, at the New Orleans Forum, located on Canal Street bordering the Historic French Quarter and Mississippi River. The location alone is one where you will want to bring your spouse or a friend along to explore the city, and the sessions being planned will offer relevant topics and learning opportunities for each core data system.

Though we are in the early stages of preparation for the TRF, Program Chair, Cory Hutchinson and his team are developing a robust agenda that will include sessions on data quality, integration, accessibility, and hot topic subjects on technology, and highly filtered vehicles. Added emphasis will be on sessions involving citation and adjudication, EMS and injury surveillance, and drugged driving. The program will feature presentations from best practices states, followed by relevant roundtable sessions for attendees to discuss challenges, successes, and lessons learned.

Please check www.ATSIP.org early in 2017, as additional details and registration information unfold about the TRF. In the meantime, save the dates in your calendar to attend and encourage other traffic records professionals from your state to do the same - this will be the venue and agenda you and your colleagues will not want to miss!

Who are the Leaders of ATSIP

Shane Bates – Captain, Kentucky State Police – Commander of the Criminal Identification and Records Branch, responsible for 15 sections involving statewide crime and collision data reporting. B.S. in Police Administration from Eastern Kentucky University. Finishing his Master’s Degree in Criminal Justice at the University of Louisville.

Kelley Craft – TSASS Consulting, Ohio. Client Support Specialist, Web Developer, Crash Data Analyst. Assisted with program planning and data analysis/system testing for the Traffic Records Information Program Reporting System (TRIPRS) and State Traffic Records Assessment Program (STRAP) online systems.

Sladjana Oulad Daoud – California Dept. of Motor Vehicles. Research Program Specialist. She has produced the Annual Report of the CA DUI Management Information System, that tracks the processing of DUI offenders from arrest through adjudication and sanctioning. Master’s Degree from California State University in Sacramento.

Jim Davis – ATSSIP Co-Parliamentarian – Epidemiologist with the New Mexico Dept. of Health, Epidemiology and Response Division, focused on substance abuse issues. He spent most of thirty years as an employee of the University of New Mexico doing analysis of a wide variety of traffic safety data for the NM Traffic Safety Bureau.


Kathleen Haney – ATSSIP 1st Vice President – Minnesota Dept. of Public Safety, Highway Safety Office – State Traffic Records Coordinator. She has held various positions including Research Analyst and Evaluation Coordinator. Serves as a member of the Minnesota EMS Regulatory Board Data Policy Standing Advisory Committee.

Cory Hutchinson – ATSSIP 2nd Vice President – Louisiana State University – Director for the Highway Safety Research Group (HRSRG) at LSU. Earned an MS in Quantitative Analysis, and MBA, and a Ph.D. in Transportation Engineering. Has considerable experience in the manipulation and use of large datasets relating to motor vehicle crashes and injury.


Tim Kerns – ATSSIP Past President – Database Engineer at the University of Maryland’s National Study Center for Trauma and EMS. Project Coordinator for the NHTSA – Crash Injury Research and Engineering Network (CIREN) project. Has considerable experience in the manipulation and use of large datasets relating to motor vehicle crashes and injury.


Allen Parrish – President of ATSSIP – United States Naval Academy – Chair of the Department of Cyber Science. Recently, Professor of Computer Science at the University of Alabama. Director of the Center for Advanced Public Safety (CAPS). Has a Ph.D. in Computer & Information Science from the Ohio State University.

Robert Rasmussen – ATSSIP Treasurer – Virginia Dept. of Transportation (VDOT) – Program Administration Manager III, Traffic Engineering Division, including many years of progressive experience in various disciplines. Currently responsible for the migration of legacy data into the new VDOT Roadway Network System.

Robert Scopatz – ATSSIP Secretary – Dr. Scopatz is a researcher focused on improving safety behavior and advising States and federal government on data quality improvement. He has a Ph.D. in Experimental Psychology from Columbia University. He worked for the New York City Dept. of Transportation and later as Director and Acting Assistant Commissioner of the Transportation Information Section.
Rhonda Stricklin – Associate Director of the Center for Advanced Public Safety (CAPS), University of Alabama. Her focus is on Analysis, Outreach, and Business Development aspects. She is the principal investigator (PI) or Co-PI on multiple contracts/grants totaling over $2 million annually. She manages several traffic safety analysis projects at CAPS.

Eric Tang – Senior Highway Safety Engineer at VHB, with experience in the fields of transportation planning, transportation safety, and performance measurement. He has a Master’s Degree in Civil Engineering and in City & Regional Planning from the University of California at Berkeley. He is a Professional Engineer (Traffic) in the State of CA.

Ralph Zimmer – ATSIP Co-Parliamentarian – Dr. Zimmer was a Professor at the Montana State University, Dept. of Civil Engineering and Engineering Mechanics. For many years, he has helped to guide ATSIP, serving as the most active/continually serving member of ATSIP with the distinction of being the only person to attend all Traffic Records Forums, from its beginning in 1974 to the most recent Forum in Baltimore, MD – the 42nd Annual Forum.

Who are the Leaders of ATSIP

Dr. Robert Scopatz expresses his appreciation for receiving the ATSIP Distinguished Achievement Award at the 2016 Traffic Records Forum.

Thank you!

I’m enough of a narcissist that I read the nomination documents. Afterwards I thought, “hey, that’s a good person. I wonder who he is.” So, thank you for triggering my insecurities and underlying “imposter syndrome”.

This has really sent me thinking not so much about what I’ve accomplished, but what we have accomplished in 30 years since the mid-1980s to today. And, you know what, I do feel great about us as a group. The people working in traffic safety are responsible for, by my calculations, a minimum of 120,000 lives of people who lived. That’s a conservative estimate based on about 4,000 fewer deaths per year compared to the late 1970s and early 80s. That was true until 10 years ago, where we’re actually saving closer to 10,000 lives per year. So, really many more people than just 120,000 are alive because we lowered the annual death toll.

Some of them went on to become parents, so there’s even a second generation by now, and heading into a third. Babies whose parents were saved by our efforts are now growing up to have babies of their own. There are generations of people who are here today because of the work we do. Back of envelope, I can get up to about half a million people in the US who don’t even know it, but who got to live a life because we were not complacent about traffic safety. Because we took jobs in this field and gave our labor to something that mattered. And, you know, you really do have to love this work to stay in it. For every life we’ve saved over the past 30 years, there were at least 3 we couldn’t yet save. Three quarters of the kinds of deaths we saw in the 1970s are still happening now on our roadways. And that hurts. Just as I was starting to prepare these remarks, and thinking about what I could say that would share the feelings of a job well done, my youngest son’s former pre-school teacher, and her husband, and her three small children were killed in a crash. The crash was a nightmare scenario. Work zone, distracted driver behind the wheel of a semi. And a fire. The family was on their way to get training to become missionaries. They wanted to move to a new country and begin a new life and begin the work that moved their souls and begin the work that moved their souls. You probably heard about this crash as it made the national news. Not only were those lives lost, but there are many others affected by the tragedy. The truck driver will live with remorse for the rest of his life, no doubt. The first responders who had to come to that scene, put out the fire, arrest the truck driver, manage traffic, and write the reports. The people in Nebraska’s FARS unit who have to read that report and dig for accurate and relevant details. And of course, the people who miss their loved ones. The people who were going to get to know Kathryne, or her husband Jarrett. And their beautiful children, Ezra, Violet, and Calvin who will not grow up to have babies of their own. This is what, collectively, triggers the impostor syndrome in all of us. Because we know that there are so many more lives could be saved. And we couldn’t save them.

But we, and the people who follow us will. I have that much faith in all of us. And in our labor. So, here’s a dream that I hope you’ll share with me. That sooner, rather than later, we will get to the point where ANY crash is a shocking and rare event. That we are so used to seeing crashes that we no longer have to keep massive data systems in every state and across every nation to track them. Instead, when a crash happens, we will send in a team to investigate and mitigate the demonstrated causes. Like the NTSB does for airline crashes and the really bad bus or truck crashes now, we should get to the point where that’s what happens any time there’s a crash on our roads. A team of experts swoops in and examines the roadway, the people, and the vehicles (and all their interactions) and figures out what things would have stopped that particular crash from happening.

I have jokingly explained my job to non-safety people by saying that I analyze the stupid things that people do in and around cars. Of course, there’s more to it than that. And looking closely, it’s not necessarily stupidity, but uncaring, unthinking, wandering minds momentarily incapable of making the right decision in and around motor vehicles. I just say “stupid” because it gets people’s attention.

And, you know that vision I had of the team of experts swooping in? That’s really us already. And looking at it objectively, we’ve done a great deal with an overwhelming number of data points. So, I want to thank you cops for going out there and, while doing a job that is incredibly gut-wrenching, also getting the data that helps us analyze crashes. I want to thank the EMTs and paramedics, and the Emergency Department, Hospital trauma center caregivers, and sadly, the coroners too, who put their lives on the line to treat the people involved in crashes also provide us data on their injuries and outcomes. And the roadway engineers who not only strive to identify crash locations and appropriate countermeasures also give us data on locations, roadways and traffic volumes. And the driver system staff and their counterparts in vehicle registration, and the engineers in vehicle design who work to identify problem drivers and vehicle safety improvements.
The Team that Swoops In

but also give us data on drivers’ and vehicles’ histories. And the people in the courts , and prosecutors’ offices, and probation/parole, and treatment and education who work towards justice in all of these millions of cases, but also give us data on amnesties, treatments, treatment effectiveness, and recidivism. If you haven’t heard your role yet, it’s probably because you’re a researcher like me or you run a program designed to reduce the number and severity of crashes.

Turns out we ARE that team that swoops in. And we have shown that we can make a difference. So, thank you for this award, but most of all thank you for doing your jobs. We don’t always win, and it’s horrible when our efforts fall short. But we are better today than we were when I started, and that does feel good.

Thank you!

Doctors Collaborate

Crash Data Alone Cannot Save Lives

by Dr. Eric Jackson, Director of the Connecticut Transportation Safety Research Center (CTSRC) at the University of CT

The Connecticut Department of Transportation (CT DOT) and the Connecticut Transportation Safety Research Center (CTSRC) at the University of Connecticut (UCONN) have partnered to create a fully integrated crash data analysis system.

This partnership between State DOTs and Universities has proven to be a very successful model for many states. Over the past 4 years Connecticut has invested significant resources in the development of a state-of-the-art crash data collection system. This Model Minimum Uniform Crash Criteria (MMUCC) Version four compliant system focused almost exclusively on timely, accurate, and complete crash data.

However, crash data alone cannot save lives. With the successful implementation of the new crash system, Connecticut is now focusing on improving data linkage and integration. With the advances in data systems, secure networks, and the “Big Data” movement, the reality of complete data integration is more attainable than ever before.

Connecticut is embarking on a large-scale data integration project with the goal of full data integration across all six data systems recommended by the National Highway Traffic Safety Administration (NHTSA). These are Crash, Driver, Vehicle, Roadway, Citation and Adjudication, and Injury Surveillance.
The research will measure the disparity between officer assessments of personal injury as recorded on the previous PR-1 crash report, prior to 2015; the new MMUCC PR-1 crash reporting system, which began in January 2015 and injury outcomes assessed by health care professionals.

Research will be conducted by Dr. Pina Violano, through the Yale-New Haven Hospital’s Injury Prevention Program. Crash and injury data for New Haven will be integrated with data from the Yale-New Haven Hospital Trauma Registry. Steps include acquiring disparate datasets, performing linking functions, managing the resulting dataset, and conducting in-depth analyses on the linked data.

The data will be used to compare crash victim injury assessments by law enforcement with health care professionals. One assumption is that if patterns can be documented of over reporting or under reporting of injury severity along with the actions by officers in select motor vehicle crash types, e.g., high risk crashes, and pedestrian crashes, enhanced guidance to MMUCC can be provided to officers in improving their injury severity assessments of motor vehicle crash victims.

Ultimately, if a permanent linkage could be established between motor vehicle crash, emergency medical services, and hospital trauma data, this could lead to a reduction in time officers would spend in determining injury severity of motor vehicle crash victims, and provide better injury status assessment data for the State.
Doctors Collaborate

Accuracy of Injury Severity in a Motor Vehicle Crash

Dr. Pina Violano,
Healthcare professionals are accustomed to assessing injury severity of crash victims. The use of the AIS for coding injury types and injury severity, based upon an in-hospital clinical assessment is a standard scale used in the world as is the use of hospital administrative databases that utilize the ICD classification system to code injuries. Partnerships and collaborations in establishing these all-important linkages of data for highway traffic safety research take time to cultivate. They are a critical step in helping to address challenges that are constantly faced permitting much needed research to be conducted. In many states, it is still a common theme for major six pack (Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Health/Injury Control) agencies to operate in silos, without the appreciation of the research, that is so badly needed. We must re-evaluate the role that each of us can play and reach out to our partners to continue building the trust and understanding of each agency’s role in saving lives on the roadways and maybe then we can continue building the much-needed partnerships and collaboration.

Importance of Partnerships and Collaborations to Traffic Records

Dr. Carol Flannagan,
The current pace of change calls for significant improvements and changes to our current traffic records systems, and computing technology is making data sharing and linkage easier. While technology may change exponentially, the human relationship-building proceeds as it always has. Building relationships around data now will cement those human linkages and allow us all to reap greater benefit from improved technology in these exciting times.

Crash Data Alone Cannot Save Lives

Dr. Eric Jackson,
results, driver history, crash history, injuries, treatment, and vehicle information (interlock). Without linking databases, it is difficult to know how many prior DUl’s a person had before they were in a DUI crash, or if they have gone through the DUI diversion program and had their first DUI erased from their record. Crash data alone only provides a small part of the picture. To fully understand the impacts of safety improvement programs you need access to the entire picture, or else you will potentially be missing the forest because all you can see are a few trees.

Making a Dent in Crash Data Collection

by James Donnelly,
Director of Public Safety Telecommunications

In Connecticut, uniform crash reports have been the order of the day for more than five decades. Embedded in state law, the Department of Transportation has full authority to define and mandate the forms used for collection of crash data. Prior to 2015, the Uniform Accident Report, was a two-sided form with a special data collection overlay for certain fields that were considered less important for downstream users of the report. All of this changed with the adoption of the national standard MMUCC 4.0 reporting criteria. For sure, there was some trepidation about a new approach after such a long period with only minor changes. With excellent leadership from the Traffic Records Coordinating Committee and the State of Connecticut Office of Highway Safety, the decision was made to move to MMUCC statewide.

As the process unfolded, three paths emerged. First, a fillable pdf was created by the University of Connecticut based Connecticut Transportation Safety Research Center. Second, the Capitol Region Council of Governments amended its CT:CHIEF law enforcement records management system to accept MMUCC based data. Third, multiple vendors chose to create MMUCC based modifications to their existing applications to meet the new standard. As a result of these three developments, Connecticut was able to move to 100% MMUCC data collection over a one-year period. All three approaches have advantages but this article concentrates on the CT:CHIEF approach.

CT:CHIEF is a browser-based records management system designed for law enforcement use both in the field and in the office. Unlike traditional law enforcement data collection systems, it is survey based rather than forms based. In general, it takes the approach that the report form is simply a preferred output rather than an input mechanism. Hence, it begins an electronic migration away from the standing paradigm of pen and paper production of a crash report.

Dr. Pina Violano, Dr. Carol Flannagan, Dr. Eric Jackson
In many ways, it emulates what Turbo Tax does for annual tax return forms by creating small component surveys of critical information areas with integrated rule checking and a final audit before producing a document or set of documents associated with a taxpayer’s return. The same level of sensibility is provided by CT:CHIEF eCitation or e-Incident. Importantly, the application is coupled with and integrated with the enforcement mechanisms of eCitation and eWarning as well as the useful eCRAsh Information Exchange for the persons involved in the crash. Integration provides substantial efficiencies and virtually eliminates redundant data entry tasks. Moreover, when integrated with a smart records management and computer assisted dispatch system eCRAsh can radically reduce the number of key strokes necessary to collect MMUCC data.

Is the survey approach really better or just different?

For sure, the survey approach is different. In general, it compels a forced choice of an entry and the choices are limited to the standard that is externally defined. While the standard is formed from the collective experience of subject matter experts there is always some measure of dissension in the application of that wisdom in the real world. As a result, there are occasional circumstances where the standard and therefore the survey do not fit the circumstances. These have proven to be few but give cause to the perpetual requirement of continuing revision to the standard to keep the application fresh and reflective of current circumstances.

In practice, the survey has been accepted more readily by police officers whose experience with a graphical user interface and web based applications is broader than by police officers whose extended experience has been with paper forms and templates. This is not an unexpected development and it is a wholly manageable circumstance. Ultimately, it is a self-resolving issue cured by time and management sensitivity. For certain, the more that the application integrates with other technologies and external information systems, the more rapidly the technology will assimilate smoothly in an organization. Nothing annoys police officers more than repeating a process simply because another form requires it!

Finally, it is appropriate to note that the leaders of most police organizations are persons whose experience is formed around pen and paper solutions and whose information systems may be centered on replicated form completion. The experience with the CT:CHIEF application is that the police chiefs appreciate the revised approach it recognize its inherent value. Since this required the leaders to have an open mind and they reacted favorably it is not unreasonable for them to expect the same from their subordinates.

Purpose of the police crash report

Clearly, the primary purpose of the police report is to provide the documentation of an independent investigation of a crash. This is a vital document for the persons involved. The professional police officer’s independence and expertise assigns responsibility, inventories injuries, property damage, legal violations, and collects data for analysis by engineers, traffic analysts, and epidemiologists. The typical format of this information has been the paper report form. However, there is a clear direction that data exchange using national standards is a more desirable approach to crash data sharing. Moreover, it is a less expensive one and one that is more easily adapted to recurring modification as needs and technologies change going forward. Hence, we are likely to see the “police crash data record in the form of a dataset” replace the typical paper form in the not so distant future. It is not unreasonable to conclude that information exchange between police departments and their customers including insurance companies, lawyers, and researchers would move to a universal means of display that does not involve paper documents at all. Standards based data sets present such an opportunity and progressive participants in the crash data business will clearly adopt their systems and adopt revised approaches for analysis and further processing. The traditional utility of the crash data collection will remain unchanged in large measure but its form will certainly be adjusted as more states adopt the national standard.

What’s next?

For certain there will be changes in MMUCC. Many are on the table now; adopting these means changes to existing applications and databases. This is easier to accomplish than it was a decade ago but it is still expensive. The survey approach may be easier to maintain if the changes are simple adds to existing choices but if additional fields and cross edits are to be included then the survey approach does not necessarily reduce any expense. More likely, greater integration will occur from existing systems and technologies working together to save police time. This may include simple means of collecting and appending crash images and intersection details from GIS systems; data that seems overdue. The possibility of speech to text data collection seems entirely possible. Can Siri be an accident scribe? Can drones be used to survey crash scenes economically before, during, and after police are dispatched? Can we eliminate paper correspondence with the public and send crash and citation data to them electronically so that it appears on their smartphone or tablet device almost contemporaneous to the crash investigation? Can we support graduated citation fines based on prior crash occurrences and driver history? Can we electronically communicate with tow trucks? The answer to all of these questions is of course we can. But can we afford to? That is the real question that we seek an answer to.