THE SMART
CITY OF THE
BAHAMAS

Jason Tyre, Business Development Manager, Cities at Milestone Systems discusses how an updated VMS has improved operations for the Royal Bahamas Police Force

Photos by Telmo Machado at Infusion Direct Marketing

Nassau, the capital of the Bahamas, is becoming a smart city. By upgrading its video technology system, the Royal Bahamas Police Force (RBPF) aims to reduce crime such as kidnappings and armed robberies, while at the same time going beyond security to help authorities manage emergency responses.

Expanding capabilities for better prevention

According to the Commonwealth of the Bahamas' 2022 Census of Population and Housing, the country has a population of 399,314. The Bahamas is one of the main tourist destinations in the Caribbean, welcoming nearly seven million visitors every year. The city of Nassau serves as the center of commerce, law, administration, education and media for the Bahamas, while the RBPF employs over 3,000 officers and provides policing, safety and security services to residents and visitors.

Unfortunately, Nassau has seen an increase in crime in certain parts of the city in recent years, particularly from 2009 to 2015. From pickpockets and vehicular crimes including hit-and-run incidents to armed robberies and even kidnappings, the RBPF was challenged to keep up with the rising tide of criminal activity. The police force's initiative to expand the country's surveillance system as a strategic tool in the fight against crime was fully supported by the government.

"There are known criminal hotspots across the city that people of interest frequent," said Ethan Munnings, Chief Technology Innovation Officer (CTIO) at Proficient Business Services, Bahamas and the lead engineer for the city of Nassau video surveillance project.

"To curb incidents in those areas and to better track and monitor suspects, gain situational awareness and to be able to help locate or identify people after leaving the scene, the RBPF added system

infrastructure and hundreds of new IP-video cameras to increase police presence. One of those areas, for example, is the surroundings of the house of the Prime Minister."

The city's original Milestone Systems XProtect video management system (VMS) was installed in 2011 and managed close to 250 cameras. In 2019, Nassau authorities began working with Proficient Business Services, to upgrade their use of Milestone's open platform data-driven video technology system, which is compatible with a wide range of hardware and software vendors.

The improvements led to the redesign of the network infrastructure, adding over 500 high-quality network cameras from Axis Communications to the system as well as edge devices, to help the RBPF monitor and respond to the upsurge of incidents more effectively.

Munnings explained that redesigning the network infrastructure was essential to bringing all the camera feeds to the city's new Real-Time Crime Center. The center, located

at police headquarters, began operations in early February 2021. It serves as a technology hub for the RBPF.

"Nassau and police authorities are very happy with Milestone's VMS because of its reliability, ease of expansion and use, as well as its compatibility with multiple hardware and software vendors," added Munnings. "For this expansion, we brought together integrators certified in the installation and operation of Milestone Systems; we had a fiber

team and a wireless group tasked with getting the infrastructure in place and we had another unit configuring and installing the cameras. The flexibility of Milestone's VMS made this all very easy."

According to the RBPF, the upgraded video technology system is helping to manage and address a range of incidents around the city, elevating external security for government ministries and even assisting with the enforcement of pandemic-related lockdowns.

The partner ecosystem

Milestone's XProtect Open Platform VMS currently supports more than 10,000 different security devices from more than 700 of the industry's leading manufacturers. Technology partners include providers of network video cameras, network video recorders (NVRs), storage equipment, access control, alarm and detection systems, video analytics, GPS technology, laser scanners, emergency call boxes and much more.

According to Munnings, many cameras installed in the original system are still in use. The newer cameras added during the system expansion involved several types of network cameras from Axis Communications, including bullet, pan-tilt-zoom (PTZ) and fixed box cameras. Axis cameras with built-in license plate recognition (LPR) software and wireless cameras are also in use.

Five recording servers from Rasilient Systems, with a total capacity of 250 terabytes, record 24/7 and store the information on-premises for 30 days.

Within the Milestone VMS, the cameras and servers integrate with BriefCam's video analytics, providing facial recognition and person/object tracking. By harnessing the power of AI and deep learning, integrated BriefCam technologies transform video data into valuable insights for rapid video review, search and real-time alerting. The system also offers two types of LPR; the first is via the Milestone LPR add-on and the second is through direct integration with BriefCam.

ShotSpotter, the gunshot detection sensors from SoundThinking, was also integrated into the expanded system.

A team of 14 operators relies on Auvik for device monitoring and SolarWinds to manage the core network. The fiber network, with a 10G backbone, is based on Cisco technologies.
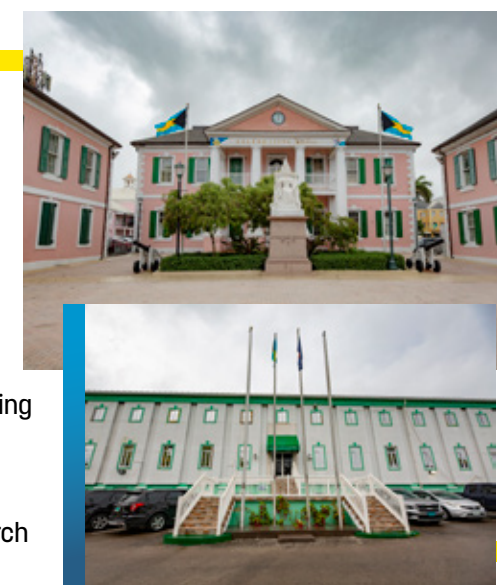
Beyond security

Nassau's renewed city surveillance system has also provided benefits beyond security. The system was integral in helping authorities enforce protective measures to prevent the spread of COVID-19 during the worst period of the pandemic, including a brief 24-hour curfew in May 2020 where residents could leave their homes only for emergencies.

"The main benefit beyond security came to light during the pandemic when authorities were able to

watch the streets to ensure curfew compliance at times when no one should have been on the road," said Munnings. "The system enabled the police to see if the COVID restrictions were being violated and then send personnel to address issues, as needed."

Another critical use beyond security is with monitoring traffic accidents and keeping drivers accountable for their actions. According to Nassau's local Eyewitness News, there were 69

traffic-related deaths in 2018. Following the nearly 30% increase between 2017 and 2018, authorities pledged to decrease the number of traffic fatalities and accidents and video technology is helping in that effort. In 2019, fatal traffic accidents in New Providence (the most populous island in the Bahamas) dropped to 33.

"The cameras we have strategically installed on traffic lights around the city use LPR integrated with Milestone Systems which have helped control hit-and-run accidents," said Munnings. "There have been cases of pedestrians being hit by vehicles that didn't stop; now the police can track those vehicles and bring those drivers to justice. The new surveillance system has also helped prevent human abductions."

For more than a decade, Nassau has been relying on and expanding the capabilities of its video surveillance system. Leading technologies and the depth of integration available within an open platform VMS ecosystem have allowed city authorities and the police to meet and overcome new challenges, building towards a safe city for citizens and visitors alike.

"Technology and innovation have taken off at the speed of light — and this will only accelerate. Embracing the innovations that improve police work is no longer optional," said Zhivago Dames, Assistant Commissioner of the RBPF. "We have deployed Milestone's VMS to engage in the fight against crime, to apprehend wrongdoers and to conduct research that gathers and analyzes data to discover root causes and remedies for mitigating criminal intentions."