The key to successful conservation law enforcement:
Automated records
management

AST YEAR the **Indiana State** Legislature enacted a new law which, for the first time, made operating a boat while under the influence of marijuana and other drugs a crime. This change added a powerful weapon to the crime-fighting arsenal available to officers of the **Indiana Department of Natural Resource Law Enforcement** Division, which has primary responsibility for law enforce-

ment on the state's waterways. But, to use that new weapon, our conservation officers needed to be able to cite the new statute correctly and to thoroughly document evidence, witness statements, and other information to support the charge in an incident report. That meant our automated records management system (RMS,) where all our incident reports are created and maintained, needed to

adapt to this change.



hen our agency acquired its RMS from CODY

Systems six years ago, we got a solution we knew could handle our needs at the time. What we have since discovered is that the system can also easily and quickly respond to the continual changes in statutes and business requirements that challenge our agency and conservation law enforcement agencies everywhere. The system is designed to be configurable so users can easily add new statutes themselves, and it's also adaptable to new, unanticipated requirements for information collection and sharing. With the budget challenges that our agency and conservation agencies across the country are facing today, this is a return on investment that we believe will continue to pay off over the long term.

Indiana DNR law enforcement: A strong statewide presence

With a century-old heritage, the Indiana Department of Natural Resources Law Enforcement Division is the oldest state law enforcement agency in Indiana. Our 214 conservation officers patrol DNR-managed parks and other properties and enforce state and federal hunting, fishing, and boating regulations on lakes, streams, and private land. Each officer is assigned to one of ten geographical districts (in the division's two regions), although our

officers may be called upon to assist in DNR-supported activities anywhere in the state. Most officers work directly from their vehicles and homes. We also maintain a 24-7 statewide dispatch center for receipt of tips and calls for assistance from Indiana citizens, which are relayed to the appropriate field staff.

As fully-qualified sworn law enforcement officers, conservation officers enforce all the laws of the State of Indiana and also assist other law enforcement agencies in responding to crime and other incidents, especially in rural areas of the state where we may be the closest law enforcement presence. Detectives in our Investigations Section often work jointly with the U.S. Fish and Wildlife Service in enforcing the Endangered Species Act and other statutes. Indiana is on the migratory path of the whooping crane eastern reintroduction flock, and the state has forty miles of shoreline on Lake Michigan.

Fulfilling a dual mission

Like many other state conservation law enforcement agencies in the United States, our DNR Law Enforcement Division has a dual mission. In addition to law enforcement, rescue, and other public safety response, the Division manages all required outdoor education, including hunting, boating, trapping, and snowmobiling safety. Successful completion of a hunter education course is a prerequisite to obtaining a hunting license for Indiana citizens born after

1986, and boaters who are over 15 years of age, are not licensed drivers, and have never had their driving privileges suspended or revoked must complete boater education in order to operate a motorboat.

Although some courses are available online through Kalkomey Enterprises, Inc. and other commercial providers, officers teach hands-on classes around the state. This gives them a unique opportunity to be seen in a positive light by new DNR "customers" they may very well later interact with in the field under different circumstances.

RMS designed to meet different user needs

With this wide range of prevention, enforcement, education, and investigation responsibilities, our agency needed a software system that could meet the needs of different types of users. When we acquired the CODY system in 2007, we got a unified system with three distinct access points, each built for the specific needs of our different user types while sharing the same core database. Since most of our officers' work is done in remote locations, the need for a stable, reliable mobile application was evident from the beginning and the system afforded us just that. Our officers in the field use a full RMS client application and reporting tool designed and configured for efficient, bandwidth-lean use on laptops, called CODY ExpressTM. Broadband data service via aircard over a VPN (virtual private network) provides them with secure internet-based access to the mobile portion of the system from virtually any location inside or outside their assigned vehicles and even from home. District, regional, and central office staffs use a more robust client, which provides additional data analysis and reporting features, including the ability to create reports from virtually any combination of data in the database. Investigations Section detectives use the case management portion of the system, which allows them to manage and control access to confidential information on investigations, while still being able to search, view, and analyze information available to all users, and even supplement reports submitted by field staff when appropriate.



Officer Corey Norrod checking the daily bag of a crappie fisherman at Brookville Reservoir.



Master Conservation Officer Tom Lahay checking a successful waterfowl hunter at Minnehaha Fish and Wildlife Area.

Behind all of these end user services is a singular database that maintains all of our data, including names, dates, vehicles, victims, locations, evidence, and citations. Relationships between records in the database are established as they are entered, eliminating redundant data entry and providing the backbone for the system's intuitive search capabilities.

Full RMS access at the officer's fingertips

One of the best features of the RMS is the accessibility of information and functionality in the field. The mobile portion of our system offers so much more than just a mobile data query. Instead, officers can generate incident case reports and enter citations or warnings right at the incident scene or any other location. Corporal Ed Bollman, assigned to District 4 in the rural east central part of the state, points out, "It allows me to spend more time in the field and less time in an office. It speeds up my job."

An officer in the field can also run a plate, driver's license, or person's name without having to radio a dispatcher to do it. Having direct query access in the field to federal and state databases, including Indiana Bureau of Motor Vehicles (BMV) files, saves time and minimizes radio traffic. And, according to Corporal Bollman, access to wanted person files "...allows me to get an idea of who and what I'm dealing with."

All incident information, including date, time, locations, persons, vehicles, charges, and case narrative notes, is entered into a single Incident Report Form (IRF) screen. Plus, mug shots and digital photos of evidence and crime scenes can also be easily attached to an IRF, providing a "one stop shop" for all the relevant information on an incident. Behind the scenes, the system then creates master files where files don't exist for that particular person or entity or updates existing master files with the new information.

Having that kind of information readily accessible (and linked in the

system) recently helped our team solve a series of burglaries on DNR park properties. Officers in different regions of the state, who would not typically be communicating with one another, were able to see a similar pattern of criminal behavior based on the incident descriptions in CODY Express. It has become increasingly easier to compare notes and close cases with everyone being on the same page, reviewing the same information.

The system has also helped us by improving the accuracy and completeness of the data itself. Previously, for example, when one of our officers wrote a ticket or a warning for a minor violation, a carbonless copy of the ticket was forwarded to the district office and basic data was entered into the legacy Law Enforcement Records System (LERS) by district office staff.

"Often, the copy was difficult to read," said Jill Scott, Telecommunications
Operator in District 4. "Now, officers enter ticket information directly into
CODY, so it's more accurate." Plus, more

information, such as a physical description, is added, so the record is more complete – and more useful to the next officer encountering that person in the field

Through use of the IRF, our agency has dramatically improved the speed of the report generation and approval process for state-mandated accident reporting. Previously, these reports were manually prepared by the officer and had to be emailed or "snail mailed" through each organizational level for approval before they were available to victims and other parties. Now, all our reports are prepared right in the system, which saves time and ensures data consistency.

Report submission and review is also handled entirely online, and the approval workflow can be uniquely defined for each report type. With paperless electronic submission from officer to district to region to headquarters, we've cut as much as 25 days out of the approval cycle for accident reports. That means we can put the report in a citizen's hands much sooner.



Possible missing boaters

Tracking our activity for budgeting, analysis, and evaluation

To help us track our activity, we are able to use the "Officer Logs" portion of the system, which captures on-duty start/end times and time spent on agency-tracked activities (as well as vehicle use and other operational metrics). Every tracked activity is associated with one of several project





cost categories reflecting the funding source for that activity. With 85% of our budget coming from federal boating and fish and wildlife grants, accurately capturing regular and overtime hours worked and project cost information is critical.

Beyond its value for budgeting purposes, Officer Logs and other CODY data are also used extensively by management at all levels to assess the performance of both our agency and each individual. For district managers like Lieutenant Andy Wuestefeld in District 4, this feature is a tool for evaluating officers to ensure "... they're meeting our expectations. It's hands-on so, if there's a particular issue, we can address it right away." He can also keep a close digital eye on new recruits: "We can review Officer Logs and IRF's in realtime to see how they're progressing." Plus, it helps district management allocate and schedule their officers based on actual need. "We have a lot more information at our fingertips to help us see where we need to add additional resources." Lieutenant Wuestefeld noted.

For agency management at headquarters in Indianapolis, our state capital,



Officer Jet Quillen creating an IRF in CODY Express.

the system gives us a powerful ability to mine the data in the system and analyze our statewide operations from many different directions and perspectives. That can have an immediate payoff. For instance, when we get a call from a member of the State Legislature asking why we haven't been patrolling a certain park or lake, we can respond – often within minutes – with the number of tickets we've written at that property over a certain period. Sometimes it helps us and sometimes it hurts us, but at least we have an answer.

Key interfaces help when adapting to change

While a system should be expected to perform as advertised from day one, its real value may not be appreciated until later, when changes are needed (as the new statute regulating boating under the influence of drugs underscores). Often, however, changes like this require more than just modifying a field. For example, when the state mandated that all agencies use its new PeopleSoft Time and Labor system, our Division management realized we had a real problem. Our officers were already entering most of the data required by the PeopleSoft system (as well as other information important to our agency that wouldn't be captured in PeopleSoft) into Officer Logs.

This change meant that we would be asking busy officers to duplicate work with a separate entry into PeopleSoft and Officer Logs every day. This was simply unacceptable. Thankfully, the flexibility built into the CODY database structure and the creativity on the part of the CODY team provided the answer. The unique activity codes required by PeopleSoft were added to Officer Logs and CODY built a view of just the



Officer Corey Norrod checking fishing licenses at Brookville Reservoir.

information required by PeopleSoft for periodic export to that system. The result is that our officers see and use only Officer Logs; the PeopleSoft interface is completely transparent to them. This outside-the-box thinking on the part of the CODY team made this interface possible, and CODY had the customer service touch to figure out a way to get it done.

The flexibility of the system also extends to adding new data sources, including one that serves our outdoor education mission. When CODY was implemented, we had a legacy system for recording who had completed a required hunter education or other class. However, the system and its outdated technology were eventually no longer supported by the vendor who installed it, and we needed to find another solution without making a significant investment.

Obviously, CODY was the logical destination for the new outdoor education database, since it has the ability to capture so much more information. The master name record approach in CODY made sense for storing student records, and the system could easily handle the additional 20,000 records added annually. Moreover, our dispatch and central office staff who typically respond to requests from other states for hunter education verification were already CODY users. Another plus is that if an individual becomes a violator, suspect, victim, or witness at a later time, we don't have to create a new master name record: all of the information we have will be linked and available from a single record.

The system continues to change to meet our outdoor education business requirements. Earlier this year, CODY

developed an interface to the Kalkomey Event Manager solution that we now use for scheduling classes, enrolling students, and recording student successful completion. After a duplicate name check against the CODY Master Name table to ensure that the student doesn't already have a record, the interface creates a new record and assigns a unique student ID. By eliminating the separate data entry into our database required to record this information, which is now entered into Event Manager directly by the student and instructor, the new interface further reduces our operational costs while making data available more quickly.

Managing for success and lessons learned

The primary reason for the success of the project, of course, is that our officers use it actively every day. However, that success wasn't assured when the system was first rolled out. For some of our officers who had never used a computer before, it was a learning cliff, not a learning curve. But after some time to get used to the system, it has become a routine part of their daily work life.

Remember that a project of this scope takes time to realize. Even after training and deployment, the system continued to evolve based in large part on how officers in the field responded to it.

It was important that we all understood from the beginning that implementation was a process, not an event, and that the system would continue to grow and change. Just like with any major change in business practice, we had growing pains in the beginning, but we kept adapting CODY to us and us to it. That approach and openness to change continues to this day. We encourage a constant flow of information from the field about how to make it better.

Don't hurry the testing. Test it every way you can think of, take a break, and come back and test it again. Imagine all the ways you might want to look at the data.

Evaluate your data needs realistically before imposing data collection requirements on users. Take the Officer Logs activity codes as an example. We initially tried to capture activity at too fine a level, and we made it too complicated. As a result, we actually left too much to individual interpretation, which led to inconsistent data. In the end, we ultimately eliminated about 60 activity codes.

The importance of personal interfaces

While new system interfaces like PeopleSoft and Kalkomey have helped extend the life and value of the system, the personal interface between us and the CODY team has proven to be equally critical to long-term project success. Having support from CODY anytime,

day or night, for the life of our project has yielded large dividends. Over time, our officers have come to use the system so well that it's actually been several years since we've even needed afterhours support, but it's comfort-

ing to know support is available if and when we do need it.

The continuity of the relationship we have with CODY has been excellent. Barbara Falcaro, our CODY project manager and point of contact, has been with us every step of the way since the start of the project. Even though she's moved up in the organization, she's never handed us off to someone else. There are other people to talk to, but Barbara is always keeping an eye on our project and our needs.

Major Michael Portteus has been employed as an Indiana conservation officer by the Indiana DNR for the last 30 years. He spent 18 years working the field, having been assigned to both Ohio County in the southeast corner of the state and Greene County in west-central Indiana. In 2001, he was promoted to lieutenant in charge of the records and communications section, where he remained until June of 2011. In that capacity, he oversaw the law enforcement division's records management, which was primarily paper-based with a simplistic database. In 2007, the division implemented CODY's RMS, and Portteus supervised the statewide training and transition.



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