

Harnessing the Power of Data

ABBIE DARST (/?AUTHOR=59A6BF51C027D8BB03618D9A)

Law enforcement agencies generate a crazy amount of data,” said Paducah Police Crime Analyst Michael Zidar. “Every time they key up a radio, a line of data is recorded.”

The question comes with figuring out what to do with the endless amount of data available and how agencies can work the numbers and information to benefit their departments’ efforts.

Kentucky Law Enforcement (1)

For several agencies in Kentucky, the data generated from every call, report, traffic stop or community complaint is helping them navigate predictive-policing strategies that are making relationships and effectiveness in reducing crime.

Getting Started

“The term predictive policing often scares chiefs off,” Madisonville Police Chief Wade Williams said. “So to get it into better terms, it’s been a business-marketing model for a long time, using

Wal-Mart as an example, Madisonville Police Maj. Robert Carter said large chain stores can run their data and, using the forecast and data from past weather patterns, know the using data to drive where and how they allocate their resources.

Likewise, predictive policing is the application of analytical techniques — particularly quantitative techniques — to identify likely targets for police intervention. Predictive policing aims statistical predictions, according to the RAND Corporation’s 2013 report on Predictive Policing.

“Predictive methods allow [law enforcement] to work more proactively with limited resources,” the RAND report states. “The objective of these methods is to develop effective strategies more effective.”

In Madisonville, the police department has made the foundation of its predictive-policing strategy all about the data.

“But it has to be useable data,” Williams emphasized. “If you don’t have a good foundation, you can’t make it work.”

Madisonville’s data is collected from E-911s, arrests, [computer-aided dispatch] calls, citations, probation and parole, traffic stops – any source of data where there is contact with the public – and is merged with their geospatial program, created by Lexis-Nexis. The information pieces are layered over each other based on time of day to generate hot-spot predictions, Williams explained.

“We’ve created a culture in our agency that everyone collects data, from the officers to civilian staff,” he said. “Every call, whether domestic violence, drugs, suspicious persons – each person has to be thinking, ‘How can I capture this data for the future.’”

Building this culture did not happen overnight. In fact, Williams and Carter said one of the key hurdles to get over was making officers understand they have to capture the data and how their role plays into the overall strategy.



"When we first discussed pursuing predictive policing, all the supervisors said, 'This is not going to work; why are you coming in here with this snake oil?'" Carter said. "But because we believe in [Chief Williams], we bought in."

Kentucky Law Enforcement (/)

"It's a slow process, but you have to believe in it. The first time we began looking at predictive policing and intelligence-led policing, he made it a top-down approach. He shared a vision, and we believed."

MPD has recorded up to 30 and 40 percent reductions in Part I crime, Williams said, seeing as much as a 60 percent reduction in the first couple of years.

"It definitely pays off," he said. "You can't put a number on someone not being a victim of Part I crime – for that, we'll do anything that will work."

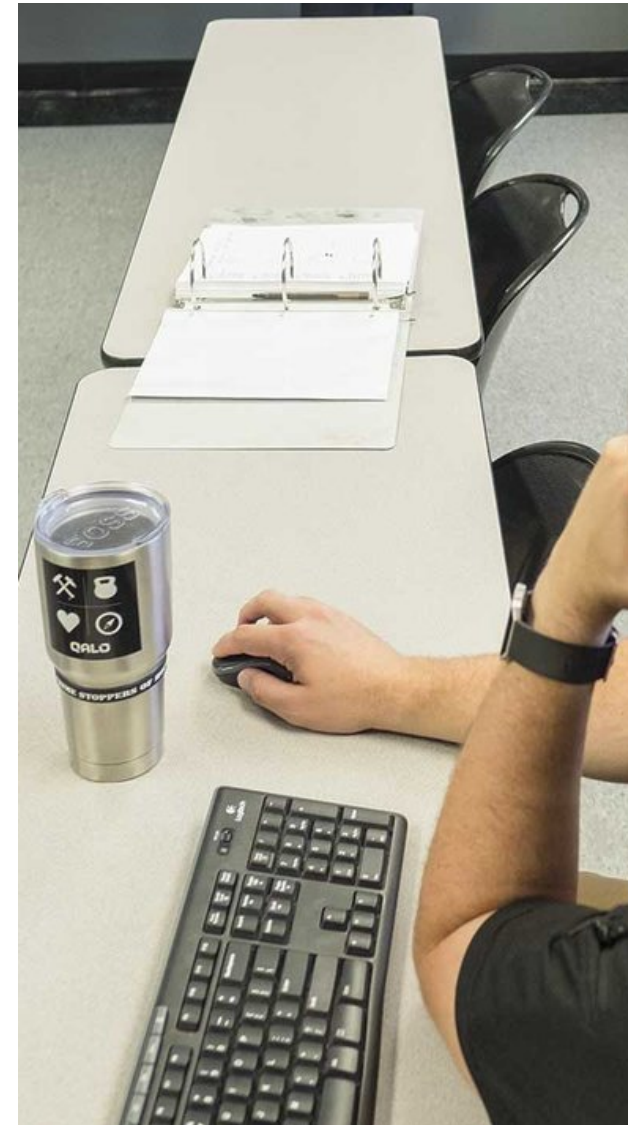
The Louisville Metro Police Department is preparing to re-rollout its predictive strategy to its approximately 1,200 officers, focusing on how officers are engaged with the strategy, what is expected on the part of each officer and showing them the value of the difference predictive strategies can make on their beat, Lt. Col. Robert Schroeder said.

"Our officers have beat pride," Schroeder said. "They don't want crime to happen on their beat. So helping them figure out where to go to catch criminals or prevent crime on their beat – they will take it willingly, they just have to see the value."

"I don't think it's about resistance, people are busy and this is one more tool, but it takes time to look at it every day," he added.

Law enforcement executives who are exploring the possibility of adopting predictive-policing strategies and technology face three main challenges – getting that complete buy-in from everyone on their staff, rejecting the idea that they are too small for implementing a predictive-policing system and understanding it takes time to grow the data necessary to make the system work for one's agency.

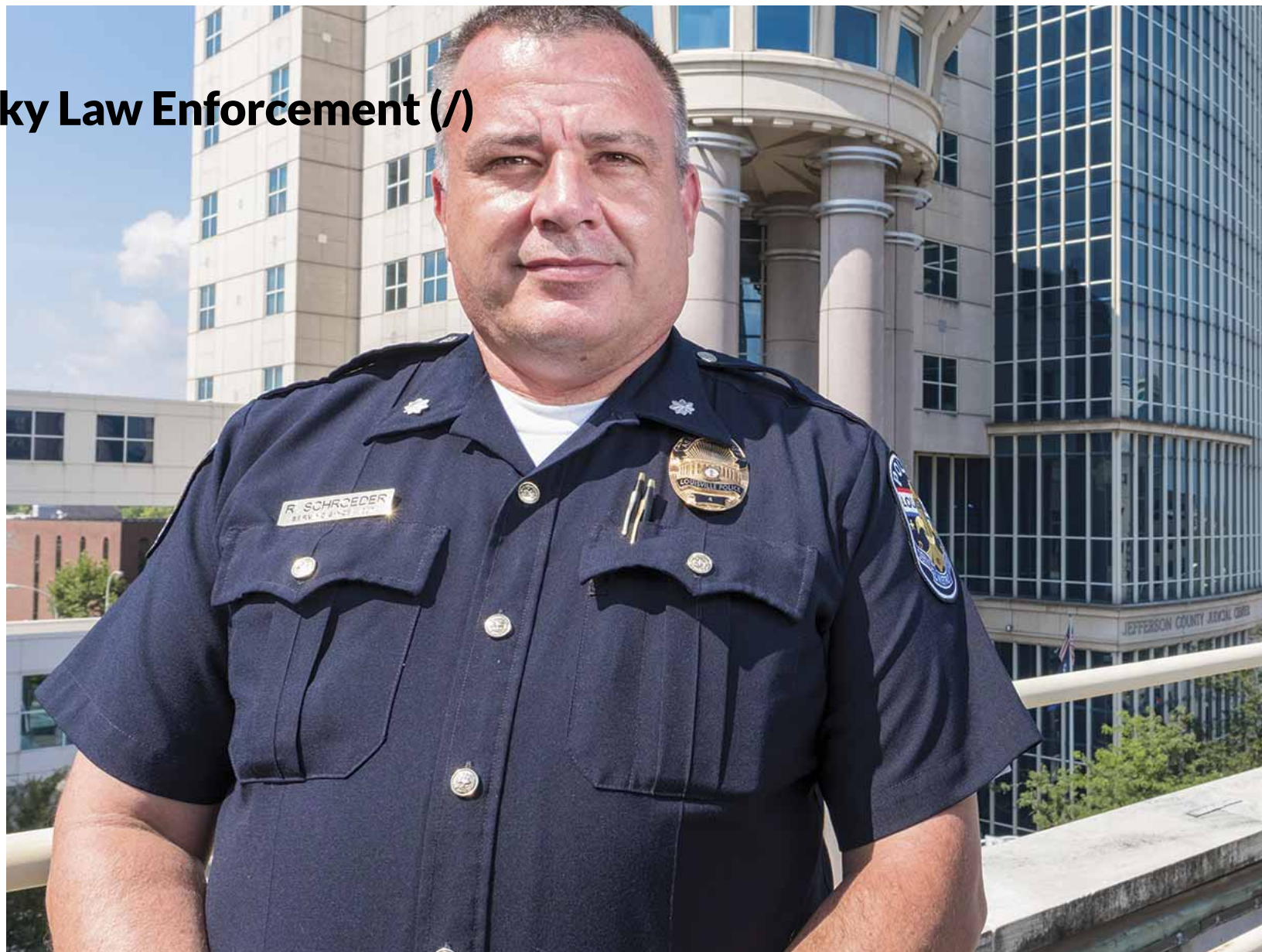
"The initial part of it is chiefs and administrators often think this is too big of a concept for smaller agencies, but we are proof you can take a large-scale idea and drill it down for any size agency," Williams said. "It's all about data collection and creating that new culture where everyone is a data analyst, and being patient – it takes time to get the data up to speed, and you may not see immediate benefits from it."



Madisonville Chief Wade Williams, top, discusses areas of the city th concentration areas to potentially focus resources with Crime Analy significant reductions in Part I crime since it began using predictive p



Kentucky Law Enforcement (/)



Lt. Col. Robert Schroeder heads up Louisville Metro Police Department's predictive policing strategy. Firmly believing that LMPD's officers and community will benefit from the technology, Sc in the process of re-rolling out its strategy and expectations to officers. (Photo by Jim Robertson)

Use What You Have

Kentucky Law Enforcement (/)

Even the best predictive-policing strategy cannot stand alone on just collected data. Madisonville's Williams stresses predictive policing is an enhancement, not an end in itself. It's about using data to inform decisions, whether a department has 1,200 officers or 12. Williams argues agencies will save manpower and dollars by using data to identify hotspots and prevent crime, instead of a shotgun blast.

"We have tailored our approach to where it works for us and could work for smaller agencies," Williams said. "I think this is the future to which everyone eventually will move. Anyone can take a bite."

Paducah's Zidar encourages agencies to look at what resources and programs they currently have that can help them process and manipulate data.

"A lot of agencies will jump into a brand-new program because of a great presentation, but Paducah is a city of 25,000 at night, we don't need a \$150,000 program to manage our data."

Instead, Zidar says there are amazing things agencies can build in Microsoft Excel that do not cost them a thing. Before asking for money for software, agencies can look at what they have and what they want.

"Take stock of what you have now and ask, 'Are we maximizing what we can get out of it?'" Zidar said. "Most often, the answer is, 'No.'"

Madisonville and Paducah have experienced success with their crime analysts in the years since creating those civilian positions. However, Zidar emphasized agencies don't necessarily need a research background, like his, or who is overly tech-savvy to be successful.

"Agencies need someone who is willing to learn, is motivated to look into it and carefully consider what the agency has and the organization's goals," he said. "Look at the people you have and need to bring someone in."

More than Just Numbers

Even the best predictive-policing strategy or software cannot stand alone on just collected data. Madisonville's Williams stresses predictive policing is an enhancement, not an end in itself. It's about using data to inform decisions, whether a department has 1,200 officers or 12. Williams argues agencies will save manpower and dollars by using data to identify hotspots and prevent crime, instead of a shotgun blast.

"Using predictive policing, problem-oriented policing, community-oriented policing and intelligence-led policing and how you respond to those things and package it really is what predictive policing is."

Zidar agrees it is more than just looking at numbers.

Predictive policing tries to harness the power of information, geospatial technologies and evidence-based intervention models to reduce crime and approach — applying advanced analytics to various data sets, in conjunction with intervention models — can move law enforcement from reacting what and where something is likely to happen and deploying resources accordingly.

— The National Institute of Justice

“It’s a misconception that a crime analyst sits behind a desk pushing out daily, weekly and monthly reports,” he said. “That’s the wrong way to be a crime analyst; having knowledge of how is a reason why that one bar is worse than the others and generates 30 calls a month.

“I like to go out to these places and look at the environment and what’s different,” he continued. “There’s usually a management issue there. There’s the same population going to this place, different.”

Another key factor in making predictive policing work is community engagement. Not only can the community be a source of data, which agencies can take into their predictive systems and helps the community take ownership over assisting law enforcement in addressing the crime and circumstances they face.

“We really pushed community interaction from football programs to cookouts to being active in neighborhood watches and the school systems,” Williams said. “We are very open to the information. They are the eyes and ears of the community, and the community is key in building information levels and concern levels.”

Madisonville Officer Andy Rush explained how a citywide program called, ‘Go Madisonville,’ allows city users to report nuisances, problems with sanitation and police issues, among other collection, along with information that comes from community members through anonymous tips directed into their predictive software and through Facebook messages.

“Sometimes it feels like there is no value in each piece of information individually, but when you add it all together, it could amount to something substantial,” Rush said.

Louisville Metro’s Schroeder agrees that community engagement is pertinent to the success of any policing strategy. LMPD releases much of their data, both raw and interpreted, to the public, permitting residents to map crime patterns and activity in their neighborhoods.

“We have an excellent relationship with our community, so when there is civil unrest in other places on a national level, we have community conversations,” Schroeder said. “We’ve gained data was all secret, but when you share it, community relationships are better. Investigations are not compromised for sharing, and overall it’s a good thing.”

Madisonville’s system works similarly, allowing the public to see all its crime data and submit tips and sign up for crime alerts, Rush said. They can receive an email every day or month at their house.

By growing community relationships and harnessing the data generated from that open dialog and willingness to share, departments set themselves up for more successfully navigating where the data is telling them to focus their resources.

“Having a good understanding of the local scene, from crime to collisions, administrative perspectives and data, lets you know about all the issues and what is successful,” Zidar said. “The data we generate already.”

Kentucky Law Enforcement (/)




Based on predictions from the Lexis-Nexis predictive software, which layers information from all facets of collected data, Madisonville officers are strategically placed at high-collision areas at help reduce accidents and injuries. (Photo by Jim Robertson)

Kentucky Law Enforcement (/)

FALL 2017 (/?CATEGORY=FALL+2017), FEATURE (/?CATEGORY=FEATURE)

Predictive Policing (/?tag=Predictive+Policing)

 (<https://www.facebook.com/sharer/sharer.php?u=https%3A%2F%2Fwww.klemagazine.com%2Fhome%2F2017%2F10%2F10%2Fharnessing-the-power-of-data>)

 (<https://twitter.com/intent/tweet?url=https%3A%2F%2Fwww.klemagazine.com%2Fhome%2F2017%2F10%2F10%2Fharnessing-the-power-of-data&text=Understanding+predictive-policing+strategies+and+how>)



Abbie Darst (/?author=59a6bf51c027d8bb03618d9a)

Latest Articles

Nominations Open for National Bravery Awards (/home/2019/1/2/nominations-open-for-national-bravery-awards)

Got skills? (/home/2018/12/14/got-skills)

Kentucky Victims Programs Awarded \$26.5M in Grants (/home/2018/12/17/kentucky-victims-programs-awarded-265-million-in-federal-grants)

Community Involvement (/home/2018/12/12/taylor-officer-profile)