CREATING A REGIONAL CRIME-FIGHTING MACHINE FOR LOCAL LAW ENFORCEMENT

How Lehigh County, PA is setting a new standard in data-sharing and investigative support

Co-authored by Maggie Riker, CODY Systems and Julia Kocis, RIIC Project Manager

Budgets are tighter than ever. During our nation's recent economic downturn, we know all too well that the small police department does not necessarily only handle small crime. In fact, according to recent statistics, the old adage of the "big city, big crime" may be becoming an outdated assumption.

While overall crime rates nationwide have declined, the percentage of violent crimes in small towns has risen by 18%, according to FBI statistics from last year. Obviously, this means that even with limited resources, the small town PD may have big city crime to fight.

Local law enforcement agencies are facing the challenge to make the most of the limited resources available to them. In Lehigh County, PA, District Attorney James B. Martin had a vision of giving the citizens of his county the investigative, analytical, and tactical crime-fighting tools they need to do just that. Supported by a county-wide COBRA.net information-sharing platform that provides the foundational core of disparate RMS data, Lehigh County has taken the next step to design, develop and build a Regional Intelligence and Investigation Center (RIIC) which is providing local agencies in the Lehigh Valley the help they need to fight crime in a big way.

Beginning with a feasibility study in 2007, the RIIC was conceived as a center to provide investigative case support to County law enforcement. The center was envisioned to be staffed by analysts and investigators armed with a consolidated information system that could deliver critical information quickly and conveniently in a way not previously possible. Now a reality, only 12 short months after commencing the project, the RIIC has delivered on the promise of providing a law enforcement data sharing capability that is focused on the needs of local and regional law enforcement investigations and could revolutionize the approach of leveraging informationsharing for local law enforcement.

Today the RIIC provides its users tools and services that are targeted directly at the needs of local investigators and task forces, allowing them to search and analyze local police and prison records, public data and data sources from the Pennsylvania State Police Criminal Intelligence Center (PaCIC) and the Pennsylvania Justice Network (JNET) all through a single system.

The RIIC provides intuitive, online tools for local law enforcement to collaborate on investigations easily with each other and to share information quickly and securely and is also staffed with a team of experienced criminal intelligence analysts who are available to assist during an investigation when requested by preparing products or performing inquiries. This team is also charged to proactively identify possible leads, crime patterns and trends across the region.

"This was a tremendous advancement for law enforcement and public safety in Lehigh County."

- James B. Martin Lehigh County DA

Data-Integration as the Foundation

In order to build this state-of-the-art crime-fighting center, the County needed to first create a centralized information repository for housing county-wide RMS data for investigative, analytical, and tactical use. Once this information hub was in place, the opportunity would exist to provide access to this data in a secure and meaningful way to serve both the officer on the street and the investigator on a case.

At the heart of the RIIC data architecture lies the COBRA.net Core, developed by PA-based CODY Systems, which offers the centralized and homogenized hub for the over 6 million incident, arrest, and person records from the disparate agency RMS databases in place across Lehigh County, including the Cities of Allentown and Bethlehem.



Operational countywide for over 5 years, COBRA.net is an extensible county-wide law enforcement informationsharing network, complete with robust, bandwidth-lean data synch connections from each local agency which provides a centralized repository and broker, made up of segregated data spaces for each of the county's 17 local police department's synchronized, disparate RMS information. For the officer on the street, COBRA.net comes complete with a web-based tactical search tool, C.tac 5, which delivers a one-stop search of all connected data sources county-wide.



C.Tac 5 provides field officers in Lehigh County with a one-stop search of county-wide law enforcement data.

Inside the COBRA.net Core, each of the local agencies has a separate, unique, and dedicated data space so that no agency's data is ever comingled with any others'. Security is such that the platform respects the permissions and security set at the local level and always resolves to the most restrictive choice. It is also flexible enough to support state and federal data-sharing regulations. This means that agencies across the region are able to participate in this sharing effort with complete confidence in the security and integrity of their data.

"Data Security and local agency control are probably the most critical aspects of achieving success in a project of this scope," commented David Heffner, Vice President of CODY Systems. "Fostering absolute confidence that the project's technology solution and governance model allows each agency to remain in complete control over the security and access to their shared information leads to the buy-in that will make or break an information-sharing project."

The combination of the timely and accurate county-wide, cross-RMS information stored in the COBRA.net Core and the C.tac 5 web-based tactical tool gives officers across Lehigh County real-time access to a county-wide core of RMS data anywhere to aid in their preparedness, safety, and situational awareness in the field. In fact, this system was revolutionary in its conception and scope and, in 2009, was the only non-federal project named a finalist in the GSN Homeland Security Awards – "Most Significant Information-Sharing Program, Project or Agency" category and shared the spotlight with projects submitted by the U.S. Postal Service, the U.S. Coast Guard, and the Department of Homeland Security.

"This was a tremendous advancement for law enforcement and public safety in Lehigh County," said District Attorney James B. Martin.

This secure, homogenized central repository for countywide information was a vital first step in reaching the County's goals for data sharing and its success provided the impetus for future sharing initiatives. The RIIC is able to leverage police records through COBRA.net, which constitute the core information sources for most investigations, and then is also able to tap into local prison records, JNET, Lexis Nexis public records and PaCIC as further search options.

"CODY's COBRA.net product served as the underlying aggregator of the police data sources for the RIIC System," said Julia Kocis, RIIC Program Manager at the Lehigh County DA's Office. "Having this aggregation piece already in place meant the RIIC project could focus on analytics, collaboration and requested functionality, rather than breaking down silos of information."

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Barbara Falcaro, CODY Systems' Executive Director of Technical Operations, has worked closely with Ms. Kocis since project inception as the RIIC's dedicated and direct Point of Contact at CODY. "It has been a pleasure to be involved with such an innovative project and to work with such a dedicated team," commented Ms. Falcaro. "We are proud that our COBRA.net product is providing the data integration foundation necessary for the RIIC to achieve its goals through its ability to aggregate data from disparate systems and other data sources."

Built with a sharp focus, collaboration and experience

The RIIC provides its analytic services and information via a secure, collaborative, unified virtual workspace that helps connect, combat and reduce crime with the RIIC playing the role of "investigative assistant" when requested.

The tools and content offered via the user-friendly RIIC portal was the result of a collaborative effort between thought leaders in the industry and the RIIC customers themselves including local Chiefs of Police and County Task Force investigators. The exemplary team in place at the DA's Office, led by Program Manager Julia Kocis, was joined by CODY and Computer Aid, Inc. (CAI) who performed the entire design, construction and implementation of the RIIC systems as well as helping to define the CONOPS and policy for the center.

Mr. Michael Newnham, lead architect and project manager from CAI for the RIIC, led a small team of seasoned lawenforcement software integrators, some of whom were veterans of other similar projects including the Real Time Crime Center (RTCC) at the NYPD and in Philadelphia. That experience combined with the sharp vision for the RIIC and the priorities outlined by its customers have led to a powerful, streamlined solution that is focused squarely on the needs of local investigators and was delivered and embraced in a very short amount of time to wide acclaim..

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Funding for the project came from a combination of Department of Justice COPS Technology Grants and county sources that totaled roughly \$1.8 million dollars. While hundreds of millions of dollars are funneled into supporting fusion centers across the nation, that have recently been under hefty criticism for not getting the job done, the RIIC offers a cost effective and intensely

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The RIIC Web-portal offers a single search of all connected sources, including the COBRA.net Core

focused approach that dramatically improves access to regionally focused information, communication, productivity and efficiency for local investigators. John Russo, General Manager of Computer Aid, Inc. and Account Executive of the RIIC project stresses that the RIIC should not to be thought of as a fusion center. With its singular focus on providing investigative assistance to local law enforcement, it is truly a regionally focused crime-fighting portal that is built for local investigators and focuses on local information while allowing them to expand outward as needed.

Fighting crime needs a regional approach

By centralizing resources, a regional approach such as at the RIIC is helping local police departments to more effectively analyze and fight crime. Additionally, the shared environment allows investigators to connect with regional peers and to focus on trends and news that has local importance. The ability to data-mine across multiple local sources and then to interrogate external sources of information provides better and more actionable information and is of special importance to the County as it has seen a recent, steady influx of gang and drug activity originating from outside the region.

According to Chief Detective Joseph P. Stauffer Commander of the Lehigh County Narcotics, Gang and Homicide Task Forces, "the region has seen an influx of gang and drug activity from New York and New Jersey, along with an increase in gang related violent crime. We are seen as an expansion market for drugs and weapons trafficking, and as a prime location for gangs to increase membership, power, and territory, thus creating a negative impact on our quality of life."



The RIIC Web-portal helps target and reduce gang activity throughout the region

The RIIC is hard at work, targeting gang and drug activity and providing law enforcement with the services and technology necessary to help break apart these criminal enterprises operating in their communities.

Cooperative Partnerships a Key to Success

Designed with scalability in mind, the goal of the RIIC is to expand to include immediate surrounding counties and to connect with other regional centers inside and outside Pennsylvania. With over 250 users to-date, the RIIC is leading the way in the Commonwealth and is setting a new standard for cooperative, collaborate data-sharing efforts to serve the good of the whole. partnerships developed between the County and the companies involved with this project were only the tip of the iceberg when considering the business relationships that needed to be nurtured and fostered in order for a project of this scope to successfully get off the ground. Lehigh County was the first county to integrate with JNET and PaCIC in order to use new search services they offered. In return, PaCIC is able to connect to the RIIC and search Lehigh County Records.

"From the beginning of this project there was a vision we could all feel was driving and molding its outcome," commented Fran Heffner, President of CODY Systems. "It was more than just business and more than just a project plan. It was the culmination of a collaborative effort in Lehigh County to combat crime in a real, meaningful, and tangible way. CODY is proud and excited to be a part of the project at the RIIC and looks forward to other counties in the Commonwealth becoming part of this exciting initiative".

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With Phase 1 of the project nearly reaching completion, the driven team at the RIIC looks to Phase 2 with determined resolve. The next phase of the RIIC project is to focus on adding more local data sources, proactive analytics, and expanding outwardly to connect to other partnering agencies including the High Intensity Drug Traffic Areas (HIDTA) of Camden-Philadelphia and New York-New Jersey; and potentially connecting to similar regional law enforcement centers within the Commonwealth if this model is adopted elsewhere.



For more information on this exciting initiative, please feel free to contact :

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