

### Your Partner in Public Safety and Management Consulting

### This Month's Feature Article

# DATA-DRIVEN POLICING: MORE THAN JUST AN ABSTRACT PRINCIPLE

by Clark Kimerer



At the outset, I will assert that the phrase "data-driven policing" has been overworked and its importance diminished by overuse – a sad reality. Like the conceptual frameworks of "unified command" or "procedural justice," the tendency to reduce important principles to mere aphorisms looks more dismissive than expansive – a way to cancel thoughtful examination rather than invite inventive, broad analysis.

But truth be told, the future of public safety and its institutions depends upon the scientific use of data and evidence in 2023 and beyond. This is a defining principle at Winbourne Consulting.

Let's start with a seminal definition: Data-Driven Policing theory posits that data and evidence matter in developing leading-edge crime control and interdiction strategies and policies.

Substitute this phrase with "evidence-based crime policy" or "data-informed decision-making," and the gravity of using reliable data to create policy-level, strategic, and tactical systems of prevention, preparedness, response, and recovery to public safety crises comes into sharp focus.

Admittedly, there is a big difference between evidence and anecdote. But, notwithstanding that many anecdotes have a foundation in reality, *evidence* – data – is the path to uncovering causality, which in turn lights the way to effective and potentially life-saving public safety strategies.

In my work with Winbourne, a critical way to exploit the value of data to inform best practices is describable as an "information access audit." For example, suppose a police department seeks to understand at an evidentiary level. In that case, the impact of the

dispatch of officers to people in a behavioral health crisis, a critical public safety topic today, does the data, if even available, have to be painstakingly retrieved, researched, and created from nothing or, preferably, has the data been pre-programmed to be immediately accessible and available for study and analysis.

#### **Lessons Learned**

If I knew then what I know now, I would diligently ensure that essential categories of data – officer activity at a granular level; suspect demographics, debriefs and subject behavioral characteristics; suspect and officer safety risk factors; call resolution and officer/call center critiques; officer debriefs and suggestions for improvement; arrest adjudication, including financial and imprisonment outcomes; lessons learned – are consistently recorded and available for immediate, integrated review and analysis. In addition, RFPs, CAD-RMS projects, and contractor requirements must include explicit provisions for data retrieval according to the priorities of the public safety entity rather than the vendor.

In particular, geospatial (GIS) and temporal coordinates and correlations are consistent data-based characteristics in every important human event or activity. For police, this includes criminal acts, victimization, the trajectories which bring people into and out of incident locations, and the presence or absence of people to observe or deter a crime. Through analysis of place, we open worlds of possibility to understand methods of addressing and ameliorating human suffering.

The "policing of place" - utilizing evidence-based approaches - is as essential to the history of the policing profession as any of our precedent, pragmatic public safety "revolutions," from the Basic Car Plan to the Professional Model to the SARA model.

We must continue to search for ways to articulate and support policy-relevant research and build police models based on data, science, and criminology rather than the gravitational pull of habit and tradition.

We must redouble our efforts to encourage and support the next generation of police professionals and academic researchers toward seeing "research practitioners" in crucial roles in all data-driven public safety institutions.

Clark Kimerer is a Winbourne researcher and subject matter expert. He retired as 2 <sup>nd</sup>-incommand of the Seattle Police Department after a career of 31 years. He was inducted into the Center for Evidence-Based Crime Policy Hall of Fame at George Mason University and currently teaches at the Naval Postgraduate School Center for Homeland Defense.

You can also find the article here: Data-driven policing: More than just an abstract principle – Winbourne Consulting, Inc (w-llc.com)

## **Articles of Interest**

The article below is about Winbourne's customer Chula Vista Police Department (California) and their drone project. Winbourne is proud to have CVPD as a customer!

Read about Winbourne and Chula Vista: In January 2021, Winbourne Consulting completed a two-year engagement with the Chula Vista Police Department in support of their Unmanned Aircraft System (UAS). – Winbourne Consulting, Inc (w-Ilc.com)

Learn more about Chula Vista's Drone Program: Drone Program | City of Chula Vista (chulavistaca.gov)



# Drones on the front lines in public safety operations

By Kaitlyn Levinson, Assistant Editor, GCN

**FEBRUARY 24, 2023** 

Drone networks that allow seamless communication among devices, first responders and dispatch centers enhance public safety operations.

Drones add the situational awareness that boosts the effectiveness of public safety response.

Agencies should consider a drone system that supports the flow of data and communications so that responders can integrate what's happening on the ground with off-site decision-makers, said David Merrick, a coordinator of unmanned aircraft systems for Florida's State Emergency Response Team.

"A camera in the sky is one of the simplest things that drones can do, but it's also one of the most effective because [it] lets someone who's 10 miles away see what's happening and ... start making decisions about what is needed," Merrick said.

While cell phones and radios are common ways to maintain communications, public safety teams are venturing into mesh networks that can provide connectivity in isolated areas, he said. These self-contained networks consist of a group of connectivity devices, which Merrick likened to Wi-Fi routers. The network may be "slower than you'd like," he said, but it still allows responders to preserve communications and share video or imagery. Solid connectivity is the foundation for an effective public safety mission, he said. For example, drones that connect to wireless networks such as LTE or Starlink satellites can give responders livestream footage of events so they can allocate personnel and resources accordingly.

A cloud-enabled infrastructure is another key asset to support the storage and transfer of large data files collected during drone missions or mapping efforts, Merrick said. A network-connected drone offers better operational effectiveness, said Charles Werner, director of Drone Responders Public Safety Alliance, a nonprofit that supports the use of unmanned aircraft systems in public safety missions.

In early 2020, for example, California's Chula Vista Police Department relied on drone footage to de-escalate a potentially deadly situation. When officers were alerted of a man brandishing a weapon outside a taco shop, the department's first move was to send a camerafitted drone to investigate the scene, the San Diego Union-Tribune reported.

The drone enabled an officer at the headquarters to view live footage of the scene and communicate to responding personnel what was happening in real time. At first glance, it appeared the individual was



holding a firearm, but the drone soon revealed it was really a gun-shaped cigarette lighter.

"That dramatically changes the police officers' approach. This person may have been accidentally killed because he may have pointed the gun at the police—and it wasn't really

a real weapon," Werner said. Once the responding officers learned there was no gun involved, they were able to arrest the individual without incident.

Drones can also provide real-time situational awareness and remove responders from potentially dangerous scenarios.

Read the full article: Drones on the front lines in public safety operations - GCN

# What responders really want from their tech

By **Stephanie Kanowitz**, Contributor, **GCN** FEBRUARY 10, 2023



## Communications technology is going to sit on the shelf if it's not reliable, interoperable and user friendly.

What are first responders looking for in communications technology? According to authors of a recent study, the No. 1 answer was simply technology that works.

Researchers at the National Institute of Standards and Technology (NIST) spent five years studying quantitative and qualitative responses from 7,182 responders nationwide as part of "Voices of First Responders" project. The study, the largest to look at public safety end users' experiences, cuts across four disciplines: police, fire, emergency medical and 911 dispatch responders.

"It really highlights three main areas that people need to be considering when they are building or developing or purchasing communication technology for first responders," said Yee-Yin Choong, a human factors scientist in NIST's Visualization and Usability Group of the Information Technology Laboratory and a report author. "It has to be reliable—working when they need it to work as intended. So, trustworthy technology. [Second,] the end user needs to be in control of the devices they're supposed to use. And then user frustration. If you can take care of the former two—trustworthy technology and user control—you have happier end users, less frustrated users."

No single technology emerged as particularly helpful or unhelpful, but a few themes bubbled up. For instance, across the responder disciplines, radio was the most useful, but its criticality varied depending on responder type. For instance, firefighters called radios their lifeline, but law enforcement officers said smartphones are more important. At the same time, many aren't provided with devices, so they use their personal ones, which can be problematic.

For 911 personnel, the most important communications technology is software that helps them pinpoint callers' exact location, but at the same time, they said their biggest challenge is pinpointing callers' exact location, Choong said.

Ultimately, the message was that "if this isn't useful for me and my job or we can't use it to communicate or if it's not interoperable with everything we already have and already are using, then it's going to sit on the shelf," said Shanée Dawkins, a computer scientist in the Visualization and Usability Group and a report author.

Read full article here: What responders really want from their tech - GCN



Are you confident in your public safety technology?

Winbourne Consulting can provide a public safety technology assessment or gap analysis. Contact us today to assist with your needs and make your agency safer and more efficient.

# Senator calls for cybersecurity audit of law enforcement wireless network

By **Frank Konkel**, Executive Editor, Nextgov APRIL 13, 2023

FirstNet is a cellular network built for first responders around the country, but at least one federal official told the senator's office they had "no confidence" in the network's security.

Sen. Ron Wyden, D-Ore., called Wednesday for annual cybersecurity audits for FirstNet—the high-speed communications platform designed to be used by first responders and military personnel—to identify security vulnerabilities that foreign governments, hackers or criminals could exploit.

In a letter, Wyden requested the National Security Agency and Cybersecurity and Infrastructure Security Agency "conduct or commission" annual cyber audits of FirstNet, operated by AT&T under a \$92 million contract issued roughly three years ago.

According to Wyden, a CISA official informed his office in February 2022 that well-known security weaknesses—known as SS7 and Diameter—in systems that exchange information between carrier networks may also impact FirstNet. Those vulnerabilities can be exploited by bad actors to track phones, intercept calls or text messages or deliver spyware.

"CISA's subject matter expert told my staff that they had no confidence in the security of FirstNet, in large part because they have not seen the results of any cybersecurity audits conducted against this government-only network," the letter states.

Wyden added that "AT&T is unwilling, and the Department of Commerce is unable to share results" of independent security audits of FirstNet. According to the letter, Commerce's National Telecommunications and Information Administration, or NTIA, "is bound by a non-disclosure provision in the contract it negotiated with AT&T."

"Concealing vital cybersecurity reporting is simply unacceptable. As the lead agencies responsible for the government's cybersecurity, CISA and NSA need to have access to all relevant information regarding the cybersecurity of FirstNet, and Congress needs this information to conduct oversight," Wyden said. "If the Department of Commerce is unable to share the results of the FirstNet audits commissioned by AT&T, CISA and NSA should conduct or commission their own annual audits and deliver the results to Congress and the FCC. If you lack the resources or authority to conduct such audits, please indicate as much, so that Congress can take the necessary steps to address this gap."

Original article here: Senator calls for cybersecurity audit of law enforcement wireless network - GCN

### **Ensuring Next Generation 911 Interoperability**

Release Date: March 2, 2023

New testing and certification program, laboratory will improve the functionality of our national 911 system.

AND SEC.

First responders safeguard our communities from threats ranging from unexpected natural disasters to COVID-19 and flu cases to daily emergencies, illnesses, and injuries. According to statistics from the National Emergency Number Association, an estimated **240 million calls** are routed to first responders every year via our country's 911 system. It is critical that responders and operators have access to the best tools and resources available so that they can effectively answer these calls quickly and accurately and keep our communities safe.

The Science and Technology Directorate (S&T) is collaborating with several partners to ensure that they not only gain this access, but to also enhance technology for a more seamless communication capability. To do this, S&T joined forces with the <u>Critical Infrastructure Resilience Institute</u> (CIRI) <u>Center of Excellence</u>, the Department of Transportation, Texas A&M University's Internet2 Technology Evaluation Center (ITEC), and other government and private stakeholders to develop and implement a Next Generation 911 (NG911) interoperability testing and certification program and laboratory that will focus on improving interoperability testing of solutions accessed across 911 platforms at the state and local levels. The ultimate goal of this resource will be to enhance the efficacy of the national 911 system as it transitions to a digital <u>NG911</u> system designed to utilize and accommodate newer communications services that are now used by callers, dispatchers, and first responders.

"Each state and county in the U.S. is responsible for managing its own 911 platforms and services," said program manager David Canty of S&T's Office of University Programs. "As of February 2021, there were **5,748 disparate 911 platforms** in the U.S., each operating its own technologies, components, and processes for sending and receiving calls and routing and dispatching emergency medical services.

However, most of these platforms utilize analog technologies that aren't designed to optimally support our increasingly multimedia-driven communications infrastructure and capabilities, like text or photo messaging, internet-based voice and video calling, location sharing, and call forwarding and transferring. All of these are commonly used to relay critical information over our national 911 system."

Read the full article: Feature Article: Ensuring Next Generation 911 Interoperability | Homeland Security (dhs.gov)

- Is your technology NG911 ready?
- Do your SOPs include the operational changes necessary to support increasing multi-media communications?
- Will your current legislation support the change from 911 service being provided by an incumbent local exchange carrier to an IP service provider in a competitive market?



Winbourne Consulting can help your agency with your NextGen911 needs. Contact us today to assist with NG911 preparation.



## [Colorado] 911 dispatchers now classified as first responders in El Paso County

(EL PASO COUNTY, Colo.) — El Paso County Commissioners voted on Tuesday, April 11 to pass a proclamation that recognizes 911 dispatchers and call takers as first responders.

This measure was two years in the making and was officially pushed forward on Tuesday by Sheriff Joe Roybal.

Most times, 911 dispatchers and call takers are the first to respond to an emergency situation, but before this vote, they weren't recognized as first responders and did not receive the benefits and resources that come with that classification.

"They are the first, first responder," said Sheriff Roybal in his speech to the Board of Commissioners.

Standing behind him was a team of El Paso County 911 dispatchers who received a standing ovation at Centennial Hall after the Board of Commissioners voted 5-0 in favor of the proclamation.

The classification means access to mental health resources, the opportunity for worker's compensation, retirement benefits, and more, according to dispatchers. Prior to Tuesday, dispatchers in the county were classified as office workers.

"Some people think... they're just telephone operators... but they're not, because the job they do is very, very, different than someone working in a call center," said Meighan Powell, the El Paso County 911 Dispatch Communications Manager.

Read full article here: 911 dispatchers now classified as first responders in El Paso County | FOX21 News Colorado

## **Industry Events**



Hyatt Regency Dulles 2300 Dulles Corner Blvd. Herndon, VA 20171

Join public safety professionals, state and local government leaders and innovative companies from the private sector to explore ways to improve retention, innovate recruiting, streamline the hiring process, implement creative staffing strategies and build a culture of excellence.

**Learn More: Program – 9-1-1 Staffing Crisis Summit (apcointl.org)** 



# May 22-24, 3023 Salt Palace Convention Center Salt Lake City, UT

As the premier professional event dedicated to discussing technology in law enforcement, attendees should expect quality presentations, professional development, and

networking covering a broad array of new and emerging technologies on:

- Digital Asset Management
- Technology Strategy
- Cybersecurity and Cybercrime
- Artificial Intelligence
- Autonomous Vehicles/UAS
- Mobile Policing
- Digital Forensics
- Information Sharing & More

**Learn more: IACP Technology Conference | International Association of Chiefs of Police (theiacp.org)** 



## CONFERENCE & EXPO

Conference & Expo | June 19-21 Technical Meeting | June 22-23 Mandalay Bay Convention Center

Interact with all the professionals that make up the fire and life safety community. We're looking forward to networking, creating needed solutions, and continuing to provide the most comprehensive education and certification programs available.

Learn more: 2023 NFPA Conference & Expo | NFPA



June 17 - 22, 2023 Gaylord Texan Grapevine, TX

At NENA 2023, you will not only hear about the public-safety issues of today and tomorrow but also gain practical, real-world know-how that you can take home with you and put into action immediately. Featuring inspiring keynote speakers, more than one hundred hours of breakout sessions that inform and empower, careerbuilding courses and workshops with real-world applications, nightly networking events to help you make the right connections, and an Expo Hall showcasing cutting-edge products and services.

Learn more: NENA 2023 | June 17-22 | Gaylord Texan | Grapevine, TX



### August 16 - 18, 2023 Kansas City Convention Center Kansas City, MO

Celebrate IAFC's 150th Anniversary at FRI2023

Each summer, thousands of the most prominent fire and emergency service leaders from across North America and around the globe come to FRI to learn, network and collaborate together. FRI education covers all areas of the

emergency service:

- Navigating the political environment
- Managing change
- Ethical leadership
- EMS issues
- Career development
- And more

FRI attracts hundreds of exhibitors to showcase the newest fire service

innovations in apparatus, technology, equipment, gear and more. If you're a fire/EMS chief, chief officer or company officer - this is YOUR conference for leadership education.

Learn more: Fire-Rescue International (eventscribe.net)

## **Our Services**

## Public Safety Technology and Management Consulting Services

### **Public Safety Services**

Winbourne Consulting Inc provides our clients with a wide range of public safety services (click on any of these to go to our website):

- Project Management
- Assessments
- Strategic Planning
- Operational Best Practices
- Governance
- Implementation Services

#### Areas of focus include:

- 911 Emergency Communications
- Public Safety Sytems
- Digital Evidence and Body Worn Cameras
- Smart Cities
- Mission Critical Facilities
- Big Data

#### International Services

#### **International Clients**

Some areas of focus include:

- Emergency Communications
- Emergency Operations Centers
- Emergency Services
- NG9-1-1
- Wireless Communications
- LTE 5G Network





- 911 Implementation
- 112 Implementation
- Transportation Management
- Smart Cities

Visit our Website

We are interested in your thoughts on the featured topics.

Please share them with us:

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