



VSM Exclusive
Interview

Technology is always evolving. Making the tools we use to fight crime more precise, more intense and more effective. But criminals are also evolving along disturbingly parallel lines as they try to outwit law enforcement.

Someone who has a unique view on this dynamic is Durham, NC CSI Officer Marilyn Coble. Unique in that she's on the front lines in a city that's viewed by outsiders almost like a coin—one side shiny (academics and medicine), the other scarred (crime). But also unique because her resume is dotted with experience which only forms a straight line when viewed in retrospect, from how perfectly it's positioned her to do what she does today. Computer graphic design. Lab work. Crime scene investigations. And now, video forensics.

We sat down with Officer Coble to get her take on ways to use video to help solve crimes, even when the criminals are getting savvier about being 'caught in the act.'

"Criminals know they're probably being filmed now. They wear hats, keep their faces covered," she says. "We've got to stay one step ahead of them."

A look at new uses
for video forensics—
through the eyes
of a Durham expert.



CSI: Durham

A Reliable Witness

“Witnesses, they’re usually upset, everything is a blur to them. They only remember seeing a gun.”

She’s talking about the recent daytime robbery of a fast-food restaurant near downtown Durham. There were people inside at the time—employees, some customers—but their recollections were typically hazy, blurred by the intensity and fear of the moment.

But one witness she’s found never flinches or flip-flops incidents. The surveillance camera. It’s going to answer all of the questions you have.

“So my first question when I get on the scene is ‘do you have surveillance?’”

She entered the crime scene as a member of the CSI team, but upon learning there’s a camera, quickly started gathering video for processing. The footage crystallized the entire robbery. Viewing it, she could see what areas to secure, and what areas to ignore. It served as a guide to their entire investigation.

“I saw they only touched this drawer and this drawer. They didn’t mess with the storeroom, didn’t go in the back, so we didn’t have to try to get prints there. We knew by looking at the weapon there would be no casings found. All that saves me time.”

The video worked almost like a play-by-play. She could scroll through it, pointing out specific spots to look for fingerprints or other clues. Her team focused on the counter and kitchen areas, and quickly found shoeprints on the countertop where the suspects climbed over. Three distinct shoe patterns were uncovered. The footage also gave the Durham Police a sense of the assailants’ heights, weights, race and what kind of weapon was used.

“So even though these guys had their faces covered, had gloves on, we had enough to start searching for them. Video gave us that.”

Two of the suspects are still being pursued, but one arrest has been made. The suspect’s account of the crime was corroborated by the forensic evidence gathered at the scene.



Crime Leads to Other Crimes



“Most of the times, these break-ins go unsolved. But in this case, he was taking stolen items and trying to use them. We weren’t able to get fingerprints or witnesses, but we could use the surveillance.”

Her next story details a much quieter showdown between criminal and storeowner.

The scene: a convenience store where one customer is acting oddly as he tries to pay with a credit card.

“The clerk noticed the guy was acting nervous, swaying back and forth, so he felt something was wrong.”

The card is declined, and the clerk’s suspicion rises. As the man leaves the store, the employee gets the plate information of the suspect’s car. Then he calls the police.

Once again, the camera caught the entire exchange, so when officers tracked the plate to an address, they were able to describe the suspect to the person living there.

“It made the detective’s job easier, when describing the suspect. When she heard the description, though, she said ‘that sounds like my daughter’s boyfriend.’”

Officer Coble hadn’t done much to the photo in terms of forensics, just brightened the contrast and sharpened the blur. But it was enough for officers to get a clear sense of who they were looking for, and with the plate ID, where to go to look for him.

A different crime that had no such leads, though, was a series of car break-ins in a nearby neighborhood. Not a single witness. No fingerprints. Victims of the crime, however, had reported certain property stolen. Various electronic items, wallets. And several credit cards.

“So when we compared the numbers of the stolen cards to the numbers on his declined card, we knew there was a connection between the two crimes.”

They told the suspect they could link him to these car break-ins, hoping that the pressure and fear of being arrested would soften the criminal. It did. He confessed to all the crimes, and eventually pled out.

The Hat Bandit

In the summer of 2008, three males took to robbing fast-food chains. The thieves worked in tandem, one acting as a lookout, one brandishing a weapon while the third robbed the cash registers.

Each wore bandanas and dark clothing, so facial features are out of the question. Latent fingerprint evidence at each scene proved useless. But one suspect was wearing an unusual, skull-and-crossbones cap. He wore it at every robbery, which was captured on surveillance video at three of the scenes.

Officer Coble downloaded stills from the digital surveillance cameras onto a CD. She scanned them, hoping for a clear shot of the 'Hat Bandit' as he came to be known. One store in particular had a few sharp images of the suspect. She frame-by-frame picked the best angles from the raw footage.

"For this case, actually, I had to adjust the contrast because of natural light coming from the drive-through. So typically I'm just adjusting brightness levels."

She circulated the polished stills along with footage in Windows Media, standard operating procedure in today's video-saturated world. She can often get this evidence to detectives within a few hours.

"When the detectives were able to see it, they were able to say 'oh, that's it, that's him, no doubt. It really brought everything together."

Soon after, the detectives pursued and pulled over a vehicle IDed by witnesses after another robbery. The driver was wearing a skull-and-crossbones hat. The arresting detective realized the link to the stills, and brought up the fact that they had plenty of shots of the cap on tape.

"At that point, he confessed. He gave names, too."

The suspects are now serving time. It is unknown what hats they wear in jail.



PROFILE

OFFICER MARILYN COBLE

Officer Coble comes from both a biology lab and computer-design background. The Durham Police asked for volunteers to learn video forensics, and she raised her hand. So she now spends her workdays as a kind of hybrid—one foot in CSI, the other in video forensics. The two are often intertwined at a crime scene. She uses multiple technologies for image cleanup.

If you have any stories like these of your own, email us at editor@videoscenemagazine.com.

