Indiana State Police Accelerates Journey Toward Vision Zero with Electronic Crash Reporting

Case Study

Inefficient processes and siloed data are roadblocks to safer roads

State law enforcement agencies that manage and process paper crash reports face significant challenges. This cumbersome and time-consuming manual approach creates a considerable administrative burden, making it nearly impossible to service report requests in a timely fashion. It also inhibits the flow of data and analytics needed to inform lifesaving policies.

In 2003, the Indiana State Police (ISP) Traffic Records Division recognized that it needed a better solution. The agency was processing 200,000 or more crash reports over 50,000 man-hours annually and wanted to eliminate its 3-year data entry backlog, reduce staffing costs and improve reporting times. It also planned to discover when, where and why traffic accidents occur so it could pinpoint critical traffic safety issues for resource reallocation, traffic engineering and federal grant funding.

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ISP partnered with the LexisNexis® Coplogic™ Solutions team of experts, who are skilled in automating complex reporting processes and integrating multiple workflows to deliver world-class data and analytics visualizations that power preventive traffic safety strategies. Together, they collaborated with the Indiana Criminal Justice Institute, the Indiana Chief of Police Association and the Indiana Sheriff's Association on an innovative solution that is helping propel the state toward its Vision Zero goal—saving more lives and reducing serious injuries on Indiana's roads and highways.

Electronic crash data collection, analysis and distribution form an end-to-end solution

The Automated Reporting Information Exchange System (ARIES), an electronic crash data collection, analysis and distribution solution, has transformed crash reporting in Indiana from the roadside to the Command Center and beyond. The pioneering solution consists of three components:

1. **Automated data collection at the roadside.** Traditional paper-based reports have been replaced with a user-friendly client and web application. Officers now scan licenses and registrations at the roadside and submit crash reports electronically. Records clerks and managers are no longer required to physically locate paper reports or perform error-prone data entry.

2. **A centralized statewide data repository for electronic submission, storage and sharing of crash reporting.** The custom-built repository with data validation for accuracy and completeness is integrated with other state databases to provide ISP and other state agencies access to a comprehensive data set, sophisticated analytics and visualizations. Using dashboards, heatmaps and charts, agencies can display the most relevant data for their needs, like collision trends, and gain data-driven insights to inform strategic safety decisions.

3. **Electronic distribution of crash reports to authorized parties.** ISP and other agencies can quickly distribute reports to authorized requesters like involved parties and their insurance carriers within as little as 24 hours after a report is submitted using LexisNexis® BuyCrash®.

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To ensure ARIES was deployed successfully, ISP and the Coplogic Solutions team conducted targeted training programs for law enforcement officers on how to use the system not only to meet state requirements, but for ease of use and overall job satisfaction.
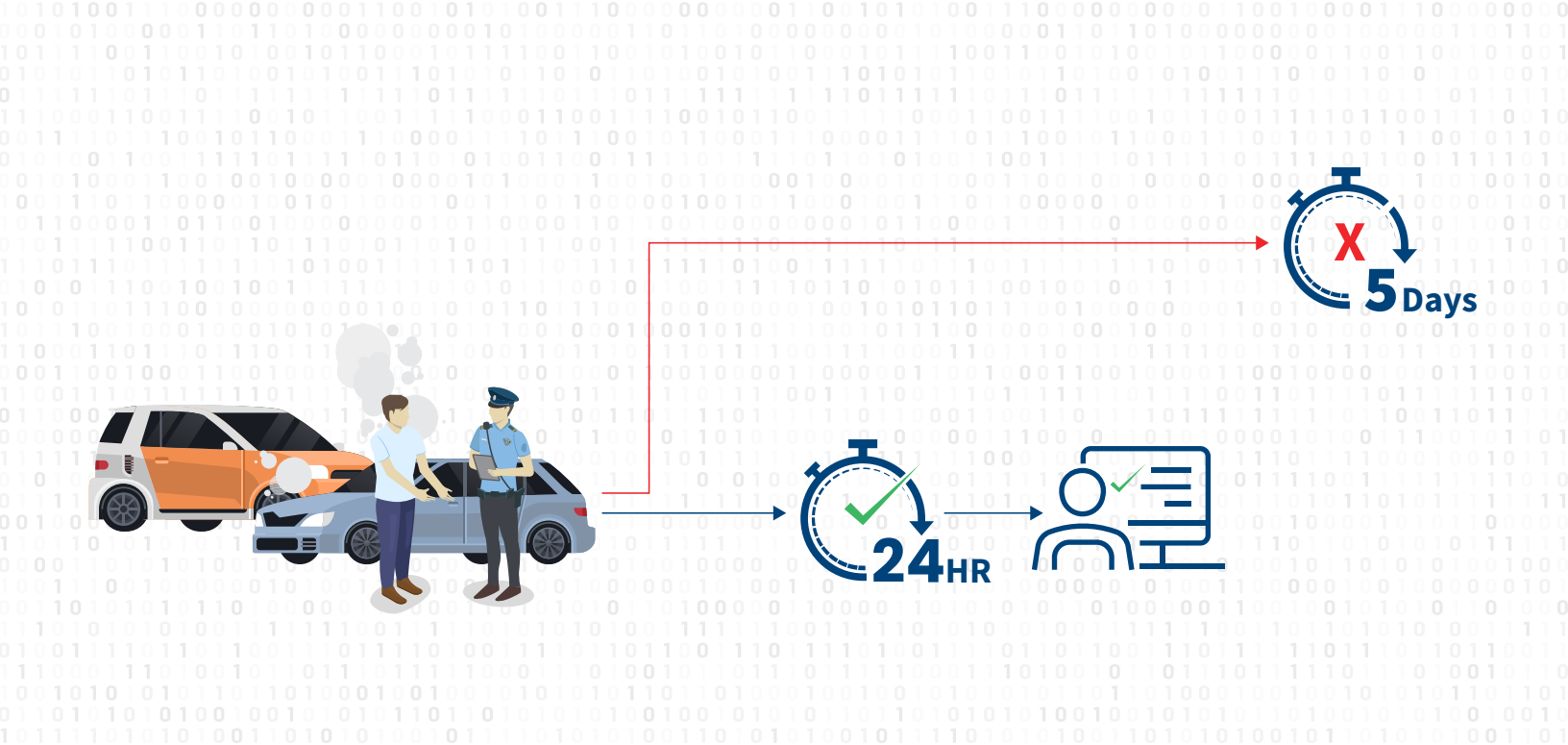
More than 500 state and local law enforcement agencies in Indiana use ARIES to automate crash reporting

ARIES has significantly reduced the time it takes for Indiana law enforcement agencies to access and share crash data. Instead of 15 days or more, crash reports are now available in as little as 24 hours. Almost real-time data powers visualizations that help local and state agencies and traffic safety stakeholders proactively improve public safety and prevent future traffic incidents. ISP Captain Douglas Hutchinson reports that *"The thoroughness of the ARIES system and the quality of the data allows the Indiana State Police to monitor all aspects of fatal crash events within the state and for agency leaders to maintain situational awareness."*

The transparency provided by ARIES has also fostered greater community engagement. Yearly crash statistics and reports generated by the system are available to the public, raising awareness about road safety issues. This has encouraged community involvement in safety initiatives and promoted safer driving behaviors as well as guided them in their respective efforts to achieve Vision Zero goals in their communities.

Since its inception, ARIES has undergone multiple updates to enhance its accuracy and usability. The Indiana Traffic Records Coordinating Committee (TRCC) has provided valuable input for these updates. This collaboration has resulted in a system that better captures and analyzes crash data, leading to more informed decision-making and policy development.
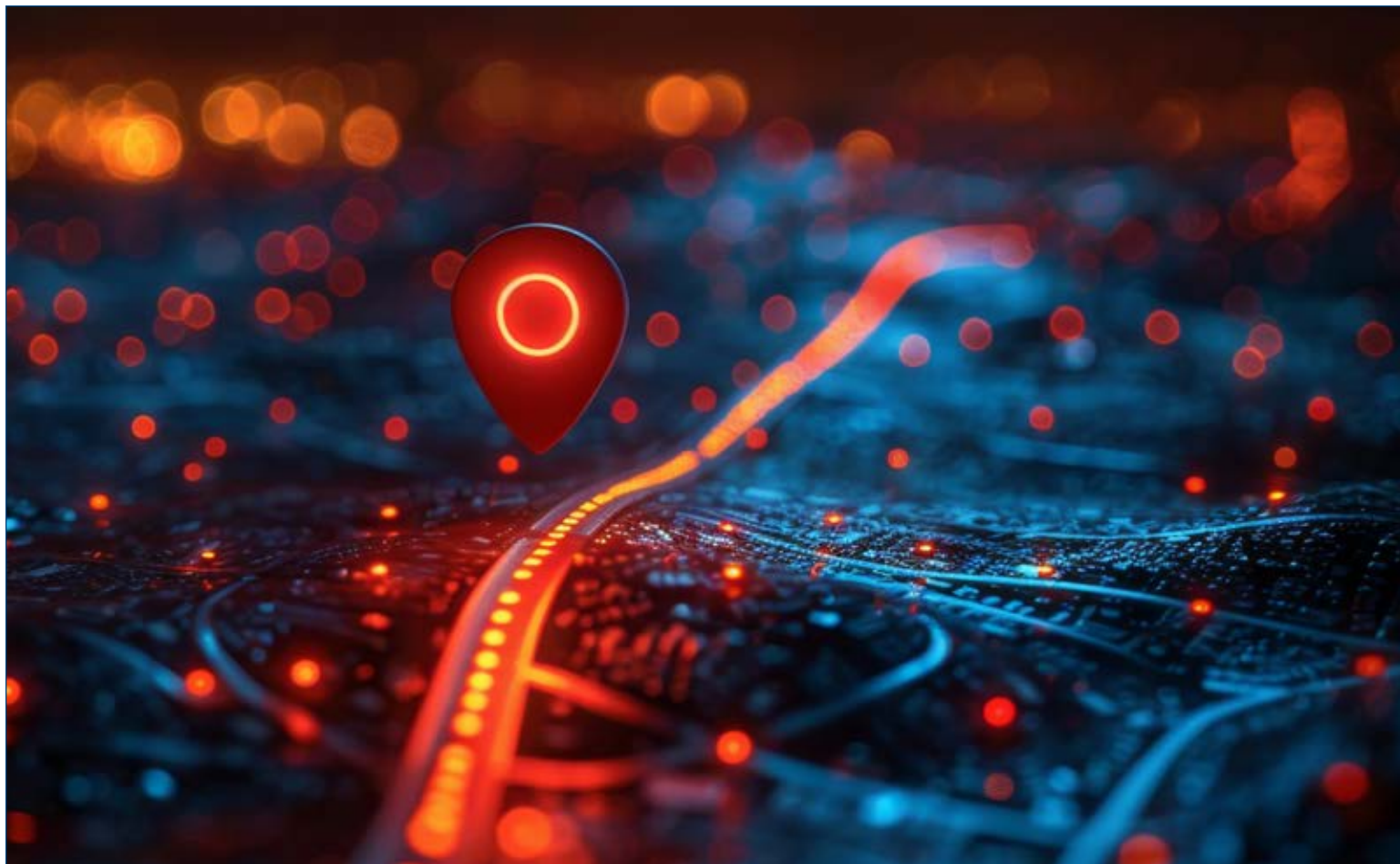
ARIES supports:

Quick identification of problem areas: Detailed crash data helps identify high-risk areas and patterns, enabling targeted interventions.

Improved allocation of resources: More accurate data allows for better allocation of resources, such as police patrols and road maintenance.

More thoroughly defined policies: Legislators and policymakers rely on the comprehensive data to draft traffic laws and regulations designed to be effective when applied.

Better informed and positively engaged communities: Timely data dissemination raises public awareness about road safety issues and encourages safer driving behaviors.

> *"Before ARIES was deployed, we were easily spending 50,000 hours annually on data entry of crash reports and over $1 million on staff. When ARIES was deployed, the process became so streamlined, we were able to move employees to other positions in the Records Division where they could provide a more valuable contribution to proactive road safety initiatives."*
>
> **—Major Doug Shelton, Indiana, Retired**
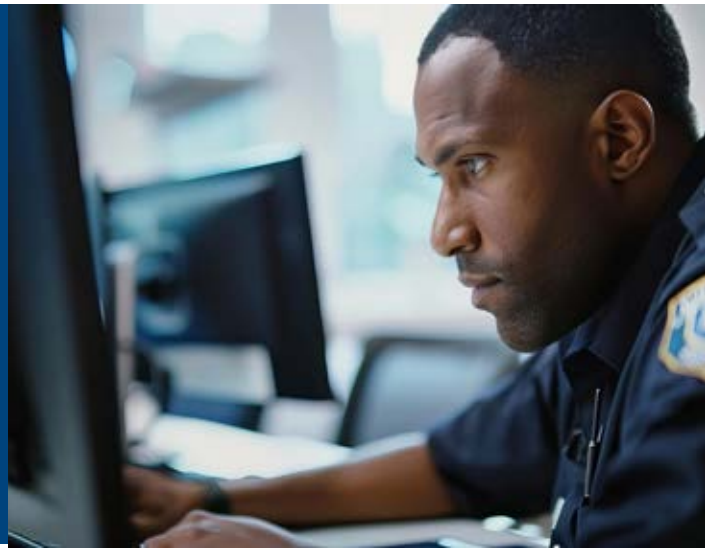
Case Study

The road to data-driven decisions starts here

Indiana State Police is proud to have helped Indiana become one of the first states to transform its cumbersome paper-based process into a streamlined 100% electronic crash reporting system used by every law enforcement agency in the state. ARIES is a ground-breaking solution made possible by ISP's leadership and collaborative approach, and nationally recognized for its success.

- **Law enforcement officers** enjoy using a user-friendly client and web application that saves them time at the scene of an accident.

- **Local and state agencies** gain enhanced data analytics and visualizations that show when, where and why crashes are happening in almost real-time, and have gained the insights they need to develop strategies that will reduce fatalities and serious injuries on the roads.

- **Authorized requesters** retrieve crash reports in as little as 24 hours, without having to drive to the precinct or wait for a report to be mailed.

- **ISP** easily access the data it needs to support statewide initiatives that will improve the lives of citizens.

Deploying an end-to-end electronic crash reporting solution is an investment that continues to pay off for ISP. It lets state and law enforcement agencies work together, basing decisions on more accurate and complete data, and developing road safety strategies to make Vision Zero a reality.

"The benefits of having one standardized electronic crash reporting system exponentially improves the quality of data collected. One of the most important aspects of analyzing any data set is having confidence in the data itself. The electronic single system model ensures the quality and consistency of the data is rarely an issue. The result is a wide range of agencies (e.g., law enforcement, transportation, engineering, etc.) are working with the same dataset to make important public safety decisions within their area of expertise."

**— Captain Douglas G. Hutchinson, Indiana State Police,
Criminal Justice Data Division Commander**

Discover how you can automate crash reporting from the roadside to the command center and beyond.
Call 877.719.8806 or email solutionsinquiry@lexisnexisrisk.com

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