BALANCING TRANSPARENCY AND PRIVACY IN THE IMPLEMENTATION OF POLICE BODY-WORN CAMERA SYSTEMS

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INTRODUCTION

An open, publicly accountable criminal justice system is fundamental to our nation's government. While the need for transparency exists within all parts of government, none requires transparency more than law enforcement. Law enforcement personnel serve on the front lines of our criminal justice system. Mutual trust between police and the communities they serve is critical to maintaining public safety and effective policing. When public trust in the police is absent, our entire criminal justice system suffers.

Despite their prominent role in society, law enforcement agencies are largely insular organizations in practice. Law enforcement procedures are typically opaque, concealed from the public eye due to the sensitive nature of the work and the desire to protect investigatory functions. When combined with incidents of officer misconduct, this opacity has led to significant distrust of law enforcement.[1] Today, public trust in the police is at an all-time low.[2]

Recent high-profile incidents involving alleged police brutality have prompted a nationwide call for accountability and reform. In particular, the shooting death of Michael Brown by police in August 2014 ignited a long-simmering debate about police accountability; the continuing dispute over what actually occurred on that fateful afternoon in Ferguson, Missouri, which was not recorded on video, is widely credited with accelerating the adoption of video cameras by police departments across the United States.[3]

Image 1: Photo by Joe Raedle/Getty Images

Following Brown's death and the ensuing protests that occurred in Washington, New York, Boston, Oakland and other communities, a broad coalition of groups including the NAACP, ACLU, and the Lawyers' Committee for Civil Rights called for police departments to adopt body-worn cameras ("BWCs") to improve police accountability and transparency. Responding to the public's demand for increased accountability, the U.S. Department of Justice announced in September 2015 that it was awarding more than $23 million in grants to law enforcement agencies to support and encourage the implementation of BWC programs.[4] Since 2015, the federal government has given the states over $85 million to support BWC programs.[5]

While a handful of police departments in the U.S. were already experimenting with BWCs—and the use of BWC systems was widespread in the United Kingdom—this seed money and the federal government's enthusiastic support for the adoption of BWC technology sparked what some commentators have described as a "body camera revolution [which] is spreading across the nation as a historic convergence of interest between civil liberties and civil rights groups and law enforcement agencies."[6]

The adoption of BWC's also has been spurred by the increasing sophistication of BWC manufacturers and the rapidly improving technology of digital video, which is lowering the costs of buying and operating BWC systems and providing functionality that would have been considered science fiction only a few years ago. Today, BWCs are small

Image 2: Wolfcom Police Cameras

enough to be worn on an officer's glasses or head and are capable of recording everything the officer sees and hears; newer cameras have night vision technology and can analyze chemical and heat signatures. As police departments expand their use of autonomous drones, the number of police cameras and their capabilities will only increase.

Although police BWCs have the potential to increase police accountability and transparency, as well as provide an important tool for gathering evidence, they raise a host of difficult questions for policymakers, ranging from privacy to employment law. Because BWCs can capture audio and video of people in private and sensitive situations, their use often implicates significant legal concerns. As Mary Fan, one of the leading scholars on this topic, has noted:

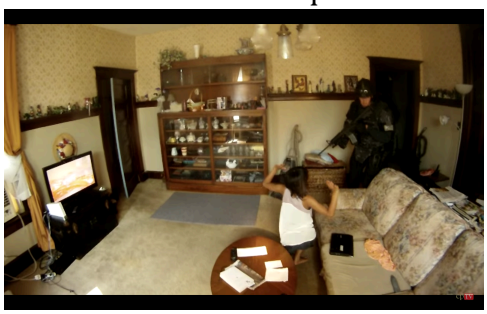

Image 3: YouTube

> Police officers enter some of our most private places and intervene at some of the worst moments of our lives. We call the police because of intimate partner violence, sexual assaults, fights, home invasions, hurt loved ones, and much more. Police see us when we are battered and bleeding, drunk and disorderly, distraught, traumatized, enraged, hopped up on drugs or stoned, and worse.[7]

Concern about the proper use of BWCs is also shared by the police officers themselves. As we discovered in talking to law enforcement officials who wear these devices, the mandatory activation of BWCs can exact a heavy toll on officers who are now subject to unprecedented public and supervisory scrutiny. Indeed, some police unions have argued that BWCs fundamentally change the nature of the working conditions of police officers who have no choice but to acquiesce to being continuously recorded.[8]

Although public debate has largely focused on the availability of BWC video (or its absence) in high-profile incidents involving police use-of-force, comparatively little study has been directed at identifying and addressing the practical issues that BWCs present for police officers, policymakers, and the media, such as when BWCs should be activated, what content and metadata should be stored and retained, and what policies should govern the overall lifecycle of BWC video.

Notwithstanding support from a diverse array of stakeholders regarding the need for video of policing activities, there are deep disagreements about how to answer these questions regarding the use of BWCs. Indeed, how we evaluate the tradeoffs inherent in the implementation of BWC systems is influenced by what we see as the purpose behind BWCs in the first place. As to this threshold question, there is a striking lack of consensus regarding the reasons for implementing BWC systems. As we discuss later in this paper, BWCs have been adopted to achieve a number of different purposes, including improving

police accountability and public trust in the police, reducing complaints against the police, preventing police brutality, improving police department oversight of officers, and enhancing prosecutions and preserving activity for evidentiary purposes.[9]

Of course, these purposes are not mutually exclusive, but how one prioritizes among them can have significant repercussions for the many practical and policy decisions that have to be made in implementing BWC systems. For example, the apparently simply question of when a camera should be turned can put some of these purposes in tension. If the goal is police accountability, then we may want the camera on continuously so that all officer activity is recorded. If, on the other hand, the goal is to collect evidence for criminal prosecutions, it may be best to make activation subject to officer discretion so that its use does not interfere with witness interrogation and the reliance on confidential informants.

Moreover, the purpose behind the use of BWCs will have an impact on whether – and how – BWC recordings should be made available to the public. On this question, those who are devising BWC policies must take account of existing public records laws that might impact the disclosure of BWC video and data. Most of these laws were passed long before BWCs came on the scene and include provisions that do not map very clearly to the types of content and data that BWC systems create.

As result, police departments that have implemented BWC systems face difficult questions regarding whether they must release some or all of the BWC video they collect. In response, some police departments have created their own policies regarding activation and disclosure. Other departments have left it to the ad-hoc decision making of patrol officers and public information officials. This inconsistency further adds to the confusion over what is recorded and whether the public has access to it.

Only a few states have enacted legislation specifically addressing the public disclosure of BWC video.[10] North Carolina, for example, passed a law in 2016 that says that most BWC and dashboard camera recordings are not public records.[11] The law contains limited disclosure provisions. Only a person whose voice or image is in the recording, or their representative, can request disclosure directly from law enforcement. Release to the public can only be done pursuant to a court order; in evaluating such a request, the court must consider at least eight factors before ordering disclosure of the video, including whether "release is necessary to advance a compelling public interest."[12]

In North Carolina, as in many jurisdictions, debate about whether the public should have access to police BWC video—and under what conditions—continues to be acrimonious. Recent public protests following police shootings in Charlotte and Asheville, NC have kept the issue of BWC video central to the discussion of police accountability.[13] Nearly three years after North Carolina changed its public records act to limit public access to BWC video, the legislature is still debating amendments to the law.[14]

To facilitate consideration of the legal and policy issues involved in the implementation of police BWC systems, the UNC Center for Media Law and Policy convened an invitation-only workshop in November 2017 to bring together experts on law enforcement, privacy, access, and newsgathering with the goals of ascertaining areas of agreement, identifying issues that would benefit from academic research, and developing best practices for police departments and the media.

This whitepaper provides an overview the issues that accompany the implementation of police BWC systems. It begins by framing the BWC debate, discussing the history of BWC systems and providing an overview of the lifecycle of BWC video. It also describes our workshop. In a subsequent report we will build on this framing and discuss some of the key findings that came out of the workshop and suggest topics that would benefit from further research.

FRAMING THE DISCUSSION

Before we examine the key policy issues involved in the implementation of police BWC systems, it is important to first review the history of police cameras and the technical context surrounding the creation, storage, and use of police video.

History of Police Camera Systems

Law enforcement agencies have long relied on surveillance equipment to record evidence of criminal activity. From security cameras on traffic signs to dashboard cameras mounted in patrol cars, surveillance footage has proven to be a valuable tool for evidence gathering and officer accountability.

Although BWCs are a relatively recent addition to law enforcement in the United States, they have been a fixture in the United Kingdom for over a decade.[15] BWCs have been in use in Great Britain since 2006,[16] and over 40 police departments in the U.K. had adopted BWC systems by 2010. Today, Britain boasts the most extensive BWC program in the world. In 2016, the London Metropolitan Police issued the largest rollout of BWCs to date, providing 22,000 cameras to officers in London.[17]

In contrast, widespread adoption of BWCs did not occur in the United States until quite recently. According to a 2013 survey conducted by the Police Executive Research Forum ("PERF"), 75% of respondent police departments did not use BWCs.[18] The *Washington Post* reported in 2014 that "[o]nly a few dozen departments, most of them small" had BWC programs.[19]

The summer of 2014, however, marked a turning point for the adoption of police BWCs in the United States. Police video became the subject of intense public interest after protests erupted following the shooting of Michael Brown in Ferguson, Missouri, and other police shootings of individuals of color.[20] Video footage of the incidents (or the lack of it) greatly affected the national conversation on police brutality, leading to calls for the adoption of BWCs nationwide,[21] as well as congressional support.[22]

In response to public demand for greater police accountability,[23] Washington, D.C., New York, and Los Angeles commenced pilot camera programs. Today, police departments in 40 states and the District of Columbia have BWC programs.[24]

Technical Capabilities and Evolution of BWCs

Police departments are using a variety of BWC models with varying features and capabilities. In March 2014, the National Institute of Justice ("NIJ"), a subdivision of the U.S. Department of Justice, examined the specifications of 18 models of cameras produced by over a dozen manufactures, including TASER International, Inc., PRO-VISION Video Systems, and VIEVU, LLC.[25] In a follow-up study in 2016, the NIJ reported that there were over 60 different BWC models produced specifically for law enforcement.[26]

BWCs typically consist of a camera, microphone, battery, and onboard data storage. They may also include other features, such as automatic activation, infrared illumination, and metadata tagging. Despite increasingly widespread use of BWCs, a single set of technical requirements does not currently exist. As a result, the capabilities of BWCs have been driven largely by the manufacturers of the cameras and associated systems. Although there are important differences between current BWC models, they share similar basic characteristics.

Body-Worn: Where a camera is mounted determines what the camera can record. By definition, BWCs are worn on the body as distinguished from cameras mounted on stationary objects or motor vehicles. BWCs can be mounted in a number of places, including on the head, chest, or shoulder.[27] In 2014, the most common mounting location for BWCs was on the officer's chest or lapel.[28] An increasing number of models are now capable of being worn on the head. In many instances this is preferable because unlike cameras mounted on a lapel or chest, which do not track the officer's head movements, head mount cameras record most closely "what the officer is seeing."[29]

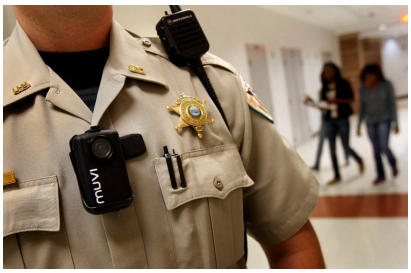

Image 4: Photo by Stan Carroll/The Commercial Appeal/TNS

Field of View: The field of view is the surrounding area that the camera can record. Current BWCs offer a field of view of between 100 and 175 degrees. Depending on the field of view, the camera may be able to capture people and activity on the officer's periphery, beyond what he or she can see. The field of view and subject's distance from the camera can be important factors influencing whether the video coincides with the officer's actual visual perceptions at the time of recording.[30]

Recording Capabilities: Camera resolution can have a significant impact on the usefulness of BWC video. Early models had image quality issues (e.g., fuzzy pictures and poor quality at night) as compared to more recent cameras that can capture video at higher resolutions and frame rates. A number of camera models reviewed by NIJ record HD video (1920 x 1080p) at 60 frames per second.[31] Higher resolution cameras, however, are typically more expensive and require greater storage capabilities.[32]

Most BWCs also record audio. According to the NIJ, "The audio recording may be at least as significant as the video, especially in cases involving investigation of use of force incidents where the video field of view may be limited or partially obscured due to the officer and suspect being in close contact during an altercation."[33] Some BWC systems include noise suppression technology and more than one microphone.

A number of newer cameras also have the ability to capture video before the camera is activated. Through the use of what is known as a "pre-record buffer," these cameras continually record video on an internal memory device that is automatically overwritten unless the camera is affirmatively activated. The amount of buffered time varies by BWC model, ranging from 15 seconds to 2 minutes.[34] For example, the AXON Body and AXON Flex cameras by TASER International continuously record video (without audio) and retain up to 30 seconds of video prior to activation of the camera.[35] This continuous recording functionality is "meant to ensure that the videos include the context leading up to an event, and may be helpful if an officer does not press record in the immediate heat of an altercation."[36]

Metadata: As is the case with consumer-level digital cameras, BWC's embed various types of metadata in their recorded video to track and manage the videos for retention and chain of custody purposes. All of the camera models examined by NIJ, for example, include a time and date stamp.[37] Some models also have GPS capabilities that can log the location of the camera at the time when the recording was made. The latest AXON cameras from TASER allow the user to create custom metadata fields in addition to embedding a visual watermark containing the date, time, model and serial number of the camera.[38]

Video Storage and Management: All BWCs contain some form of onboard storage, typically in the form of solid-state memory. The camera, however, is only one component of a larger video storage and management system that is necessary for the effective use of BWC video. Given the size of the recordings, off-camera storage is also necessary. Of the more than 40 police departments that PERF examined in 2014, all stored BWC video either on an in-house server (managed by the agency) or an online cloud database (managed by a third-party vendor).[39]

The agency's data retention policies likely will dictate the storage capacity needed. Data retention policies vary from department to department and usually differ based on whether it is anticipated that the video will be used as evidence in a criminal prosecution. Policies for retaining non-evidentiary video vary widely, with Charlotte, NC retaining non-evidentiary video for forty-five days while New Orleans retains non-evidentiary video for two years.[40] Open records laws and other statutes may also dictate the appropriate data retention period. Data retention policies are also important because the longer that recordings are retained, the longer the period of time during which they may be subject to public disclosure requirements.

When implementing BWC systems, budget considerations need to be made for purchasing the cameras, data storage, software, and network infrastructure. The most substantial expense of employing BWCs lies in the costs for storing video data on secure servers.[41] Storing hundreds of hours of weekly police video can put significant financial and technological strain on a police department. As a result, some police departments are utilizing cloud-based storage and management software provided by the camera manufacturers. TASER, for example, heavily markets its online video management tool, Evidence.com, which it describes as "a robust, cloud-based system [that] stores all your data — from body-worn cameras to audio records — while streamlining data management and sharing."[42]

Evidentiary Safeguards: BWC video would be of little value without some assurance that the recording has not been manipulated. If the video will be used in court, this "may require meeting all of the demands of chain of custody,"[43] which typically involves documentation showing when and how the video was recorded, stored, transferred and analyzed. Nearly all of the camera models NIJ examined in 2014 provide some form of "video safeguards." For example, most cameras prevent users from deleting or modifying a video. The AXON cameras from TASER also generate a digital ID using a security hash, which allows subsequent users to verify that the original file has not been altered.[44]

Future Capabilities: BWCs will undoubtedly get smaller and more powerful. Some devices will split the functions between a camera and a recording unit, connected by a cable or wireless transmitter, which will allow the camera unit to become even smaller and lighter. More BWCs will include eye-mounted displays, similar to that used in Google Glass, that can superimpose text and images on the officer's field of view without blocking vision. Officers wearing the display might see messages from dispatch or from other officers, replies to inquiries made for warrants and records, and real-time facial recognition.[45]

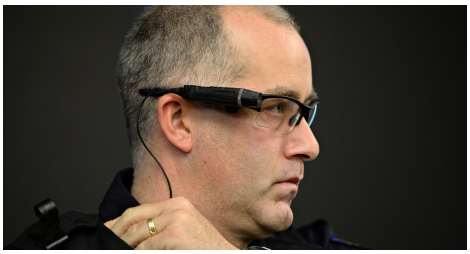

Image 5: Photo by Valerie Mosley/The Coloradoan

BWCs will also likely integrate various forms of artificial intelligence, particularly with regard to camera activation. Both VIEVU and AXON have developed holster-based technology that automatically activates the camera when an officer draws his or her firearm. Given that a camera's capabilities are irrelevant if it is not recording, this is an area that is likely to see a great deal of innovation. As a recent article on police technology notes, "Artificial intelligence (AI) can monitor the condition of the patrol vehicle and emergency lights, sense whether the brakes were applied hard, know if the officer was en route to a high-risk call, determine if he was running or struggling with someone, and even monitor an officer's heart rate to determine if this might be a good time to have the recorder running."[46]

The increasing demand from police departments for BWCs is clearly driving an expansion of the market for BWC systems. As the NIJ noted in its 2016 market survey, there are many more manufacturers now that sell BWC products as compared to prior years. The market continues to grow at an estimated 17% compound annual growth rate.[47] These vendors are adding new technical capabilities at a rapid pace, leading the NIJ to warn that "the incorporation by vendors of new technological BWC features prompts the strong need for clear policies."[48]

Lifecycle of BWC Video

As noted above, the camera is only one component of a complex system involving the capture, storage, management, and use of BWC video. In order to fully understand the policy tradeoffs associated with police BWCs, we must consider the entire lifecycle of BWC video. This section is excerpted from a recent article by Professor Richard Myers, who

explains that BWC policies must address five distinct phases that constitute the lifecycle of BWC video: creation, storage, access, redaction, and use.[49]

Creation

Creation marks, as it name suggests, the starting point of the BWC video lifecycle. Thus, this stage in the lifecycle centers on the moment when a BWC begins to record, either because an officer switches his or her camera on when responding to a call or via some other means of activation. Though seemingly straightforward, this stage in the lifecycle presents many practical questions that require exploration. For example: When and how should the camera be turned on? The technology permits us to choose a range of options. The camera may be always on or sometimes on. If the camera is only sometimes on, it can either be presumptively on, with circumstances in which it is turned off—either at the officer's discretion or under dispatch control—or presumptively off, but turned on for certain kinds of encounters—either at the officer's discretion or under dispatch control.

Each of these choices comes with advantages and disadvantages. For example, the always-on option creates the fewest opportunities for manipulation by the officer; it means that the video will reflect the full range of the encounters in which the officer engages. It also raises the highest risk for privacy and implicates the privacy of the public as well as the privacy of the officers. Under this system fleeting conversations between officers and citizens will now be recorded. With the cameras always on, in-person anonymous tips would no longer exist. Domestic violence victims could expect their spouse and their spouse's counsel to review any statement made to the police. It follows that requests for protection would predictably be converted into evidence for the prosecution, which some advocates say might reduce reporting and increase the danger to victims.[50]

Another approach calls for the camera to only sometimes be on—either presumptively on or presumptively off. Under this model, the discretion regarding when the camera will be turned off or on can rest either with the officer or headquarters. As Myers notes, "The decision of where the discretion should lie and the determination of what is sufficient warning to notify a citizen that she is being recorded create their own quandaries."[51]

Many advocate for officer discretion when it comes to activation because of the sensitive nature of law enforcement interactions and the invasiveness of BWCs. While society has become accustomed to a degree of surveillance through the use of cameras on dashboards, street corners, and even within private businesses, Myers points out that BWCs differ from the more traditional surveillance cameras because they are mobile.[52] Thus, the creation stage poses important issues that affect the entire BWC lifecycle.

Storage

Storage is the second stage of the BWC lifecycle. This stage refers to the maintenance and handling of video captured by BWCs. Storage of BWC footage brings about issues of where BWC video should be stored, who should control BWC video, and which methods are most desirable for preserving BWC video. Decisions regarding storage tend to center around a police department's technical and financial capabilities because the storage of digital video—especially high-definition video—is storage intensive.

Many police departments and BWC policies divide video into two categories—evidentiary video and non-evidentiary video—and follow different protocols for each category. Case needs will help define storage periods for evidentiary video, which might last decades depending on appellate schedules and exhaustion. Non-evidentiary video might be kept for significantly shorter periods. Currently, departments' presumptive storage times vary widely. Chicago and Dallas police policies call for deletion after ninety days unless it has evidentiary value.[53] The policies in New Orleans, Louisiana and Oakland, California specify two years.[54]

Policymakers must determine whether BWC video should be stored in cloud-based systems, on police department servers, or elsewhere and, most importantly, how long the recordings are kept. Often, these decisions are impacted by state public records laws; BWC video is generally considered a public record, and thus subject to specific requirements for storage and maintenance. However, some states exempt BWC video from their public records laws, opening the door for police departments to determine the best course for maintaining BWC video.[55] The decisions made during the storage stage of the lifecycle greatly affect the remaining stages: access, redaction and use.

Access

Access refers to the dissemination of BWC video. Once BWC video has been captured and stored, there are many parties that have an interest in obtaining, examining, or simply viewing it. Interested parties include officers, prosecutors, defense attorneys, judges, crime victims, defendants, the press, and members of the public. BWC video may be released based on pre-determined conditions; for example, some departments can only release BWC video to the public pursuant to a court order while other departments have the discretion to publish BWC ahead of public request.[56]

Interested groups might be granted access to the data under different predefined conditions. Police departments might have internal policies about who within the agency can access the video once it is created. For example, an officer might presumptively have access to the video created by his own camera for purposes of writing ordinary reports, but may lose access in cases where officer conduct or discipline is likely to become an issue. Departmental supervisors might have routine access for personnel management or training purposes or access only under certain conditions. Local political bodies such as town councils, county commissions, police commissions, spokespeople, or other non-law-enforcement government employees might also need to access the video in order to ensure public accountability. These groups might be considered to be within the police-management chain of command for access purposes.[57]

From prosecutors hoping to utilize BWC footage in court as evidence, to reporters who wish to keep the public abreast of law enforcement activity, the desire for BWC footage is fervent. Access to BWC video, however, is more politically complicated once the requests expand beyond the core categories of participants in the criminal justice system. We can reasonably expect access requests from uncharged recorded citizens, local and state political bodies, the news media, researchers, and members of the public. The further afield the requesters are, some commentators believe, the more attenuated the need for direct access and the more significant privacy concerns become.[58]

Redaction

Redaction refers to the editing of BWC video to prepare it for dissemination. What gets released, and in what form, depends largely on the audience to which the video is being released. Unless the department makes the highly unlikely choice to release all video, someone will have to serve as a gatekeeper and redact the video in keeping with some protocol.

The core tradeoff will be between the privacy of the individuals recorded and the police officers involved, on the one hand, and public oversight on the other. Police may fear that routine release outside law enforcement circles will make victims and cooperating witnesses less likely to come forward. If there is no confidentiality, by definition there can be no confidential informants. Prosecutors, defense attorneys, and judges might be concerned about contaminating jury and witness pools and about retaining the evidentiary value of the recordings. Members of the media will want unfettered access to video of any high-salience event as soon in the news cycle as possible, so they can exercise their own news judgment. Victims and witnesses may want the video released, or they may want it kept secret because they fear reputational harm or retaliation. Accused persons might want the video freely available because they believe it proves their innocence, or they may want it suppressed because they fear that it makes them appear guilty.

If a state considers BWC video part of the public record, then redaction is typically based on the statutory requirements set out in the state's law. In most cases, this means blurring, censoring, or removal of identifying information and other sensitive information. In other instances, the video may be redacted based on department policy or practice. Because the release of BWC footage can raise privacy concerns for those featured on the video, redaction often requires a careful balancing of interests.

Use

Use is the final stage of the BWC lifecycle. Use prompts some of the most challenging questions surrounding the BWC debate because it implicates the most perplexing BWC issue directly: What is the purpose of BWC video? As discussed previously—and below—BWC video has multiple uses. BWC video may be used as evidence in criminal and civil trials and in disciplinary proceedings related to use-of-force complaints. It can be used by courts to determine compliance with the Fourth and Fifth Amendments. It can be used internally by police departments for training and management, and by outside oversight bodies for the same purposes. It can be used by the press and the public to show the good and bad of police actions and to spur policymakers to action. These multiple and sometimes competing uses often necessitate tradeoffs and concessions when it comes to developing BWC policies.

BWC policies are now being made at a number of levels, sometimes with extensive participation from all interested parties, but oftentimes not. Many of the early pilot projects that were used as starting points for follow-on policies were very localized. Police departments wrote the policy, with a strong focus on the needs of law enforcement. Local politicians who are directly responsible for department budgets and personnel decisions had the most direct impact on department policy.

As Myers notes, "Police-generated digital video sits at the intersection of at least ten areas of law and policy: police management, administrative law, privacy law, public records law, wiretap/recording laws, Fourth Amendment law, labor law, First Amendment law, tort law, and the emerging field of big data."[59] Properly drafting a policy requires legal as well as political skill.

The State of Access Law

Every state, along with the federal government, has enacted open records laws to provide the public with avenues to obtain certain kinds of government information. These laws were in place long before the widespread adoption of BWCs and include provisions that do not map very clearly to the types of content and data that BWC systems create.

Nevertheless, police BWC video is generally deemed part of the public record.[60] Thus, under many states' freedom of information laws ("FOI"), the public ostensibly has a right to access BWC video by filing a FOI request. Such requests receive considerable pushback, though, from police departments that view BWC video as evidentiary in nature; many police organizations are hesitant to release BWC video to the public.

As privacy issues have become more salient, state legislatures have been scrambling to address the accessibility of BWC footage under their public records laws. Some states have exempted BWC footage from their open records laws altogether,[61] while other states have tried to strike a balance between privacy concerns and the need for public accountability.[62] Texas, for example, has allowed local agencies to craft their own policies for access, with some restrictions.[63] Given fairly quick adoption of BWCs by police departments across the country, different states have understandably taken divergent approaches, depending on which constituency's concerns (police departments, privacy advocates, etc.) were prioritized.

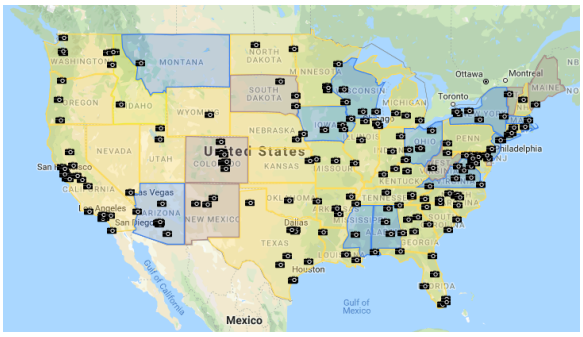

Image 6: Reporters Committee for Freedom of the Press, rcfp.org.

These policy splits have emerged in part due to the limitations on the ability to redact BWC footage, to prevent sensitive information from being released while also providing some public accountability. Right now, it is very costly to attempt to redact sensitive parts of a video that would otherwise be appropriate for public disclosure. As technology improves and redacting certain parts of videos becomes more automated and cost-effective, then there may be a corresponding liberalization of some of the more restrictive access laws.[64]

The Workshop

On November 4, 2017, the UNC Center for Media Law and Policy hosted an invitation-only workshop to discuss the practical issues associated with the implementation of BWC systems ("BWC Workshop"). The BWC Workshop was a

supplement to the *North Carolina Law Review's* 2017 symposium "Badgecams as Data and Deterrent: Law Enforcement, the Public, and the Press in the Age of Digital Video," which brought together some of the nation's leading scholars on this important topic.[65]

Although public debate has largely focused on the tension between police accountability and privacy, little work has been done to address the practical needs of law enforcement and the media, particularly the retention, redaction and release of BWC video to the public. To address this deficiency, the Center invited a range of experts on law enforcement, newsgathering, privacy, and public access with the goals of ascertaining areas of agreement, identifying issues that would benefit from further research, and developing best practices for police departments and the media.

Approximately 50 people attended the BWC Workshop, including seven police officers, two North Carolina Representatives, five attorneys, multiple access and reform advocates, and a dozen academics. The workshop was structured to promote open and candid discussion. It consisted of two plenary sessions and eight breakout sessions to address specific topics. During the first plenary session, attendees were able to select the topics for the breakout sessions. Throughout the plenary and breakout sessions participants were able to hear a variety of perspectives regarding BWCs.

Although the BWC Workshop did not produce many points of consensus, it facilitated an important dialogue between the various stakeholders and interested parties. It is, unfortunately, rare for privacy advocates, policymakers, and law enforcement to sit down together and talk about issues surrounding the use of police BWC systems.

APPENDIX

A. Existing Research Related to Police BWC Systems

Background on BWCs

- Alberto R. Gonzales & Donald Q. Cochran, *Police-Worn Body Cameras: An Antidote to the Ferguson Effect*, 82 MO. L. REV. 299 (2017).
  This article examines the role BWCs may play in officer-citizen encounters, and the resolution of legal disputes that arise from such encounters. It discusses what effect, if any, citizen-recorded videos have on society and the prevalence of crime.

- Alexandra Mateescu, Alex Rosenblat & danah boyd, Police Body-Worn Cameras, (Data & Soc'y Research Inst., Working Paper, 2015), https://www.datasociety.net/pubs/dcr/PoliceBodyWornCameras.pdf.
  This paper serves as a primer on BWCs and highlights the unanswered questions about how BWC programs may impact civil rights and civil liberties. It provides information on how BWC video is captured and stored and provides an overview of key issues.

- LINDSAY MILLER & JESSICA TOLIVER, POLICE EXEC. RESEARCH FORUM, IMPLEMENTING A BODY-WORN CAMERA PROGRAM: RECOMMENDATIONS AND LESSONS LEARNED (2014), http://www.policeforum.org/assets/docs/Free_Online_Documents/Technology/implementing%20a%20body-worn%20camera%20program.pdf.
  This influential report on BWCs presents the findings and analysis of PERF's research project. The project consisted of three components: an informal survey of 500 law enforcement agencies nationwide; interviews with police executives; and a conference in which police chiefs and other experts from across the country gathered to discuss the use of BWCs. The report is designed to provide law enforcement agencies with guidance on BWC programs.

- Richard E. Myers II, *Police-Generated Digital Video: Five Key Questions, Multiple Audiences, and a Range of Answers*, 96 N.C. L. REV. 1237 (2018).
  This article discusses the lifecycle of BWC video, describing five stages that BWC video goes through from the point of creation to dissemination to the public. The author provides a thorough description of each stage in the BWC lifecycle and discusses the issues that arise in each phase.

- US DEP'T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, NAT'L INST. OF JUSTICE, A PRIMER ON BODY-WORN CAMERAS FOR LAW ENFORCEMENT (2012) http://www.calea.org/sites/default/files/Body-Worn-Cameras-508.pdf.

This NIJ report was drafted to examine deficiencies in technical and procedural standards for BWC programs. It addresses the purposes for BWCs, the types of BWCs, and provides an overview of the issues that may arise once BWCs are implemented.

- JAY STANLEY, AM. CIVIL LIBERTIES UNION POLICE BODY-MOUNTED CAMERAS: WITH RIGHT POLICIES IN PLACE, A WIN FOR ALL (2015), https://www.aclu.org/sites/default/files/assets/police_body-mounted_cameras-v2.pdf.

  This ACLU report discusses the organization's interest in BWCs and provides recommendations on BWC practices. It provides desired policy instructions for certain scenarios (such as the use of BWCs in private residences) and offers advice to citizens.

- U.S. DEP'T OF HOMELAND SECURITY, SAVER, BODY-WORN VIDEO CAMERAS FOR LAW ENFORCEMENT MARKET SURVEY REPORT (2015), https://www.dhs.gov/sites/default/files/publications/Body-Worn-Cams-MSR_0615-508_1.pdf.

  This DHS report provides information on technology and devices police departments may use in implementing BWC systems. It provides detailed descriptions of the different types of cameras available, including technical specifics and capabilities.

- Michael White & James Coldren, *Body-Worn Police Cameras: Separating Fact from Fiction*, INT'L CITY/COUNTY MGMT ASS'N: PUB. MGMT. MAG. (Feb. 12, 2017), https://icma.org/articles/pm-magazine/body-worn-police-cameras-separating-fact-fiction.

  This article addresses some of the myths about BWC systems. It examines how police officers feel about BWCs and discusses the reliability of BWCs in high-stakes situations.

Privacy and BWCs

- Kami Chavis Simmons, *Body-Mounted Police Cameras: A Primer on Police Accountability vs. Privacy*, 58 HOWARD L.J. 881 (2015).

  This article examines the trade-offs of accountability and privacy with BWC systems. Specifically, it addresses whether citizens are willing to (or should) give up a bit of their privacy in order to reap the potential benefits of BWC technology.

- Mary D. Fan, *Privacy, Public Disclosure, Police Body Cameras: Policy Splits*, 68 ALA. L. REV. 395 (2016).

  This article sheds light on the balance being struck in state laws and in the body camera policies of police departments serving the 100 largest cities in the nation. The evaluation illuminates two emerging areas of concern: the enactment of blanket or overbroad exemptions of body camera footage from

public disclosure and silence on victim and witness protection in many policies.

- Richard Lin, *Police Body Worn Cameras and Privacy: Retaining Benefits While Reducing Public Concerns*, 14 DUKE L. & TECH. REV. 346 (2016).
  This article addresses the privacy concerns surrounding the release of BWC footage. It provides recommendations to alleviate privacy concerns, including data management techniques to identify and preserve critical video evidence, clear data-retention policies, and use of software redaction to produce releasable video that does not threaten the privacy of recorded individuals.

Use and Control of BWCs

- Mary D. Fan, *Missing Police Body Camera Videos: Remedies, Evidentiary Fairness, and Automatic Activation*, 52 GA. L. REV. 57, 108 (2017).
  This article discusses how the labor-management structure of police departments and the individual-blame nature of disciplinary processes render internal departmental enforcement of BWC recording rules challenging. It proposes three judicial pretrial remedies that proceed from an administrable evidentiary fairness perspective: exclusion of partial recordings, favorable inferences, and pattern and practice detection harnessing systemic facts accumulated by courts in criminal cases.

- V. Noah Gimbel, Note, *Body Cameras and Criminal Discovery*, 104 GEO. L.J. 1581 (2016).
  This note addresses the use of BWC footage in criminal proceedings. Through a discussion of the conflict between the government's interest in maintaining exclusive control over BWC video and the defendant's entitlement to pretrial discovery under Rule 16 of the Federal Rules of Criminal Procedure and the Due Process Clause of the Fifth and Fourteenth Amendments, the author argues that the discovery rules governing analogous pre-existing technologies militate in favor of broad pretrial disclosure of BWC footage.

- Dru S. Letourneau, *Police Body Cameras: Implementation with Caution, Forethought, and Policy*, 50 U. RICH. L. REV. 439 (2015).
  This article provides an initial implementation policy designed to maximize the benefits of increased police use of body cameras, while minimizing the negative impacts. Through an examination of the perceived benefits and challenges of BWC systems, the author offers a recommended implementation policy designed to maximize the benefits of BWCs.

- Kyle J. Maury, *Police Body-Worn Camera Policy: Balancing the Tension between Privacy and Public Access in State Laws*, 92 NOTRE DAME L. REV. 479 (2016).
  This article provides an overview of the existing BWC technologies along with their benefits and drawbacks. It outlines state legislation governing

body cameras, focusing specifically on how cameras are used by law enforcement and the scope of access granted to the public, and analyzes the statutes in light of current policy judgments.

- Laurent Sacharoff and Sarah Lustbader, *Who Should Own Police Body Camera Videos*, 95 WASH. U. L. REV. 269 (2017).
  This article examines the current view that BWC video should be used for ordinary law enforcement purposes alone. To combat this, the authors contend that there should be a shift in BWC video ownership and control from police departments to a neutral police accountability agency.
- Steve Zansberg, *As Body-Worn Cameras Proliferate, States' Access Restrictions Defeat Their Purpose*, 32 COMM. LAW., Fall 2016, at 12.
  This article provides an overview of the states that consider BWC video exempt from public record law and the potential ramifications of such policies. Through an examination of the statements of several organizations, such as the ACLU and Media Law Resource Center, the author argues that cost issues and other hurdles must be addressed so BWCs remain a tool for transparency.

Police Accountability and BWCs

- Kami N. Chavis, *Body-Worn Cameras: Exploring the Unintentional Consequences of Technological Advances and Ensuring a Role for Community Consultation*, 51 WAKE FOREST L. REV. 985 (2016).
  This article discusses the role police BWCs can play in ensuring police legitimacy by increasing transparency, deterring police and citizen misbehavior, increasing officer professionalism, providing valuable training tools, and improving evidentiary documentation when crimes occur. The author identifies best practices for implementing body-worn camera programs and identifies key components of body-worn camera policies that strengthen accountability.

- Karson Kampfe, *Police-Worn Body Cameras: Balancing Privacy and Accountability through State and Police Department Action*, 76 OHIO ST. L.J. 1153 (2015).
  This note examines the legal and social implications of police departments adopting the use of BWCs in order to inform state legislatures and police departments on the laws and policies necessary to facilitate the use of BWCs.

- Caren Myers Morrison, *Body Camera Obscura: The Semiotics of Police Video*, 54 AM. CRIM. L. REV. 791, 842 (2017).
  This article proposes a descriptive critique of the use of BWC video evidence in assessing the lawfulness of police violence. Using insights from semiotics, film criticism, cultural theory, and cognitive psychology, it attempts to sketch out a nuanced way of approaching video evidence in the context of these cases.

Empirical Studies on the Effects of BWCs

- Barak Ariel et al., *The Deterrence Spectrum: Explaining Why Police Body-Worn Cameras 'Work' or 'Backfire' in Aggressive Police–Public Encounters*, 12 POLICING: J. POL'Y & PRACTICE 6 (2018).

  This article offers a theoretical composition for the causal mechanisms that can explain the efficacy of BWCs. To address what sets BWCs apart from other systems, the article introduces a deterrence spectrum, within which BWCs can de-escalate or exacerbate aggressive encounters. The authors posit that the deterrent effect of BWCs is a function of discretion, whereby strong discretion is inversely linked to a weak deterrent effect that consequently leads to more use of force, and weak discretion is inversely linked to a strong deterrent effect and less forceful police responses.

- Barak Ariel, et al., *The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints Against the Police: A Randomized Controlled Trial*, 31 J. QUANTITATIVE CRIMINOLOGY 509 (2015).

  In this seminal study on BWCs, the authors investigate whether BWCs reduce the prevalence of use-of-force and/or citizens' complaints against the police in Rialto, California. The authors tested use of BWCs measuring the effect of videotaping police–public encounters on incidents of police use-of-force and complaints, in randomized-controlled setting over twelve months. The study revealed that the presence of BWCs limited use of force and lowered the number complaints against officers.

- Barak Ariel, *Increasing Cooperation with the Police Using Body Worn Cameras*, 19 POLICE QUARTERLY 326 (2016).

  This article covers a six-month study in Denver that investigated whether BWCs can change crime-reporting behavior, with treatment-officers wearing BWCs patrolling targeted street segments, while control officers patrolled the no-treatment areas without BWCs. The study suggests that BWCs lead to greater willingness to report crimes to the police in low crime density level residential street segments, but no discernable differences emerge in hotspot street segments.

- Barak Ariel, *Police Body Cameras in Large Police Departments*, 106 J. CRIM. L. AND CRIMINOLOGY 729 (2016).

  This article examines the effect of BWC systems in large cities in an attempt to corroborate the known findings that BWCs reduce the number of reported incidents involving police-public encounters. Using one metropolitan police district as the treatment area and five other districts within a large metropolitan area, Denver, Colorado, as comparisons, the study revealed fewer arrests, lower odds for citizens' complaints against the police use of

force, and greater odds for a complaint against misconduct when BWCs are used.Max Goetschal and Jon. M. Peha, *Police Perceptions of Body-Worn Cameras*, 42 J. CRIM. JUSTICE 698 (2017).

This article assesses police perceptions towards BWCs in Pittsburgh and other cities to better characterize and explain resistance to their use, and also gain insight into the efficacy and potential benefits of BWCs from officers who have used the technology in their daily policing duties.

- C. Hedberg, Charles M. Katz & David E. Choate, *Body-Worn Cameras and Citizen Interactions with Police Officers: Estimating Plausible Effects Given Varying Compliance Levels*, 34 JUSTICE Q. 627 (2017).

  In this article, the authors estimate two measures of effectiveness of BWCs by comparing incidents that occur when a squad is assigned cameras to determine the effectiveness that policymakers can expect from BWCs. Ultimately, the authors found that BWCs have no effect on the rate of arrest or resistance, but can substantially reduce complaints.

- Bryce Clayton Newell, *Collateral Visibility: A Socio-Legal Study of Police Body-Camera Adoption, Privacy, and Public Disclosure in Washington State*, 92 IND. L.J. 1329, 1400 (2017).

  This article presents findings from a study of the legal and social implications of body-worn camera adoption by two police departments in Washington State. In particular, this study focuses on the public disclosure of BWC footage under Washington State's public records act, state privacy law, and original empirical findings related to officer attitudes about—and perceptions of—the impact of these laws on their work, their own personal privacy, and the privacy of the citizens they serve.

- DAVID YOKUM, ANITA RAVISHANKAR & ALEXANDER COPPOCK, THE LAB @ DC, EVALUATING THE EFFECTS OF POLICE BODY-WORN CAMERAS: A RANDOMIZED CONTROLLED TRIAL (2017).

  This report presents the findings of a randomized trial involving Metropolitan Police Department (MPD) officers in Washington, DC in which the authors compared officers randomly assigned to wear BWCs to officers in a control condition who did not wear BWCs. The trial only showed "very small" measured outcomes, suggesting that we should recalibrate our expectations of BWCs' ability to induce large-scale behavioral changes in policing, particularly in contexts similar to Washington, DC.

- Jacob T.N. Young & Justin T. Ready, *A Longitudinal Analysis of the Relationship Between Administrative Policy, Technological Preferences, and Body-Worn Camera Activation among Police Officers*, 12 POLICING: J. POL'Y & PRACTICE 27 (2018).

  This study investigates how officers use BWCs and whether their actions are driven by administrative requirements. The article discusses the dual role of officer preferences and administrative policy on compliance with

technological innovations within police organizations, revealing that BWC policy compliance is greatest in agencies that have mandatory use policies.

B. Other Resources Related to Police BWC Systems

Online Resources

- *Police Body-Worn Cameras Information*, AM. FOR EFFECTIVE L. ENFORCEMENT (last updated Jan. 18, 2018), http://www.aele.org/bwc-info.html.
  This site offers a body of information on BWC systems, including links to relevant studies and information on the technical components of BWCs.

- *Police Body-Worn Camera Policies*, BRENNAN CTR. FOR JUST. (last updated Sept. 26, 2016), https://www.brennancenter.org/body-cam-city-map.
  This site provides links to current BWC policies in the United States. It provides a breakdown of terminology and other information to assist the reader as they peruse the policies on the site map.

- *Body-Worn Camera Law Database*, NAT'L CONF. ST. LEGISLATURES (Oct. 27, 2017), available at http://www.ncsl.org/research/civil-and-criminal-justice/body-worn-cameras-interactive-graphic.aspx.
  This site provides the text and information on state laws pertaining to BWC usage and video.

- *Access to Police Body-Worn Camera Video*, REPORTERS COMMITTEE FOR FREEDOM OF THE PRESS (last visited May 3, 2018), http://www.rcfp.org/bodycams

  This helpful site provides the links, text, and other information on the current BWC policies of several states, cities, and police precincts. The site provides a color code map that describes the availability of BWC video in each state. It is updated routinely.

[1] The case of Laquan McDonald exemplifies the intersection between opacity of police records with potential police misconduct. After McDonald was fatally shot by Chicago
[2] Jeffrey M. Jones, *In U.S., Confidence in Police Lowest in 22 Years*, GALLUP (Jun. 19, 2015), http://news.gallup.com/poll/183704/confidence-police-lowest-years.aspx.
[3] *See* Josh Sanburn, *The One Battle Michael Brown's Family Will Win*, TIME (Nov. 26, 2014), http://time.com/3606376/police-cameras-ferguson-evidence/. The Brennan Center reported that two narratives emerged describing the incident:

> In one, Brown, an 18-year-old unarmed black man, was approaching officer Darren Wilson with his hands up, only to be shot six times. In another, ultimately supported by a Department of Justice investigation, Wilson shot Brown after Brown reached through the window of the officer's cruiser, struggled for Wilson's gun, retreated, and then appeared to lunge at him again.

Brynee O'Neill, *How Do Police-Worn Body Camera Programs Actually Work?*, BRENNAN CTR. FOR JUST. (Feb. 5, 2016), https://www.brennancenter.org/blog/how-do-police-worn-body-camera-programs-actually-work. A grand jury did not charge Wilson, further frustrating the Ferguson community. *Id*.
[4] Press Release, U.S. Dep't of Justice, Justice Department Awards Over $23 Million in Funding for Body Worn Camera Pilot Program to Support Local Law Enforcement Agencies in 32 States (Sept. 21, 2015), https://www.justice.gov/opa/pr/justice-department-awards-over-23-million-funding-body-worn-camera-pilot-program-support-law.
[5] Amanda Ripley, "*A Big Test of Police Body Cameras Defies Expectations*," N.Y. TIMES (Oct. 20, 2017), https://www.nytimes.com/2017/10/20/upshot/a-big-test-of-police-body-cameras-defies-expectations.html. For information regarding 2015-17 *see* U.S. DEPT. OF JUSTICE, OFFICE OF JUSTICE PROGRAMS: FY 2018 PROGRAM SUMMARIES 2 (2017); For information regarding 2018-19 *see* U.S. DEPT. OF JUSTICE, OFFICE OF JUSTICE PROGRAMS: FY 2019 PROGRAM SUMMARIES 13 (2018).
[6] Mary Fan, *Privacy, Public Disclosure, Police Body Cameras*, 68 ALA. L. REV. 395, 398 (2016).
[7] Fan, *Privacy, Public Disclosure, Police Body Cameras*, 68 ALA. L. REV. 395, 399 (2016).
[8] *See* LINDSAY MILLER & JESSICA TOLIVER, POLICE EXEC. RESEARCH FORUM, IMPLEMENTING A BODY-WORN CAMERA PROGRAM: RECOMMENDATIONS AND LESSONS LEARNED 24–25 (2014), http://www.policeforum.org/assets/docs/Free_Online_Documents/Technology/implementing%20a%20body-worn%20camera%20program.pdf.
[9] *See* Barak Ariel, William A. Farrar, and Alex Sutherland, *The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints Against the Police: A Randomized Controlled Trial*, 31 J. OF QUANTITATIVE CRIMINOLOGY 509 (2014); MILLER & TOLIVER, *supra* note 8, at 5-9.
[10] Mary Fan, *Privacy, Public Disclosure, Police Body Cameras*, 68 ALA. L. REV. 395, 400 (2016).
[11] N.C. GEN. STAT. § 132-1.4A (2016).
[12] The court, when considering release, must evaluate the following factors:

> (1) Release is necessary to advance a compelling public interest. (2) The recording contains information that is otherwise confidential or exempt from disclosure or release under State or federal law. (3) The person requesting

release is seeking to obtain evidence to determine legal issues in a current or potential court proceeding. (4) Release would reveal information regarding a person that is of a highly sensitive personal nature. (5) Release may harm the reputation or jeopardize the safety of a person. (6) Release would create a serious threat to the fair, impartial, and orderly administration of justice. (7) Confidentiality is necessary to protect either an active or inactive internal or criminal investigation or potential internal or criminal investigation. (8) There is good cause shown to release all portions of a recording.

N.C. GEN. STAT. § 132-1.4A(f) (2016).

[13] Jim Morrill & Michael Gordon, "*Horrific" Video of Police Shooting "Speaks for Itself," Victim's Lawyer Says,* CHARLOTTE OBSERVER (Oct. 9, 2017), http://www.charlotteobserver.com/news/politics-government/article177974641.html.

[14] *Id*.

[15] Cameron Barr, *Body-worn cameras for police? Britain started long ago,* WASH. POST (Dec. 2, 2014), https://www.washingtonpost.com/news/post-nation/wp/2014/12/02/body-worn-cameras-for-police-britain-started-long-ago/?utm_term=.8938d73d3c4b.

[16] Id.

[17] *Rollout of body worn cameras*, Metropolitan Police, Oct. 16, 2017 *available at* http://news.met.police.uk/news/rollout-of-body-worn-cameras-191380; see also *Police body cameras 'reduce the need to fire Taser*' BBC NEWS (Mar. 27 2018) available at https://www.bbc.com/news/uk-england-leeds-43541479.

[18] As of July 2013. LINDSAY MILLER & JESSICA TOLIVER, POLICE EXEC. RESEARCH FORUM, IMPLEMENTING A BODY-WORN CAMERA PROGRAM: RECOMMENDATIONS AND LESSONS LEARNED (2014), http://www.policeforum.org/assets/docs/Free_Online_Documents/Technology/implementing%20a%20body-worn%20camera%20program.pdf.

[19] Peter Hermann & Rachel Weiner, *Issues Over Police Shooting in Ferguson Lead Push for Officers and Body Cameras*, WASH. POST (Dec. 2, 2014), https://www.washingtonpost.com/local/crime/issues-over-police-shooting-in-ferguson-lead-push-for-officers-and-body-cameras/2014/12/02/dedcb2d8-7a58-11e4-84d4-7c896b90abdc_story.html.

[20] *See* Josh Sanburn, *The One Battle Michael Brown's Family Will Win*, TIME (Nov. 26, 2014), http://time.com/3606376/police-cameras-ferguson-evidence/; Joe Marusak & Mark Washburn, *CMPD Releases Full Video of Fatal Keith Lamont Scott Shooting*, CHARLOTTE OBSERVER (Oct. 4, 2016), http://www.charlotteobserver.com/news/special-reports/charlotte-shooting-protests/article105978672.html.

[21] Peter Hermann & Rachel Weiner, *Issues Over Police Shooting in Ferguson Lead Push for Officers and Body Cameras*, WASH. POST (Dec. 2, 2014), https://www.washingtonpost.com/local/crime/issues-over-police-shooting-in-ferguson-lead-push-for-officers-and-body-cameras/2014/12/02/dedcb2d8-7a58-11e4-84d4-7c896b90abdc_story.html.

[22] On December 1, 2014, President Barack Obama requested that Congress partially reimburse communities for the adoption of BWC programs, which would have required a $75 Million budget for purchasing devices. Hermann & Weiner, *Issues Over Police Shooting in Ferguson Lead Push for Officers and Body Cameras*, WASH. POST; Eyder Peralta, *Obama to Ask for $263 Million for Police Body Cameras, Training*, NAT'L PUB. RADIO (Dec. 1, 2014, 7:02

AM), https://www.npr.org/sections/thetwo-way/2014/12/01/367721705/obama-to-meet-civil-rights-leader-to-talk-about-mistrust-of-police.
[23] A 2015 poll found that 88 percent of Americans supported the use of police body-worn cameras. *Unlike Ferguson, the Shooting of Walter Scott Finds Racial Agreement*, YOUGOV (April 15, 2015), https://today.yougov.com/news/2015/04/15/unlike-ferguson-shooting-walter-scott-finds-racial/.
[24] *Access to Police Body-Worn Camera Video*, REPORTERS COMMITTEE FOR FREEDOM OF THE PRESS (last visited June 17, 2019), http://www.rcfp.org/bodycams.
[25] NAT'L INST. JUSTICE, BODY-WORN CAMERAS FOR CRIMINAL JUSTICE: MARKET SURVEY VERSION 1.0 (2014), https://www.justnet.org/pdf/Body-Worn-Camera-Market-Survey-508.pdf.
[26] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 1-5 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[27] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERAS FOR LAW ENFORCEMENT 6 (2012), https://www.justnet.org/pdf/00-Body-Worn-Cameras-508.pdf.
[28] PERF Report, p. 39.
[29] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERAS FOR LAW ENFORCEMENT 6 (2012), https://www.justnet.org/pdf/00-Body-Worn-Cameras-508.pdf.
[30] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 3-10 to 3-11 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[31] NAT'L INST. JUSTICE, BODY-WORN CAMERAS FOR CRIMINAL JUSTICE: MARKET SURVEY VERSION 1.0, AT 25–26 (2014), https://www.justnet.org/pdf/Body-Worn-Camera-Market-Survey-508.pdf.
[32] At VGA resolution (640 x 480) and a frame rate of 30 frames per second, an hour of video recording would take approximately 550-1,100 MB of storage. High definition (HD) resolution, also called 720P, is 1280 x 720; an hour of recording would take approximately 1,650-3,325 MB of storage. NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 3-10 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[33] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 3-10 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[34] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 3-13 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[35] NAT'L INST. JUSTICE, BODY-WORN CAMERAS FOR CRIMINAL JUSTICE: MARKET SURVEY VERSION 1.0, at 5–6 (2014), https://www.justnet.org/pdf/Body-Worn-Camera-Market-Survey-508.pdf.
[36] Alexandra Mateescu, Alex Rosenblat & danah boyd, *Police Body-Worn Cameras*, at 5 (Data & Soc'y Research Inst., Working Paper, 2015), https://www.datasociety.net/pubs/dcr/PoliceBodyWornCameras.pdf.
[37] NAT'L INST. JUSTICE, BODY-WORN CAMERAS FOR CRIMINAL JUSTICE: MARKET SURVEY VERSION 1.0, at 5–6 (2014), https://www.justnet.org/pdf/Body-Worn-Camera-Market-Survey-508.pdf.
[38] *Axon Camera Video Watermark Timestamp,* AXON (last visited May 3, 2018), https://help.axon.com/hc/en-us/articles/115002746247-Axon-Camera-Video-Watermark-Timestamp.
[39] LINDSAY MILLER & JESSICA TOLIVER, POLICE EXEC. RESEARCH FORUM, IMPLEMENTING A BODY-WORN CAMERA PROGRAM: RECOMMENDATIONS AND LESSONS LEARNED 16 (2014), http://www.policeforum.org/assets/docs/Free_Online_Documents/Technology/implementing%20a%20body-worn%20camera%20program.pdf.

[40] Brennan Ctr. For Justice, Police Body Camera Polices, Retention and Release (2016), https://www.brennancenter.org/analysis/police-body-camera-policies-retention-and-release.
[41] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 6-32 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[42] *Evidence.com*, Axon (last visited May 3, 2018), https://www.axon.com/products/evidence.
[43] Richard E. Myers II, *Police-Generated Digital Video: Five Key Questions, Multiple Audiences, and a Range of Answers*, 96 N.C. L. REV. 1237, 1254 (2018).
[44] NAT'L INST. JUSTICE, BODY-WORN CAMERAS FOR CRIMINAL JUSTICE: MARKET SURVEY VERSION 1.0, at 5–6 (2014), https://www.justnet.org/pdf/Body-Worn-Camera-Market-Survey-508.pdf.
[45] Tim Dees, *What is the future of the body-worn camera in policing?*, PoliceOne.com (Dec. 7, 2017), https://www.policeone.com/policing-in-the-video-age/articles/467246006-What-is-the-future-of-the-body-worn-camera-in-policing/.
[46] *Id*.
[47] *Body Worn Camera Market 2019: Company Profile Segments, Global Trends, Landscape and Demand Forecast to 2013*, REUTERS (Feb. 28, 2019, 10:30 AM), https://www.reuters.com/brandfeatures/venture-capital/article?id=86693.
[48] NAT'L INST. JUSTICE, A PRIMER ON BODY WORN CAMERA TECHNOLOGIES 1-5 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants/250382.pdf.
[49] Richard E. Myers II, *Police-Generated Digital Video: Five Key Questions, Multiple Audiences, and a Range of Answers*, 96 N.C. L. REV. 1237, 1237 (2018).
[50] Myers, *supra* note 43, at 1241.
[51] Myers, *Police-generated digital video,* at 1241-42.
[52] *Id*.
[53] *Police Body Camera Polices, Retention and Release*, BRENNAN CTR. FOR JUST. (last updated July 8, 2016), https://www.brennancenter.org/analysis/police-body-camera-policies-retention-and-release.
[54] *Id*.
[55] For example, North Carolina and South Carolina exempt BWC video from their public records laws. *See* https://ncleg.net/Sessions/2015/Bills/House/PDF/H972v8.pdf, http://www.scstatehouse.gov/sess121_2015-2016/prever/47_20150604.htm.).
[56] *See supra* notes 11–15 and text accompanying
[57] Myers, *supra* note 43, at 1249.
[58] Myers, *supra* note 43, at 1250.
[59] Myers, *supra* note 43, at 1255.
[60] *See* Body-Worn Camera Law Database, *available* at http://www.ncsl.org/research/civil-and-criminal-justice/body-worn-cameras-interactive-graphic.aspx; *Police Mobile Camera Footage as a Public Record*, *available at* https://www2.archivists.org/statements/issue-brief-police-mobile-camera-footage-as-a-public-record.
[61] *See, e.g.*, N.C. GEN. STAT. 132-1.4A (2016);); S.C. CODE ANN. § 23-1-240(G) (2016).
[62] *See, e.g.*, FLA. STAT. § 119.071(2)(l) (2016); OKLA. STAT. tit. 51, § 24A.8(A)(9)–(10) (2016)
[63] TEX. OCC. CODE ANN. §§ 1701.655, .661 (West 2016).
[64] *See* Fan, *supra* note 6, at 431–37.

[65] For more information on the symposium visit https://www.northcarolinalawreview.org/symposium.