The Bethlehem Police Department Boosts Efficiency with Cloud-Native RMS, Reclaiming 50% of Officers' Shift Time

The Bethlehem Police Department (Bethlehem PD) serves approximately 100,000 residents, making it the 8th largest police force in Pennsylvania. With over 170 employees, including 154 sworn officers, the Bethlehem PD is committed to protecting and serving with integrity and professionalism. Under the leadership of Chief Michelle Kott, a public safety innovator, community advocate and industry leader, the Bethlehem PD is at the forefront of policing in Pennsylvania. As part of the Lehigh County Consortium, the department plays a vital role in preventing crime and ensuring public safety in the region. The Bethlehem PD relies on advanced, modern technology to meet current needs and adapt to future challenges.

THE CHALLENGES

The Bethlehem PD faced significant operational challenges with its previous records management system (RMS), which was inadequate for modern policing demands. The fragmented system was hindering the department both technologically and in terms of manpower. Officers and supervisors found themselves tethered to desktops at their station for half of their shifts, rather than being in the field—where they were needed and where they signed up to serve.

The outdated system was cumbersome, making it difficult for officers and supervisors to access critical information efficiently. As a result, delays became pervasive, slowing down workflows, impeding timely and accurate reporting, and obstructing access to essential analytics—all of which impacted effective response and decision-making. Recognizing the need for a more streamlined, user-friendly solution, the Bethlehem PD sought a system that would improve operational speed, accuracy, and community trust.

The department aimed to address the following key pain points:

Inaccurate Reporting and Challenges with NIBRS Compliance

One of the most pressing issues was the agency's inability to meet federal reporting standards under the National Incident-Based Reporting System (NIBRS), essential for federal grant eligibility. The system used outdated Uniform Crime Reporting (UCR) standards, which were error-prone and caused inaccurate reporting. Lieutenant Joshua Schnalzer explained, **"Before upgrading our technology, we weren't able to access NIBRS reporting. We relied on UCR and would often encounter pages of errors that needed to be fixed, making the reporting process time-consuming and frustrating."**

Fragmented Workflows and Inefficient Data Management

The old approach required officers and supervisors to toggle between three separate software applications, slowing reporting and complicating information access. **"We as Supervisors didn't have the visibility that we needed to see all the reports in one place. We had to search between three separate software applications, so it was very difficult for us to keep track of where officers were and get reports done in a timely manner,"** recalled Lieutenant Schnalzer. The old system had limited search filters, and officers couldn't revise, or update reports once finalized— **"It was essentially a permanent record which ended up causing some problems. That's not the nature of police work—we learn new things and sometimes need to add or make a change to a report and the old system just didn't allow for that."**

Delayed Case Assignments and Lack of Visibility

Before transitioning to a cloud-native RMS, supervisors managed case assignments across multiple systems, making it nearly impossible to track which cases required follow-up. **"Back when I was a lieutenant, I would have to assign cases for follow-up to my detectives. Sometimes you wouldn't see that criminal offenses needed to be assigned because it wasn't merged yet...it was cumbersome,"** Chief Michelle Kott explained. This fragmentation resulted in delays that impacted investigations. **"It would delay the start of investigation which could be extremely detrimental to a case when you have to get moving... and it would extend the time of an investigation as well."**

Lack of Analytics and Data-Driven Decision Making

Limited analytics was also a major barrier to making data-driven decisions, as it wasn't possible to pull meaningful, accessible data from reports. **"We were missing the ability to pull data from the records management system and make it consumer-friendly,"** said Chief Kott.

THE SOLUTION

The department had a unique opportunity to join the Lehigh County Consortium's initiative to implement a modern, cloud-native RMS solution. The decision to adopt a new RMS was driven by the need to embrace modern technology, ensuring the flexibility and interoperability necessary to meet the evolving demands of the Bethlehem community.

This technology transition was no small feat, but under Chief Kott's leadership, the Bethlehem PD embraced it for the long-term benefit of officers and the community. The department deployed Mark43 RMS and Analytics in March 2021, with the successful transition driven by focused training and implementation efforts. Lieutenant Schnalzer oversaw 100 officers and a swift adoption: **"Not one person came to me and said I don't like it—everyone embraced it."** Chief Kott added, **"People were very happy to make the change. Once officers learned how to navigate the system, it was quickly embraced."**

The new system equipped the Bethlehem PD with new capabilities:

Control and visibility

Officers can manage data and reports within one central system, eliminating timely merging and outdated documentation. This not only streamlines operations but ensures real-time access to information for quick decision-making and data-driven policing.

Extensibility

An open API enables seamless integration with other critical applications. This allows the Bethlehem PD to build a customized technology ecosystem that reduces data silos and improves cross-department decision-making.

Built-in compliance

NIBRS compliance is native to the RMS solution, ensuring federal and state reporting requirements are met. This eliminates the risk of costly fines and administrative burdens, allowing the department to focus on its core mission, knowing that compliance is seamlessly integrated into daily operations.

Security

Built on AWS GovCloud, the Bethlehem PD benefits from the highest level of security, including superior encryption standards, tech stack and infrastructure that exceed CJIS requirements and other regulations. This ensures the Bethlehem PD has the most mature controls available to protect against modern-day cyberthreats.

Configurability

The cloud-native RMS adapts to the agency's current and future workflows, ensuring the Bethlehem PD can quickly respond to needs without costly or time-consuming system overhauls. This flexibility will allow the department to stay efficient, and agile to improve response and office effectiveness in the short and long term.

THE IMPACT

The Bethlehem PD's technology upgrade has transformed operations—saving valuable time, boosting cross-agency collaboration and enhancing transparency. The department saw immediate gains in workflow efficiency: **"A lot of the learning curve was adapting our workflows. We've completely eliminated physical paperwork, and that's all now in Mark43,"** said Lieutenant Schnalzer.
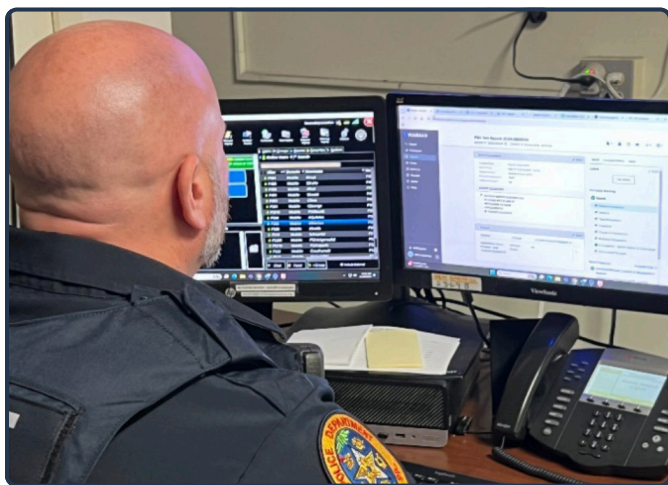
Most importantly, it keeps officers in the community where they are needed. With faster report writing, seamless case assignment and streamlined compliance reporting, the benefits of adopting a cloud-native public safety solution are clear.

> Bethlehem officers have **regained nearly 50% of their shift time** with Mark43 RMS, enabling them to dedicate more hours to community engagement and operational priorities, as the 3-4 hour report writing and case assignment process has been cut down to virtually zero.
>
> The Bethlehem PD has maintained a **zero percent NIBRS reporting error rate** since transitioning to Mark43 RMS.

Better Collaboration and Coordination with City Officials

With streamlined interactions between the police department and city officials, the Bethlehem PD has experienced expedited timelines and improved morale between the department and District Attorney's office. Chief Kott emphasized the benefit of having data easily accessible for decision-makers like herself: **"Being able to pull data and make it consumer-friendly is critical. I can now reach out to my Lieutenant and ask, 'How many gun offenses did we have last year?' and get answers instantly and seamlessly."**

This ease of access improves transparency and collaboration with City Council members and drives data-driven decisions across the department. In addition, the District Attorney's office benefits from real-time access to reports, which has helped expedite legal processes including bail hearings and expungements.

Time Back in the Community

By cutting down time spent on manual reporting, case assignments, and paperwork, officers are now spending more time on patrol and engaging with their community members. Lieutenant Schnalzer states, **"Being able to go to calls where a supervisor was needed, being able to actually be out on patrol or interacting with members of the community is what local law enforcement is supposed to be doing, not sitting at a desk and doing computer work."**

Now, with an easy-to-use and intuitive records platform, officers make changes on the fly. The transition has saved supervisors hours of work, particularly the time-consuming task of merging reports manually, which Lieutenant Schnalzer had described as **"very frustrating; dealing with duplicate records or incomplete or inconsistent data. These issues disappeared overnight after the switch to Mark43,"** improving efficiency and data integrity.

This reduction in administrative tasks has particularly benefited younger officers, who expect modern technology that makes their core duties easier, not more laborious. Chief Kott notes, **"The IT is just easy. In our job with so many unknowns and variables, the younger officers want to write the report and get out there to the next call. They don't want to be handcuffed by multiple computer platforms and programs."**

Adopting a cloud-native public safety solution has become a key benefit in recruitment and retention. Lieutenant Schnalzer notes, **"Modern technology is the expectation for younger officers. If we're not using the latest tools, it's a less appealing agency to work for."**

Improved Community Relations and Transparency

Following the technology transition, the Bethlehem PD turned data into a strategic asset to help prevent and address crime while also strengthening community trust. By leveraging real-time data, the department has enhanced public relations and transparency. Its single view of agency activity and library of more than 15 visualizations and dashboards allow the Bethlehem PD to stay proactive in reporting.

> "We've improved public trust through transparency and accountability. Being able to put out daily snapshots of criminal offenses with Mark43 Analytics has been huge. For the longest time, we didn't have the capabilities."
>
> – Chief Kott, the Bethlehem Police Department

BETHLEHEM POLICE DEPARTMENT
In partnership with our Community

Reported Crimes: October 19, 2024   through   October 26, 2024

	Last Two Weeks		Last 28 Day Period			Year To Date		
Violent Crime	10/11 - 10/18	10/19 - 10/26	8/30/2024 - 9/27/2024	9/28/2024 - 10/26/2024	%Change	2023	2024	%Change
Homicide	0	0	1	0		0	2	
Rape	0	1	1	3	200%	30	25	-17%
Robbery	0	0	1	1	0%	26	20	-23%
Aggravated Assault	1	3	9	8	-11%	46	72	57%
Simple Assault / Harassment	17	26	78	80	3%	812	790	-3%
Total Violent Crime	18	30	89	92	3%	914	909	-1%
Property Crime	10/11 - 10/18	10/19 - 10/26	8/30/2024 - 9/27/2024	9/28/2024 - 10/26/2024	%Change	2023	2024	%Change
Burglary	2	3	9	7	-22%	72	58	-19%
Theft From Building/Other	13	16	38	49	29%	448	400	-11%
Theft From Vehicle	3	4	25	18	-28%	178	160	-10%
Theft of Vehicle Parts	1	0	4	2	-50%	118	37	-69%
Retail Theft	7	7	12	18	50%	122	144	18%
Motor Vehicle Theft	0	1	7	3	-57%	74	100	35%
Total Property Crime	26	31	95	97	2%	1012	899	-11%
Public Order / Alcohol-Related	10/11 - 10/18	10/19 - 10/26	8/30/2024 - 9/27/2024	9/28/2024 - 10/26/2024	%Change	2023	2024	%Change
DUI / Driving Under the Influence	7	7	35	24	-31%	223	256	15%
Public Drunkenness	6	9	28	27	-4%	312	293	-6%
Vandalism / Criminal Mischief	14	13	29	39	34%	300	254	-15%
Disorderly Conduct	8	4	16	17	6%	137	138	1%
Total Public Order / Alcohol-Related	35	33	108	107	-1%	972	941	-3%
Other Crimes	10/11 - 10/18	10/19 - 10/26	8/30/2024 - 9/27/2024	9/28/2024 - 10/26/2024	%Change	2023	2024	%Change
Sexual-Related Offenses & EWC	4	3	11	19	73%	161	166	3%
Fraud-Related Offenses	6	8	29	27	-7%	412	306	-26%
CY-104 Report	3	5	16	23	44%	177	163	-8%
All Other Offenses	2	2	12	12	0%	190	165	-13%
Total Reports in Mark 43	810	852	3378	3061	-9%	34,587	33,468	-3%

Today, the department releases crime data directly to the public, keeping the community informed. This shift in information-sharing has been critical as more people rely on social media for updates. **"It's incumbent on the police departments to release that information,"** added Chief Kott. See here for an example of the Bethlehem PD's daily public-facing crime data report.
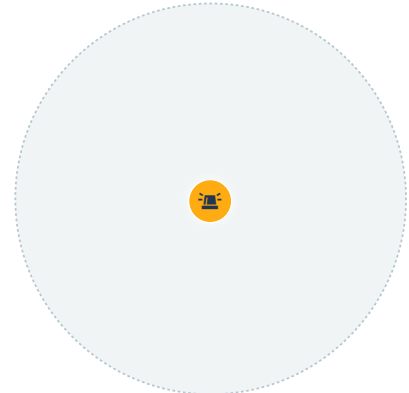
Real-Time Data Sharing through the Consortium Database

The ability to share data seamlessly with neighboring agencies has been a significant force multiplier for Bethlehem officers. Lieutenant Schnalzer points out, **"We share a border with Allentown and Easton, and the surrounding area is home to nearly 1 million people. With a lot of movement between jurisdictions, being able to share reports and name profiles is hugely beneficial for investigations and crime detection."**

Officers now have access to shared regional reports and criminal profiles in real-time, which has proven invaluable for both routine and emergency situations. In addition, Bethlehem's own service center plays a key role in leveraging this data, as Chief Kott explains: **"We have our own service center here with NCIC capabilities. They're able to get on the radio and provide real-time information to officers while they're on the scene. This data access has enhanced situational awareness, enabling officers to make faster, more informed decisions."** Chief Kott added, **"Given that Lehigh Valley is a metro area, having a pulse on the activity across regions enhances our situational awareness, officer safety, and safety of our community members."**

Enhanced Reporting Accuracy and Compliance

Compliance with federal and state reporting requirements has dramatically improved since the department upgraded its reporting technology. One key area of improvement is the department's transition from UCR reporting to NIBRS, which has resulted in a significant reduction in reporting errors, a more detailed view of crime data, and increased eligibility for federal funding.

"**Before we started with Mark43, we were still doing UCR reporting and it was bad. The old system generated pages of reporting errors. Since switching to Mark43, the NIBRS error rate is very low,**" said Lieutenant Schnalzer.

The ability to access and manage these records within the system has also simplified the department's accreditation process. Chief Kott and Lieutenant Schnalzer highlight:

"**Pursuit reporting in Mark43 has been a game-changer. It's a state requirement for us to submit monthly reports on any vehicle pursuits, and we do it all through Mark43. This is also crucial for our accreditation process, as our accreditation manager can easily access the data and use it as proof when it's time for us to be re-accredited.**"

In adopting a cloud-native RMS and Analytics solution, the Bethlehem PD has successfully transformed its operational processes and reinforced its commitment to community-focused, data-driven policing. The transition to a cloud-native RMS has empowered officers to spend more time in the field, increased reporting accuracy, and enhanced both internal and public transparency. With streamlined workflows, NIBRS compliance, and real-time data-sharing capabilities, the Bethlehem PD is well-equipped to meet the evolving demands of modern policing. By embracing this advanced technology, the Bethlehem PD has set a new standard for public safety in Pennsylvania, positioning itself as a model of innovation, efficiency, and community trust.

About Mark43

Mark43 brings modern technology to enhance public safety, making state, local and federal agencies faster, smarter, and their communities safer. Our integrated Records Management System, Computer-Aided Dispatch, and Data Analytics form the backbone of a unified, real-time public safety operating platform to streamline workflows, improve response times, and foster collaboration. Trusted by over 290 agencies, Mark43 increases effectiveness and efficiency amid rising demands and limited resources. By supporting first responders with innovative tools, AI technology, and a strong cybersecurity foundation, Mark43 equips public safety agencies to address the challenges of today and tomorrow.

Visit **www.mark43.com** for more information or to request a demo.