About a third of the nation’s 18,000 police departments are using wearable body cameras to record interactions between officers and citizens. Still other law enforcement agencies are piloting body camera initiatives, and many others are debating their use.

Interest in the technology has jumped dramatically in the last year due to a string of high-profile police shootings that grabbed media and public attention. Many states and municipalities are looking at legislation that mandates the technology, and President Obama has asked Congress to fund a community policing initiative that includes 50,000 body cameras.

Advocates say body cameras will reduce the use of unnecessary force by police and the number of false or unwarranted citizen complaints. Opponents of the technology cite privacy concerns for citizens and officers.

This issue brief will review some of the key issues surrounding the use of wearable body cameras by public safety officers, including the primary benefits and challenges of the technology. In addition, the brief will provide an overview of body camera technologies and systems.
Body cam, in-car cam … or both?

Due to the strengths and weaknesses of each device, consider the body camera a complement to the in-car camera, not a replacement.

- Depending on the lens, body cameras in general tend to have a smaller field of view than in-car cameras. Wide-angle lenses can provide more coverage, but may distort the scene or make it difficult to judge distances.
- Body cameras tend to produce lower-quality videos in low-light situations.
- Mobile, removable body cameras are easier to lose than permanently mounted, in-car cameras.
- Body cameras only record citizens, while in-car cameras capture both citizen and officer activity.
- Because of battery life, body cameras are meant to be turned on manually when citizen interaction begins. In-car cameras can be triggered to turn on automatically — for example, when the patrol car’s light bar is activated or the car’s speed exceeds a certain limit.
- Because body cameras must be manually powered on, an officer may forget to turn the camera on.
- Body cameras don’t record the activity of backseat passengers.

Benefits: Body cameras protect citizen rights, police reputations

Body cameras provide many of the same advantages as in-car cameras, including police accountability and transparency. Fresno, California, Police Chief Jerry Dyer says body cameras are one way that police forces can regain public trust, which he says has eroded over the past few years. Dyer, who is overseeing a pilot rollout of 100 body cameras to the city’s 400-person force, says, “It really boils down to this — trust.”

Both officers and citizens check their behavior when they know their actions are being recorded. It’s a win-win, say proponents — body cameras prevent both police misconduct and frivolous citizen complaints. In Rialto, California, exhaustive research seems to confirm their optimism. In the year after it equipped its 54 police officers with body cameras, the town of about 100,000 experienced a 60% decline in the use of force by officers and an 88% reduction in citizen complaints against police. The International Association for Chiefs of Police (IACP) found that 93% of citizen complaints against police are dismissed when video evidence is available.

Rialto Chief William A. Farrar says when a citizen comes to the police station to file a complaint, police staff are able to retrieve the video of the police encounter and review it with the citizen. In many cases, he says, “The individuals left the station with basically no other things to say and have never come back.”

Even the American Civil Liberties Union (ACLU), a strong opponent of most public video surveillance initiatives, supports body cameras because they protect both cops and citizens. Senior ACLU Policy Analyst Jay Stanley notes, “There are many police officers who’ve had a cloud fall over them because of an unfounded accusation of abuse. Now police officers won’t have to worry so much about that kind of thing.”

Law enforcement agencies with real-time video surveillance centers can integrate wearable body cameras to provide command and support staff with more visual information, thereby increasing situational awareness and officer safety. Like in-car camera video, body camera video can be used for training purposes and to improve policing policies and procedures. And body cameras can dramatically improve the process for preparing police reports and capturing on-scene evidence for investigations and court proceedings.

Challenges: Overcoming privacy objections

For enthusiastic advocates, body cameras are a proverbial slam dunk. But there are challenges as well, primarily related to privacy.

Citizens worry that video of their police encounters may find its way into the public domain. And while many can accept being recorded on the side of the road during a traffic stop, it’s quite another thing to be filmed by police when they enter a private residence to answer an emergency call. As the ACLU’s Stanley wrote in a policy brief, “The challenge of on-officer cameras is the tension between their potential to invade privacy and their strong benefit in promoting police accountability.”

Privacy is the primary reason that police officers and the organizations that represent them are not in lock-step agreement on the use of body cameras. For example, while the Massachusetts Chiefs of Police Association has thrown its support behind body cameras, and the Massachusetts State Police are mulling over a pilot program, the Boston Police Department is lukewarm.
Handheld mobile devices complement body cameras

To complement body cameras, police officers can be equipped with smartphones and tablets that can be connected to cameras for viewing video in the field and to aid in writing police reports. Many of these portable devices are designed with ruggedized bodies, or can be outfitted with a protective ruggedized case.

As a bonus, smartphones and tablets free police command staff, detectives and officers from the confines of their vehicles, enabling them to view detailed location information, criminal records, maps and photos from anywhere. Specialty mobile applications enable field documentation and data collection, computer-aided dispatch, map-based vehicle tracking, license plate scanning, crime prediction analytics and basic office productivity functions, such as word processing and spreadsheets.

Mobile devices also provide access to criminal databases, searchable editions of state penal codes and other information sources that provide rank-and-file police officers with the ability to gather and share data, improve public and officer safety, enhance field-based decision-making and increase productivity.

“Having all this information at your fingertips and being able to share it instantaneously with other officers in the field is invaluable,” explains Lt. Chris Catren of the Redlands, California, police department. “We have had many cases where officers have been able to quickly identify perpetrators, or transfer video that’s led to the capture of suspects.”

He continues, “Instead of coming back to the building, officers can handle these tasks in the ‘hot spot’ areas where crimes occur. It keeps them out on the streets and in the community for longer periods.”

Certainly, many police officers and organizations had the same concerns about in-car cameras when they were first introduced; now, most consider them indispensable. Rialto Chief Farrar acknowledges body cameras weren’t “the easiest sell” to his force until he reminded them that citizens regularly use cellphones to record incomplete interactions. “So instead of relying on somebody else’s partial picture of what occurred, why not have your own? In this way, you have the real one.”

The remedy to both citizen and police concerns is a carefully developed, airtight use policy that includes clear guidance on:

- When to activate the camera
- Who can view the recorded content, and when and where they can view it
- Public and media disclosure
- Appropriate penalties for breaking departmental policy, such as releasing video to the media or consistently failing to activate the camera
- The process for viewing content and how long it should take to retrieve video
- How long video will be archived
- Notifying citizens they’re being recorded

Overview of body camera technologies and systems

The most visible component of the system, the camera, can be mounted on glasses or sunglasses, a hat, lapel, collar or epaulette, among other options. Additional on-camera features include integrated audio recording and video playback.

If the camera doesn’t have onboard video playback, it can be connected to a smartphone or tablet in the field. Fresno’s Chief Dyer says all officers receiving body cameras are also being issued a tablet to allow them to review video before writing police reports.

To prevent tampering and preserve chain of custody, the camera system should include software that automatically preserves the unaltered original video file and provides an audit trail.

Look for a system with a back-end solution that simplifies video management. Secure video management software is integrated to simplify video storage, retrieval, management, and camera assignment and tracking. For better productivity, departments that already have in-car camera systems will need a video management software platform that handles both types of video.

When connected to the Internet via a docking station or another accessory, videos are uploaded automatically to a video server, which ingests the video and provisions it to storage. Either the server or the storage infrastructure — or both — may be located in a public or private cloud or in a government-owned data center.

Storage is a huge consideration, given the massive volume of video generated by wearable cameras. One calculation for a 50-officer police force estimated the agency would generate 360GB of video per day. That’s about a terabyte every three days, or 10TB per month.

That’s not insignificant. It requires law enforcement agencies to gain an accurate understanding of storage costs before launching a body camera initiative. In theory, video could be archived in the agency’s data center, but cloud-based storage is easier to deploy and manage. It’s also more cost-effective and can be funded from the agency’s operational budget.
In either case, determine how long to archive videos that aren’t being used as evidence in open cases, and create information lifecycle guidelines that can be automatically executed by the storage solution.

To integrate body camera video into a real-time video surveillance center, the system will need to support streaming video, and you’ll need access to a municipal wireless or mobile network. And finally, the police department’s wireless and broadband network infrastructure should support the daily uploading of multiple gigabytes of medium- to high-quality video to the cloud or data center.

Conclusion

Police departments across the nation are deploying wearable body camera systems in an effort to improve citizen interactions and build constituent trust. While there are privacy concerns, due diligence in the form of citizen and police education and thoughtful policy development can allay fears. And to guarantee financial viability, law enforcement agencies must take into account all expenses, particularly those associated with storage, when they’re planning a deployment.

Although wearable body camera systems are not a cure-all, they’re essential tools for protecting both citizens and police, and for capturing a comprehensive picture of citizen-police interactions. As the systems become more commonplace, citizens and police alike will find the video evidence they provide to be indispensable.