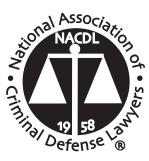


Joel M. Schumm Clinical Professor of Law Indiana University Robert H. McKinney School of Law

REPORTER





Copyright © 2017 National Association of Criminal Defense Lawyers

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/. It may be reproduced, provided that no charge is imposed, and the National Association of Criminal Defense Lawyers is acknowledged as the original publisher and the copyright holder. For any other form of reproduction, please contact NACDL for permission.

Cover Illustration: Flak Jacket & Badge © panyamail |123RF, Camera Illustration © Cathy Zlomek | NACDL



For more information contact: National Association of Criminal Defense Lawyers[®] 1660 L Street NW, 12th Floor, Washington, DC 20036 Phone 202-872-8600 www.nacdl.org

> This publication is available online at www.nacdl.org/policingbodycameras



POLICING BODY CAMERAS Policies and Procedures to Safeguard the Rights of the Accused

Barry J. Pollack President, NACDL Washington, DC

Gerald B. Lefcourt

President, FCJ New York, NY

E.G. "Gerry" Morris Immediate Past President, NACDL *Austin, TX*

> Norman L. Reimer Executive Director, NACDL Washington, DC

Kyle O'Dowd

Associate Executive Director for Policy, NACDL Washington, DC

Jumana Musa Senior Privacy & National Security Counsel, NACDL *Washington, DC*

NACDL Body Camera Task Force

Steven R. Morrison Co-Chair Grand Forks. ND

Anna M. Durbin Ardmore, PA

Elizabeth Kelley Spokane, WA Kobie Flowers Washington, DC

Michael J. Nichols East Lansing, MI

Martin A. Sabelli San Francisco, CA

Reporter

Joel M. Schumm Clinical Professor of Law Indiana University Robert H. McKinney School of Law, Reporter *Indianapolis, IN*

Barry J. Pollack Co-Chair Washington, DC

Rick Jones New York, NY

Barry G. Porter Albuquerque, NM



Table of Contents

About the National Association of Criminal Defense Lawyers and the Foundation for Criminal Justice
Acknowledgements
Foreword
Executive Summary
NACDL Body Camera Principles
Introduction / Scope of Report
Recommendations
 Clear and strictly enforced policies must establish when body cameras will be recording so that the decision of when to record is not left to the discretion of individual police officers
2. Video must be stored for a sufficient time to allow the accused to obtain evidence that is exculpatory or may lead to the discovery of exculpatory evidence
3. Arrested individuals and their attorneys must be given prompt access to all body camera video pertaining to a case
 Policies must be crafted and equipment must be designed to minimize concerns with the misinterpretation of video
5. Police officers should not access body camera video before preparing their initial reports
6. Policies must prohibit the use of any biometric technologies in conjunction with body cameras25
7. Video must not be later viewed to search for additional crimes or take other punitive action against an individual
8. Adequate resources must be available to ensure ongoing officer training on body camera use
 Sufficient resources must be available to ensure that counsel are appropriately trained and that appointed counsel have adequate time and access to experts necessary to render effective assistance of counsel 27
10. An independent, non-police agency must retain and control access to body camera footage
Conclusion
Endnotes
Appendix A – Witnesses



 $(\circ$

RE

About the National Association of Criminal Defense Lawyers and the Foundation for Criminal Justice

The National Association of Criminal Defense Lawyers (NACDL) is the preeminent organization in the United States advancing the goal of the criminal defense bar to ensure justice and due process for persons charged with a crime or wrongdoing. NACDL's core mission is to: *Ensure justice and due process for persons accused of crime … Foster the integrity, independence and expertise of the criminal defense profession … Promote the proper and fair administration of criminal justice.*

Founded in 1958, NACDL has a rich history of promoting education and reform through steadfast support of America's criminal defense bar, *amicus curiae* advocacy, and myriad projects designed to safeguard due process rights and promote a rational and humane criminal justice system. NACDL's many thousands of direct members — and 90 state, local and international affiliate organizations totalling up to 40,000 members — include private criminal defense lawyers, public defenders, active U.S. military defense counsel, and law professors committed to preserving fairness in America's criminal justice system. Representing thousands of criminal defense attorneys who know firsthand the inadequacies of the current system, NACDL is recognized domestically and internationally for its expertise on criminal justice policies and best practices.

The Foundation for Criminal Justice (FCJ) is a 501(c)(3) charitable non-profit organized to preserve and promote the core values of America's criminal justice system guaranteed by the Constitution — among them access to effective counsel, due process, freedom from unreasonable search and seizure, and fair sentencing. The FCJ supports NACDL's charitable efforts to improve America's public defense system, and other efforts to preserve core criminal justice values through resources, education, training, and advocacy tools for the public and the nation's criminal defense bar.



For more information contact: National Association of Criminal Defense Lawyers[®] 1660 L Street NW, 12th Floor, Washington, DC 20036 Phone 202-872-8600 www.nacdl.org

> This publication is available online at www.nacdl.org/policingbodycameras

Acknowledgements

NACDL thanks the Foundation for Criminal Justice for its support of the task force and Joel M. Schumm for drafting this report. Thanks also to the following NACDL staff for their careful editing and helpful suggestions: Jumana Musa, Sr. Privacy and National Security Counsel, Norman L. Reimer, Executive Director; Kyle O'Dowd, Associate Executive Director for Policy; Quintin Chatman, Editor of *The Champion®*, and Ivan Dominguez, Director of Public Affairs & Communications. NACDL would also like to thank Cathy Zlomek, NACDL Art Director for the design of the report.

NACDL extends its deep appreciation to the members of the Body Camera Task Force who dedicated their time and effort to studying the issues and working through the recommendations in order to ensure the strongest protection for the rights of the accused in criminal cases: Co-chairs Steven R. Morrison and Barry J. Pollack; Anna M. Durbin, Kobie Flowers, Rick Jones, Elizabeth Kelley, Michael J. Nichols, Barry G. Porter, and Martin A. Sabelli.

The work of the Task Force would not have been possible without the insightful contributions of our esteemed witnesses, identified throughout the report and in Appendix A. Sincerest gratitude goes to the following individuals, who worked behind the scenes to make the task force and report possible: At NACDL Barry J. Pollack, President, NACDL and Task Force Co-chair; E.G. "Gerry" Morris, Immediate Past President, NACDL; Theodore Simon, former NACDL president; Norman L. Reimer, Executive Director; Jumana Musa, Sr. Privacy and National Security Counsel; and Lisa Schrade, National Affairs Assistant.



Foreword

Criminal defense lawyers have long known that while most police do their best under difficult circumstances, the use of excessive force by police occurs with greater frequency than was publicly acknowledged, and the excessive use of force is deployed disproportionately against African Americans and other minority communities. Within the past few years, a spate of police shootings captured on video fostered national debate and propelled a movement to deploy body worn video cameras as required police equipment.

Fifty years ago, instant video replay made its national debut. For many years, it allowed fans at home to assess whether or not an official acting in real time made the right call. Now, in nearly every professional sport, video replay has become part of the game itself. Leagues realize that officials will gain a more accurate sense of what transpired if they are able to review the video before attempting to make a final determination. That does not mean that the official will always get it right. Frequently, video is taken from a particular angle that provides a skewed view of the actual events. But, the leagues recognize the additional information the video offers will overall lead to better decision making.

In our courtrooms, as juries try to determine what happened in real time, often in situations where the participants and various eyewitnesses have very different perceptions of the events, having additional evidence available to them, even if far from perfect evidence, is likely overall to lead to better decision making. Yet, body worn cameras are nothing close to a panacea for what ails police-community relations. Police must be better trained to de-escalate situations, understand explicit and implicit bias, and employ force only as a last resort and only to the extent truly necessary. Without such training, people will continue to be shot and killed on our streets needlessly. Further, not only do body worn cameras not solve all problems, they also introduce new ones. In particular, they can be costly, potentially taking resources away from other reform measures such as better training, and present significant privacy concerns.

Typically, criminal justice reforms emanate from law enforcement, often implemented in the passion of some sensationalized case, and rarely with input from the defense bar. As the body camera movement gained momentum, NACDL resolved to study the issue. It established a Task Force to consider the widespread deployment of body worn cameras, and to assess how best to employ them considering the implications for the rights of the general public, criminally accused persons, the defense function, and the integrity of the criminal justice system. This report is the product of more than two years of intensive study with input from a broad range of stakeholders in the criminal justice system. NACDL offers this report to the criminal justice community and the public at large, confident it provides thoughtful analysis and a much-needed perspective.



Allal

the min

Barry J. Pollack Steven R. Morrison Co-Chairs, NACDL's Body Camera Task Force

Executive Summary

To contribute to the important national debate about body cameras, and in response to "the furor over recent cases in which unarmed black men were killed by law enforcement," National Association of Criminal Defense Lawyers (NACDL) then-President Theodore Simon established a working group in December 2014 and, in July 2015, the NACDL Board of Directors adopted a set of principles on body camera policies to direct future work of this Body Camera Task Force.

Over the months of drafting and discussing this report, many more men and women of color and other civilians have been shot by police under circumstances that raise serious concerns and leave many unanswered questions. At times, multiple shootings have grabbed headlines in different cities in the same week. NACDL's concern is not limited to those killed and their families, but also extends to the communities torn apart by the distrust that such shootings often bring or exacerbate and to the rights of police officers involved, some of whom may be criminally charged.

The core mission of NACDL is to: "Ensure justice and due process for persons accused of crime ... Foster the integrity, independence and expertise of the criminal defense profession ... Promote the proper and fair administration of criminal justice." The use of body cameras will not eliminate unnecessary shootings of civilians, but NACDL believes the documentation of police-citizen encounters has already had, or over time will have, a salutary effect on policing and the criminal justice system, by ensuring a more full and fair record of these encounters.

NACDL cautiously endorses the continued and wider use of body cameras implemented with the protections outlined in this report. The use of body cameras under the carefully-crafted policies outlined below offers the potential to ensure both police accountability and the creation and maintenance of a fuller evidentiary record, which is essential to further the search for truth in investigations and trials.

Body cameras are not by any means a complete solution to what ails the criminal justice system, and their increased implementation should in no way supplant other important initiatives. NACDL may revisit its endorsement of the use of body cameras and the principles essential to their use as new issues or concerns arise.

1. Clear and strictly enforced policies must establish when body cameras will be recording so that the decision of when to record is not left to the discretion of individual police officers.

If the individual police officer wearing a body camera has discretion over the camera — when to turn it on, when to turn it off, what to film, and so forth — the camera becomes vulnerable to manipulation that may serve the officer instead of serving the public interest.

Achieving the goals of the protection of the rights of the criminally accused and police accountability requires that body cameras be running continuously and clear policies and advisements be crafted to ensure that individual police officers are not able to decide when and what will be recorded. Sometimes the video will be harmful to those accused of a crime. Nevertheless, as two different public defenders told the Task Force, clients almost always prefer video of an incident over the word of the officer standing alone, believing their word is not going to hold up against the police.

Evidence thus far has shown that many officers do not comply with activation policies, and there is a suspicious frequency of cameras malfunctioning, regardless of whether police officers get to decide when to record. Allowing officer discretion will only increase the ability of individual officers to skew when recordings occur to the perceived benefit of the officer. In Albuquerque, Denver, and other cities, officer compliance with body camera recording is as low as 30%.

Recording every public encounter between police and citizens offers the best chance of achieving the goals of police accountability and protection of the rights of the criminally accused. As detailed in this report, clear and well-known policies limiting access to the video can mitigate the intrusion on privacy caused by the recording and can address most of the concerns with potential misuse of the resulting footage.

In public areas, ensuring preservation of evidence and accountability counsels in favor of continuously recording citizen encounters even if a request is made to stop recording. Private homes, on the other hand, are an area entitled to greater privacy, and officers should request consent before recording.

Discretion in deciding when a camera should be turned off during non-public interactions must rest with the person interacting with the police — not the officer. When individuals ask that the camera be turned off in a private home, the request should be made on camera and include a standard, carefully crafted advisement from the officer in response.

The continuous recording by body cameras is essential to increased transparency, accountability, and evidentiary documentation, but NACDL readily acknowledges concerns that these cameras are not watching police, but are instead pointed at "the community being policed," which raises the potential for their use as "tool[s] of high-tech racial profiling." NACDL also acknowledges that body cameras should not supplant other methods of ensuring police accountability. Individuals must also be free to videotape the police, whether occasionally when they see something that seems awry or in a more organized way.

Policies requiring recording become meaningless without consistent compliance. Policies must include potent remedies for violations, including disciplinary action against the officer and exclusion of evidence found as a result of certain violations.

2. Video must be stored for a sufficient time to allow the accused to obtain evidence that is exculpatory or may lead to the discovery of exculpatory evidence.

All body camera footage is not equal, and certain types of footage must be preserved longer than other types. Flagging footage for longer retention should occur automatically for any incident:

- involving a use of force;
- that leads to detention or arrest;
- that remains open or under investigation; or
- concerning which either a formal or informal complaint has been registered.



Moreover, the subject of any recording may flag a recording, even if not filing a complaint, and third parties should also be able to flag an incident whenever an individual has some good faith basis to believe police misconduct occurred. In addition, defendants and defense counsel must be permitted to flag for extended preservation any footage believed in good faith to be relevant to any criminal case. This may include footage supportive of an alibi or suggestive that someone else committed a charged offense.

Flagged videos, including videos of use of force incidents, must be kept for the duration of the case to which it pertains and a reasonable period of time after that to ensure that all post-conviction remedies have been exhausted.

3. Arrested individuals and their attorneys must be given prompt access to all body camera video pertaining to a case.

It is imperative that video is provided to defense counsel as soon as technically feasible, ideally within a day or two of arrest. Simply providing defense counsel an opportunity to view the footage is not sufficient; defense counsel must be provided a copy of the footage.

Reviewing this footage can be time-consuming, and an early start is imperative to preparing for preliminary hearings and important to investigating the case for potential suppression issues and defenses.

4. Policies must be crafted and equipment must be designed to minimize concerns with the misinterpretation of video.

Body camera footage, like any video, is not an objective record of events. Unlike dash cams, which often capture both officers and citizens and a wide field of view, body cameras provide a limited view from the officer's perspective. To present a more accurate perspective of an encounter, only body cameras with a wide field of view should be used. Cameras must also include a buffer of at least thirty seconds to ensure a more complete account of an event.

The placement of the body camera can also result in a distorted reality. Most body cameras in the United States are mounted on an officer's chest, unlike the head-mounted cameras in some other countries. Viewing an event from a perspective several inches lower than the officer's sightline can make a suspect seem larger and more intimidating, particularly when the suspect is physically close to the officer. Moreover, because cameras are mounted on clothing, simple movements will appear exaggerated. Body cameras mounted on hats, glasses, or helmets will generally present a more accurate view of events.

In addition, although a body camera generally captures the officer's voice, it does not show if an officer has his or her hand on a gun or is making a menacing gesture while talking in an otherwise calm and reasonable voice. Similarly, body cameras do not show whether an individual being arrested is tensing his or her arm. Body camera footage alone must be viewed cautiously; it presents only the officer's perspective, which is not only limited, but also prone to manipulation. Even video footage thought to be unambiguous may be susceptible to multiple interpretations depending on the "cultural outlook" of the individual viewing the tape.



5. Police officers should not access body camera video before preparing their initial reports.

Officers, like other eyewitnesses, should generally not be permitted to view body camera footage before giving a statement about, or preparing a report of, an incident. Academic research shows that watching the video can "essentially erase and record over" an officer's memory. Allowing police — but not suspects or witnesses — to view body camera footage before providing their account of an incident unfairly bolsters the officers' account, and thus credibility, by allowing officers to recall more details seemingly more accurately than others and to conform their recollections (consciously or subconsciously) to those seemingly supported by the video. Rather, only after an initial report is prepared, and with careful monitoring and documentation, officers may be permitted to view footage and prepare an addendum to their report.

Policies must prohibit the use of any biometric technologies in conjunction with body cameras.

The Fourth Amendment protects citizens against unreasonable searches, which are those in which the government violates a subjective expectation of privacy that society recognizes as reasonable. Although a citizen may not have a general expectation of privacy when he or she is in the public square, many would question the reasonableness of constant recording that could not only collect massive amounts of biometric information, but also compile and later search those videos using biometric means. Using body cameras as dragnet surveillance tools of individuals, most of whom are suspected of no crime, raises serious privacy concerns and implicates the constitutional rights of individuals whose biometric data is collected and searched. In addition, individuals who live in highly-policed neighborhoods, who are often poor and predominantly people of color, are more likely to be put in such databases. Short retention periods for unflagged video may reduce privacy concerns only if biometric data is never collected and never added to government databases.

7. Video must not be later viewed to search for additional crimes or take other punitive action against an individual.

The Fourth Amendment has long protected individuals' expectation of privacy against overzealous police action. Although video may document a crime scene, repeated views and technologically enhanced scrutiny should not be permitted to investigate additional potential crimes or exact punitive consequences after a police encounter has concluded. However, in the absence of a judicially-approved warrant particularly describing the place or item to be searched and specifically authorizing technological enhancements, officers should not be permitted to review video of their entry into a home to search for, with enhanced lighting and the ability to slow and replay segments of video, evidence of contraband, for example. Nor should an officer without a warrant be able to comb through video collected for other purposes to engage in a fishing expedition hoping to discover evidence of criminal activity.

8. Adequate resources must be available to ensure ongoing officer training on body camera use.

Training police officers on the proper use and protocols is critical to operation of a body camera program that adheres to policies, collects and preserves evidence when required, and protects the rights of the accused. Officers must also understand the consequences of not using their body cameras when required, which is discussed as part of Principle 1 above. Unfortunately, as one former police chief told the Task Force,

the high cost of the equipment and data storage sometimes leaves jurisdictions in a cash-strapped position in which training is not funded or not funded at a sufficient level.

Training should not only be offered regularly, it should specifically address the reality that body cameras alter interactions with the public generally and especially with vulnerable populations, such as individuals with mental disabilities, who represent more than half the people in the nation's jails and prisons.

9. Sufficient resources must be available to ensure that counsel are appropriately trained and that appointed counsel have adequate time and access to experts necessary to render effective assistance of counsel.

NACDL acknowledges the significant cost of body cameras, which is largely borne by local governments, although some DOJ funding or state funding may be available. The efficacy of spending millions of dollars for body cameras is far from settled. If a decision is made to purchase body cameras, however, funding must also be made available for training officers on their proper use. That funding should not be on the backs of the criminally accused, which will exact a heavier price on the low-income communities most often targeted by police activity.

Body camera programs entail a number of obvious and less obvious costs. They include the purchase of the physical equipment and its upkeep, training, data storage, the dedication of lawyer time to review and examine footage, and the possibility of requiring a forensic expert. These costs will affect police departments, prosecutors' offices, private criminal defense attorneys, and, perhaps most severely, public defenders. Any body camera program must account for all of its upfront costs, as well as the resources necessary to maintain an effective program.

Prosecutors and defense counsel not only take a significant amount of time reviewing camera footage for their cases, they may also require the assistance of forensic experts. These lawyers, and public defenders in particular, may have inadequate resources to properly review this evidence.

10. An independent, non-police agency must retain and control access to body camera footage.

In light of the many concerns discussed above, an Independent Monitoring Board should be appointed to control access to all body camera footage. Because for many people much of the impetus for use of body cameras is an ongoing distrust of police, allowing police to control when cameras are used and access and store video at their discretion exacerbates rather than resolves the concern. Ironically, the very organizations meant to be held accountable are able to prevent these videos from being created in the first instance or shared after the fact.

The information collected — like all other forms of evidence — does not belong to any particular party in litigation, including the police. Thus, jurisdictions should create independent boards of civilians, not police, to retain and release that information. Federal government grants should not fund programs that do not follow these guidelines or, at a minimum, should offer funding to a few jurisdictions who agree to create such a system that relies on the use of an independent, non-police monitoring agency.

11

An independent monitor obviates many of the issues discussed above. An entity other than police retaining and controlling access to video will greatly reduce accusations of tampering or deletion, intentional or inadvertent, by police and the need for courts to have hearings and craft remedies.

In short, an independent monitor can thoughtfully mitigate the privacy concerns created by widespread collection of body camera footage while best ensuring police accountability.

Conclusion

Body cameras were introduced long before policies for their use were fully developed. As with any police technology, the devil is in the details. With the right policies in place, body cameras can be an important tool for accountability and can have great evidentiary value. Police-civilian interactions will no longer be a matter of the accused's word against that of the police officer. NACDL will work to ensure that body cameras are used in ways that preserve the constitutional rights of the accused in criminal cases.



NACDL Body Camera Principles

- 1. Clear and strictly enforced policies must establish when body cameras will be recording so that the decision of when to record is not left to the discretion of individual police officers.
- 2. Video must be stored for a sufficient time to allow the accused to obtain evidence that is exculpatory or may lead to the discovery of exculpatory evidence.
- **3.** Arrested individuals and their attorneys must be given prompt access to all body camera video pertaining to a case.
- **4.** Policies must be crafted and equipment must be designed to minimize concerns with the misinterpretation of video.
- 5. Police officers should not access body camera video before preparing their initial reports.
- **6.** Policies must prohibit the use of any biometric technologies in conjunction with body cameras.
- 7. Video must not be later viewed to search for additional crimes or take other punitive action against an individual.
- 8. Adequate resources must be available to ensure ongoing officer training on body camera use.
- **9.** Sufficient resources must be available to ensure that counsel are appropriately trained and that appointed counsel have adequate time and access to experts necessary to render effective assistance of counsel.
- **10.** An independent, non-police agency must retain and control access to body camera footage.



Introduction/Scope of Report

To contribute to the important national debate about body cameras and in response to "the furor over recent cases in which unarmed black men were killed by law enforcement," National Association of Criminal Defense Lawyers (NACDL) then President Theodore Simon established a working group in December 2014¹ and, in July 2015, the NACDL Board of Directors adopted an interim set of principles on body camera policies that could direct future work of this Body Camera Task Force (Task Force).²



NACDL's concern is not limited to those killed and their families, but also extends to the communities torn apart by the distrust that such shootings often bring or exacerbate and the rights of police officers involved, some of whom may be criminally charged.

Over the months of drafting and discussing this report, many more men and women of color and other civilians have been shot by police under circumstances that raise serious concerns and leave many unanswered questions. At times, multiple shootings have grabbed headlines in different cities in the same week.³ NACDL's concern is not limited to those killed and their families, but also extends to the communities torn apart by the distrust that such shootings often bring or exacerbate and the rights of police officers involved, some of whom may be criminally charged.

The core mission of NACDL is to: "Ensure justice and due process for persons accused of crime ... Foster the integrity, independence and expertise of the criminal defense profession ... Promote the proper and fair administration of criminal justice."⁴ The use of body cameras will not eliminate unnecessary shootings of civilians, but NACDL believes the documentation of police-citizen encounters has already had, or over time will have, a salutary effect on policing and the criminal justice system, by ensuring a more full and fair record of these encounters.⁵

NACDL's Review

A wide array of organizations has endorsed use of police body cameras. Focusing on law enforcement, Attorney General Loretta Lynch has said that body camera programs give police officers "the tools, support, and training they need to tackle the 21st century challenges we face while holding tremendous promise for enhancing transparency, promoting accountability, and advancing public safety for law enforcement officers and the communities they serve."⁶ A coalition of civil rights, privacy, and media rights groups have explained that body cameras may "help provide transparency into law enforcement practices, by providing first-hand evidence of public interactions," while expressing concerns for misuse and abuse.⁷ The Task Force carefully considered the concerns of the privacy of the accused, the public,⁸ police officers,⁹ and crime victims.¹⁰

Studies on the effectiveness of body cameras are relatively few and arguably inconclusive. Proponents claim that if officers know they are being recorded, they will reconsider engaging in abusive behavior. In Rialto, California, researchers found a 60 percent reduction in officer use of force when body cameras were employed, and an 88 percent reduction of citizen complaints against officers.¹¹ But the study did not control for the recent changes of a new police chief and new training protocols.¹² The Rialto study's findings were not replicated in a study of camera use by the Albuquerque police.¹³

More recently, a study by researchers from Temple University offered the troubling conclusion that "the use of wearable body cameras is associated with an increase in the shooting deaths of civilians," purportedly because the cameras "can help the police justify shooting deaths of armed suspects."¹⁴ The study merely correlated existing numerical data and was not a controlled study; it was quickly criticized by a leading body camera researcher for relying on 2013 Bureau of Justice Statistics data, which he believed were too old to incorporate in analyzing police killings during 2015.¹⁵ The effectiveness of body cameras, like any important policy issue, warrants rigorous and continuing study and review.¹⁶



The effectiveness of body cameras, like any important policy issue, warrants rigorous and continuing study and review.... The Task Force reviewed hundreds of pages of policy reports, articles, legislation, and department policies, and heard from sixteen witnesses representing a wide variety of perspectives[.]

In addition to these studies, the Task Force reviewed hundreds of pages of policy reports, articles, legislation, and department policies, and heard from sixteen witnesses representing a wide variety of perspectives, as listed in Appendix A. This report, which is the product of that Task Force's work, was discussed at length by the NACDL Board at its August 2016 annual meeting. While dissenting views were thoughtfully and cogently presented and carefully considered, the Board, over these dissenting opinions, adopted as NACDL policy the views expressed in this report. This report adds a critical voice that has not previously been part of the discussion: the criminal defense bar committed to protecting the rights of the accused.



Recommendations

NACDL cautiously endorses the continued and wider use of body cameras implemented with the protections outlined in this report. With these protections, body cameras offer enormous potential to better document encounters between police officers and citizens while mitigating competing concerns about their potential for misuse or abuse.

The use of body cameras under the carefully crafted policies outlined below offers the potential to ensure both police accountability and to create and maintain a fuller evidentiary record, which is essential to further the search for truth in investigations and trials. The experience of defense lawyers with video evidence, whether it be dashboard cameras or recorded statements to police, has been largely positive. As with these other forms of police-generated video, some video footage is better than none and more footage is better than less. When a camera is able to better reveal the "truth" of a police-citizen encounter, the important goals of obtaining and maintaining evidence relevant to criminal investigations and trials, transparency, accountability, and public safety are advanced.



Body cameras are not by any means a complete solution to what ails the criminal justice system, and their increased implementation should in no way supplant other important initiatives.

Body cameras are not by any means a complete solution to what ails the criminal justice system, and their increased implementation should in no way supplant other important initiatives. NACDL may revisit its endorsement of the use of body cameras and the principles essential to their use as new issues or concerns arise.

NACDL acknowledges that any municipality adopting a body camera policy or state legislature setting broader policy will need to weigh the competing considerations and the interests of many groups expressing views on the merits of body cameras. Different municipalities that have adopted the use of body cameras have not provided uniform protections against their misuse.¹⁷

The perspective and concerns of the criminal defense bar advocating for the rights of the criminally accused must be a critical part of the discussion about whether and how to use body cameras. This report offers principles essential to maximizing the likelihood that the use of body cameras will result in a net benefit in furthering the important goals of increased police accountability and protection of the rights of the criminally accused. Policies on using body cameras should incorporate each of these ten principles.

1. Clear and strictly enforced policies must establish when body cameras will be recording so that the decision of when to record is not left to the discretion of individual police officers.

If the individual police officer wearing a body camera has discretion over the camera — when to turn it on, when to turn it off, what to film, and so forth — the camera becomes vulnerable to manipulation that may serve the officer instead of serving the public interest.



Clients almost always prefer video of an incident over the word of the officer standing alone, believing their word is not going to hold up against the police.

Achieving the goals of the protection of the rights of the criminally accused and police accountability requires that body cameras be running continuously and clear policies and advisements be crafted to ensure that individual police officers are not able to decide when and what will be recorded.¹⁸ Sometimes the video will be harmful to those accused of a crime. Nevertheless, as two different public defenders (one in a jurisdiction that has long used body cameras and one in a jurisdiction that does not use them) told the Task Force, clients almost always prefer video of an incident over the word of the officer standing alone, believing their word is not going to hold up against the police.¹⁹

The public interest is served by having more evidence about what occurred during police-citizen encounters, not less. Similar to DNA evidence, which concerned some defense lawyers initially because it could hurt criminal defendants, body cameras may also serve as a powerful tool for possible exoneration. Body camera footage may also be crucial to a suppression motion, where it "would have been much harder" to establish a non-consensual encounter without it.²⁰ Moreover, when NACDL members represent any individual, including police officers who are the subject of false allegations that they behaved criminally, evidence properly collected by body cameras may be crucial to the search for the truth.

As explained below, because of the difficult and nuanced situations posed to officers, unambiguous policies that eliminate individual officer discretion should be crafted to maximize the protection of the rights of suspects and potential suspects.





Allowing officer discretion will only increase the ability of individual officers to skew when recordings occur to the perceived benefit of the officer.

A. Poor records of compliance

Many officers do not comply with activation policies, and there is a suspicious frequency of cameras malfunctioning, regardless of whether police officers get to decide when to record. Allowing officer discretion will only increase the ability of individual officers to skew when recordings occur to the perceived benefit of the officer. Allowing individual discretion also makes it harder to detect whether a failure to record is the result of a decision made in good faith. Finally, allowing such discretion can result in valuable evidence being lost, even when the discretionary decision not to record was made in good faith.

In Albuquerque, Denver, and other cities, officer compliance with body camera recording is as low as 30%.²¹ Although officers in Albuquerque were given no discretion as to when to record, officers repeatedly turned off their body cameras prior to incidents in 2012.²² An independent monitor investigating the New Orleans Police Department's use of body cameras in 2010 expressed suspicion regarding how frequently body cameras malfunctioned and failed to record during crucial moments.²³ The independent monitor reviewed 145 use-of-force reports logged by the investigation team and found documentation of footage of only 49 use-of-force incidents, signaling a significant failure to record.²⁴

Noncompliance by police with a policy, sometimes imposed in the face of strong opposition from officers, is not surprising, as earlier attempts to equip officers with microphones, dash cameras, and body cameras were met by rampant defiance.²⁵ Sometimes the failure to record is willful; other times it may simply be a reality of the difficult job of officers. As a former police chief told the Task Force, when officers are in a stressful or shooting situation, they "will not have the mental acuity to turn it on ... they are in life preservation mode."²⁶

NACDL acknowledges the concerns of continuous recording that have been expressed by police officers, privacy advocates, and others. These include citizens' privacy and the potential harm to confidential informants, victims, witnesses, minors, or those merely having an "informal, non-law enforcement interactions with members of the community," not to mention the potential chilling effect that body cameras might have on the willingness of citizens to speak with police.²⁷ Recording every public encounter between police and citizens offers the best chance of achieving the goals of police accountability and protection of the rights of the criminally accused. As detailed later in this report, clear and well-known policies limiting access to the video can mitigate the intrusion on privacy caused by the recording and can address most of the concerns with potential misuse of the resulting footage.

B. The need to eliminate discretion

Although many department policies provide for recording specific types of encounters, the language chosen often allows exceptions to swallow the general rule requiring recording. For example, in Illinois, police are required to turn off the camera when a victim, witness of a crime, or community member asks for the camera to be turned off as well as when a police officer is interacting with a confidential informant.²⁸ But the camera need not stop recording if exigent circumstances exist or otherwise doing so would be "impracticable or impossible."²⁹ Moreover, police officers are given the discretion to continue recording in all of these circumstances if they believe the victim, witness, or confidential informant has committed a crime or is in the process of doing so.³⁰

Allowing officers discretion to decide when and what to record leads to officers making comments like "we are live" while looking at each other or stating they need to have an "administrative conversation" before turning off the camera.³¹ Achieving the important goals of police accountability as well as evidence collection and preservation will be difficult, if not impossible, if officers are permitted to choose when to record. Indeed, granting officers discretion to deactivate cameras when they deem appropriate led to a reduction in recording by as much as 42 percent.³²





Recording in the midst of an encounter provides an incomplete, if not distorted version of events, by omitting the circumstances that led up to the escalation.

Moreover, a recent study showed that the use of force increases significantly when police have discretion to announce mid-encounter that they are turning on video.³³ Recording in the midst of an encounter provides an incomplete, if not distorted version of events, by omitting the circumstances that led up to the escalation. Moreover, if an "officer suddenly says 'I'm turning on this camera to record this,' that could be considered an escalation," which is wholly avoidable if the camera is running from the outset.³⁴

C. In public areas, recording must be continuous, but in private homes officers should request consent

NACDL largely agrees with the initial recommendations of the American Civil Liberties Union ("ACLU") regarding recording. Specifically, body cameras should generally be limited to uniformed police officers, which will ensure people know that the encounter will be recorded.³⁵ Non-uniformed officers involved in SWAT raids or in other planned enforcement actions or uses of force should also be equipped with cameras.³⁶

A simple, non-verbal form of notice of recording should also be provided.³⁷ For example, officers could wear an easily visible pin or sticker stating something to the effect of "lapel camera in operation."³⁸ Cameras could also have blinking red lights when they record, which is standard on most cameras.³⁹



In public areas, ensuring preservation of evidence and accountability counsels in favor of continuously recording citizen encounters even if a request is made to stop recording.

In public areas, ensuring preservation of evidence and accountability counsels in favor of continuously recording citizen encounters even if a request is made to stop recording. Fourth Amendment jurisprudence does not recognize an expectation of privacy in the public square, and many public areas are already the subject of video surveillance. Police-citizen encounters should not be the one thing that goes unrecorded. As discussed elsewhere in the report, the increased privacy intrusion of recording such encounters can be mitigated through strict policies regarding the retention of data collected and strictly limiting the access to that data.

Private homes, on the other hand, are an area entitled to greater privacy, and officers should request consent before recording. Absent exigency, police need a warrant or consent to enter the home. But important evidence, including statements of witnesses that will be used against defendants and the seizure of evidence that is claimed to be in plain view, are often gathered in the home.⁴⁰ On the other hand, evidence favorable to defendants may also be found in a home, and its preservation on video may be essential to mounting an effective defense.

Nevertheless, officers must be cognizant that some individuals will not want the inside of their homes recorded. Unless the officer's visit to the home requires examination of the inside of the home (for investigation or aid of a person inside, for example), the officer should ask the homeowner if he or she would prefer to speak outside. Otherwise, in the absence of a demonstrable exigency that makes an advisement impossible, officers should expressly advise individuals that they are being recorded and may ask for the camera to be turned off in the home. As explained below, this advisement and interaction before entering the home must be recorded.

D. Requests not to record must be documented and retained

Discretion in deciding when a camera should be turned off during non-public interactions must rest with the person interacting with the police — not the officer. When individuals ask that the camera be turned off in a private home, the request should be made on camera and include a standard, carefully crafted advisement from the officer in response.



If a statement is not recorded, a clear advisement from police is necessary to ensure this decision is one made knowingly and voluntarily. Officers should not be permitted to pick and choose which encounters or parts of encounters will be taped by encouraging or discouraging consent based on the perceived benefits of video. Any colloquy regarding a request to stop taping must be taped and preserved.⁴¹

E. The use of police body cameras should in no way limit the rights of citizens to videotape police

The continuous recording by body cameras is essential to increased transparency, accountability, and evidentiary documentation, but NACDL readily acknowledges concerns that these cameras are not watching police, but are instead pointed at "the community being policed," which raises the potential for their use as "tool[s] of high-tech racial profiling."⁴² A number of the recommendations in this report are designed to lessen this concern.



NACDL readily acknowledges concerns that these cameras are not watching police, but are instead pointed at "the community being policed," which raises the potential for their use as "tool[s] of high-tech racial profiling."

Further, police body cameras are not the only devices capable of recording police-citizen encounters. Individuals must also be free to videotape the police, whether occasionally when they see something that seems awry or in a more organized way sometimes known as "copwatching," through which "groups of local residents . . . wear uniforms, carry visible recording devices, patrol neighborhoods, and film police-citizen interactions in an effort to hold police departments accountable to the populations they police."⁴³ Unapologetically adversarial in nature, copwatchers "point their cameras at officers, ask them questions about the officers' practices and policies, and critique those practices and policies on social media and in court."⁴⁴

F. Consequences for violation of recording rules

Policies requiring recording become meaningless without consistent compliance.⁴⁵ Policies must include potent remedies for violations, including disciplinary action against the officer and exclusion of evidence found as a result of certain violations.

If departments allow officers to flout or disregard rules, the integrity of evidence and public trust of the department is undermined.

Officer Discipline

Officers must face true disciplinary sanctions when they intentionally or recklessly fail to follow body camera program procedures. If departments allow officers to flout or disregard rules, the integrity of evidence and public trust of the department is undermined. The sanctions must be graduated based on the intentionality of the conduct and mindful of prior violations. Minor or first time violations may warrant

reprimands or leave without pay. But willful or repeated violations should result in severe sanctions that include termination.

Limits on Admissibility of Evidence

Although officer discipline is an important sanction for the failure to record or preserve video, courts can and should consider suppression of evidence to make defendants whole and ensure the important goals of body cameras are achieved. Most states addressing claims of lost or destroyed evidence follow *Arizona v. Youngblood*, 488 U.S. 51 (1988), which requires a showing of "bad faith" on the part of the police — "an almost impossible bar for criminal defendants."⁴⁶ Courts, however, could properly find that failing to record or allowing footage to be destroyed in violation of an unambiguous recording and retention policy amounts to bad faith.⁴⁷



In order to ensure a fair trial, judges should, at a minimum, grant an adverse-inference jury instruction whenever there has been spoliation of body camera evidence.

Beyond the *Youngblood* framework, jurisdictions should consider adopting statutes or courts rules to ensure the integrity of the fact-finding process when police do not follow established body camera policies. For example, if police fail to record in violation of an unambiguous policy that required recording, the officer could be prohibited from testifying about the observations that were not recorded.⁴⁸ Similarly, in cases that require consent by the suspect, police failure to document that consent by a recording should invalidate the consent and result in suppression of the statement.⁴⁹ In order to ensure a fair trial, judges should, at a minimum, grant an adverse-inference jury instruction whenever there has been spoliation of body camera evidence.⁵⁰

Whenever there is a claim that the equipment malfunctioned, defense counsel must have access to cameras to allow for forensic analysis of claims of equipment malfunctioning, especially repeated ones from the same officer. Moreover, similar to radar or alcohol testing devices, body camera equipment should be regularly tested and certified to ensure its proper functioning. Mandatory reporting and documentation of equipment malfunctions should be required for all body camera programs.

Finally, as a practical matter, as body camera footage becomes more prevalent, jurors may expect it in every case and discount "other types of evidence, such as statements from police officers or other eyewitnesses" unaccompanied by video.⁵¹ Defense lawyers must be mindful of this in selecting jurors and arguing cases to juries in cases without video.

2. Video must be stored for a sufficient time to allow the accused to obtain evidence that is exculpatory or may lead to the discovery of exculpatory evidence.

All body camera footage is not equal, and certain types of footage must be preserved longer than other types. Flagging footage for longer retention should occur automatically for any incident:

- involving a use of force;
- that leads to detention or arrest;

- that remains open or under investigation; or
- concerning which either a formal or informal complaint has been registered.⁵²

Moreover, the subject of any recording may flag a recording, even if not filing a complaint, and third parties should also be able to flag an incident whenever an individual has some good faith basis to believe police misconduct occurred.⁵³ In addition, defendants and defense counsel must be permitted to flag for extended preservation any footage believed in good faith to be relevant to any criminal case. This may include footage supportive of an alibi or suggestive that someone else committed a charged offense.



Flagged videos, including videos of use-of-force incidents, must be kept for the duration of the case to which it pertains and a reasonable period of time after that to ensure that all post-conviction remedies have been exhausted.

Flagged videos, including videos of use-of-force incidents, must be kept for the duration of the case to which it pertains and a reasonable period of time after that to ensure that all post-conviction remedies have been exhausted.⁵⁴

Policies must include clear provisions regarding storage of various types of data. Footage that serves no evidentiary or officer accountability purpose should be deleted in relatively short order.⁵⁵ The ACLU provides a useful framework in which footage that is flagged is retained for a longer period than unflagged video, which could be deleted within a relatively short period of time, such as 90 days.⁵⁶ As a practical matter, most complaints against police are filed within two weeks.⁵⁷ Although the statute of limitations for filing a civil suit may be longer in some jurisdictions, policies should strike a fair balance between the concerns presented by the long-term retention of unflagged data and giving interested parties sufficient time to flag footage. Continuous deletion mitigates concerns for privacy, the risk of improper use of video for improper further investigation and/or biometric screening, each discussed below, and the cost of storage of exceedingly large amounts of data.⁵⁸

In short, retention policies must be crafted to ensure preservation of evidence, police accountability, and protection of the rights of the criminally accused by establishing longer periods for flagged video. Moreover, as discussed in Principle 7, technological controls must strictly limit access to footage and establish digital fingerprints to document any access.

3. Arrested individuals and their attorneys must be given prompt access to all body camera video pertaining to a case.

It is imperative that video is provided to defense counsel as soon as technically feasible, ideally within a day or two of arrest. Simply providing defense counsel an opportunity to view the footage is not sufficient; defense counsel must be provided a copy of the footage.⁵⁹

Reviewing this footage can be time-consuming, and an early start is imperative to prepare for preliminary hearings and important to investigating the case for potential suppression issues and defenses. Realizing early on what body camera video is available is crucial to determine whether other footage (*e.g.*, closed circuit television (CCTV), private businesses, etc.) may exist in order to request it before it is deleted, which

often occurs in less than a month. Early receipt of video may also be important in identifying what, if any, experts need to be consulted in the case.⁶⁰

4. Policies must be crafted and equipment must be designed to minimize concerns with the misinterpretation of video.

Body camera footage, like any video, is not an objective record of events. Unlike dash cams, which capture both officers and citizens and a wide field of view, body cameras provide a limited view from the officer's perspective.

Even with body cameras rolling at all times, though, the picture may not capture either "what happened outside the camera's view or the causation for actions shown . . . depend[ing] on 'the camera's perspective (angles) and breadth of view (wide shots and focus)."⁶¹

A. Equipment design

Like an instant replay video of a sporting event, body cameras also have a limited perspective on any given incident. Thus, although body cameras may provide a valuable account of an incident, the view is not always a comprehensive or reliable one. A single camera is fixed on one part of an officer's body and does not provide additional views or context.

To present a more accurate perspective of an encounter, only body cameras with a wide field of view should be used. But body cameras are marketed to police departments — not citizens. Thus, it is troubling that some cameras are specifically being marketed because of their narrow field of view — which could be decreased from 165 degrees to as little as 50 or 60 degrees.⁶² Presenting an accurate picture of what the officer saw is desirable; presenting a distortedly narrow one is not.

The placement of the body camera can add to the distortion. Most body cameras in the United States are mounted on an officer's chest, unlike the head-mounted cameras in some other countries.⁶³ Viewing an event from a perspective several inches lower than the officer's sightline can make a suspect seem larger and more intimidating, particularly when the suspect is physically close to the officer.⁶⁴ Moreover, because cameras are mounted on clothing, simple movements will appear exaggerated. Body cameras mounted on hats, glasses, or helmets will generally present a more accurate view of events.

Finally, cameras must include a buffer of at least thirty seconds to ensure a more complete account of an event. Although cameras should be continuously recording in the public as explained in Principle 1, when an officer turns on a camera it is essential to know what occurred immediately before the event that led the officer to activate the camera. This technology is readily available, and any jurisdiction using body cameras should only purchase cameras with a buffer of at least thirty seconds.

B. Understanding the incomplete picture and importance of perspective

Moreover, although a body camera generally captures the officer's voice, it does not show if an officer has his or her hand on a gun or is making a menacing gesture while talking in an otherwise calm and reasonable voice. Similarly, body cameras do not show whether an individual being arrested is tensing his or her arm. The camera will record an officer's narrative, and officers have been trained to narrate events when they are



being recorded.⁶⁵ Thus, yelling at a suspect to "stop resisting" presents powerful, and powerfully misleading, evidence if an individual is not tensing his arm or taking any other action.

The way one perceives body camera footage is shaped by what one believes of law enforcement.

Law professor and former police officer Seth Stoughton created an interactive test available online through the *New York Times* that demonstrates that the way one perceives body camera footage is shaped by what one believes of law enforcement.⁶⁶ Professor Stoughton explains the phenomenon of "camera perspective bias," the idea that body camera footage, which allows us to view incidents through the officer's perspective, tends to cause us to interpret the video in the officer's favor.⁶⁷ This kind of interpretation favoring the officer is even more likely from someone cognitively biased in favor of the police.⁶⁸

 \odot

REC

The importance of vantage point is similarly highlighted by studies of mock juries shown a first-person interrogation tape without the officer on screen who are "significantly less likely to find an interrogation coercive, and more likely to believe in the truth and accuracy of the confession," than are jurors who are shown the identical interrogation but from a wider angle that includes the officer.⁶⁹This sort of distortion is especially concerning given that body camera footage will always be filmed from the perspective of the officer, making it easier for a jury to credit this perspective.⁷⁰

In addition, two people can interpret the same video in different ways. The conflicting opinions of justices of the Supreme Court in *Scott v. Harris*,⁷⁵ a case that included video of a high speed chase that left a motorist paralyzed, highlight this concern. Video was crucial to the case. As one scholar noted, "[T]o eight out of nine justices, the video was a transparent — clear — window onto truth."⁷⁶ After noting that Justice Stevens' dissent suggests the majority was "misrepresenting" the contents of the video, Justice Scalia concludes that he and the majority "are happy to allow the videotape to speak for itself," referring all interested members of the public to a link on the Supreme Court's website.⁷⁷

he assumption that body camera footage is objective is disproved by the case of **Derrick Price in Florida, a victim** of police brutality.⁷¹ The incident with Mr. Price was caught on both police body camera footage and video surveillance from a building. The discrepancies in the footage illustrate the subjectivity of police body camera footage.⁷² The wide view of the video surveillance shows that while Mr. Price was running from the police, he surrendered and lay on the ground with his hands up many seconds before officers stopped their car, got out, and beat and arrested him.73 The body camera was turned on late and showed only a scuffle that seems to show Mr. Price resisting arrest and officers yelling "stop resisting." The video surveillance unmistakably showed Mr. Price was not resisting but was being beaten up by the officers.⁷⁴ Mr. Price's case illustrates the need for skepticism in viewing body camera footage alone; it presents only the officer's perspective, which is not only limited, but also prone to manipulation.





Even video footage thought to be unambiguous may be susceptible to multiple interpretations depending on the "cultural outlook[]" of the individual viewing the tape.

Finally, even video footage thought to be unambiguous may be susceptible to multiple interpretations depending on the "cultural outlook[]" of the individual viewing the tape, as shown by an empirical study conducted by Professor Dan Kahan.⁷⁸ These sorts of implicit biases may subtly affect how viewers process — in their living room or in the courtroom — the story told by body-camera footage.⁷⁹ This phenomenon may also allow for the unconscious incorporation of implicit biases when determining whether an officer's actions were "reasonable" under the circumstances for purposes of an indictment or conviction.⁸⁰

As explained in Principle 9 below, training for criminal defense lawyers and the availability of expert witnesses are essential to ensure fairness to the accused when a case includes body camera footage.



The "public has more faith in the process if the officer does not watch the video" before drafting the report[.]

5. Police officers should not access body camera video before preparing initial reports.

Officers, like other eyewitnesses, should generally not be permitted to view body camera footage before giving a statement about, or preparing a report of, an incident. Only after an initial report is prepared, and with careful monitoring and documentation, may officers be permitted to view footage and prepare an addendum to their report.

Some police chiefs have argued that preventing officers from viewing body camera footage is akin to trying to catch officers in a lie.⁸¹ Others whose departments have used body cameras believe that showing officers video is unnecessary and undermines the purpose of the body cameras. Specifically, as one of the chiefs explained, he "wants to know what an officer recalls from an incident, not what the video recorded."⁸² What officers recall untainted by the video reflects their "state of mind."⁸³ Moreover, transparency is essential and the "public has more faith in the process if the officer does not watch the video" before drafting the report.⁸⁴

Science supports prohibiting, or at least carefully restricting, officer access:

If the purpose of any investigation is to get the most complete, accurate information possible, then it could be argued that the officer should view the footage, probably multiple times, prior to being questioned and prior to testifying. Human memory is notoriously flawed, but we can consider recorded footage to be "ground truth." So according to this argument, bolstering the officer's account by having him view the recorded footage effectively serves to enhance the accuracy of the officer's report. And it does. The problem is that in so doing, two independent lines of evidence — the officer's eyewitness memory and the recorded footage — are no longer two independent lines of evidence. That is, the eyewitness memory of the officer has been tainted by viewing the recorded footage. If in the prosecution of the case the officer is to serve as an eyewitness, and his memory is to be preserved untainted, then it is critical that the officer not view the footage If it is important to know exactly what happened, then viewing the video footage will always be more accurate than the account of an officer, in which case the officer does not need to see the footage. If it is important to know an officer's perception of an event, then it is important to preserve his memory untainted by viewing the video footage. In neither case is viewing the video footage recommended.⁸⁵



Initially, the Police Executive Research Forum (PERF), an organization that has written one of the most comprehensive reports on body cameras, favored allowing officer access. However, the organization has since changed its position, citing "academic research showing that video can 'essentially erase and record over' an officer's memory."⁸⁶ "If [police] are going to review the video, other [eyewitnesses] should be allowed to see it, too," the executive director explained.⁸⁷ Taking the officer's statement before he or she is allowed to watch the video also helps law enforcement agencies build trust with the communities they police.

Although equal treatment of police with other witnesses and suspects may not always be possible, a vast, unnecessary disparity should not be tolerated. Allowing police — but not suspects or witnesses — to view body camera footage before providing their account of an incident unfairly bolsters the officers' account, and thus credibility, by allowing officers to recall more details seemingly more accurately than others and to conform their recollections (consciously or subconsciously) to those seemingly supported by the video.

6. Policies must prohibit the use of any biometric technologies in conjunction with body cameras.



Using body cameras as dragnet surveillance tools of individuals, most of whom are suspected of no crime, raises serious privacy concerns and implicates the constitutional rights of individuals whose biometric data is collected and searched.

The Fourth Amendment protects citizens against unreasonable searches, which are those in which the government violates a subjective expectation of privacy that society recognizes as reasonable.⁸⁸ Although a citizen may not have a general expectation of privacy when he or she is in the public square, many would question the reasonableness of constant recording that could not only collect massive amounts of biometric information, but also enable compilation and later searches of those videos using biometric means.⁸⁹ Using body cameras as dragnet surveillance tools of individuals, most of whom are suspected of no crime, raises serious privacy concerns and implicates the constitutional rights of individuals whose biometric data is collected and searched.

The potential use of data collected by body cameras in conjunction with facial recognition, voice recognition, iris scan technology or other tools⁹⁰ that could feed biometric databases such as the FBI's Next Generation Identification (NGI) database is staggering.⁹¹ The immense existing privacy concerns are likely to be exacerbated in the near future as vendors highlight and market the capacity to incorporate facial recognition technology into their cameras.⁹² Even if the government can already "connect the dots" from massive amounts of data,⁹³ body cameras enhanced with biometric capabilities would add personal, street-level data to this ocean.



Individuals who live in highly-policed neighborhoods, who are often poor and predominantly people of color, are more likely to be put in such databases.

Federal privacy laws currently do not offer protection from government biometric data collection.⁹⁴ Moreover, officer-mounted cameras, paired with facial recognition, could go far beyond the current crop of

POLICING BODY CAMERAS: Policies and Procedures to Safeguard the Rights of the Accused

25



automated license readers, constantly reading thousands of faces (license plates) and interpreting identity (plate number), if this information could be fed into and screened against national and local crime databases in real-time.⁹⁵ Individuals who live in highly-policed neighborhoods, who are often poor and predominantly people of color, are more likely to be put in such databases.

Many members of the community may be less likely to speak with (or even cross paths of) police if they knew their face would be compared to any number of databases anytime they see an officer.⁹⁶ At least one state, Oregon, has banned the use of facial recognition technology with body cameras.⁹⁷ At the municipal level, only a few cities place some restrictions and no jurisdiction sharply limits the use of facial recognition to identify recorded individuals,⁹⁸ which is essential to maintain community relations and dampen fears about the surveillance potential that cameras could bring.

Short retention periods of unflagged video may reduce privacy concerns only if biometric data is never collected and never added to these databases. Thus, as discussed in Principle 7, flagged data should be used only for its original purpose of preserving evidence and increasing transparency and accountability.

7. Video must not be later viewed to search for additional crimes or take other punitive action against an individual.

As discussed above, body camera footage offers great potential for preservation of evidence and police accountability, but with real risks of abuse and surveillance. The Fourth Amendment has long protected individuals' expectation of privacy against overzealous police action. Although video may document a crime scene, repeated views and technologically-enhanced scrutiny should not be permitted to investigate additional potential crimes or exact punitive consequences after a police encounter has concluded.



 \odot

Nor should an officer without a warrant be able to comb through video collected for other purposes to engage in a fishing expedition hoping to discover evidence of criminal activity.

For example, an officer who with the naked eye sees contraband in plain view in a residence is entitled to seize it or seek a warrant.⁹⁹ However, in the absence of a judicially-approved warrant particularly describing the place or item to be searched and specifically authorizing technological enhancements, officers should not be permitted to review video of their entry into a home to search for, with enhanced lighting and the ability to slow and replay segments of video, evidence of contraband. Nor should an officer without a warrant be able to comb through video collected for other purposes to engage in a fishing expedition hoping to discover evidence of criminal activity.

8. Adequate resources must be available to ensure ongoing officer training on body camera use.

As law enforcement agencies begin to work with body cameras, training the officers on proper use and protocols is critical to operation of a body camera program that adheres to policies, collects and preserves evidence when required, and protects the rights of the accused. Officers must also understand the consequences of not using their body cameras when required, which is discussed as part of Principle 1 above.

Unfortunately, as one former police chief told the Task Force, the high cost of the equipment and data storage sometimes leaves jurisdictions in a cash-strapped position in which training is not funded or not funded at a sufficient level.¹⁰⁰

Moreover, training should ensure that police departments not only abide by the letter of the law, but also that they interact with the public with professionalism and sensitivity. Training should address that body cameras alter that interaction with the public generally and especially with respect to vulnerable populations, such as individuals with mental disabilities, who represent more than half the people in the nation's jails and prisons.¹⁰¹ Training could include ways to de-escalate encounters with persons with mental disabilities, as taught in Crisis Intervention Trainings (CIT) implemented by many departments throughout the country.

9. Sufficient resources must be available to ensure that counsel are appropriately trained and that appointed counsel have adequate time and access to experts necessary to render effective assistance of counsel.

NACDL acknowledges the significant cost of body cameras, which is largely borne by local governments, although some DOJ funding or state funding may be available.¹⁰² As noted above, the efficacy of spending millions of dollars for body cameras is far from settled. If a decision is made to purchase body cameras, however, funding must also be made available for training officers on their proper use. That funding should not be on the backs of the criminally accused, which will exact a heavier price on the low-income communities most often targeted by police activity.¹⁰³ Moreover, adoption of body cameras must not incentivize profit-driven policing through reliance on monies seized¹⁰⁴ and increased fines.¹⁰⁵ Funding proposals can instead acknowledge the offset of costs from significant savings in litigation.¹⁰⁶

As noted throughout this report, body camera programs entail a number of obvious and less obvious costs. They include the purchase of the physical equipment and its upkeep, training, data storage, the dedication of lawyer time to review and examine footage, and the possibility of requiring a forensic expert. These costs will affect police departments, prosecutors' offices, private criminal defense attorneys, and, perhaps most severely, public defenders. Any body camera program must account for all of its upfront costs, as well as the resources necessary to maintain an effective program.



 \odot

Courts and legislatures must . . . take steps to ensure that all lawyers have the opportunity to adequately review, examine, and scrutinize body camera footage[.]

Prosecutors and defense counsel not only take a significant amount of time reviewing camera footage for their cases, they may also require the assistance of forensic experts. These lawyers, and public defenders in particular, may have inadequate resources to properly review this evidence. Courts and legislatures must be cognizant of these resource limitations and take steps to ensure that all lawyers have the opportunity to adequately review, examine, and scrutinize body camera footage, as well as investigate leads obtained from that footage, all of which is essential to providing effective assistance of counsel to those accused of crimes.¹⁰⁷

As body cameras are introduced into a jurisdiction, early and comprehensive training of both the private and public defense bar is imperative. NACDL is committed to assisting in this training by helping to develop a cadre of experienced lawyers available for in-person and web-based training. Training on a variety of topics is essential for lawyers to harness the full potential of body cameras by understanding the technology and

what to do when it fails, methods and strategies for redaction or use of still photos, use of experts, and jury selection strategies, to name a few.

Criminal defense lawyers representing persons with mental disabilities should be aware of the existence of body camera footage and take steps to ensure this footage protects rather than diminishes their clients' constitutional rights. Many people, including judges, jurors, and prosecutors, either do not understand the behavior of defendants with mental disabilities or are frightened of them. Body cameras may record a person having a psychotic episode or manifesting decompensation due to lack of medication or simply not acting in a neurotypical manner. This footage may be more than embarrassing to the person. Indeed, the footage might also be used against that person at bail hearings, trials, sentencing, probation violation hearings, custody proceedings, or civil commitment proceedings. Evidence needs to be presented or excluded in a responsible way with careful consideration of motions *in limine*, redaction of video, and limiting jury instructions.

10. An independent, non-police agency must retain and control access to body camera footage.

In light of the many concerns discussed above, an independent monitoring board should be appointed to control access to all body camera footage. Because for many people much of the impetus for use of body cameras is an ongoing distrust of police, allowing police to control when cameras are used and access and store video at their discretion exacerbates rather than resolves the concern. Ironically, the very organizations meant to be held accountable are able to prevent these videos from being created in the first instance or shared after the fact.

The information collected — like all other forms of evidence — does not belong to any particular party in litigation, including the police. Thus, jurisdictions should create independent boards of civilians, not police, to retain and release that information. Federal government grants should not fund programs that do not follow these guidelines or, at a minimum, should offer funding to a few jurisdictions who agree to create such a system that relies on the use of an independent, non-police monitoring agency.

Appointment to the monitoring board may vary by jurisdiction. For example, a five-member board could include one board member appointed by the Mayor, one by the Police Chief and law enforcement, one by the City Council, one by the Criminal Defense Bar, and one by a collection of community groups.

The board may then hire individuals to implement the policies set forth by the board. After each individual is cleared by an extensive background check,¹⁰⁸ the board members and individuals appointed will have sole access to the footage and will be responsible for periodically reviewing the footage, responding to requests to view the footage, and making redactions in necessary circumstances.

An independent monitor obviates many of the issues discussed above. An entity other than police retaining and controlling access to video will greatly reduce accusations of tampering or deletion, intentional or inadvertent, by police and the need for courts to have hearings and craft remedies.¹⁰⁹

A. Implementation

Video footage should be stored in a secure, cloud-based storage system encrypted to prevent access from any outside party. This is technologically feasible. Taser, for example, uses a cloud-based storage system that prohibits access from officers as well as Taser technicians.¹¹⁰ The device must have safeguards against data manipulation (such as digital fingerprints)¹¹¹ throughout the chain of custody of the footage.¹¹² As set forth in Principles 6 and 7, above, there should be no biometric facial recognition technology of any kind in any body camera device under any circumstance nor should any programs that data-mine video for biometric information be permitted; any such capabilities would run afoul of the fundamental purpose of body cameras.¹¹³

There should be no biometric facial recognition technology of any kind in any body camera device under any circumstance[.]

B. Access

 \odot

In criminal proceedings, both the prosecution and defense should have the ability to subpoen athe footage and each side should be granted access to the footage at the same time.¹¹⁴ When footage is distributed outside of the third-party monitor other than to litigants subject to an appropriate protective order, faces and any other identifying characteristics must be blurred¹¹⁵ and all audio must be muted unless such aspects of the footage are relevant to the purpose of the request.

In short, an independent monitor can thoughtfully mitigate the privacy concerns created by widespread collection of body camera footage while best ensuring police accountability.



Conclusion

Body cameras were introduced long before policies for their use were fully developed. As with any police technology, the devil is in the details. With the right policies in place, body cameras can be an important tool for accountability and can have great evidentiary value. Police-civilian interactions will no longer be a matter of the accused's word against that of the police officer. NACDL will work to ensure that body cameras are used in ways that preserve the constitutional rights of the accused in criminal cases.



Endnotes

1. Press Release, Nat'l Ass'n of Criminal Def. Lawyers, Nation's Criminal Defense Bar Announces New Initiatives in the Aftermath of Recent Police Killings (Dec. 10, 2014), *available at*

https://www.nacdl.org/NewsReleases.aspx?id=35493.

2. *See* Minutes of Annual Meeting of the Board of Directors, July 26, 2015, and Appendix A thereto, adopting the following principles:

1. Black and Latino lives matter. This is the most important reason to support widespread use of body cams.

a. Many citizen-police interactions that result in unnecessary use of force must be recorded for protection of the citizens.

2. Police officers can be protected from false accusations by data preserved from body cams.

3. Body cams and dash cams are the best available technology at this time to protect the interests of the citizens and the police.

4. It is critical to have clear rules to protect the integrity of the evidence, privacy, and the fair administration of justice.

a. Citizens accused of crimes and police officers accused of misconduct are best protected when there is a complete and accurate record generated from these dash and body cams.

b. The cameras should not be turned off or covered arbitrarily at the discretion of the officer. There should be clear rules on when the cameras are turned on and off and rigorous documentation.

c. There should be clear rules on how long the data should be preserved, who gets access to the data and when, and when it becomes publicly disclosed, if ever, and who makes the disclosure decision.

d. Policies on protecting privacy of citizens and officers and the uses of the data outside of litigated proceedings must be clear and developed.

Then-NACDL President E.G. "Gerry" Morris appointed the following NACDL members to the Task Force: Anna Durbin, Kobie Flowers, Rick Jones, Elizabeth Kelley, Steven Morrison, Michael Nichols, Barry Pollack, Barry Porter, and Martin Sabelli. Professor Joel Schumm served as the reporter for the Task Force. NACDL thanks each of these individuals for their service on the Task Force. The Task Force's report does not represent the views of any of its individual members, but rather the views ultimately adopted by the Task Force.

3. See The Counted: People Killed by Police in the US, available at https://www.theguardian.com/usnews/ng-interactive/2015/jun/01/the-counted-police-killings-us-database. The Washington Post also updates a website that lists people who "have been shot and killed by police."

https://www.washingtonpost.com/graphics/national/police-shootings-2016/

4. About NACDL, available at https://www.nacdl.org/about/mission-and-values/.

6. Mark Berman, Justice Dept. Will Spend \$20 Million on Police Body Cameras Nationwide, WASH. POST, May 1, 2015.



7. Civil Rights, Privacy, and Media Rights Groups Release Principles for Law Enforcement Body Worn Cameras,

May 15, 2015, available at http://www.civilrights.org/press/2015/body-camera-principles.html?referrer=, http://www.savetheinternet.com/blog/2015/05/20/coalition-says-law-enforcement-must-protect-civilrights-when-wearing-body-cameras. Some members of this coalition have endorsed the use of body cameras, some have opposed them, and others have not yet articulated a position.

8. Jay Stanley, Police Body-Mounted Cameras: With Right Policies in Place, a Win for All, ACLU, March 2015, available at https://www.aclu.org/police-body-mounted-cameras-right-policies-place-win-all.

9. Police Executive Research Forum (PERF) report, Implementing a Body-Worn Camera Program: Recommendations and Lessons Learned, available at

http://www.policeforum.org/assets/docs/Free Online Documents/Technology/implementing%20a%20 body-worn%20camera%20program.pdf.

10. The Leadership Conference on Civil and Human Rights & Upturn, Police Body Worn Cameras: A Policy Scorecard, August 2016, available at https://www.bwcscorecard.org/ (evaluating whether policies protect "categories of vulnerable individuals (e.g., victims of sex crimes) from being recorded without their informed consent"). Although the Task Force also spoke with a domestic violence advocate, it appears that no domestic violence advocacy group has yet prepared a written policy on the use of police body cameras.

11. Rory Carroll, California Police Use of Body Cameras Cuts Violence and Complaints, THE GUARDIAN, Nov. 4, 2013, available at https://www.theguardian.com/world/2013/nov/04/california-police-body-cameras-cutsviolence-complaints-rialto.

12. Carlos Miller, A Study in Contrasts Between Rialto Police and Albuquerque Police in Regards to Body-Mounted Cameras, Photography Is Not A Crime available at

http://photographyisnotacrime.com/2014/03/study-contrasts-rialto-police-albuquerque-policeregards-body-mounted-cameras//.

13. *Id*.

14. Min-Seok Pang & Paul A. Pavlou, Armed with Technology: The Impact on Fatal Shootings by the Police 35 (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2808662).

15. Jacob Gershman, Professor Says Police Bodycam Study Suffers from 'Fatal Flaw,' WALL ST. J., Aug. 15, 2016, available at http://blogs.wsj.com/law/2016/08/15/professor-says-police-bodycam-study-suffers-fromfatal-flaw/.

16. A recent report summarized additional studies before concluding "there is at least a perceived improvement in police behavior" when body cameras are used, although the research does not resolve the causal issue of whether "cameras lead to improved individual behavior, improved police behavior, or a mixture of both." THE CONSTITUTION PROJECT, GUIDELINES FOR THE USE OF BODY-WORN CAMERAS BY LAW ENFORCEMENT 12-13 (Dec. 2016), available at

http://www.constitutionproject.org/wp-content/uploads/2016/12/BodyCamerasRptOnline.pdf

17. See generally Police Body Worn Cameras: A Policy Scorecard, Aug. 2016, available at

https://www.bwcscorecard.org/ (evaluating more than 50 department policies in several categories).

18. Serious efforts must be taken to assure body camera footage is not misused, as discussed in Principles 4, 6, and 7 below.

19. Statement of Seth Morris to the Task Force, Feb. 1, 2016; Statement of Kate Finley to the Task Force, Feb. 1, 2016.

20. Rachael Alexander, Body Cam Videos Affect Outcomes of Criminal Cases, THE SPOKESMAN-REVIEW, July 7, 2016, available at http://www.govtech.com/public-safety/Body-Cam-Videos-Affect-Outcomes-of-Criminal-**Cases.html** (guoting a public defender in Spokane).

21. Stanley, supra note 8, at 4.



22. ALEXANDRA MATEESCU, ALEX ROSENBLAT & DANAH BOYD, DATA & SOCIETY RESEARCH INSTITUTE, POLICE BODY-WORN CAMERAS (Feb. 2015), *available at* https://www.datasociety.net/pubs/dcr/PoliceBodyWornCameras.pdf; Sarah

Lustbader, The Real Problem With Police Video, N.Y. TIMES, Dec. 2, 2015, available at

http://www.nytimes.com/2015/12/02/opinion/the-real-problem-with-police-video.html?_r=0.

23. Martin Kaste, *Even Police Body Cameras Can Lose Sight of the Truth*, ALL TECH CONSIDERED, Aug. 27, 2014, *available at* http://www.npr.org/2014/08/23/342623830/even-police-body-cameras-can-lose-sight-of-the-truth.

24. Mateescu, Rosenblat & Boyd, *supra* note 22.

25. Statement of Seth Stoughton to the Task Force, June 14, 2016.

26. Statement of Jeffrey Halstead to the Task Force, Feb. 1, 2016.

27. PERF report, supra note 9, at 12.

28. Liane C. Dublinski, *Comprehensive Police Officer Body Camera Guidelines in Illinois*, 47 Loy. U. Chi. L.J. 1449, 1458 (2016).

29. *Id.*

30. *Id.*

31. Statement of Seth Morris to the Task Force, Feb. 1, 2016.

32. GUIDELINES FOR THE USE OF BODY-WORN CAMERAS, *supra* note 16, at 27-28 (citing Michael D. White, DOJ Office of Justice Programs, *Police Officer Body-Worn Cameras: Assessing the Evidence* 9 (2014).

33. Devin Coldewey, *Study Finds That Police Body Cameras May Increase Assaults* — If Used Improperly, TECHCRUNCH.COM, May 17, 2016, *available at* https://techcrunch.com/2016/05/17/study-finds-that-police-body-cameras-may-increase-assaults-if-used-improperly/.

34. *Id.* This section focuses on the importance of reducing officer discretion when to record. Officers must retain discretion when to arrest, especially for minor offenses. *See generally GuideLines For The Use of Body-Worn CAMERAS, supra* note 16, at 25 (discussing concerns that police departments with "strict standards might see an uptick in arrests resulting from implementation of body cameras," which could disproportionately affect "minority communities subject to a disproportionately large police presence").

35. Stanley, supra note 8, at 5.

36. *Id.*

37. State statutes that require two-party or all-party consent to recording a conversation may need to be amended to account for the use of body cameras. Michael D. White, DOJ Office of Justice Programs, *Police Officer Body-Worn Cameras: Assessing the Evidence* 27 (2014) (explaining how the Seattle Police Department initially determined that body-worn cameras violated state law concerning all-party consent when recording conversations).

38. Stanley, *supra* note 8, at 5.

39. *Id.*

40. This evidence may be helpful to the accused or helpful to the prosecution depending on the specific case. For example, in domestic violence cases the footage regularly documents "firsthand the victim's injuries, demeanor ... immediate reactions" and "[i]n some cases, officers capture the assault itself." Karson Kampfe, *Police-Worn Body Cameras: Balancing Privacy and Accountability Through State and Police Department Action*, 76 OHIO ST. L.J. 1153, 1182-83 (2015).

41. As discussed in Principle 2, this type of footage must be "flagged" and retained for a longer period of time.
42. Jeff Stone, *Police Body Cam Rules Pushed by ACLU, NAACP Include Facial Recognition Ban*, INT'L BUS. TIMES,
May 15, 2015, *available at* http://www.ibtimes.com/police-body-cam-rules-pushed-aclu-naacp-include-facial-recognition-ban-1924240 (quoting Malkia Cyril, Executive Director of the Center for Media Justice).

43. Jocelyn Simonson, Copwatching, 104 CAL. L. REV. 391 (2016).



44. *Id.*

45. Cyrus Farivar, Oakland Cops Disciplined 24 Times for Failing to Turn on Body-Worn Cameras, Ars TECHNICA,

Dec. 15, 2014, *available at* http://arstechnica.com/tech-policy/2014/12/oakland-cops-disciplined-24-times-for-failing-to-turn-on-body-worn-cameras/.

46. GREG HURLEY, NATIONAL CENTER FOR STATE COURTS (NCSC), BODY-WORN CAMERAS AND THE COURTS, 2016, available at

http://www.ncsc-jurystudies.org/~/media/files/pdf/jury/final%20bwc%20report.ashx.

- 47. Id. (citing State v. Durnwald, 837 N.E 2d 1234 (Ohio Ct. App. 2005)).
- 48. See generally Indiana Evidence Rule 617 (regarding recorded confessions).
- 49. NCSC report, supra note 46, at 10.

50. *Id.* at 10-11. A recent report offers a detailed proposed model jury instruction that would empower juries to draw inferences against a police officer or department if the jurors conclude the failure to record or destruction of a recording was unreasonable or done in bad faith. American Civil Liberties Union Foundation of Massachusetts & University of California, Berkeley School of Law, Samuelson Law, Technology & Public Policy Clinic, No Tape, No Testimony: How Courts Can Ensure the Responsible Use of Body Cameras 13-14 (Nov. 29, 2016), *available at*

https://aclum.org/uncategorized/no-tape-no-testimony-courts-can-ensure-responsible-use-body-cameras/.

51. Considering Police Body Cameras, 128 HARV. L. REV. 1794, 1803 (2015).

52. Stanley, *supra* note 8, at 6. The ACLU report does not expressly include cases under investigation as a category.

53. *Id.*

54. A consent decree with the Albuquerque Police Department requires the department to retain body camera "evidentiary recordings for at least one year, or, if a case remains in investigation or litigation, until the case is resolved." *United States v. City of Albuquerque* Settlement Agreement ¶ 220, available at

https://www.justice.gov/sites/default/files/usao-nm/legacy/2015/01/20/DOJ-

ABQ%20Settlement%20Agreement%20EXECUTED.pdf.

55. Video might also be preserved for training purposes, subject to the limitations on use discussed in Principle 7 of this report.

56. *See supra* note 52 and accompanying text, listing use of force, detention or arrest, open investigations, and formal or informal complaints.

57. Statement of Harlan Yu to the Task Force, Feb. 1, 2016. *See generally* NYC CIVILIAN COMPLAINT REVIEW BOARD, 2012 ANNUAL REPORT 12, *available at* **http://www.nyc.gov/html/ccrb/downloads/pdf/ccrb_annual_2012.pdf** ("Eighty-three percent of complaints are filed within a week of the incident.").

58. The Task Force heard from a public defender in Baltimore who noted that CCTV footage was deleted after 28 days, which was often too short of a time period for defenders to make a request for necessary footage. Statement of Kate Finley to the Task Force, Feb. 1, 2016.

59. In some jurisdictions, prompt access is provided to defense counsel through a link that allows counsel to download the video onto their computer, which may also be burned onto a DVD. For example, law enforcement agencies may contract with vendors that provide their criminal justice partners a username and password. Any evidence uploaded and "shared" with them is downloadable. See generally Evidence.com, available at https://www.axon.io/products/evidence ("Share: Grant access to people, like prosecutors, or share content with

a secure link.").

- 60. Statement of Kate Finley to the Task Force, Feb. 1, 2016.
- 61. Considering Police Body Cameras, supra note 51, at 1813-14.
- 62. Statement of Aliya Rahman to the Task Force, Feb. 1, 2016.
- 63. Statement of Seth Stoughton to the Task Force, June 14, 2016.
- 64. *Id.*
- 65. Statement of Seth Stoughton to the Task Force, June 14, 2016.



N.Y. TIMES, Apr. 1, 2016, available at

http://www.nytimes.com/interactive/2016/04/01/us/100000004278201.app.html?_r=2.

67. *Id.*

68. *Id.*

69. Considering Police Body Cameras, *supra* note 51, at 1813 (quoting Jennifer L. Mnookin, *Can a Jury Believe What It Sees?*, N.Y. TIMES, July 14, 2014, *available at* http://www.nytimes.com/2014/07/14/opinion/videotaped-

confessions-can-be-misleading.html).

70. Considering Police Body Cameras, *supra* note 51, at 1813-14.

71. Radley Balko, *Police Cameras Are a Tool, It's How We Use This Tool That Matters*, WASH. POST, March 15, 2016, *available at* https://www.washingtonpost.com/news/the-watch/wp/2016/03/15/police-cameras-are-a-tool-its-how-we-use-this-tool-that-matters/.

72. *Id.*

73. Id.

74. *Id.*

75. 550 U.S. 372, 378 (2007).

76. Elizabeth G. Porter, Taking Images Seriously, 114 COLUM. L. REV. 1687, 1758 (2014).

77. Scott v. Harris, 550 U.S. at 378 n.5.

78. Considering Police Body Cameras, *supra* note 51, at 1813 (citing Dan Kahan et al., *Whose Eyes Are You Going to Believe? Scott v. Harris and the Perils of Cognitive Illiberalism*, 122 Harv. L. Rev. 837, 903 (2009)).

79. Id.

80. Considering Police Body Cameras, supra note 51, at 1813-14.

81. New York City's police commissioner strongly objected to an inspector general's recommendation that police officers be prevented from viewing body camera footage before giving a statement to investigators: "I am not intending to use the cameras to play a game of gotcha with the cops," *Bratton Says Cops Should See Body Camera Footage*, POLITICO NEW YORK, Aug. 4, 2015, *available at* http://www.capitalnewyork.com/article/city-hall/2015/08/8573390/bratton-says-cops-should-see-body-camera-footage (noting "one of the recommendations of the I.G. that we strongly, strongly disagree with and will not support under any circumstance").

82. Richard Gonzales, *California Bill Could Limit Police Access to Body Camera Footage*, NPR MORNING EDITION, May 1, 2015, *available at* http://www.npr.org/2015/05/01/403316673/oakland-laws-could-limit-police-access-to-body-camera-footage.

83. *Id.*

84. *Id.*

85. Kathy Pedzek, Should Cops Get to Review the Video Before They Report? THE MARSHALL PROJECT, Aug. 13, 2015, available at https://www.themarshallproject.org/2015/08/13/should-cops-get-to-review-the-video-before-they-report.

86. Kimberly Kindy & Julie Tate, *Police Withhold Videos Despite Vows of Transparency*, WASH. POST, Oct. 8, 2015, *available at* http://www.washingtonpost.com/sf/national/2015/10/08/police-withhold-videos-despite-vows-of-transparency/.

87. *Id.*

88. Katz v. United States, 389 U.S. 347 (1967).

89. In *United States v. Jones*, 132 S. Ct. 945 (2012), the Supreme Court found the placement of a GPS tracking device unconstitutional under the Fourth Amendment based on the illegal trespass to place the device initially. Justice Sotomayor's concurrence expressed concern that the trespass "approach is ill-suited to the digital age, in which people reveal a great deal of information about themselves to third parties in the course of carrying out

POLICING BODY CAMERAS: Policies and Procedures to Safeguard the Rights of the Accused

mundane tasks." *Id.* at 957. Moreover, Justice Alito's concurrence found the Fourth Amendment implicated by a lengthy period of secretly monitoring movement of an individual's vehicle. *Id.* at 964.

90. Harlan Yu told the Task Force that technology could be developed to identify individuals by their gait or distinct manner of walking. Statement of Harlan Yu to the Task Force, Feb. 1, 2016.

91. Shakeer Rahman, Op-Ed., Body Cameras Could Transform Policing — For the Worse, AL JAZEERA, April 17, 2015 (http://america.aljazeera.com/opinions/2015/4/body-cameras-could-transform-policing--for-the-worse1.html) (Mr. Rahman reports that police use body-worn cameras with face recognition software in the United Kingdom, Dubai and Canada to investigate suspects and find missing persons. He states that Google has software for Google Glass that recognizes and identifies faces.) The FBI's NGI database is replacing Integrated Automated Fingerprint Identification System (IAFIS) and the place where biometric information — including fingerprints, facial recognition databases and iris scans — are kept and cross-referenced. "The NGI system, developed over multiple years, is an incremental replacement of the IAFIS that provides new functionality and improves existing capabilities... This technological upgrade accommodates increased information processing and sharing demands from local, state, tribal, federal, and international agencies. The NGI system offers state-of-the-art biometric identification services and compiles core capabilities that serve as the platform for multimodal functionality." Next Generation Identification (NGI) available at https://www.fbi.gov/about-us/cjis/fingerprints_biometrics/ngi.

92. See Guidelines for the Use of Body-Worn Cameras, *supra* note 16, at 17.

93. See K.A. Taipale, Data Mining and Domestic Security: Connecting the Dots to Make Sense of Data, 5 COLUM. Sci. & TECH. L. Rev. 1, 3 n.3 (2003).

94. Anna Meyers, *Can the U.S. Legal System Adapt to Biometric Technology?*, PRIVACY TECH, Aug. 12, 2016, *available at* https://iapp.org/news/a/can-the-u-s-legal-system-can-adapt-to-biometric-technology/ ("Currently there is no federal law and only one state with a law protecting biometric information.").

95. Bryce Clayton Newell, *Crossing Lenses: Policing's New Visibility and the Role of 'Smartphone Journalism' as a Form of Freedom-Preserving Reciprocal Surveillance*, 2014 U. ILL. J.L. TECH. & Pol'Y 59, 90 (explaining that the advancement of technology could allow review of years of stored body-camera footage using facial recognition software to look for "cold" hits); Considering Police Body Cameras, *supra* note 51, at 1812.

96. Karson Kampfe, *Police-Worn Body Cameras: Balancing Privacy and Accountability Through State and Police Department Action*, 76 OHIO ST. L.J. 1153, 1173-74 (2015).

97. Id. at 1174.

98. Body Worn Camera Scorecard, supra note 17.

99. See generally Arizona v. Hicks, 480 U.S. 321 (1987).

100. Statement of Jeffrey Halstead to the Task Force, Feb. 1, 2016.

101. Doris J. James & Lauren E. Glaze, Bureau of Justice Statistics, Mental Health Problems of Prison and Jail Inmates, Sept. 2006, *available at* http://www.bjs.gov/content/pub/pdf/mhppji.pdf.

102. Press Release, DOJ, Justice Department Announces \$20 Million in Funding to Support Body-Worn Camera Pilot Program (May 1, 2015), *available at* http://www.justice.gov/opa/pr/justice-department-announces-20-million-funding-support-body-worn-camera-pilot-program).

103. Considering Police Body Cameras, supra note 51, at 1809-10.

104. Eric King, Forth Worth Clipping Cameras to Officers, NBCDFW.com, available at

http://www.nbcdfw.com/news/local/Fort-Worth-Clipping-Cameras-to-Its-Officers-219642111.html (last visited, Apr. 28, 2016).

105. For example, in New Jersey legislators proposed to increase fines for DUIs and sex offenders to pay for body cameras. *Considering Police Body Cameras, supra* note 51, at 1810.

106. *New York State Assembly Standing Committees on Codes, the Judiciary, and Governmental Operations* [hereinafter N.Y. State Assembly Committee] (Dec. 8, 2015) (statement of Letitia James, Public Advocate for the City of New York).



107. Others argue that body cameras essentially pay for themselves by reducing the rate of frivolous lawsuits brought against officers and departments. *See, e.g.,* PERF report, *supra* note 9, at 31.

108. Statement of Jeffrey Halstead, Former Fort Worth Police Chief, Taser Consultant, Feb. 1, 2016.

109. For example, media reports recently revealed that the Oakland Police Department, one of the first in the nation to use body cameras, accidentally deleted 25 percent of the footage it had collected over the past several years. Jack Morse, *Oakland Police Say They Accidentally Deleted 25 Percent of Their Body-Cam Archive*, sFIST, Sept. 15, 2016, *available at* http://sfist.com/2016/09/15/oakland_police_accidentally_delete.php.

110. Mitch Mitchell, *Tarrant County Police Race to Join Body Camera Bandwagon*, FORT WORTH STAR-TELEGRAM, Oct. 23, 2015, *available at* http://www.star-telegram.com/news/local/community/fort-worth/article41250195.html.

111. Statement of Jeffrey Halstead, Former Fort Worth Police Chief, Taser Consultant, Feb. 1, 2016.

112. Mateescu, Rosenblat & Boyd, *supra* note 22.

113. Scott Simpson, *Civil Rights, Privacy, and Media Rights Groups Release Principles for Law Enforcement Body Worn Cameras*, The Leadership Conference, May 15, 2015; N.Y. State Assembly Committee (statement of Veronica Bayetti Flores, Steering Community Member, Communities United for Police Reform).

114. N.Y. State Assembly Committee (statement of Alice L. Fontier, Vice President, New York State Association of Criminal Defense Lawyers).

115. N.Y. State Assembly Committee (statement of Johanna E. Miller, Advocacy Director, New York Civil Liberties Union). ■



Appendix A: Witnesses

Malkia Amala Cyril, Executive Director of the Center for Media Justice (CMJ) and cofounder of the Media Action Grassroots Network, *San Francisco, CA*

Kate Finley, then-Assistant Public Defender, Montgomery County, MD

Gretta Gardner, Policy Director, DC Coalition against Domestic Violence, *Washington, DC*

Jeffrey Halstead, former Dallas Police Chief, current consultant for Taser, Ft. Worth, TX

Greg Hurley, Knowledge and Information Services Analyst for the National Center for State Courts, *Williamsburg, VA*

Jennifer Lynch, Sr. Staff Attorney, Electronic Frontier Foundation, San Francisco, CA

Kenyan McDuffie, Councilman, Washington, DC

Seth Morris, then-Deputy Public Defender, Alameda County, CA

Aliya Rahman, Technologist and advisor to BLM and other movements, *Brooklyn, NY* and *Washington, DC*

Timothy M. Richardson, Senior Legislative Liaison with the Fraternal Order of Police Steve Young Law Enforcement Legislative Advocacy Center in *Washington, DC*

Jeramie Scott, Electronic Privacy Information Center National Security Counsel, Washington, DC

Jonathan Smith, Associate Dean of Experiential and Clinical Programs at University of District Columbia David A. Clarke School of Law, *Washington, DC*

Jay Stanley, Sr. Policy Analyst for the Speech, Privacy and Technology Project at the ACLU *Washington, DC*

Seth Stoughton, Assistant Professor at University of South Carolina School of Law, *Columbia, SC*

Sean Whent, then-Chief, Oakland, California Police Department, Oakland, CA

Harlan Yu, Principal, Upturn, author of the Police Body Warn Cameras: A Policy Scorecard, *Washington, DC* =

Notes

)
'	

•		
	111	
R	3	
PR	ESS	



This publication is available online at www.nacdl.org/policingbodycameras





For more information contact: National Association of Criminal Defense Lawyers® 1660 L Street NW, 12th Floor, Washington, DC 20036 Phone 202-872-8600 WWW.Nactlorg

This publication is available online at www.nacdl.org/policingbodycameras

POLICE BODY-WORN CAMERAS*

SETH W. STOUGHTON**

Since the summer of 2014, community members, politicians, and police executives across the country have called for greater police accountability and improvements in police-community relations. Body-worn cameras ("BWCs") are widely seen as serving both ends. Today, thousands of police agencies are exploring, adopting, and implementing body-cam programs. BWCs are here, and more are coming. Legal scholars have largely responded to this burgeoning new technology by addressing it through the framework of traditional discussions about privacy, police accountability, or the rules of evidence. Relatively few articles have gone further by identifying the potential benefits of BWCs and critically examining whether the adoption of this technology by police agencies can truly do what many proponents claim. This Article falls solidly into the latter camp.

Body-worn cameras are a tool. Tools should be used to advance normatively desirable goals when they are an efficient way of accomplishing or facilitating those goals. Body-worn cameras, like any tool, should not be used when the goal itself is inappropriate or when the tool is ill-suited for the job at hand.

This Article explores the limits of BWCs as a tool. It does so by first reviewing the historical justifications for, implementation of, and lessons learned from an earlier iteration of police video recording technology: in-car cameras. It then offers a simplified way of conceptualizing the multitudinous advantages that BWC proponents have identified, putting them into three categories: symbolic benefits, behavioral benefits, and informational

^{* © 2018} Seth W. Stoughton.

^{**} Assistant Professor of Law, University of South Carolina School of Law. I am thankful for the thoughtful suggestions and feedback provided by Arif Alikhan, Geoff Alpert, Annie Eisenberg, Roger Goldman, David Harris, Sander Flight, Jeff Noble, Nick Selby, Michael White, and Jordan Woods. I very much appreciate the help of Marcurius Byrd, Kristie Commins, Colton Driver, Catherine Oates-Robinson, and Lucas Walters, as well as the editorial assistance provided by Vanessa McQuinn, Shannon Palmore, and members of the North Carolina Law Review. As always, I am grateful for the support of Alisa Stoughton.

benefits. This classification is a necessary first step in police agencies and communities articulating what they hope to achieve with a BWC program. Whether body cams will advance the desired goals depends on the practical limitations of the technology and our ability to interpret the resulting video footage as well as the policies and procedures that govern implementation. The latter half of the paper is dedicated to a critical examination of the practical limitations and policy considerations that will ultimately determine whether body-worn cameras can live up to the hype.

INTRO	ODU	CTION	1364
I.	ΑI	BRIEF HISTORY OF POLICE VIDEO	1371
II.	Тн	E POTENTIAL BENEFITS OF BODY-WORN CAMERAS	1378
	<i>A</i> .	Symbolic Benefits	1379
		Behavioral Benefits	
		Informational Benefits	
III.		ACTICAL LIMITATIONS	
	<i>A</i> .	Limits of Technology	1400
		Limits of Human Interpretation	
IV.		LICY CONSIDERATIONS	
	<i>A</i> .	Video Creation	1415
	В.	Supervisory Review	1416
		Officer Review	
		Discretionary Release	
CONC		SION	

INTRODUCTION

In 2013, Judge Shira Scheindlin found that the New York Police Department's widespread and aggressive use of stop-and-frisks had violated civilians' constitutional rights.¹ She ordered the agency to "institute a pilot project in which body-worn cameras [would] be worn for a one-year period by officers on patrol."² Having video footage of officers' interactions with civilians, Judge Scheindlin wrote, "will serve a variety of useful functions."³ That sentiment was popularized in the aftermath of Officer Darren Wilson's fatal shooting of Michael Brown in the then little-known St. Louis suburb of Ferguson, Missouri—among the first in a series of violent incidents

2. Id. at 685.

^{1.} Floyd v. City of New York, 959 F. Supp. 2d 540, 658 (S.D.N.Y. 2013).

^{3.} Id.

that attracted public scrutiny and widespread criticism of the police.⁴ Community members, politicians, and police executives across the

^{4.} Other incidents in and after the summer 2014 have kept a public spotlight on policing, including, but certainly not limited to, the July 17, 2014, asphyxiation of Eric Garner, who was selling loose cigarettes; the August 5, 2014, shooting of John Crawford, who was in a Walmart store holding a pellet rifle he had picked up in one of the aisles; the November 20, 2014, shooting of Akai Gurley, who was shot while his girlfriend was braiding his hair in an apartment stairwell; the November 22, 2014, shooting of Tamir Rice, who was playing with a realistic-looking pellet gun in a public park; the April 4, 2015, shooting of Walter Scott, who was fleeing on foot from a traffic stop; the October 20, 2014, shooting of Laquan McDonald, who was walking down the street with a knife; the April 12, 2015, death of Freddie Gray, who had been arrested and put into a prisoner transport van; the June 5, 2015, use of force against children at a pool party in McKinney, Texas; the July 19, 2015, shooting of Samuel DuBose during a traffic stop; the August 7, 2015, shooting of Christian Taylor, who had broken into a car dealership; the July 5, 2016, shooting of Alton Sterling, who had been tackled by officers after allegedly threatening someone with a gun; the July 6, 2016, shooting of Philando Castile, who informed an officer during a stop that he was carrying a firearm; and the July 10, 2015, traffic stop and arrest of Sandra Bland, who committed suicide in a jail cell three days later. Ryllie Danylko, Cleveland Police Officer Fatally Shoots 12-Year-Old Tamir Rice, CLEVELAND PLAIN DEALER (Nov. 24, 2014), http://www.cleveland.com/metro/index.ssf/2014/11 /cleveland_police_officer_fatal.html [https://perma.cc/G299-SKVM]; Quinn Ford, Cops: Boy, 17, Fatally Shot by Officer After Refusing to Drop Knife, CHI. TRIBUNE (Oct. 21, 2014), http://www.chicagotribune.com/news/local/breaking/chi-chicago-shootings-violence-20141021-story.html [https://perma.cc/6CUF-NDGC]; Joseph Goldstein & Nate Schweber, Man's Death After Chokehold Raises Old Issue for the Police, N.Y. TIMES, July 19, 2014, at A1; Elahe Izadi, Ohio Wal-Mart Surveillance Video Shows Police Shooting and Killing John Crawford III, WASH. POST (Sept. 25, 2015), https://www.washingtonpost.com/news /post-nation/wp/2014/09/25/ohio-wal-mart-surveillance-video-shows-police-shooting-andkilling-john-crawford-iii/?utm_term=.cb8846245191 [https://perma.cc/W7E8-YTCT]; Michael E. Miller et al., How a Cellphone Video Led to Murder Charges Against a Cop in North Charleston, S.C., WASH. POST (April 8, 2015), https://www.washingtonpost.com /news/morning-mix/wp/2015/04/08/how-a-cell-phone-video-led-to-murder-charges-againsta-cop-in-north-charleston-s-c/?utm_term=.0c8b36b3a957 [https://perma.cc/P58Y-EFY9]; David Montgomery, New Details Released in Sandra Bland's Death in Texas Jail, N.Y. TIMES (July 20, 2015), https://www.nytimes.com/2015/07/21/us/new-details-released-insandra-blands-death-in-texas-jail.html?smid=pl-share [https://perma.cc/67MX-NEDQ (dark archive)]; Richard Pérez-Peña, University of Cincinnati Officer Indicted in Shooting Death of Samuel Dubose, N.Y. TIMES (July 29, 2015), https://www.nytimes.com/2015/07/30 /us/university-of-cincinnati-officer-indicted-in-shooting-death-of-motorist.html [https://perma.cc /L8AP-FB4N (dark archive)]; Kristine Phillips, Black Teen Who Was Slammed to the Ground by a White Cop at Texas Pool Party Sues for \$5 million, WASH. POST (Jan. 5, https://www.washingtonpost.com/news/post-nation/wp/2017/01/05/black-teenager-2017), who-was-slammed-to-the-ground-at-texas-pool-party-sues-ex-cop-city-for-5m/?utm_term= .f8a9048cfef8 [https://perma.cc/QWM9-C9R8]; Kevin Rector, The 45-Minute Mystery of Freddie Gray's death, BALT. SUN (Apr. 25, 2015), http://www.baltimoresun.com/news /maryland/freddie-gray/bs-md-gray-ticker-20150425-story.html [https://perma.cc/QUZ6-KEZR]; Rebecca R. Ruiz, U.S. Won't Charge Two Officers In a 2016 Killing of a Black Man, N.Y. Times, May 3, 2017, at A1, A11; Police Shooting During Traffic Stop Leaves Minnesota Man Dead, CBS NEWS (July 7, 2016), https://www.cbsnews.com/news/policeshooting-during-traffic-stop-leaves-minnesota-man-dead-family/ [https://perma.cc/QB2P-9KBP]; Liam Stack, Answers Sought in Another Police Shooting, N.Y. TIMES, Aug. 9, 2015, at A19; Michael Wilson, City Officer's Errant Shot Kills an Unarmed Man, N.Y.

country called for greater police accountability and improvements in police-community relations. Body-worn cameras ("body cams" or "BWCs") were and are widely seen as serving both ends.

The combination of public demand and federal or private funding has led thousands of police agencies to explore, adopt, and implement body-cam programs. A 2015 survey by the Major Cities Chiefs Association and the Major County Sheriffs' Association found that ninety-five percent of surveyed agencies had either implemented or were committed to implementing a BWC program.⁵ By the middle of 2016, half of the seventy largest cities in the United States had begun using or committed to using BWCs.⁶ In November of that year, a market survey commissioned by the National Institute of Justice identified sixty-six different BWC models by dozens of different vendors.⁷ Competition between the largest vendors was fierce. In April 2017, TASER International officially changed its name to Axon—the name of its market-dominating body-cam system—and offered all interested police agencies free cameras for a year.⁸

Body-worn cameras are here, and more are coming.⁹ It is not difficult to figure out why. As Howard Wasserman has pointed out:

Supporters promote body cameras as a panacea; they are spoken of as the singularly effective solution to the problem, able to prevent "another Ferguson." And the public perceives them as that comprehensive cure to the problem. Video tells us exactly what happened, entirely eliminates the he-said/he-said

TIMES, Nov. 22, 2014, at A1, A3. Whether any of the officers involved in these incidents acted appropriately or inappropriately is outside the scope of this discussion; I identify the incidents for the limited point of noting that they have drawn substantial and sustained public attention to policing.

^{5.} LAFAYETTE GRP., MAJOR CITIES CHIEFS & MAJOR CTY. SHERIFFS, SURVEY OF TECH. NEEDS-BODY WORN CAMERAS ii (2015), https://assets.bwbx.io/documents/users /iqjWHBFdfxIU/rvnT.EAJQwK4/v0 [https://perma.cc/QD3P-VUC2].

^{6.} Rachel Lerman, *Body Cameras Now in Half of Big City Police Departments*, SEATTLE TIMES (July 7, 2016), https://www.seattletimes.com/business/technology/body-cameras-now-in-half-of-big-city-police-departments/ [https://perma.cc/V7RM-CLEZ].

^{7.} VIVIAN HUNG, STEVEN BABIN & JACQUELINE COBERLY, A MARKET SURVEY ON BODY WORN CAMERA TECH. 1–9 (2016), https://www.ncjrs.gov/pdffiles1/nij/grants /250381.pdf [https://perma.cc/LXD5-SYQF].

^{8.} Josh Sanburn, *The Company that Makes Tasers Is Giving Free Body Cameras to Police*, TIME (Apr. 5, 2017), http://time.com/4726775/axon-taser-free-body-cameras-police/ [https://perma.cc/27BN-J6AF].

^{9.} Exactly where they are coming may depend on local characteristics. See, e.g., Jeffrey S. Nowacki & Dale Willits, Adoption of Body Cameras by United States Police Agencies: An Organisational Analysis, 26 POLICING & SOC'Y 1 (2016) (finding that police agencies that identify as technological innovators are more likely to adopt BWCs, but "agencies with large operating budgets and agencies represented by collective bargaining units are less likely" to adopt them).

ambiguity that often characterizes police-citizen encounters, and deters misbehavior by police and citizens.¹⁰

The popular belief in the inherent superiority of video footage has led to what Mary Fan calls the "camera cultural revolution."¹¹ The result, she predicts, is that "the future will be recorded."¹²

Legal scholars have largely responded to this burgeoning new technology by addressing it through the framework of traditional discussions about privacy, police accountability, or the rules of evidence.¹³ Relatively few articles have gone further by identifying the potential benefits of BWCs and critically examining whether the adoption of this technology by police agencies can truly do what the

12. Id. at 928, 934.

13. See, e.g., Mary D. Fan, Privacy, Public Disclosure, Police Body Cameras: Policy Splits, 68 ALA. L. REV. 395, 442 (2016); Stephen E. Henderson, Fourth Amendment Time Machines (And What They Might Say About Police Body Cameras), 18 U. PA. J. CONST. L. 933, 972 (2016); Martina Kitzmueller, Are You Recording This?: Enforcement of Police Videotaping, 47 CONN. L. REV. 167, 170-73 (2014); Rachel Levinson-Waldman, Hiding in Plain Sight: A Fourth Amendment Framework for Analyzing Government Surveillance in Public, 66 EMORY L.J. 527, 614 (2017); Kami Chavis Simmons, Body-Mounted Police Cameras: A Primer on Police Accountability vs. Privacy, 58 HOW. L.J. 881, 884 (2015); Mark Tunick, Regulating Public Access to Body Camera Footage: Response to Iesha S. Nunes, "Hands Up, Don't Shoot," 67 FLA. L. REV. F. 143, 150 (2016).

Body-worn cameras have also provided fodder for a slew of research by law students, the vast majority of which follows in the same vein. See, e.g., Bradley X. Barbour, Note, Big Budget Productions with Limited Release: Video Retention Issues with Body-Worn Cameras, 85 FORDHAM L. REV. 1725, 1755 (2017); Joey Dhillon, Note, Police Body-Mounted Cameras: Balancing the Interests of Citizens and the State, 25 S. CAL. REV. L. & SOC. JUST. 69, 85 (2015); Kelly Freund, Note, When Cameras Are Rolling: Privacy Implications of Body-Mounted Cameras on Police, 49 COLUM. J. L. & SOC. PROBS. 91, 132-33 (2015); V. Noah Gimbel, Note, Body Cameras and Criminal Discovery, 104 GEO. L.J. 1581, 1585-86 (2016); Mindy Lawrence, Note, Lights, Camera, Action: The Age of Body Cameras in Law Enforcement and the Effects of Implementing Body Camera Programs in Rural Communities, 91 N.D. L. REV. 611, 613 (2015); Dru S. Letourneau, Comment, Police Body Cameras: Implementation with Caution, Forethought, and Policy, 50 U. RICH. L. REV. 439, 475 (2015); Richard Lin, Note, Police Body Worn Cameras and Privacy: Retaining Benefits While Reducing Public Concerns, 14 DUKE L. & TECH. REV. 346, 365 (2016); Kyle J. Maury, Note, Police Body-Worn Camera Policy: Balancing the Tension Between Privacy and Public Access in State Laws, 92 NOTRE DAME L. REV. 479, 551 (2016); Iesha S. Nunes, Note, "Hands Up, Don't Shoot": Police Misconduct and the Need for Body Cameras, 67 FLA. L. REV. 1811, 1843 (2015); Ethan Thomas, Note, The Privacy Case for Body Cameras: The Need for a Privacy-Centric Approach to Body Camera Policymaking, 50 COLUM. J.L. & SOC. PROBS. 191, 227-28 (2017).

^{10.} Howard M. Wasserman, *Moral Panics and Body Cameras*, 92 WASH. U. L. REV. 831, 833 (2015) (presenting exaggerated claims about body cameras as a foil).

^{11.} Mary D. Fan, Justice Visualized: Courts and the Body Camera Revolution, 50 U.C. DAVIS L. REV. 897, 907–08 (2017).

many proponents claim.¹⁴ This Article falls solidly into the latter camp.

This Article is not intended to endorse or condemn police body cams, but rather to identify and critically examine the potential benefits of the technology in light of its capabilities and limitations. For more than two years now, I have educated a variety of audiences about police BWCs, from state supreme court justices to practicing attorneys and from police executives to rank-and-file officers,¹⁵ and I

15. I have presented on police body-worn cameras for judicial audiences (including the Conference of Chief Justices; the Midwest Conference of Chief Justices and State Court Administrators; the National Consortium on Racial & Ethnic Fairness in the Courts; the Ohio Judicial Conference; the Missouri Judicial Conference; the North Dakota Judicial Conference; the South Carolina Judicial Conference; the Indiana Bench/Bar Conference; and the Kansas Judicial Conference); legal audiences (including the Defense Research Institute; the South Carolina Solicitors' Conference; and the National Association of Criminal Defense Lawyers Body-Camera Task Force); police audiences (including the Chicago Civilian Office of Police Accountability; the Peace Officers' Association of Georgia; a United States Inspectors General Investigators Training conference; senior executives at the Bureau of Alcohol, Tobacco, Firearms, and Explosives; the Federal Law Enforcement Training Center; and the Legal Liability and Risk Management Institute); and technology audiences (including the International Association of Privacy Professionals and the National Institute of Standards and Technology Public Safety Video Analytics Working Group). I have also presented similar information at talks at Savannah Law School, William & Mary Law School, and in multiple out-of-class presentations here at the University of South Carolina School of Law. My work on BWCs has been featured widely in the media both domestically and internationally. See, e.g., Radley Balko, Criminal Defense Attorney Group Releases WASH. **Recommendations** for Body Cameras, Post (Mar. 22, 2017), https://www.washingtonpost.com/news/the-watch/wp/2017/03/22/criminal-defense-groupreleases-recommendations-for-body-cameras/?utm_term=.582ccd752ef7 [https://perma.cc /J5UT-FEZD]; Radley Balko, Police Cameras Are a Tool. It's How We Use This Tool That Matters, WASH. POST (Mar. 15, 2016), https://www.washingtonpost.com/news/thewatch/wp/2016/03/15/police-cameras-are-a-tool-its-how-we-use-this-tool-that-matters/?utm _term=.32b69e71b484 [https://perma.cc/9T32-AGUF]; The Fifth Estate, Deception and Police-Worn Body Cameras, YOUTUBE, at 0.33 (Nov. 4, 2016), https://www.youtube.com /watch?v=PQMLN_nkGC4 [https://perma.cc/BP35-W77Y]; Yaniv Kubovich, Police Body Cams Pit Violence Against Privacy, HAARETZ (May 15, 2016), https://www.haaretz.com /israel-news/.premium-police-body-cams-pit-violence-against-privacy-1.5383104 [https://perma.cc /4YES-7JAR]; Test: Wat Zie Jij in Deze Bodycam-Beelden?, NOS (June 7, 2016), https://nos.nl/op3/artikel/2109597-test-wat-zie-jij-in-deze-bodycam-beelden.html [https://perma.cc /JRL7-XD4M]; TODAY Show: Police Body Cameras: Can You Always Believe What They Show? (NBC television broadcast May 16, 2016), https://www.today.com/video/policebody-cameras-can-you-always-believe-what-they-show-686449731595 [https://perma.cc/UX4Y -3EXW]; Timothy Williams et al., Police Body Cameras: What Do You See?, N.Y. TIMES

^{14.} For exceptions, see 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, 988–89 (2016); Caren Myers Morrison, Body Camera Obscura: The Semiotics of Police Video, 54 AM. CRIM. L. REV. 791, 795–96 (2017); Roseanna Sommers, Developments in the Law: Policing 128 HARV. L. REV. 1706, 1797 (2015); Wasserman, supra note 10, at 833.

have repeatedly been asked some variant of what appears to be a simple question: is the adoption of body cameras a good idea? My response is no doubt familiar to law students across the country: it depends. Body-worn cameras are a tool. Tools should be used to accomplish normatively desirable tasks when they are an efficient way of accomplishing or facilitating that task. Following that logic, tools should not be used when the task itself is inappropriate or when the tool is ill-suited for the job at hand. To make this point more directly, consider that most indelicate of tools: the hammer. For some tasks, such as putting in nails, the hammer is among the best possible tools to use. For other tasks, such as extracting nails, the hammer is a perfectly reasonable option even though other tools, such as a nail puller or cat's paw crowbar, may prove marginally more efficacious. For some tasks, such as cleaning a windshield, using a hammer will not only be ineffective, it may prove destructively counterproductive. And some tasks, like bashing in another person's head, are themselves so objectionable that a hammer should not be used even if its use would easily accomplish the task.

The analogy between body cams and hammers is, of course, inexact. While the relative capabilities and limitations of a hammer are both well-known and easily capable of being identified through even a superficial examination, the potential value and constraints of a body-worn camera system are more speculative and not immediately obvious. Regrettably, the lack of clear information can lead public officials and police executives to give substantially more consideration to the technical questions of *how* BWCs should be acquired and deployed than the more complicated questions of what agencies are trying to achieve with their use and whether BWCs are an appropriate and efficient tool.¹⁶ That is, the real difficulty with body cams is both pinpointing ex ante what the jurisdiction or agency is trying to accomplish with a BWC system and recognizing the various factors that are likely to affect a body cams' value in that context.

This Article seeks to elevate public discourse about body-worn cameras. It provides a simplified framework that police executives, elected officials, and community members can apply to make more

2018]

⁽Apr. 1, 2016), https://www.nytimes.com/interactive/2016/04/01/us/police-bodycam-video .html [https://perma.cc/4DNC-456Z (dark archive)].

^{16.} This observation is not limited to BWC programs or to police agencies. Mats Alvesson and André Spicer have observed that this phenomenon, which they identify as an aspect of "functional stupidity," is endemic in private organizations. MATS ALVESON & ANDRÉ SPICER, THE STUPIDITY PARADOX 8–13 (2016).

informed decisions about whether and how to implement body-worn cameras.¹⁷

Part I reviews the justifications for, implementation of, and lessons learned from in-car camera systems (or "dash cams"). Although broadly accepted and widely used today, in-car camera systems were adopted by police agencies much more hesitantly and over a much longer period of time than BWC systems appear to be. Historically, dash cams were justified by their ability to record video that was believed to provide three discrete benefits: it was persuasive evidence in DUI cases, it could establish the validity of a defendant's consent to search a vehicle that contained drugs, and it was originally thought to help gather information about, if not reduce or eliminate, racial profiling. As officers and administrators became accustomed to the new technology, the list of potential benefits continued to grow. This Part discusses the results and shortcomings of one of the few studies that attempted a comprehensive review of in-car camera systems.

Part II tackles the multitude of different benefits that politicians, police executives, officers, and activists believe or have hoped that body-worn cameras will provide by offering a three-part taxonomy. All of the purported benefits fall, this Article asserts, into one of three categories: symbolic benefits, behavioral benefits, and informational benefits. The symbolic benefits of body cams relate to the potential effect on police-community relations and particularly the extent to which the adoption and implementation of a body-worn camera program can communicate to the public that the agency is aware of, respectful of, and responsive to concerns about accountability and transparency. The behavioral benefits relate to the purported ability of body-worn cameras to encourage lawful and appropriate behavior, increase civility, and decrease physical resistance by civilians and the use of force by officers. The informational benefits relate to the potential for BWC videos to provide more and better information about police encounters than we would otherwise have, along with the various uses to which that information could be put.

The potential benefits outlined in Part II are just that: *potential* benefits. Whether an agency that adopts body-worn cameras will

^{17.} See Floyd v. City of New York, 959 F. Supp. 2d 668, 685 (S.D.N.Y. 2013) (analyzing the unique benefits of body-worn cameras both generally and as applied to the case at hand, and "ordering the NYPD to institute a pilot program in which body-worn cameras will be worn for a one year period by officers on patrol in one precinct per borough").

enjoy those benefits depends heavily on the practical limitations of the technology and our ability to use it effectively and the policy choices that police agencies make when they implement a BWC program. Part III addresses the former, while Part IV reviews some of the more difficult aspects of the latter. This Article concludes that policymakers can make informed decisions about whether to adopt body cams, which camera system to use, and how to deploy BWCs only after reviewing the practical limitations and policy implications that affect each potential benefit and considering how to best manage any incidental effects.

I. A BRIEF HISTORY OF POLICE VIDEO

It is no exaggeration to say that today's police officers and the first "modern" police officers would scarcely recognize each other.¹⁸ Most large cities in the United States had police departments by the 1850s, but the officers did not wear uniforms and were typically prohibited from carrying firearms.¹⁹ As policing has evolved, it has adopted a range of once-new-and-now-familiar equipment and technology, some of which has dramatically changed the practice, and sometimes the very nature, of policing. Each change evoked acclaim and criticism from the public, police administrators, and officers themselves.²⁰

Police communications have shifted from in-person interactions to police callboxes to in-car wireless radios to today's portable digital radios and cellular communications technology.²¹ Dispatch and police records have changed from index cards and paper files to computeraided dispatch systems and electronic filing and records-management systems. Patrol routines, once limited to highly diffused officers working a foot-patrol beat, have so thoroughly shifted with the advent of police vehicles that "[t]he patrol car became the symbol of policing...represent[ing] mobility, power, conspicuous presence,

2018]

^{18.} Exactly when cities in the United States adopted the modern approach to policing is difficult to identify with any precision, but by all accounts the institution is less than 200 years old. Seth W. Stoughton, *The Blurred Blue Line: Reform in an Era of Public and Private Policing*, 44 AM. J. CRIM. L. 117, 125-27 (2017).

^{19.} WILLIAM J. BOPP & DONALD O. SCHULTZ, A SHORT HISTORY OF AMERICAN LAW ENFORCEMENT 27–28, 38 (1972).

^{20.} Id. at 46–47; DAVID R. JOHNSON, AMERICAN LAW ENFORCEMENT: A HISTORY 25–26 (1981).

^{21.} See, e.g., The Network, FIRSTNET, https://www.firstnet.gov/network [https://perma.cc /J6PD-HV5G].

control of officers, and professional distance from citizens."²² Police weaponry has changed, too. In the context of lethal weaponry, the revolvers of yesteryear have given way to the semi-automatic handguns that are issued today, with shotguns and rifles often added to the mix. The expansive menu of less-lethal weaponry starts with the original police weapon, the baton, and includes the chemical sprays and electric cattle prods that were used against demonstrators and protestors in the 1960s,²³ TASERS and other "stun guns" and the large caliber "baton round" launchers that date from the 1970s,²⁴ Pepperballs (a paintball filled with a liquid or powder irritating agent) in the late 1990s,²⁵ and the acoustic or microwave weaponry of the early- and mid-2000s.²⁶

Investigative equipment and technology, too, has changed substantially. Police agencies around the country now employ automated license plate readers, gunfire detection systems,²⁷ radar and LIDAR speed detection devices, laser scanners for forensic measurements, drones and other remote-piloted robotic tools, and so on.

Comparatively speaking, the history of police-video recording is of much more recent vintage than other technological innovations. Although there were failed attempts to install cameras in police vehicles as early as the $1930s^{28}$ —"[t]he camera was on a small tripod

24. REJALI, supra note 23, at 229.

25. Advanced Interactive Systems, Inc. and PepperBall Technologies, Inc. Join Forces, POLICEONE.COM (Apr. 7, 2004), https://www.policeone.com/police-products/less-lethal /press-releases/84200-Advanced-Interactive-Systems-Inc-and-PepperBall-Technologies-Inc-Join-Forces/ [https://perma.cc/8UXB-9WXH].

26. Colin Moynihan, Noise as a Weapon? Police Use of Sound Cannons Questioned, N.Y. TIMES (June 1, 2017), https://www.nytimes.com/2017/06/01/nyregion/sound-cannonprotest-lawsuit-long-range-acoustic-device.html [https://perma.cc/DV2R-A7EN (dark archive)]; Rania Khalek, 6 Creepy New Weapons the Police and Military Use to Subdue Unarmed People, ALTERNET (Aug. 1, 2011), http://www.alternet.org/story/151864/6_creepy _new_weapons_the_police_and_military_use_to_subdue_unarmed_people [https://perma.cc/GSF8-5N2N].

27. SHOTSPOTTER, http://www.shotspotter.com/ [https://perma.cc/553X-RK55].

28. INT'L ASS'N OF CHIEFS OF POLICE, THE IMPACT OF VIDEO EVIDENCE ON MODERN POLICING: RESEARCH & BEST PRACTICES FROM THE IACP STUDY ON IN-CAR

^{22.} George L. Kelling & Mark H. Moore, *The Evolving Strategy of Policing*, 4 PERSP. ON POLICING 8 (1988).

^{23.} DARIES REIALI, TORTURE & DEMOCRACY 226-29 (2009); JEROME H. SKOLNICK & JAMES J. FYFE, ABOVE THE LAW: POLICE & THE EXCESSIVE USE OF FORCE 75 (Free Press et al. eds., 1993); Daniel A. Gross, *The Forgotten History of Mace, Designed by a 29-Year-Old and Reinvented as a Police Weapon*, SMITHSONIAN.COM (Nov. 4, 2014), http://www.smithsonianmag.com/history/forgotten-history-mace-designed-29-year-old-and-reinvented-police-weapon-180953239/#8meYgGEJ60IMYyTE.99 [https://perma.cc /JFS6-8AWQ].

that required the full passenger side of the front seat with the back seat fully loaded with a recorder and cables"²⁹—it is more accurate to say that police-video recording is celebrating its thirtieth birthday.

When they were first commercially introduced in the late 1980s, dash cams were not particularly popular. The notion of private ownership of video-playing hardware was still new and largely alien. By 1985, only seventeen percent of households had a Video Cassette Recording ("VCR") system,³⁰ which some number of readers will recall played Video Home System ("VHS") tapes. Private ownership of those VHS cassettes—the recording medium of the day—was rare; rentals were the norm. In 1987, Paramount Pictures shocked the video industry by announcing that cassettes of *Top Gun* would be sold for a mere \$26.95, "the lowest introductory price ever asked for a major movie on cassette."³¹

In the policing context, the cameras that could be mounted in vehicles were large, difficult to install, and expensive.³² Each unit had three components—the camera itself, a monochromatic playback unit that could be mounted overhead or between the front seats, and a VCR secured in a locking stainless steel box that was typically mounted in the passenger foot-well, the back seat, or the trunk; all of the components had to be wired together.³³ The high price and difficulty of installation and maintenance limited the initial adoption

CAMERAS 5 (2004). The IACP report cites an article in *Popular Science* magazine but incorrectly reports that the article was about a Connecticut article in the 1960s. In fact, the article was published in September 1939 and is about Officer R.H. Galbraith of the California Highway Patrol. *Movie Camera in Police Car Puts Evidence on Film*, MODERN MECHANIX (Mar. 14, 2012), https://web.archive.org/web/20120314041757/http://blog.modernmechanix.com/2012/03/09/movie-camera-in-police-car-puts-evidence-on-film/ [https://perma.cc/XGU5-H2A6].

^{29.} INT'L ASS'N OF CHIEFS OF POLICE, supra note 28, at 5.

^{30.} Trish Hall, *Electronics: It's Not Home Without It*, N.Y. TIMES, Mar. 29, 1990, at C6.

^{31.} See Aljean Harmetz, Marketing 'Top Gun' Cassette, N.Y. TIMES (Jan. 15, 1987), http://www.nytimes.com/1987/01/15/arts/marketing-top-gun-cassette.html [https://perma.cc /9VGA-WLYN (dark archive)].

^{32.} One news report from 1993 put the price of an in-car camera system at \$1,750. *Law Enforcement Agencies Get Cameras*, GOUPSTATE.COM, http://www.goupstate.com/article/NC/19931005/News/605197740/SJ/ [https://perma.cc/6LXW-SD6T (dark archive)]. Adjusted for inflation, the cost of the camera system in 2017 dollars is \$3,000. CPI INFLATION CALCULATOR, https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=1750&year1 =199301&year2=201704 [https://perma.cc/TX9Y-L7KJ].

^{33.} The components of the L3's Mobile Vision In-Car Video System, for example, can still be found and purchased online. *M3 Mobile Vision MV-7 In Car Video System, VoiceLink Microphone* + *Extras*, EBAY, https://www.ebay.com/itm/M3-Mobile-Vision-MV-7-In-Car-Video-System-VoiceLink-Plus-Microphone-Extras-/132424099234 [https://perma.cc /VG88-W34L].

by police agencies. It may also have been true that police executives did not feel a compelling need to adopt in-car camera systems; after all, officers had never had them before and their absence had not hindered police operations.

Over the next fifteen years, agencies began to adopt dash cams more readilv for four separate reasons, presented here chronologically. First, Mothers Against Drunk Driving, which had been founded in 1980, began providing grants or directly purchasing in-car camera systems for police agencies in the late 1980s and early 1990s.³⁴ For drunk-driving cases, video footage from in-car camera systems was viewed as "a 'defense killer" that could dramatically increase the potential for a prosecution to end in a plea deal.³⁵ As public perceptions shifted, video footage was believed to be necessary for fact-finders to fairly assess the situation, including the defendant's performance on field sobriety exercises. Since 1998, for example, South Carolina has required video recordings in DUI prosecutions; subject to a few exceptions, the arresting officer must provide a video recording of the investigation both at the site of the stop and at the location of the breath testing or submit an affidavit explaining why video was not available.36

Second, dash cams were a response to the public outcry that followed from the Rodney King beating, fortuitously filmed by a bystander with a personal camcorder in March 1991. Then, as now, public demand for police accountability and the police interest in protecting officers from frivolous allegations of misconduct both contributed to the adoption of in-car camera systems.³⁷

Third, by the mid-1990s, the Drug Enforcement Administration ("DEA") had become concerned about the number of drug possession cases that were not resulting in convictions. At issue in those cases was the validity of a motorist's consent to a police search of his vehicle.³⁸ The DEA began to offer funding for local police agencies to acquire in-car camera systems because the video would, they believed, help prosecutors prove to skeptical judges and juries that someone who was "transporting large quantities of narcotics and

^{34.} INT'L ASS'N OF CHIEFS OF POLICE, supra note 28, at 5.

^{35.} Law Enforcement Agencies Get Cameras, supra note 32.

^{36.} Act of June 29, 1998, No. 434, 1998 S.C. Acts 3205 (codified as amended at S.C. CODE. ANN. § 56-5-2953 (2017)).

^{37.} See Bob Sullivan, Squad Car Video Cameras Go Digital, NBC NEWS.COM (May 14, 2017), http://www.nbcnews.com/id/3078632/ns/technology_and_science-tech_and _gadgets/t/squad-car-video-cameras-go-digital/ [https://perma.cc/V7FQ-GQG6].

^{38.} INT'L ASS'N OF CHIEFS OF POLICE, supra note 28, at 5.

hundreds-of-thousands of dollars of unexplainable cash would actually give the police permission to search his/her vehicle."³⁹ And they continued to offer funding, in modest amounts, because video was powerful evidence. "Time and time again the camera documented the consented search, which was later used to gain a conviction."⁴⁰

Fourth, by the end of the 1990s and through the early 2000s, public attention to and criticism of racial profiling led the Community Oriented Policing Services ("COPS") Office at the Department of Justice to offer substantial grant funding for agencies to purchase incar camera systems.⁴¹ In-car cameras were seen as a way to gather critical data without requiring officers to fill out cumbersome questionnaires after every traffic stop; legislation in Texas, Missouri, and Minnesota, for example, required officers to record race-related information after traffic stops but allowed agencies to install in-car cameras "in lieu of or in addition to collecting data."⁴²

41. INT'L ASS'N OF CHIEFS OF POLICE, supra note 28, at 1; U.S. DEP'T OF JUSTICE, COPS OFFICE, U.S. Department of Justice Awards \$3.1 Million in Grants to Purchase In-(Sept. 18, 2003), https://web.archive.org/web/20031124102306 Car Cameras /http://www.cops.usdoj.gov:80/Default.asp?Item=950 [https://perma.cc/7X4Y-437E]; U.S. DEP'T OF JUSTICE, COPS OFFICE, U.S. Department of Justice Announces \$3 Million in Grants to Purchase In-Car Cameras (Nov. 13, 2002), https://web.archive.org/web /20030316233659/http://www.cops.usdoj.gov:80/default.asp?Item=742 [https://perma.cc/T6VG-6BBL]; U.S. DEP'T OF JUSTICE, COPS OFFICE, U.S. Department of Justice Announces \$3.2 Million in Grants to Purchase In-Car Cameras (Sept. 21, 2001), https://web.archive.org/web /20011119131008/http://www.usdoj.gov:80/cops/news_info/press_releases/pr_9_21_01c.htm [https://perma.cc/GBG6-HFA3]. It was also perceived at the time that there was an increase in the number of assaults on officers and that in-car camera systems would increase officer safety. Id. The Law Enforcement Officers Killed & Assaulted Data collected and maintained by the Federal Bureau of Investigation does not support the observation that there was a long-term increase in assaults on officers. There was a dramatic drop in assaults on officers in 1996 (46,608 assaults on offices compared to a tenyear average of 63,475 assaults on officers) with an increase in 1997 (52,149 assaults on officers compared to a ten-year average of 62,576 assaults) and 1998 (60,673 assaults on officers compared to 62,768 assaults). Over the next few years, the number of assaults on officers fluctuated between almost 56,000 in 1999 and over 59,000 in 2002, yet the average continued to drop from 62,148 in 1999 to 58,049 in 2002. Law Enforcement Officers Killed and Assaulted: Number of Assaults and Percent Injured by Type of Weapon, 1996-2005, UNIFORM CRIME REPORTING PROGRAM (2005), https://www2.fbi.gov/ucr/killed/2005 /table68.htm [https://perma.cc/B25R-8P2M].

42. See, e.g., AMY FARRELL ET AL., NEW CHALLENGES IN CONFRONTING RACIAL PROFILING IN THE 21ST CENTURY: LEARNING FROM RESEARCH & PRACTICE 121 (2003); Florangela Davila, Mayor's Plan Will Gather Race Data, SEATTLE TIMES (July 19, 2002), http://community.seattletimes.nwsource.com/archive/?date=20020719&slug=race19m [https://perma.cc/Z8YK-6QQA].

^{39.} Id.

^{40.} Id.

Given these pressures and incentives, it should not be surprising that in-car camera systems spread across the policing industry. In 2000, only 37% of police agencies used in-car video cameras.⁴³ By 2007, that number had climbed to more than 60% of agencies,⁴⁴ and by 2013, the most recent year for which data are available, it had reached 70% of agencies; today, it is almost certainly an even higher percentage.⁴⁵ The total number of vehicles equipped with camera systems had also jumped dramatically. In 2000, in-car camera systems had been installed in only 3,400 of state police and highway patrol vehicles; by 2003, that number had grown to more than 17,500, "representing 72% of total state patrol vehicles."⁴⁶

In 2001, the International Association of Chiefs of Police conducted a study of in-car camera systems at the behest of the COPS Office. Researchers employed a series of surveys, focus group discussions, and interviews at dozens of state police agencies and highway patrols that had received funding through the COPS In-Car Camera Initiative. The first phase of the study involved forty-seven police agencies and focused on "selection, acquisition, installation and maintenance of in-car cameras systems, the development of relevant policies and procedures, and in-car camera operation and training. Agencies were also asked to highlight the obstacles encountered as well as the benefits derived from the use of in-car cameras."⁴⁷ The second phase of the study was limited to twenty-one agencies and focused on "both the problems and successes that have arisen since the implementation of their [in-car camera] program" as identified in the "perceptions of prosecutors, police line officers, police mid-level

^{43.} Matthew J. Hickman & Brian A. Reaves, U.S. Dep't of Justice, Bureau of Justice Stat., NCJ 196002, Local Police Departments 2000, at iv (2003), https://www.bjs.gov/content/pub/pdf/lpd00.pdf [https://perma.cc/7TBV-CHJS]. Earlier data are unavailable; prior to 2000, the Law Enforcement Management and Administrative Statistics survey did not include questions about camera use. *See* Brian A. Reaves, U.S. Dep't of Justice, Bureau of Justice Stat., NCJ-148822, Local Police Departments 1993 (1996), https://www.bjs.gov/content/pub/pdf/Lpd93.pdf [https://perma.cc/W6TS-J48K]; Brian A. Reaves & Andrew L. Goldberg, U.S. Dep't of Justice, Bureau of Justice Stat., NCJ 173429, Local Police Departments 1997 (2000), https://www.bjs.gov/content/pub/pdf/lpd97.pdf [https://perma.cc/GP64-LUX4].

^{44.} BRIAN A. REAVES, U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STAT., NCJ 231174, LOCAL POLICE DEPARTMENTS 2007, at 7 (2010), https://bjs.gov/content/pub/pdf /lpd07.pdf [https://perma.cc/2X24-DJ4H].

^{45.} BRIAN A. REAVES, U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STAT., NCJ 248767, LOCAL POLICE DEPARTMENTS, 2013: EQUIPMENT AND TECHNOLOGY 4 (2015), https://www.bjs.gov/content/pub/pdf/lpd13et.pdf [https://perma.cc/BQZ9-93KW].

^{46.} INT'L ASS'N OF CHIEFS OF POLICE, supra note 28, at 6.

^{47.} Id. at 7.

2018]

managers and executive staff, as well as private citizens."⁴⁸ That study identified a series of benefits, including:

- Enhancing officer safety[;]
- Improving agency accountability[;]
- Reducing agency liability[;]
- Simplifying incident review[;]
- Enhancing new recruit and in-service training (post-incident use of videos)[;]
- Improving Community/Media perceptions[;]
- Strengthening police leadership[;]
- Advancing prosecution/case resolution[;]
- Enhancing officer performance and professionalism[;]
- Increasing homeland security[; and]
- Upgrading technology policies and procedures.⁴⁹

Importantly, the study reflects individuals' perceptions and does not attempt to track more objective measures. In the context of officer safety, for example, the study concluded that "33% of the officers reported in the survey that the use of the cameras caused them to feel safer on the job, while 64% reported that the use of the camera has had no impact on their level of personal safety."50 But the study did not attempt to identify whether officers were, in fact, any safer after the introduction of cameras than they had been before. In the same vein, civilians who were surveyed were asked about whether being recorded would affect their behavior or their willingness to file a complaint, but there was no attempt to determine empirically whether these perceptions were accurate reflections of actual practice.⁵¹ The ultimate findings of the study reflected an enthusiastic, if empirically dubious, endorsement of the value of in-car camera systems,⁵² along with exhortations that proper policies and management are essential elements of success and this cautionary note: "[O]nce the agency commits to the use of the in-car cameras, the use of the systems will become the norm and not the exception.

Electronic copy available at: https://ssrn.com/abstract=3094334

^{48.} Id.

^{49.} Id. at 2.

^{50.} Id. at 13.

^{51.} Id. at 21.

^{52.} Representative conclusions include statements such as, "The in-car camera is an unbiased witness to events to ensure the accountability and the integrity of their officers." *Id.* at 25.

Community leaders, the courts, and investigators will expect video evidence in all cases."⁵³

If the history of in-car cameras tells us anything, it is that video recording technology will fully solve the problems it was intended to solve only rarely, if at all. Prosecutions for DUI, suppression motions that attack the validity of consent, and racial profiling remain active and, in some cases, are quite difficult problems to manage. Video footage has certainly proven valuable on some occasions, but acknowledging that cameras have been and can be *part* of a solution is not to suggest that they are *the* solution.

II. THE POTENTIAL BENEFITS OF BODY-WORN CAMERAS

Today, the public conversation about body-worn camera systems largely mirrors the historical expectations of the various benefits that police agencies and the public could realize by adopting in-car camera systems. Commentators have provided a veritable laundry list of advantages, but there has been little in the way of consistency in how those advantages are defined. This Part offers a taxonomy inspired by the tripartite justifications that Judge Scheindlin provided for ordering the New York Police Department to begin a trial of BWCs as one of the remedies in the *Floyd v. City of New York*⁵⁴ litigation:

Video recordings will serve a variety of useful functions. First, they will provide a contemporaneous, objective record of stops and frisks, allowing for the review of officer conduct by supervisors and the courts.... Second, the knowledge that an exchange is being recorded will encourage lawful and respectful interactions on the part of both parties. Third, the recordings will diminish the sense on the part of those who file complaints that it is their word against the police, and that the authorities are more likely to believe the police. Thus, the recordings should also alleviate some of the mistrust that has developed between the police and the black and Hispanic communities, based on the belief that stops and frisks are overwhelmingly and unjustifiably directed at members of these communities.⁵⁵

Those justifications gave rise to three categories that encompass all the potential benefits of body-worn camera systems: symbolic benefits, behavioral benefits, and informational benefits.

^{53.} Id. at 26.

^{54. 959} F. Supp. 2d 668, 685 (S.D.N.Y. 2013).

^{55.} Id. at 685.

2018]

A. Symbolic Benefits

In May 2015, the Presidential Task Force on 21st Century Policing released its final report.⁵⁶ It opens with the following statement: "Trust between law enforcement agencies and the people they protect and serve is essential in a democracy. It is key to the stability of our communities, the integrity of our criminal justice system, and the safe and effective delivery of policing services."⁵⁷ Citing work by Yale Law School professor Tom Tyler and by sociologist M. Somjen Frazer, the report explicitly ties public trust to the perception that the police are legitimate authorities.⁵⁸ Ultimately, the Task Force would make a series of recommendations that it organized into six different "pillars," the first of which was "building trust and legitimacy."⁵⁹

Legitimacy has become a buzzword in policing circles, and for good reason. Research suggests that community members who view police as legitimate are more likely to obey the law, cooperate with officers, and take a favorable view of public policies that increase police authority.⁶⁰ When members of the public perceive the police as less legitimate, in contrast, their distrust of police can make them less likely to call for police assistance or cooperate with officers.⁶¹ Distrust can handicap officers' efforts in the very environments that are most

61. See Mike Hough et al., *Procedural Justice, Trust, and Institutional Legitimacy*, 4 POLICING 203, 207 (2010) ("[P]ublic cooperation with the police was... strongly predicted by legal cynicism, perceived, police legitimacy, and personal morality.").

^{56.} PRESIDENT'S TASK FORCE ON 21ST CENTURY POLICING, FINAL REPORT OF PRESIDENTIAL TASK FORCE ON 21ST CENTURY POLICING (2015).

^{57.} Id. at 1.

^{58.} Id. at 5 n.2.

^{59.} Id. at 9.

^{60.} See Jason Sunshine & Tom R. Tyler, The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing, 37 LAW & SOC'Y REV. 513, 514 (2003) (studying how police legitimacy influences "behavioral compliance with the law, behavioral cooperation with the police, and public willingness to support policies that empower the police to use their discretion in enforcing the law"); Tom R. Tyler & Jeffrey Fagan, Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities?, 6 OHIO ST. J. CRIM. L. 231, 233-35 (2008) (contrasting two models of community cooperation with police, and concluding that increased perception of police decisions as legitimate more effectively motivates cooperation than does imposing sanctions and incentives); see also E. ALAN LIND & TOM R. TYLER, THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE 64 (1988) (describing the effect of community perceptions of police legitimacy); E. ALLAN LIND & TOM R. TYLER, WHY PEOPLE OBEY THE LAW 5 (2006) (discussing citizens' concerns with legal authorities); Tom R. Tyler, Enhancing Police Legitimacy, 593 ANNALS AM. ACAD. POL. & SOC. SCI. 84, 86 (2004) (explaining the loose correlation between public perception of the police and effectiveness at fighting crime, suggesting that increased legitimacy provides a more sufficient basis "for securing compliance with the law").

in need of policing services; "typical residents in low-income urban neighborhoods are extremely reluctant to cooperate with police in producing crime reduction strategies."⁶²

When it comes to shaping public perceptions of police legitimacy, the substantive content of the law or the ultimate results of its application is not as important as the characteristics of the interactions between civilians and police officers. That is, individuals' perceptions of police legitimacy depend heavily on how they are treated, or what has come to be called "procedural justice."⁶³ Procedural justice may be explained as an approach to mediating or resolving a dispute that leads disputants to perceive that the mediation or resolution process was fair. People are more likely to view an encounter as procedurally just when officers solicit or are responsive to their input, when officers are viewed as neutral and equitable authorities, when officers treat them with dignity and respect, and when officers are perceived as sincerely concerned with safety and well-being.⁶⁴ Procedural justice, then, depends on civilians' perceptions of officers' actions. Civilian perceptions depend, in part,

63. See TOM TYLER & YUEN HUO, TRUST IN THE LAW 14 (2002). For discussion of views of procedural justice, see generally Lorraine Mazerolle et al., Procedural Justice, Routine Encounters and Citizen Perceptions of Police: Main Findings from the Queensland Community Engagement Trial, 8 J. EXPERIMENTAL CRIMINOLOGY 343 (2012); Kristina Murphy et al., Nurturing Regulatory Compliance: Is Procedural Justice Effective When People Question the Legitimacy of the Law?, 3 REG. & GOVERNANCE 1 (2009); Michael D. Reisig et al., Procedural Justice, Police Legitimacy, and Public Cooperation with the Police Among Young Slovene Adults, 14 VARSTVOSLOVJE 147 (2012); Michael D. Reisig & Camille Lloyd, Procedural Justice, Police Legitimacy, and Helping the Police Fight Crime: Results from a Survey of Jamaican Adolescents, 12 POLICE Q. 42 (2009); Sunshine & Tyler, supra note 60, at 535-36; Tom R. Tyler, Procedural Justice, Legitimacy, and the Effective Rule of Law, CRIM. & JUST. 283 (2003); Tyler & Fagan, supra note 60, at 231; Tom R. Tyler & Jonathan Jackson, Popular Legitimacy and the Exercise of Legal Authority: Motivating Compliance, Cooperation, and Engagement, 20 PSYCH. PUB. POL. & L. 78, 81 (2014); Scott E. Wolfe et al., Is the Effect of Procedural Justice on Police Legitimacy Invariant? Testing the Generality of Procedural Justice and Competing Antecedents of Legitimacy, 32 J. QUANT. CRIM. 253 (2016); and Scott E. Wolfe, The Effect of Low Self-Control on Perceived Police Legitimacy, 39 J. CRIM. JUST. 67 (2011).

64. Tyler, supra note 60, at 94-95.

^{62.} ERIC J. FRITSCH ET AL., POLICE PATROL ALLOCATION AND DEPLOYMENT 103 (2009); cf. Patrick J. Carr et al., We Never Call the Cops and Here is Why: A Qualitative Examination of Legal Cynicism in Three Philadelphia Neighborhoods, 45 CRIMINOLOGY 445, 446 (2007) ("[O]ther research has demonstrated that legal cynicism is very high among residents of disadvantaged neighborhoods...."); Tyler & Fagan, supra note 60, at 234 (explaining that "helping [police] has short term costs" which "could potentially be minor inconveniences but could also involve serious danger of retaliation"); Ronald Weitzer, White, Black, or Blue Cops? Race and Citizen Assessments of Police Officers, 28 J. CRIM. JUST. 313, 321–22 (2000) (containing a study that "shows a statistically significant neighborhood").

2018]

on the civilian's prior beliefs about police; an individual who tends to strongly distrust the police is less likely to view an officer as a neutral and equitable authority or as sincerely concerned with public safety.⁶⁵ Trust, however, is difficult to establish when the police-community relationship is strained by tension.

Enter police body cams. Police executives, politicians, and policing scholars have expressed their hope that body cams would increase public trust or explicitly asserted that the technology can or is doing so.⁶⁶ According to a survey commissioned by BWC manufacturer Reveal and conducted by research firm YouGov, sixty percent of Americans "believe that if all police officers wore body cameras, police/community tensions would be reduced," and twentyeight percent believe tension would be "[r]educed a lot."⁶⁷ The implementation of a BWC system, it is hoped, can provide a valuable symbolic benefit, contributing to an improvement in policecommunity relations.

66. Alex Acquisto, Privacy, Right to Know Influence South Portland Police Policy on Body Cams, THE FORECASTER (Jan. 12, 2017), http://www.theforecaster.net/privacy-rightto-know-influence-south-portland-police-policy-on-body-cams/ [https://perma.cc/7C95-Q7Q5] (quoting a South Portland Police Department Facebook post that said "cameras would assist in 'enhancing public trust"); Carolyn Blackburne, Hagerstown Police Chief Requesting 60 More Body Cameras, LOCALDVM.COM, http://www.localdvm.com/news /maryland/hagerstown-police-chief-requesting-60-more-body-cameras/482855163 [https://perma.cc /9R2M-FL5B] (quoting Hagerstown Police Chief Victor Brito saying, "The use of this technology goes a long way to build that public trust and contributing to build the goodwill we have in our community"); Rich Johnson, Montgomery Co. Police Body Camera Program: So Far, So Good, WTOP (Apr. 3, 2017, 6:25PM), http://wtop.com/montgomerycounty/2017/04/13311231/ [https://perma.cc/TL6Q-TYC3] (quoting Montgomery County Councilman Marc Elrich saying, "Having these cameras increases the public trust"); Maria Nagle & Derek Beigh, Police: Body Cameras Will Improve Transparency, Public Trust, PANTAGRAPH (Oct. 11, 2015), http://www.pantagraph.com/news/police-body-cameraswill-improve-transparency-public-trust/article_c7794844-107a-5365-8411-f7360e500126.html [https://perma.cc/86LF-9UJH] (quoting Bloomington Police Chief Brendan Heffner saying that having a body-worn camera system "increases public trust in what we're doing"); Sierra Pizarro, New Body Cams for SPD May Help to "Encourage Public Trust," KTBS.COM (June 21, 2017), https://www.ktbs.com/community/new-body-cams-for-spd-mayhelp-to-encourage-public/article_4fbca5c6-56ca-11e7-8572-ff485e0f601f.html [https://perma.cc [7X2D-827C] (stating that the Shreveport Police Department believes "the cameras will ... encourage public trust in law enforcement"); Truth, Transparency, and Trust in Law Enforcement, KAMALA HARRIS, SENATOR, http://www.newkamalaharris.org.php56-9.dfw3-2.websitetestlink.com/truthtransparencytrust/ [https://perma.cc/HFY5-KUL6] (stating that Kamala Harris supports "the adoption of body-worn cameras around the country to improve transparency, accountability and training").

67. *Reveal Public Survey on Body Worn Cameras*, YOUGOV, PLC (Sept. 2015) (on file with the North Carolina Law Review).

^{65.} See Roseanna Sommers, Developments in the Law, Considering Police Body Cameras, 128 HARV. L. REV. 1794, 1799 (2015).

There are at least three ways in which police body cameras could provide a symbolic benefit. First, the adoption of a BWC system can serve as a signal to community members that the agency is both receptive and responsive to public calls for transparency and accountability. Knowing that an agency had directed officers to record their interactions can, as Judge Scheindlin wrote, "diminish the sense on the part of those who file complaints that it is their word against the police, and that the authorities are more likely to believe the police."68 In this way, the body camera serves as evidence that the agency is open to soliciting, accepting, and responding to civilian feedback. Second, to the extent that body cameras are expected to improve officer behavior by increasing professionalism,⁶⁹ the decision to implement a body-worn camera program can signal that the agency is committed to promoting the type of policing that the public expects. Finally, to the extent that body cameras are expected to reduce police uses of force,⁷⁰ their adoption can signal to the public that the police agency is taking steps to safeguard community members' safety and well-being at the hands of officers.

In short, the implementation of a BWC system can provide a valuable symbolic benefit that, it is hoped, will contribute to an improvement in police-community relations.⁷¹

B. Behavioral Benefits

Where the potential symbolic benefits of a body-worn camera program are both ethereal and attenuated, the potential behavioral benefits are more commonly seen as tangible and immediate. Activists who want to reduce the frequency of police uses of force, police executives who want to increase officer professionalism, and the officers who want civilians to resist less often have all championed body-worn cameras as a way to achieve the desired behavioral change. As University of Pittsburgh law professor David A. Harris explained in the first piece of legal scholarship to focus on body-worn cameras, the technology could "increas[e] police compliance with

^{68.} Floyd v. City of New York, 959 F. Supp. 2d 668, 685 (S.D.N.Y. 2013).

^{69.} See infra Section II.B.

^{70.} See infra Section II.B.

^{71.} It is worth noting that the extent to which BWCs create symbolic benefits in individual encounters with the police appears to depend on whether the civilian was aware that the officer with whom they were interacting is equipped with a camera. Michael D. White et al., Assessing Citizen Perceptions of Body-Worn Cameras After Encounters with Police, 40 POLICING: INT'L J. POLICE STRATEGIES & MGMT. 689, 696 (2016).

Fourth Amendment rules."⁷² Further, "the knowledge that an exchange is being recorded will encourage lawful and respectful interactions on the part of both parties."⁷³ Officers themselves have different expectations and perceptions of what body-worn cameras will do, or whether they will do anything at all,⁷⁴ but the belief that they will improve officer or civilian behavior is not uncommon: a survey of officers in Phoenix, Arizona; Spokane, Washington; and Tempe, Arizona, found a substantial number agreed or strongly agreed that BWCs will make citizens more respectful and cooperative and reduce resistance, as well as making officers act more professionally.⁷⁵ A survey of officers at the Orlando Police Department found that a substantial minority of officers, 19.8%, believed that body-worn cameras would improve their own behavior, and more than twice as many, 42.9%, believed that they would "increase the by-the-book behavior of *other* officers."⁷⁶

The potential behavioral benefits of BWCs fall into three distinct categories: improving compliance with rules, decreasing incivility, and reducing violence. Officers and civilians alike may be affected by all three categories of behavioral change. With regard to improving compliance, officers may be more likely to obey the rules that govern their behavior, from the constitutional limitations on searches and seizures to agency policies and procedures. Civilians, meanwhile, may be more likely to obey state laws as well as officers' directives. With regard to decreasing incivility, it is hoped that officers and civilians who are being recorded will be more polite to each other, improving the character of police encounters. Finally, with regard to reducing violence, the objective is to discourage resistance by civilians and gratuitously severe or frequent uses of force by officers, especially in the context of deadly force.

It is worth pointing out at the outset that although civilian discourtesy, officer rudeness, civilian resistance, and police uses of force are distinct, there are many cases in which they will be interrelated, if not interdependent. Use-of-force scenarios only rarely

75. Id. at 284.

76. Wesley G. Jennings et al., Cops and Cameras: Officer Perceptions of the Use of Body-Worn Cameras in Law Enforcement, 42 J. CRIM. JUST. 549, 551 (2014).

2018]

^{72.} David A. Harris, Picture This: Body-Worn Video Devices (Head Cams) as Tools for Ensuring Fourth Amendment Compliance by Police, 43 TEX. TECH. L. REV. 357, 359 (2010).

^{73.} Floyd, 959 F. Supp. 2d at 685.

^{74.} See generally Janne E. Gaub et al., Officer Perceptions of Body-Worn Cameras Before and After Deployment: A Study of Three Departments, 19 POLICE Q. 275 (2016) (discussing police perceptions of BWCs).

arise spontaneously. Police violence can, but typically does not, just suddenly erupt. Instead, it is far more common for an officer's use of force to be the culmination of an encounter with multiple iterations, a series of back-and-forth exchanges between the officer and the civilian.⁷⁷ Incivility on either side—or both sides—can contribute to an officer's use of force. For example, an officer may use force to overcome civilian resistance that was provoked by the officer's rudeness. Or, to present the same idea chronologically, an officer's incivility can give rise to civilian resistance that an officer then overcomes with force.⁷⁸ In short, it is possible that an increase in civility and professionalism will lead to a corresponding reduction in resistance, which will lead to a reduction in police uses of force. It is also possible that even without any impact on civility, the presence of a body-worn camera can discourage resistance or, for that matter, that BWCs could affect officers' use-of-force decisions even if they had no effect on civilian resistance.

There is some reason to believe that body-worn cameras *do* influence civilian and officer behavior, although the results of empirical studies are not consistent. A well-publicized, randomized, controlled trial in Rialto, California, for example, found that the adoption of body-cameras in the twelve-month evaluation period was correlated with an approximately ninety percent reduction in the number of complaints filed against officers and a roughly fifty percent decrease in officer use-of-force incidents.⁷⁹ Several observers have also pointed to the much larger Oakland Police Department,⁸⁰ which saw a more than seventy percent decline in uses of force and a similarly large decline in civilian complaints over the seven-year period (2008 to 2015) during which it was working toward meeting the requirements of a federal consent decree⁸¹ by, *inter alia*, rolling out

81. See generally Settlement Agreement Re: Pattern and Practice Claims, Allen v. City of Oakland, C00-4599 TEH (JL) (N.D. Cal. Dec. 2008) (requiring the department to implement any procedures that would increase officer accountability).

^{77.} See GEOFFREY P. ALPERT & ROGER G. DUNHAM, UNDERSTANDING POLICE USE OF FORCE: OFFICERS, SUSPECTS, & RECIPROCITY 41 (2004).

^{78.} See Seth W. Stoughton, Principled Policing: Warrior Cops & Guardian Officers, 51 WAKE FOREST L. REV. 611, 652-58 (2016).

^{79.} Barak Ariel, William A. Farrar & 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. QUANTITATIVE CRIMINOLOGY 509, 510 (2014).

^{80.} The Rialto Police Department employs approximately 100 sworn officers, while the Oakland Police Department employs over 700 sworn officers. *See id.* at 518; CITY OF OAKLAND CAL., AUGUST 2017 STAFFING REPORT, http://www2.oaklandnet.com/oakca1 /groups/police/documents/agenda/oak067044.pdf [https://perma.cc/C4F6-4YEW].

body-worn cameras for all patrol officers.⁸² Two pilot programs in Scotland—one in Renfrewshire and the other in Aberdeen suggested that civilians are less likely to assault officers who are wearing body-worn cameras.⁸³ In late-2017, the Las Vegas Metropolitan Police Department released the results of a randomized, controlled trial that found that cameras reduced officer misconduct and the use of force.⁸⁴

Not all of the studies support the conclusion that body cameras will have the desired effects, however. Most recently, a randomized, controlled trial at the Metropolitan Police Department in Washington, DC, showed no statistically significant effect on officer uses of force or civilian complaints.⁸⁵ That study was rolled out in multiple patrol districts over the course of eighteen months, although the findings are based only on the first seven months of BWC implementation.⁸⁶ A prior thirty-month study at the Phoenix Police Department, which included a review of the fifteen months prior to implementation and the fifteen months after implementation, found that body-worn cameras did not have any impact on civilian behavior or the use of force.⁸⁷ It did, however, find both a reduction in civilian

83. ODS CONSULTING, BODY WORN VIDEO PROJECTS IN PAISLEY AND ABERDEEN SELF EVALUATION 14 (2011).

84. ANTHONY A. BRAGA ET AL., THE BENEFITS OF BODY-WORN CAMERAS: NEW FINDINGS FROM A RANDOMIZED, CONTROLLED TRIAL AT THE LAS VEGAS METROPOLITAN POLICE DEPARTMENT 8–9 (2017), https://www.cna.org/cna_files/pdf /IRM-2017-U-016112-Final.pdf [https://perma.cc/7R5S-D3XC].

2018]

^{82.} Mike Blasky, Oakland Police Becoming Example for Departments Seeking to Reform, MERCURY NEWS (May 9, 2015), http://www.mercurynews.com/2015/05/09 /oakland-police-becoming-example-for-departments-seeking-to-reform/ [https://perma.cc /Q5SW-BLMC]. Importantly, the data from the Oakland Police Department is not the result of a randomized, controlled trial. Id. It is highly likely that the other measures the agency was taking pursuant to the consent decree also contributed to the decline in uses of force.

^{85.} Randomized Controlled Trial of the Metropolitan Police Department Body-Worn Camera Program, THE LAB @ DC, http://bwc.thelab.dc.gov/ [https://perma.cc/ZUU4-2VD6].

^{86.} *Id.* The study examined whether BWCs changed behavior by comparing the actions of officers who were wearing a BWC with those of officers who were not, but most of the police encounters reviewed involved officers who had BWCs *and* officers who did not. This is relevant because it may well be the case that the *presence* of a BWC on scene, not the *wearing* of a BWC by a particular officer, affected officer behavior; testing for this effect was not within the scope of the study.

^{87.} CHARLES M. KATZ ET AL., EVALUATING THE IMPACT OF OFFICER BODY WORN CAMERAS IN THE PHOENIX POLICE DEPARTMENT 3 (2014) [hereinafter KATZ ET AL., EVALUATING THE IMPACT]; CHARLES M. KATZ ET AL., U.S. DEP'T OF JUSTICE., BUREAU OF JUSTICE ASSISTANCE, PHOENIX, ARIZONA, SMART POLICING INITIATIVE: EVALUATING THE IMPACT OF POLICE OFFICER BODY-WORN CAMERAS ii (2015) [hereinafter KATZ ET AL., SMART POLICING INITIATIVE].

complaints and an increase in discretionary arrests.⁸⁸ The Edmonton Police Service in Alberta, Canada conducted a three-year pilot program and concluded that BWCs had no statistically significant effect on officers' use of force or civilian complaints.⁸⁹ One multi-site study suggested that officers wearing body cameras were *more* likely to be assaulted by civilians than officers who were not so equipped,⁹⁰ while a follow-up study suggested that the timing of when officers begin recording or announce that they have begun recording may have more of an effect than the mere presence or absence of a bodycamera.⁹¹

The conflicting findings make it imprudent to assume, at this point, that body-worn cameras consistently affect civilian or officer behavior, let alone that they do so in predictable ways. Perhaps more importantly, to the extent that BWCs *do* affect civilian or officer behavior, the various studies have not yet attempted to identify how. That is, there is no empirical evidence as to the mechanism or mechanisms through which body-worn cameras affect behavior. There are at least four possibilities, which may very well work in conjunction with each other: the observer effect, deterrence theory, conformity, and experiential updating.

91. Barak Ariel et al., Report: Increases in Police Use of Force in the Presence of Body-Worn Cameras Are Driven by Officer Discretion: A Protocol-Based Subgroup Analysis of Ten Randomized Experiments, 12 J. EXPERIMENTAL CRIMINOLOGY 453, 461 (2016).

^{88.} KATZ ET AL., EVALUATING THE IMPACT, *supra* note 87, at 3; KATZ ET AL., SMART POLICING INITIATIVE, *supra* note 8787, at 7–8.

^{89.} EDMONTON POLICE SERV., BODY WORN VIDEO: CONSIDERING THE EVIDENCE 8 (2015), http://www.bwvsg.com/wp-content/uploads/2015/06/Edmonton-Police-BWV-Final-Report.pdf [https://perma.cc/A3Y3-AYPL].

^{90.} Barak Ariel et al., Wearing Body Cameras Increases Assaults Against Officers and Does Not Reduce Police Use of Force: Results from a Global Multi-Site Experiment, 13 EUR. J. CRIMINOLOGY 744, 750 (2016).

^{92.} Ryan Olson et al., What We Teach Students About the Hawthorne Studies: A Review of Content Within a Sample of Introductory I-O and OB Textbooks, 41 INDUS.-ORGANIZATIONAL PSYCHOLOGIST 23, 31 (2004) (citing JAMES L. BOWDITCH & ANTHONY F. BUONO, A PRIMER ON ORGANIZATIONAL BEHAVIOR 361 (5th ed. 2001)).

on—affected employee productivity.⁹³ The studies found that changing almost any factor, including a reversion back to the original conditions, resulted in an increase to productivity, at least for a period of time.⁹⁴ Later psychological research posited that the short-term gains in productivity were not because of the changes to the working environment, but rather because the employees were aware that they were being closely monitored in the aftermath of those changes because they received feedback about their productivity or because of how employees interpreted the change in conditions.⁹⁵ In the context of policing, body-worn camera systems may change civilian and officer behaviors by serving as a reminder that the behaviors in question are—or may be—observed and evaluated.

But observation and evaluation need not be conducted by an external party for the observer effect to come into play. Objective Self-Awareness Theory posits that the likelihood that an individual can and will alter her behavior is affected by her self-awareness.⁹⁶ "Self-awareness... may be increased by any stimulus that draws a person's attention to himself, e.g., ... the presence of a mirror or a camera."97 In some sense, the subject is both actor and observer. In the 1970s, Charles Carver conducted a series of experiments designed to test whether self-awareness could reduce aggression: subjects were paired up, and one (the actual subject) was instructed to ask the other (who was secretly a research assistant) several questions.⁹⁸ For each wrong answer, the actual subject was to deliver an electrical shock to the other "subject." The strength of the shock varied on a one to ten point scale, and it was up to the actual subject to determine the level of each shock. Carver found that the subjects who were in a room with a mirror used less intense shocks than did subjects in a room without a mirror. He concluded that the mirror increased selfawareness, which in turn reduced aggression.⁹⁹ However, a separate study suggested that it was not aggression itself that was affected, but rather the subjects' motivation to conform their behavior to what they

^{93.} Id. at 26; see also John G. Adair, The Hawthorne Effect: A Reconsideration of the Methodological Artifact, 69 J. APPLIED PSYCHOL. 334, 336 (1984).

^{94.} Olson et al., supra note 92, at 26; Adair, supra note 93, at 336-37.

^{95.} Adair, supra note 93, at 336-37, 342-43.

^{96.} See Charles S. Carver, Physical Aggression as a Function of Objective Self-Awareness and Attitudes Toward Punishment, 10 J. EXPERIMENTAL SOC. PSYCHOL. 510, 510 (1975); Ronald V. Clarke, Situational Crime Prevention, 19 CRIME & JUST. 91, 91 (1995).

^{97.} Carver, supra note 96, at 510 (citation omitted).

^{98.} Id. at 512-13.

^{99.} Id. at 516.

perceived as expected.¹⁰⁰ That study was similarly designed, but subjects were informed that aggression was "positively valued," or normatively desirable.¹⁰¹ In that study, the subjects in a room with a mirror delivered significantly higher shocks than did the subjects in a room without a mirror.¹⁰² Both studies suggest that self-awareness can increase the likelihood that the subjects will act in the way they believe they are expected to act. When a civilian or officer perceives that aggression is viewed negatively, the presence of a body-worn camera may well reduce violence. But when they perceive that aggression is a virtue, instead of a vice,¹⁰³ the presence of a body-worn camera may *increase* violence.

The preceding discussions, of course, suggest that an individual must know that he are being observed or have some external reminder that prompts his self-awareness. Police officers who manually activate a body cam are likely in the best position to know when a video recording is being made. Some cameras activate automatically, but it is entirely plausible that officers and civilians alike will, on at least some occasions, fail to perceive or fail to understand any visible or audible signals that indicate that the camera has begun recording. A study of civilians in Spokane, Washington, for example, found that only twenty-eight of the people who interacted with an officer equipped with a body-worn camera were aware of the camera during the encounter.¹⁰⁴

Further, given the relatively short shelf-life of the observer effect—the improved productivity rates identified in the Hawthorne Studies were found to return to near pre-intervention levels within about eight weeks¹⁰⁵—it is not clear that the observer effect will create lasting changes to behavior even when all parties are aware that they are being recorded. Data from the Spokane, Washington study supports this hypothesis: a randomized, controlled trial found a thirty-

104. See, e.g., Michael D. White, Natalie Todak & Janne E. Gaub, Assessing Citizen Perceptions of Body-Worn Cameras After Encounters with Police, 40 POLICING: AN INT'L J. POLICE STRATEGIES & MGMT. 689, 693–94 (2017).

105. Richard E. Clark & Brenda M. Sugrue, *Research on Instructional Media*, 1978-1988, in INSTRUCTIONAL TECHNOLOGY: PAST, PRESENT, AND FUTURE 327, 328-33 (Gary J. Anglin ed., 1991).

^{100.} Id. at 510; Charles S. Carver, Facilitation of Physical Aggression Through Objective Self-Awareness, 10 J. EXPERIMENTAL SOC. PSYCHOL. 365, 365 (1974).

^{101.} Carver, supra note 100, at 365; see also id. at 367.

^{102.} Id. at 367-68.

^{103.} See, e.g., DAVE GROSSMAN & LOREN W. CHRISTENSEN, ON COMBAT: THE PSYCHOLOGY AND PHYSIOLOGY OF DEADLY CONFLICT IN WAR AND IN PEACE 181 (2008) (discussing what the authors call "the gift of aggression"); see also Stoughton, supra note 78, at 634–35, 652–58.

nine percent reduction in use of force incidents by officers equipped with a BWC (compared to *no* reduction in the control group), but the reductions disappeared after six months.¹⁰⁶

Like the observer effect, deterrence theory suggests that officers may adapt their behaviors because they know their actions are being scrutinized. But where the observer effect may be predicated on selfawareness, deterrence theory posits that behavioral change may be the result of a desire to avoid punishment.¹⁰⁷ In this way, the effect of body-worn cameras may be understood as an application of situational crime prevention theory, which posits that crime can be reduced by, *inter alia*, increasing the potential perpetrator's perception that she is likely to be identified and apprehended.¹⁰⁸ Whether the potential perpetrator is a civilian who would otherwise assault an officer or an officer who would otherwise treat a civilian disrespectfully or use force gratuitously, the potential for bad actions to be identified may discourage the actors from engaging in those bad actions in the first place. According to Barak Ariel:

Effective deterrence is often thought of as a threat mechanism, comprising five intertwined elements: A potential rule violator must: (1) realize that the probability of apprehension ... has changed; (2) take these altered risks into account when deciding whether to break the rule; (3) believe that there is a non-negligible likelihood of being caught; (4) believe that any altered penalty with will applied to him/her if caught; and (5) be willing to alter choices in light of [the increased probability of being apprehended].¹⁰⁹

The presence of body-worn cameras may implicate deterrence theory because video-recording technology increases the likelihood that misconduct will be detected.¹¹⁰

The strength of the deterrence effect may very well be contextual; some behaviors may be more or less susceptible to deterrence based on the officer's ability to prevent the probability of

^{106.} Michael D. White, Janne E. Gaub & Natalie Todak, *Exploring the Potential for Body-Worn Cameras to Reduce Violence in Police-Citizen Encounters*, 12 POLICING 66, 70 (2017).

^{107.} Barak Ariel et al., The Deterrence Spectrum: Explaining Why Police Body-Worn Cameras Work' or 'Backfire' in Aggressive Police-Public Encounters, 11 POLICING 1, 8–9 (2017).

^{108.} Ronald Clarke, *Situational Crime Prevention*, 19 CRIME & JUST. 91, 106 (1995) (describing "situational deterrence" as "increasing the risks of being caught).

^{109.} Ariel et al., *supra* note 107, at 9 (citations omitted).

^{110.} Id. ("The likelihood of getting caught for abusing powers, for instance, is substantially elevated when the camera is recording the police-public interaction.").

detection and apprehension from changing. If officers adapt to the presence of BWCs by, for example, deactivating a camera during a civilian encounter, failing to activate the camera before a civilian encounter, or failing to charge the camera batteries before shift, the probability of apprehension has not increased.¹¹¹ Indeed, relative to the baseline of officers who are equipped with BWCs, the probability of apprehension has *decreased*. This suggests the need for a second-order application of deterrence theory: cameras may deter misconduct, but only if officers are sufficiently deterred from misusing (or not using) the cameras themselves.

Body-worn cameras may also promote behavioral changes in a way that may be explained by the social psychological theory of conformity. Social conformity, it is posited, pressures individuals to adapt their behaviors to integrate into a group. In his now-famous conformity experiments, Solomon Asch put a study subject in a line with four other people who were described as other subjects, but who were actually part of the experiment.¹¹² The group of five people was shown two cards and asked to match the line on Card 1 with one of three lines of different lengths on Card 2. The experimenters pretending to be study subjects all provided the same obviously incorrect answer; the experiment was to see whether the actual study subject would answer in kind. Asch found that more than a quarter of the study subjects consistently agreed with the obviously incorrect answer provided by the experimenters, and more than half did so at least once.¹¹³ Later asked about their incorrect answers, the study subjects explained that, after hearing the experimenters' responses, they either thought their initial (and correct) answer was wrong or they knew the answer offered by the other "subjects" was wrong but

^{111.} See, e.g., KATZ ET AL., EVALUATING THE IMPACT, supra note 87, at 21 (finding that most officers at the Phoenix Police Department did not activate their body-worn cameras in situations that they were required by policy to record).

^{112.} Solomon E. Asch, Effects of Group Pressure on the Modification and Distortion of Judgments, in GROUPS, LEADERSHIP, AND MEN 177 (H. Guetzkow ed., 1951); Solomon E. Asch, Effects of Group Pressure on the Modification and Distortion of Judgments, in READINGS IN SOCIAL PSYCHOLOGY 2 (Guy E. Swanson et al., ed., 1952) [hereinafter Asch, Effects of Group Pressure]; Solomon E. Asch, Opinions and Social Pressure, 193 SCI. AM. 31, 32 (1955); Solomon E. Asch, Studies of Independence and Conformity: I. A Minority of One Against a Unanimous Majority, 70 PSYCHOL. MONOGRAPHS: GEN. & APPLIED 1, 3-5 (1956) [hereinafter Asch, Studies of Independence].

^{113.} Asch, Effects of Group Pressure, supra note 112, at 2. A later meta-analysis of 133 similar studies from 17 countries found that conformity existed in all studies, but the level of conformity depended on a range of factors including cultural norms relating to collectivism or individualism. Rod Bond & Peter B. Smith, Culture and Conformity: A Meta-Analysis of Studies Using Asch's (1952b, 1956) Line Judgment Task, 119 PSYCHOL. BULL. 111, 111 (1996).

they were afraid of being derided. Social psychologists identify these two answers as references to informational conformity and normative conformity.

Informational conformity refers to an individual's acceptance of evidence that has been provided or suggested by others.¹¹⁴ In the Asch experiments, the subjects' perception that the other study participants had seen the line on Card 1 a certain way led them to adopt that view as correct. In short, study subjects gave what they believed was the correct answer, and they thought it was the correct answer because the other "participants" had all provided it.

Normative conformity, sometimes called "social conformity," refers to an individual's desire to fit in and willingness to adopt the group perspective so as not to be judged as non-conforming by group members.¹¹⁵ In other words, study subjects knowingly gave incorrect answers to fit in with perceived group expectations.

Body-worn cameras have the potential to change officer behavior through a combination of informational and normative conformity. Officers already get a substantial amount of information about how to do their jobs through the formal example set by supervisors and training officers, the informal example set by their more senior peers, and, to a lesser extent, from external sources such as the courts and the federal government.¹¹⁶ To the extent that body cameras can change officer behavior at all, it is possible that there may be an initial change in the conclusions that officers draw about the world—for example, whether a particular action by a suspect justifies a use of force—and that initial change may, through the process of informational conformity, spread from officer to officer, especially from senior officers to junior officers.

Similarly, the implementation of a body-worn camera system may lead officers to perceive that their colleagues expect them to behave in a particular way—by, for example, reducing the frequency or severity of uses of force. Normative conformity suggests that officers may change their behaviors so as to be in accordance with what they perceive as their colleagues' expectations. This *may* explain the results of the randomized, controlled trial at the Rialto, California Police Department: different shifts were randomly assigned a camera, so the same officer could be equipped with a camera on one shift, but

^{114.} KNUD S. LARSEN, REIDAR OMMUNDSEN & KEES VAN DER VEER, BEING HUMAN: RELATIONSHIPS AND YOU: A SOCIAL PSYCHOLOGICAL ANALYSIS 253 (2015). 115. *Id.*

^{116.} See Stoughton, supra note 78, at 641-51.

then not given a camera on the next, and the study found a reduction in the use of force among *all* officers (although the reduction among officers when they were not wearing cameras was not as great as the reduction among officers when they were wearing cameras).¹¹⁷

That finding may not be attributable to normative conformity, of course; it may be the result of experiential updating, the utterly mundane ability to learn from one's experience and apply those lessons to similar behavior in the future. To use a simplified example, if a person has previously used only a hobby hammer-a smaller, lightweight version of the standard hammer-to drive nails and then one day uses a standard hammer and realizes how much easier it is, that person's experience allows him to update his approach to driving nails: from that point on, he will choose to use a standard hammer. In the context of policing, officers who have approached their job a particular way may act differently shortly after being equipped with a body camera (perhaps because of the observer effect or conformity). If the officers learn that the changes improve their working lives by, for example, making them more effective or safer, we might expect them to retain some or all of those changes even after the dissipation of the observer effect.

Body-worn cameras, it has been suggested, can improve policing by increasing civility and decreasing both resistance by civilians and the use of force by officers. Whether this prediction will bear fruit may depend heavily on local factors well beyond the implementation of a single piece of technology; the existing studies have shown mixed results. The potential for body cameras to influence behavioral change may depend on whether that change is driven by the observer effect, conformity, experiential updating, or some combination of the three.

C. Informational Benefits

The final category of potential benefits relates to the ability of a body-worn camera to provide more information than would otherwise be available. This is particularly important in the context of the often-brief encounters between police officers and civilians the "quasi-events" marked by "the fleetingness and fluidity of power."¹¹⁸ As Mary Fan has written, "more law enforcement encounters—including some of the most opaque domains of criminal procedure—

^{117.} Ariel et al., *supra* note 79, at 524–27.

^{118.} Mat Coleman & Angela Stuesse, The Disappearing State and the Quasi-Event of Immigration Control, 48 ANTIPODE 524, 527 (2016).

will be illuminated."¹¹⁹ Video footage, it is hoped, will not just provide critical insight; it will allow us to draw reliable conclusions about those previously shrouded interactions. As Howard Wasserman has said, describing popular sentiment, "Video tells us exactly what happened, entirely eliminates the he-said/he-said ambiguity that often characterizes police-citizen encounters, and deters misbehavior by police and citizens."¹²⁰ In short, body-worn camera systems will not only provide comprehensive evidence, by providing *more* information than currently exists, they will also provide accurate and objective evidence.

In some ways this category is the most straight-forward. The symbolic and behavioral benefits are attenuated from the BWC hardware itself and require abstract sociological or psychological theories to fully appreciate, but it takes no erudition or great imagination to view BWCs as, well, cameras designed to record video. In other ways, however, this category is the most fraught with disagreement. That disagreement does not relate to the videorecording capacity of BWCs, but rather to the ultimate usage to which the resulting video can or should be put. Although the range of potential uses is likely as broad as human imagination, making any list inherently incomplete, this Article offers a brief discussion of the most common usages: officer accountability; individual investigations, prosecutions, and defenses; aggregation and dragnet surveillance; analytics and machine-learning; officer training, and news and entertainment media.

Officer Accountability. Community members and officers alike have an interest in officer accountability, although their perceptions of current failures can be quite different. From the community perspective, officers are too often improperly shielded from the consequences of their errors and missteps by special procedural protections in a system that has been coopted by powerful police unions.¹²¹ A video recording of an encounter can both provide critical evidence to supplement "official narratives, like sworn documents created by police officers"¹²² and can provoke sufficient public

^{119.} Fan, supra note 11, at 929.

^{120.} Wasserman, *supra* note 10, at 832-33 (presenting exaggerated claims about body cams as a foil).

^{121.} Kevin M. Keenan & Samuel Walker, An Impediment to Police Accountability? An Analysis of Statutory Law Enforcement Officers' Bill of Rights, 14 B.U. PUB. INT. L.J. 185, 185–87 (2005); Kate Levine, Police Suspects, 116 COLUM. L. REV. 1197, 1200–02 (2016); Stephen Rushin, Police Union Contracts, 66 DUKE L.J. 1191, 1195–98 (2017).

^{122.} Harris, supra note 72, at 359 (quoting Jim Dwyer, When Official Truth Collides with Cheap Digital Technology, N.Y. TIMES, July 30, 2008, at B1).

interest to create political pressures for police agencies or political subdivisions to take remedial or disciplinary actions. From the police perspective, officers are too often improperly castigated for actions that were entirely appropriate in the situation because of the media's obsession with negative portrayals of the police¹²³ and public ignorance about the harsh realities of policing.¹²⁴ Further, video from other sources, including bystanders, often fails to capture relevant information, such as events that occurred prior to the initiation of recording. Having more information about the nuances of an individual encounter can protect officers from frivolous complaints and give civilians some sense of situational empathy by illustrating the pressures that officers face when making decisions in the field. From both perspectives, additional video could potentially help recalibrate the current flawed approach to officer accountability by providing much-needed information.

Individual Investigations, Prosecutions, and Defenses. Video footage could also be used to support a police investigation or the ultimate prosecution of an individual civilian. The most obvious scenario is a BWC video of an individual engaged in criminal activity, but that is hardly the only possible example. By recording victim or witness statements-particularly "good" statements by confident, articulate witnesses or visibly emotionally distraught victims with whom a jury is likely to sympathize-officers can collect valuable evidence. Prosecutors can then use that evidence to bolster their prosecutions with something more salient than a dry, written account and more predictable than courtroom testimony. Similarly, a video recording of the suspect's interrogation-which is unusual in the field even at police agencies that require or recommend recording stationhouse interviews-can be a powerful record of a damning confession. Defense attorneys, on the other hand, can use BWC videos to identify legal violations, such as failing to provide the Miranda warnings or conducting unconstitutional searches. Further, defense attorneys may use video evidence to raise questions about the underlying evidence by highlighting discrepancies in witnesses' statements or poor

^{123.} John Gramlich & Kim Parker, Most Officers Say the Media Treat Police Unfairly, PEW RES. CTR. (Jan. 25, 2017), http://www.pewresearch.org/fact-tank/2017/01/25/mostofficers-say-the-media-treat-police-unfairly/ [https://perma.cc/YCU5-WUDZ]. A Pew Research Center survey, for example, found that eighty-one percent of officers either agreed or strongly agreed that police are treated unfairly by the media. *Id*.

^{124.} Stoughton, supra note 78, at 663.

investigative procedures.¹²⁵ Body-worn camera video of the crime scene, the impoundment of evidence, the counting of seized currency, the interrogation of the suspect, and other investigative steps can provide documentation of what officers did and, even more importantly, how they did it. Such a record is of obvious value: video can serve as documentation of a good investigation and as a way to identify and address shortcomings in a poor investigation. The principal tactical value will go to officers and prosecutors, who have the first opportunity to review BWC video. Well before a defense attorney has access to the video, officers and prosecutors can use it to determine how to best proceed with an investigation or prosecution. Defense attorneys, meanwhile, will be able to use video to develop their own case theories, and judges and juries' fact-finding task may be simplified by the presence of video evidence.

Aggregation & Dragnet Surveillance. Body-worn camera videos will not just support specific investigations and prosecutions; they will also allow for investigations and prosecutions that would not have otherwise occurred. Hundreds or thousands of videos can be aggregated and mined, reviewed manually by officers or, more efficiently, by computer programs to develop information that may be utterly unrelated to any ongoing criminal investigation or prosecution.¹²⁶ Running a stockpile of video through a facialrecognition program and social network analysis, for example, can offer insights into an individual's movements over time and the identities of the people with whom the individual associates.¹²⁷ Existing video from traffic cameras, stationary pole-cameras, public/private security cameras, and the like already allow for such analysis, of course, but from a very different perspective: long distance and often from above, rather than close-range and from at or relatively near eve level. Further, the transportability of body-worn cameras means they can provide significantly more information about, inter alia, the inside of a house or business, streets in residential neighborhoods, backyards and enclosures, and so on. In

^{125.} For example, a video may show officers conducting a shoddy interview by asking leading questions that consciously or unconsciously contaminate the subject's answers. See BRANDON GARRETT, CONVICTING THE INNOCENT 19–36 (2011).

^{126.} See, e.g., United States v. Jones, 565 U.S. 400, 415–16 (2012) (Sotomayor, J., concurring); Steven M. Bellovin et al., When Enough is Enough: Location Tracking, Mosaic Theory, and Machine Learning, 8 N.Y.U. J. L. & LIBERTY 556, 564–65 (2014); Orin S. Kerr, The Mosaic Theory of the Fourth Amendment, 111 MICH. L. REV. 311, 345 (2012).

^{127.} E.g., Sharon Nakar & Dov Greenbaum, Now You See Me. Now You Still Do: Facial Recognition Technology and the Growing Lack of Privacy., 23 B.U. J. SCI. & TECH. L. 88, 89, 100, 104, 109–10 (2017).

this way, body-worn cameras have the potential to not just add a few extra data points to persistent surveillance but to dramatically expand its scope. As technology becomes more sophisticated, with hardware that allows for high-quality streaming and software that allows for real-time facial recognition and behavioral analytics, BWCs may alert officers when they detect an individual with an outstanding warrant or an individual whom an algorithm determines is acting suspiciously.¹²⁸

Body-worn camera video can be used to facilitate machine learning, in which massive amounts of data can be fed through a software algorithm so that "computer systems learn about an underlying process and its patterns by creating a useful mathematical approximation of how the process works. This approximation can then be applied to new data to predict future occurrences of the same phenomena."¹²⁹ In the context of policing, technology companies are using machine learning to develop automated editing tools.¹³⁰ This may prove particularly important in the policing context given the need to redact at least some information from publicly-requested police videos and the significant resources that manual redaction requires. Redaction is hardly the only innovation that might come from running BWC videos through machine-learning algorithms; technologists could use them to train algorithms to identify, inter alia, the frequency and nature of an officer's on-duty activities (for officer evaluation purposes), suspicious behavior,¹³¹ deception,¹³² rudeness¹³³ or unprofessional conduct by officers, behaviors that predict a

^{128.} There are, of course, a variety of potential problems with such usage, including the invasion of privacy and the likelihood that algorithmic analysis can be contaminated by human biases. *See, e.g.*, Julia Angwin et al., *Machine Bias*, PROPUBLICA (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing [https://perma.cc/KD8J-9579]; *see also* Fan, *supra* note 13, at 398; Henderson, *supra* note 13, at 937–38; Levinson-Waldman, *supra* note 13, at 889.

^{129.} Michael L. Rich, Machine Learning, Automated Suspicion Algorithms, and the Fourth Amendment, 164 U. PA. L. REV. 871, 875 (2016).

^{130.} Neural Network for Video Editing, U.S. Patent Application No. 9,456,174, at 57 (filed Jan. 20, 2015) (describing "an automated video editing system").

^{131.} Rich, supra note 129, at 876.

^{132.} See Verónica Pérez-Rosas et al., Deception Detection Using Real-Life Trial Data, PROC. 2015 ACM ON INT'L CONF. ON MULTIMODAL INTERACTION 59, 59 (describing a study which used a "multimodal deception detection system" to determine whether statements made during testimony were truthful).

^{133.} See Lisa Pearl & Mark Steyvers, "C'mon – You Should Read This": Automatic Identification of Tone from Language Text, 4 INT'L J. COMPUTATIONAL LINGUISTICS 12, 20–24 (2013) (studying machine learning techniques used to detect different tones, including rudeness, from text).

civilian's impending flight from or violent assault of officers,¹³⁴ behaviors indicative of mental illness or drug impairment,¹³⁵ and so on. Using the results of that machine learning could allow for the integration of body-cameras, GPS systems, and police computer-aided-dispatch systems.

Officers do not learn the same way that machine-learning algorithms do, of course, but modern police training involves a substantial number of videos. As a number of scholars have noted, police training heavily prioritizes real world experience,¹³⁶ and video offers a rare window into which would-be officers can see what the world is really like.¹³⁷ One common theme can be found in "officer survival" videos, which attempt to remind officers of the dangers of complacency¹³⁸ by showing officers being brutally attacked,¹³⁹ disarmed,¹⁴⁰ or killed. Indeed, it is the rare officer who has not seen the video-recorded line-of-duty deaths of Laurens County, Georgia Deputy Kyle Dinkheller¹⁴¹ or South Carolina Trooper Mark Coates.¹⁴²

135. For example, officers can be trained as a "drug recognition expert[s]" who use a standardized protocol to "recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol." *Drug Recognition Experts (DRE)*, THE INT'L DRUG EVALUATION & CLASSIFICATION PROGRAM, http://www.decp.org/drug-recognition-experts-dre/ [https://perma.cc/XMQ6-7FQ7].

136. DAVID A. HARRIS, FAILED EVIDENCE: WHY LAW ENFORCEMENT RESISTS SCIENCE 67 (2012); Seth Stoughton, *Evidentiary Rulings as Police Reform*, 69 U. MIAMI L. REV. 429, 456–60 (2015).

137. For example, in The Line of Duty, a police training company that started producing and marketing VHS video training to police agencies in 1995 and today offers "[o]ver 300 video courses covering virtually every aspect of law enforcement training" in a large library of streaming, downloadable, and DVD videos. *FAQs*, IN THE LINE OF DUTY, http://www.lineofduty.com/faqs/ [https://perma.cc/6P99-NHWT].

138. See SCOTT FIELDEN, THE MIND OF A COP. WHAT THEY DO AND WHY THEY DO IT 21 (2009) ("If we have to use force to ensure our safety, we're going to do so. That's why we won't hesitate to come down on somebody like a ton of bricks in a tornado if we need to.").

139. Associated Press, *Police: Officer Punched During Traffic Stop*, YOUTUBE (Jul. 22, 2010), https://www.youtube.com/watch?v=-eTcaF_6ILc.

140. PoliceOfficerSafety, Officer Disarmed During Arrest, YOUTUBE (Nov. 29, 2012), https://www.youtube.com/watch?v=tVjVCVDEYIY.

141. Deputy Dinkheller initiated a traffic stop and the motorist became belligerent and aggressive. Ignoring Deputy Dinkheller's repeated commands to the contrary, the motorist reached back into his vehicle, drew a rifle, and ultimately shot Deputy Dinkheller to death. See Thomas Lake, The Endless Death of Kyle Dinkheller: The Trigger and the Choice, CNN (Aug. 2017), http://www.cnn.com/interactive/2017/politics/state/kyle-

^{134.} See PAUL K. DAVIS ET AL., RAND CORP. NAT'L DEF. RESEARCH INST., USING BEHAVIORAL INDICATORS TO HELP DETECT POTENTIAL VIOLENT ACTS: A REVIEW OF THE SCIENCE BASE xiii-xiv (2013), https://www.rand.org/content/dam/rand/pubs/research _reports/RR200/RR215/RAND_RR215.pdf [https://perma.cc/RR4T-2JNL] (describing a study of recent and developing technologies used to "help detect potential violent attacks").

Videos are also used to debrief officers after critical incidents and to train them for high-risk situations such as active shooters,¹⁴³ armed encounters,¹⁴⁴ and so on.

Where the prior examples of potential informational benefits are tightly related to policing itself, it is inevitable that news- and entertainment-media sources will feature BWC video and thus benefit from the additional information that BWCs can provide. Indeed, they have already done so. As of November 2017, the *first page* of a Google News search for "body-camera video" returned links to various news outlets reporting on BWC video that showed, *inter alia*, a Baltimore police officer verbally de-escalating a suicidal man armed with a knife,¹⁴⁵ a Los Angeles police officer allegedly planting cocaine in a hit-and-run suspect's wallet,¹⁴⁶ a Cleveland sergeant who was criminally charged for using excessive force,¹⁴⁷ and

143. Most officers, I expect, have seen video from the 1997 armed robbery of a bank in North Hollywood, California. Matthew Cipolla, *The North Hollywood Shootout*, YOUTUBE (Mar. 12, 2017), https://www.youtube.com/watch?v=d7dLeqEg6b8.

144. JustPoliceVideos, Kalamazoo, MI Police Respond to a Subject Openly Carrying Rifle, YOUTUBE (Jun. 16, 2014), https://www.youtube.com/watch?v=9Ap4reNEbyQ.

146. Amy Powell, Attorney Says Body Cam Footage Shows LAPD Officer Planting Cocaine, ABC7 (Nov. 10, 2017), http://abc7.com/attorney-says-body-cam-footage-shows-lapd-officer-planting-cocaine/2631384/ [https://perma.cc/4BL4-SHKK].

147. Adam Ferrise, Cleveland Police Officer Attacked Woman and Then Arrested Her on False Charges, Court Records Say, CLEVELAND.COM (Oct. 5, 2017), http://www.cleveland.com/metro/index.ssf/2017/10/cleveland_police_officer_charg_12.html [https://perma.cc/4MLN-HYBP].

dinkheller-police-video/ [https://perma.cc/S3GL-37A5] ("Two decades later, a traffic stop on a country road is still teaching police officers about deadly force—and the cost of hesitation."). This video is most often used to teach officers about the dangers of hesitation.

^{142.} Trooper Coates initiated a traffic stop and attempted to conduct a patdown of the motorist when the motorist drew a handgun, shooting Trooper Coates. Trooper Coates was able to use his radio to call for help, but his dispatcher and other officers did not know where he had conducted the traffic stop. Jeff Brown, *Corporal Mark Coates Shooting (Fatal)*, YOUTUBE (May 27, 2015), https://www.youtube.com/watch?v=2FraE77l4fI. This video is most often used to teach officers about the need to inform dispatch of the location of a stop before officers initiate the stop or interact with stopped subjects.

^{145.} Kevin Rector, Body Camera Footage Shows Baltimore Police Officer De-Escalate Standoff with Armed Man in Crisis, BALT. SUN (Nov. 8, 2017, 1:15 PM), http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-villaronga-video-20171108-story.html [https://perma.cc/6LHL-7VPN].

2018]

fatal police shootings in Providence, Rhode Island;¹⁴⁸ Santa Clara, California;¹⁴⁹ and Pueblo, Colorado.¹⁵⁰

In sum, body-worn cameras offer agencies and communities alike potential symbolic benefits, behavioral benefits, and informational benefits.

III. PRACTICAL LIMITATIONS

I assume, dear reader, that there is some significant likelihood that you would appreciate having more money. Have I got excellent news for you! The potential benefits of winning the lottery are simply tremendous, and the causal mechanism is almost laughably simple: play the lottery, win the lottery, report your win, and collect your earnings. In light of this startling, new information, I am confident that you feel a strong, nigh overpowering, temptation to run right out and buy yourself a lottery ticket. And yet, by virtue of the fact that you are reading this sentence,¹⁵¹ I must assume that you have not discarded this Article and run to the nearest store where lottery products are sold.¹⁵² Why not? After all, I have clearly identified the potential benefits of winning the lottery and the causal mechanism by which those benefits can be realized! Perhaps it is because you are aware of the immense practical challenges—namely, the nature of probabilities—that limit your ability to win the lottery.

Part II identified the potential benefits that body-worn camera systems may provide—symbolic benefits, behavioral benefits, and informational benefits—but, as the preceding paragraph makes clear, identifying the potential benefits and describing the causal mechanisms is only the beginning of the analysis. Whether it is fair to expect that any of the potential benefits can or will be realized requires additional consideration, assuming there is video available in

150. Chhun Sun, Watch: Pueblo Police Release Video of Fatal Officer-Involved Shooting, GAZETTE (Nov. 8, 2017), http://gazette.com/watch-pueblo-police-release-video-of-fatal-officer-involved-shooting/article/1614856 [https://perma.cc/GQ9G-EGNL].

151. And apparently even reading this footnote.

152. I acknowledge, of course, that you may very well have done exactly that before returning to finish this Article. I would applaud such diligence, although the probability that my applause is called for seems vanishingly small.

^{148.} Amanda Milkovits & Jacqueline Tempera, Providence Police Defend Shooting that Killed Pickup Truck Driver, Injured Passenger, PROVIDENCE JOURNAL (Nov. 10, 2017, 8:52 PM), http://www.providencejournal.com/news/20171110/providence-police-defend-shooting-that-killed-pickup-truck-driver-injured-passenger [https://perma.cc/R5L4 -VC7S].

^{149.} Lisa Fernandez, Body Camera Video Released in Fatal Santa Clara Shooting of 24-Year-Old Man, KTVU (Nov. 3, 2017, 12:55 PM), http://www.ktvu.com/news/body-cameravideo-released-in-fatal-santa-clara-shooting-of-24-year-old-man [https://perma.cc/JT57-82CG].

1400

the first place.¹⁵³ This Part explores some of the practical limitations of body-worn camera technology and of our ability to use that technology. The following Part addresses the policy considerations that can affect whether BWCs live up to their potential benefits.

A. Limits of Technology

Body-worn cameras are merely another variety of camera, and thus they suffer from the same limitations that we have known about since Nicéphore Niépce first projected an image onto a piece of paper coated with silver chloride some 200 years ago.¹⁵⁴ First and most prominently, there must be sufficient infrastructure to ensure that the relevant officers are equipped with cameras and that the relevant audiences can access the resulting footage of those interactions. The dominant approach at police agencies has been to equip patrol officers with body-worn cameras: by December 2017, for example, the Chicago Police Department had equipped every officer in its twentyfive patrol districts with a BWC.¹⁵⁵ That makes sense; the patrol function is typically the single largest division in most agencies, employing between sixty percent and ninety percent of sworn officers, and typically it is patrol officers who are most salient when it comes to solving crimes.¹⁵⁶ But patrol officers are hardly the only officers who interact with community members in potentially problematic ways; the behavioral and informational benefits of a body-worn camera system will be incomplete if other officers are not similarly equipped. At the Chicago Police Department, which is admittedly much larger than the average police agency, officers assigned to the Canine Unit, the Traffic Section, SWAT, Public Transportation, and the Troubled

^{153.} See infra Section IV.A.

^{154.} HELMUT GERNSHEIM, A CONCISE HISTORY OF PHOTOGRAPHY 9 (3d ed. 1986).

^{155.} Michelle Gallardo & Cate Cauguiran, All Chicago Police Patrol Officers Now Equipped with Body Cameras, Department Says, ABC 7 EYEWITNESS NEWS (Dec. 10, 2017), http://abc7chicago.com/all-cpd-patrol-officers-now-equipped-with-body-cameras/2764478/ [https://perma.cc/ZJ8S-UUSN] ("Chicago now has the largest deployment of body cameras in the nation.... In total, more than 7,000 Chicago police personnel are now equipped with body cameras."); see also Ryan Dunn, Body Camera Issued to Each Patrol BLADE Officer at Toledo Police Department, THE (Oct. 20. 2017). http://www.toledoblade.com/Police-Fire/2017/10/20/Body-camera-issued-to-each-patrolofficer-at-Toledo-Police-Department.html [https://perma.cc/7VCE-BUMD] (explaining a similar plan for patrol officers in Toledo, Ohio); Mark Wilson, Austin Officers Who Patrol Neighborhoods to Get Body Cameras Soon, MYSTATESMAN (Sept. 15, 2017, 4:41 PM), http://www.mystatesman.com/news/local-govt--politics/austin-officers-who-patrol-neighborhoods -get-body-cameras-soon/tgcx33iP9pUjq2CW1lgD3I/ [https://perma.cc/88NU-WKML] (explaining that the Austin, Texas Police Department will soon "roll out its first large batch of body cameras for officers working outside of downtown").

^{156.} Seth W. Stoughton, Policing Facts, 88 TUL. L. REV. 847, 878-79 (2014).

Buildings Unit fall under the Bureau of Patrol but are not assigned to one of the twenty-five patrol districts.¹⁵⁷ Meanwhile, officers who investigate property crimes, violent crimes, and youth investigations and officers working in the Fugitive Apprehension Unit, the Major Auto Theft Investigation Unit, and the Violent Crimes Task Force are operationally in the Bureau of Detectives, which is not scheduled to receive body-worn cameras,¹⁵⁸ nor are officers who work in the Narcotics Division, the Gang Investigations Division, or the Vice and Asset Forfeiture Division, which are organized under the Bureau of Organized Crime.¹⁵⁹ In short, the first infrastructure problem arises from the difficult problem of equipping *all* officers, investigators, and detectives who regularly interact with the public by, *inter alia*, initiating stops, making arrests, and conducting interviews. The benefits that may accrue from equipping specialized units must be weighed against the unique challenges that doing so would entail.¹⁶⁰

Similarly, a majority of agencies allow their officers to work in a police capacity for private employers while off-duty;¹⁶¹ if these officers are not equipped with or required to wear BWCs,¹⁶² that absence can limit the behavioral and informational benefits of having the technology. Simply put, if officers are not wearing the cameras while they are working in a uniformed-police capacity—even if that work is performed for the private employer—cameras cannot record their

158. Id. at attachment 5.

159. Id.

161. See Seth W. Stoughton, *Moonlighting: The Private Employment of Off-Duty Officers*, 2017 U. ILL. L. REV. 1847, 1849–50 (2017) (explaining that agencies often encourage moonlighting, which "increase[s] police visibility in the community" and "supplements agency staffing").

162. AP Exclusive: Moonlighting Police Leave Body Cameras Behind, ABC NEWS (Jun. 11, 2017), http://abcnews.go.com/amp/Technology/wireStory/ap-exclusivemoonlighting-police-leave-body-cameras-home-47965683 [https://perma.cc/86ZV-MQT7]; see also POLICING PROJECT, N.Y. UNIV. SCH. OF LAW, NYPD Body-Worn Camera Proposed Policy: Fact Sheet, POLICINGPROJECT.ORG https://policingproject.org/nypdbody-worn-camera-proposed-policy-fact-sheet/ [https://perma.cc/UJ79-HLB9] (summarizing the NYPD body-cam policy without mention to any off-duty protocol).

1401

^{157.} CHI. POLICE DEP'T, ORGANIZATIONAL OVERVIEW: BUREAU OF PATROL, attachment 4 (2017), https://home.chicagopolice.org/wp-content/uploads/2014/12/org-for-command-DRAFT-87-CW-revisions-to-Forensic-Services-Division-15AUG17-FINAL.pdf [https://perma.cc/DF39-F3LV].

^{160.} See JANNE E. GAUB, NATALIE TODAK & MICHAEL D. WHITE, BEYOND PATROL: EXPLORING THE PERCEPTIONS OF POLICE BODY-WORN CAMERAS AMONG OFFICERS IN SPECIALIZED UNITS III (2017), https://www.bwctta.com/sites/default/files /Files/Resources/Specialty%20Unit%20Report%20Final%202-17_1.pdf [https://perma.cc /ZYG5-VZD3] ("BWCs may not be appropriate for certain specialized units, and Department leadership should carefully weigh the advantages and disadvantages of deployment for each unit.").

interactions and are unlikely to exert any influence on behavior. Worse, the failure to equip officers with BWCs can undermine the symbolic benefits by leading community members to conclude, even unfairly, that the agency's efforts were superficial and not seriously intended to improve transparency and accountability.

On the other side of the camera, inadequate infrastructure-that is, insufficient time and resources-can preclude everyone who needs to see the video to achieve the desired benefits from being able to do so. A supervisor cannot effectively use BWC videos to more closely monitor the officers on her squad if, for example, the current demands on her time are already so burdensome as to limit or preclude her from reviewing the videos. Beyond police supervisors, several aspects of the potential informational benefits require prosecutors, defense attorneys, and judges to be able to access video recordings. Several manufacturers record video in proprietary file formats, which either require special software to review or which must be manually exported in a different format, marginally reducing availability.¹⁶³ Finally, internet-based video management systems, such as Axon's (formerly known as TASER International) Evidence.com, require viewers to accept "Terms and Conditions" before viewing the video; several defense attorneys have refused to do so, arguing that such an arrangement "effectively requires users to sign away some of their legal rights in exchange for receiving public records" that they have a right to obtain and review.¹⁶⁴ In short, if cameras are not where we need them to be and the relevant entities cannot or will not review the footage, the technology is unlikely to fulfill the full extent of the potential benefits.

Even when there is video footage from the proper person to review and the proper person actually reviews it, a body-worn camera still suffers from unavoidable practical limitations. Most obviously, someone can obscure the object from the camera: an officer's arm may get in the way or a drop of rain on the exterior of the lens may distort the image. Just as importantly, however, is the camera's limited field of view, meaning the extent of the visible image. An officer's BWC will never capture the details of that officer's

^{163.} SAVER PROGRAM, SCI. AND TECH. DIRECTORATE, U.S. DEP'T OF HOMELAND SEC., BODY-WORN VIDEO CAMERAS FOR LAW ENFORCEMENT MARKET SURVEY REPORT 2-3 (2015), https://www.dhs.gov/sites/default/files/publications/Body-Worn-Cams-MSR_0615-508_1.pdf [https://perma.cc/2RZU-2JP5].

^{164.} Janus Kopfstein, Police Body Camera Giant Made Lawyers Sign Away Client Footage, VOCATIVE (May 12, 2017 3:53 PM), http://www.vocativ.com/429096/police-bodycamera-taser-axon-made-lawyers-sign-away-client-footage/index.html [https://perma.cc /RG9L-VLQD].

behavior—their stance, body language, and specific movements simply because the camera is outward looking. In cases where it is important to know, for example, exactly when an officer drew their baton or raised it up to strike, the officer's BWC footage simply will not help answer that question.

Further, a camera's field of view is narrower than of the human eye. The human eye has, in most cases, a rather large horizontal field of view. To test this, put your arms straight out in front of you and start wiggling your fingers. Keeping your eyes focused straight ahead, slowly open your arms while you continue to wiggle your fingers. Stop opening your arms when you can just barely see your fingers moving out of the corners of your eyes. Most people will find that they have opened their arms somewhere between 170° and 200°. Cameras have substantially more restricted fields of view. The Axon Body 2 has one of the widest available horizontal fields-of-view at 143°.¹⁶⁵ The Vievu LE3 body-worn camera, in contrast, has a 68° diagonal field of view.¹⁶⁶

At the same time, however, a camera's effective field of view is actually wider than that of the human eye. Everything that appears within the camera's field of view is in focus, but human vision is more limited. Our central angle of view is 40-60°, and the field of sharp visual acuity, known as fovea or foveal vision after the fovea centralis, gives us only about two degrees of sharp focus.¹⁶⁷ To "see" objects that do not fit within *foveal* vision, we must move our eyes around the image so that our brain can stitch together the different pieces we have put in our fovea.¹⁶⁸ To demonstrate this, stand about arm's length from someone and ask him to describe your face; watch his eyes and you will see them shifting back and forth as he moves his foveal vision around your face. Cameras, however, have no such limitations. In short, sometimes officers will see things that the camera does not (as when the camera is pointed straight ahead and the officer sees something at the edge of their vision) and sometimes the camera will see things that the officer does not (as when the

^{165.} AXON Body 2, AXON, https://www.axon.com/products/body-2 [https://perma.cc /QD47-HY3A].

^{166.} Body Camera Comparison: A Look at Camera Specs Side-by-Side, MIAMI VALLEY RISK MANAGEMENT ASSOCIATION, http://www.mvrma.com/pdfs/BWC %20comparison%20chart.pdf [https://perma.cc/LZR4-7MKA].

^{167.} Robert P. O'Shea, *Thumb's Rule Tested: Visual Angle of Thumb's Width is About 2 Degrees*, 20 PERCEPTION 415, 415 (1991).

^{168.} Alex Burmester, *How Do Our Brains Reconstruct the Visual World*? THE CONVERSATION (Nov. 5, 2015, 6:11 AM), http://theconversation.com/how-do-our-brains-reconstruct-the-visual-world-49276 [https://perma.cc/S2QB-6ZEG].

officer's vision is focused on a subject's right hand but the camera can see both hands).

Field of view can also affect the viewer's perception of distance. Imagine two cameras set up the same distance from a person. In the video from the camera with the narrower field of view, the person will appear closer than he does in the video from the camera with the wider field of view. And both will look different than if you placed your eyes where the cameras were located. Anyone who has attempted to photograph something only to be disappointed in how small the object turns out in the picture has seen firsthand an everyday example of the difference between her own field of view and a camera's.

Digital video recording technology also presents some practical limitations on informational benefits of body-worn cameras. Consider a high-definition image with a resolution of 1920 by 1080, or 1920 pixels horizontally by 1080 pixels vertically, for a grand total of 2,073,600 pixels. Video is nothing more than a series of still images recorded in sequence and played back at a high enough rate—known as the "frame rate"—that our brains see movement and motion. With a standard twenty-four-frame rate video, then, there are twenty-four separate images in each second of video, which means that one second of video made up of separate digital images (known as "raw" video) would have 49,766,400 pixels.¹⁶⁹ For many devices, that would be memory-prohibitive: it would simply take more electronic space than most devices have. The solution is compression of digital video, which one article refers to as "the art of throwing as much data away as possible without it showing."¹⁷⁰ The article explains:

By the end of the 1990s, the dominant techniques were based on a three-stage algorithm known as DCT (Discrete Cosine Transform). DCT uses the fact that adjacent pixels in a picture – either physically close in the image (spatial) or in successive images (temporal) – may be the same value. A mathematical transform ... is performed on grids of 8×8 pixels (hence the blocks of visual artefacts at high compression levels). It doesn't reduce data but the resulting coefficient frequency values are no longer equal in their information-carrying roles. Specifically, it's been shown that for visual systems, the lower frequency components are more important than high frequency ones. A

^{169.} Ryan Knott, Frame Rate: A Beginner's Guide, TECHSMITH (March 28, 2017), https://www.techsmith.com/blog/frame-rate-beginners-guide/ [https://perma.cc/HE5Z-V5K6]. 170. Digital Video Compression, PCTECHGUIDE, https://www.pctechguide.com/digital-

video/digital-video-compression [https://perma.cc/48H4-99HE].

quantisation process weights these accordingly and ejects those contributing least visual information, depending on the compression level required.¹⁷¹

In layman's terms, the software applies a "codec" that reviews the separate still images in each frame and looks for small pieces of the image that are similar to each other. If the pieces are sufficiently similar, the software discards one of them and keeps the other, displaying it in both frames. The codec repeats this for the next frame of the image in which it detects no changes or only changes that it believes would not be visible to the human eye.¹⁷² In short, a compressed recording from a digital-video camera, including a BWC, is not a reflection of still pictures taken every 1/24th of a second and then put together; instead, it is a collection of pieces of still pictures that are reassembled according to the instructions in the codec. The quality of the codec, then, can affect whether compressed video is an accurate reflection of what it recorded.

Body-worn cameras can provide informational benefits, but those benefits are only as good as the practical limitations of the hardware allow. Despite the superficial similarities, BWCs are not just another source of visual and auditory information akin to human eyes and ears. Even a head-mounted camera will not provide an officer's-eye view of the situation, to say nothing of and shoulder or chest-mounted cameras, and the human eye cannot see the infra-red spectrum the way some cameras can. In short, BWCs will record less, more, and differently than a human would see, all at the same time.

B. Limits of Human Interpretation

The potential for body-worn cameras to have informational benefits assumes that viewers will be able to accurately interpret the recorded videos, but just as digital cameras have inherent limitations, so too do their users. We all suffer from a range of cognitive limitations that can affect our ability to interpret evidence, including video footages. Cognitive biases are, in essence, mental frameworks that help us analyze the otherwise overwhelming flood of information that we perceive in every conscious moment. Without our ever being aware of it, our brains seek to reduce the amount of effort that processing information requires by filtering current perceptions through the lenses of previous experience, identity, and expectation,

Electronic copy available at: https://ssrn.com/abstract=3094334

^{171.} Id.

^{172.} For an easy to follow explanation of this concept, see David Shelburne, *Digital Video Compression*, YOUTUBE (Mar. 16, 2014), https://youtu.be/nOo3SCihTZI?t=116.

drawing associations between certain observations and predicted outcomes or possibilities.¹⁷³

One such cognitive bias is motivated reasoning, defined as "the tendency of people to conform [their] assessments of information to some goal or end [other than] accuracy."¹⁷⁴ When evaluating information, legal scholar and psychologist Dan Kahan explains,

[t]he goal of protecting one's identity or standing in an affinity group that shares fundamental values can generate motivated cognition relating to policy-relevant facts If a proposition about some policy-relevant fact comes to be commonly associated with membership in such a group, the prospect that one might form a contrary position can threaten one's standing within it.¹⁷⁵

Relatedly, the tendency to interpret information in a way that confirms one's preexisting worldview or beliefs—what Kahan calls "identity-affirmation" or "identity-protective cognition"¹⁷⁶—also affects the way we see the world. Together, motivated reasoning and identity confirmation bias can lead us to unconsciously interpret evidence, including video, so that we see what we expect and want to see.

In the policing context, a study by YouGov can serve as an example of motivated reasoning and confirmation bias in perceptions of police officer and subject honesty. Respondents were given a hypothetical situation in which a police officer has arrested a suspected criminal and "both are complaining that they have been assaulted by the other."¹⁷⁷ Respondents were asked who was most likely to be telling the truth. Among white respondents, 44% believed the officer was most likely telling the truth, 29% believed they were equally likely to be telling the truth, and 7% believed the suspect was most likely telling the truth.¹⁷⁸ Among black respondents, only 4%

175. Id.

176. Dan M. Kahan & Donald Braman, *Cultural Cognition and Public Policy*, 24 YALE L. & POL'Y REV. 149, 150 (2006).

177. Reveal Public Survey on Body Worn Cameras, YOUGOV, PLC (Sept. 2015) (on file with the North Carolina Law Review).

178. Id.

^{173.} DANIEL KAHNEMAN, THINKING FAST AND SLOW 20–21 (Farrar, Straus & Giroux eds., 2011) (describing the dual process theory of human cognition, comprised of "System 1" thinking, which consists of subconscious reflexive assessments and responses to sudden stimuli and "System 2" thinking, which is marked by conscious deliberation or the use of logic).

^{174.} Dan M. Kahan, Ideology, Motivated Reasoning, and Cognitive Reflection, 8 JUDGMENT & DECISION MAKING 407, 408 (2013).

thought the officer was likely to be telling the truth, 41% thought they were equally likely to be telling the truth, and 20% thought the suspect was likely to be telling the truth.¹⁷⁹ Respondents lacked any reliable information upon which to base their conclusions about the officer's and suspect's honesty, so their perceptions were shaped instead by their own identities and expectations. The results are consistent with the findings of well-known studies finding that whites and blacks report very different levels of confidence in the police.¹⁸⁰

The same phenomenon plays out when individuals watch videos; their perceptions of the video will be affected by their prior attitudes toward the police.¹⁸¹ I worked with The New York Times to develop an interactive feature that involved viewers identifying their perception of police and interpreting a series of ambiguous videos. The methodology was not scientifically rigorous-some questions had 55,000 responses while some had more than 77,000 responses, viewers could submit responses multiple times, and there was no way to control the environment in which viewers watched the video or whether a previous viewer shared information about the video with a future viewer-but the results were nevertheless notable. After watching a video of an officer who approaches a vehicle and then falls to the ground as the driver exists the vehicle, viewers were asked whether they saw a "serious threat" to the officer: a serious threat was reported by twenty-eight percent of individuals who indicated that they generally trust the police, but only by nineteen percent of the individuals who indicated that they generally distrust the police.¹⁸²

In a much more rigorous study, Roseanna Sommers tested study participants by first evaluating whether they identified with the police ("high identifiers") and then determining whether that identification affected their evaluation of videos from three police interactions.¹⁸³ Study participants were asked about the facts of each video, whether the officer was fair, and whether the officer's actions were

^{179.} Id.

^{180.} See, e.g., RICH MORIN & RENEE STEPLER, PEW RESEARCH CTR., THE RACIAL CONFIDENCE GAP IN POLICE PERFORMANCE 3 (2016), http://www.pewsocialtrends.org/2016/09/29/the-racial-confidence-gap-in-police-performance/[https://perma.cc/4L9S-66L6].

^{181.} See Roseanna Sommers, Developments in the Law—Policing: Considering Police Body Cameras, 128 HARV. L. REV. 1794, 1812–14 (2015) (discussing the questionable objectivity of body-camera video).

^{182.} Timothy Williams et al., *Police Body Cameras: What Do You See*?, N.Y. TIMES (Apr. 1, 2016), https://www.nytimes.com/interactive/2016/04/01/us/police-bodycam-video.html [https://perma.cc/L2AU-AWG5].

^{183.} Roseanna Sommers, Note, Will Putting Body Cameras on Police Reduce Polarization?, 125 YALE L.J. 1304, 1318-22 (2016).

appropriate.¹⁸⁴ She found that "viewers' prior attitudes toward the police color their interpretations of the events caught on tape."¹⁸⁵ Specifically,

[f]or factual judgments, across all three videos, respondents who strongly identified with police were more likely to find facts favoring the police. In other words, high identifiers were less likely to agree that the officer displayed or used weapons, that the officer used insulting language, or that the citizen complied with the officer's requests. A similar pattern was observed for fairness judgments, the second outcome variable. Across all three videos, high identifiers thought the police officer acted more fairly and respectfully than did low identifiers. On the third outcome variable—global judgments the same pattern was again observed. High identifiers were more likely than low identifiers to find that the police officer acted appropriately and lawfully. They were less likely to believe that the police officer deserved punishment.¹⁸⁶

Even more importantly, Sommers found that video was about as susceptible to motivated reasoning as other forms of evidence, leading her to conclude that "video evidence is not worse than other types of testimony, but whether it is superior to the alternatives remains an open question."¹⁸⁷ However, she notes, individuals who saw video are more certain that their conclusions are correct than individuals who reviewed other forms of evidence: "When we compare the responses of participants given video and nonvideo testimony, we find that those who saw the videos and already identified with the police were more likely to express certitude in their judgment that the officer had acted reasonably or unreasonably."¹⁸⁸

Beyond our own general tendency to view (video) evidence in a way that confirms our preexisting worldview, there are specific biases that can limit our ability to draw accurate conclusions from video. One such cognitive limitation is "camera perspective bias," illuminated in the interrogation context by Daniel Lassiter and his coauthors. In their study, actors reenacted a police interrogation that was recorded in five different ways: there was a written transcript, an audio recording, a video recording taken from over the detective's

184. Id.
 185. Id. at 1304.
 186. Id. at 1322–23.
 187. Id. at 1345.
 188. Id. at 1346.

shoulder and focused on the suspect (the "suspect-focus" camera), a video recording taken from over the suspect's shoulder and focused on the detective (the "detective-focus" camera), and a video recording taken from a high vantage point with both the detective and the suspect in the frame (the "equal-focus" camera).¹⁸⁹ Study participants were assigned to view one of the five records of the interrogation and to evaluate how coercive or voluntary the suspect's ultimate confession was. The participants who read the transcript, listened to the audio recording, or watched the equal-focus video reported roughly equal levels of coercion and voluntariness, but not so with the other two groups of participants.¹⁹⁰ The participants who watched the suspect-focus video reported a higher degree of voluntariness and a lower degree of coercion than the transcript, audio recording, and equal-focus groups, while the participants who watched the detective focus video reported a lower degree of voluntariness and a higher degree of coercion.¹⁹¹ The result demonstrates a cognitive psychology concept of "illusory causation," which refers to people's tendency to "overattribute causality to a given stimulus when it is salient or the focus of their attention."¹⁹² In short, the participants who watched the suspect-focus video overestimated the extent to which the suspect was the cause of the confession because the suspect dominated the video they watched, while the participants who watched the detective-focus video did exactly the same with the detective. In later studies, Lassiter concluded that "people's literal point of view affects how they initially perceive, or extract, information from an observed interaction, which in turn affects their judgments regarding the causal influence exerted by each interactant."193

Illusory causation has obvious implications for the potential for body-worn cameras to provide informational benefits. The various manufacturers of BWCs make a variety of models that officers can wear on their heads, shoulders/lapels, or chests, but as noted above, all of them are outward facing. Viewing recorded interactions through that keyhole will lead watchers to overattribute causality to the

^{189.} G. Daniel Lassiter et al., Accountability and the Camera Perspective Bias in Videotaped Confessions, 1 ANALYSES SOC. ISSUES & PUB. POL'Y 53, 54–55 (2001); see G. Daniel Lassiter et al., The Potential for Bias in Videotaped Confessions, 22 J. APPLIED SOC. PSYCHOL. 1843 (1992) [hereinafter Lassiter, Potential for Bias].

^{190.} Id. at 1847-48.

^{191.} Id.

^{192.} G. Daniel Lassiter et al., *Illusory Causation: Why it Occurs*, 13 PSYCHOL. SCI. 299, 299 (2002).

^{193.} Id.

individuals with whom the officer is interacting. That tendency is problematic not just in the context of confessions, but also when viewers are being asked to determine the validity of a subject's consent to an officer's request to stop and chat or to search, the events that precipitated a subject's flight or an officer's use of force, and so on. Camera-perspective bias may suggest that officers are passive observers, merely reacting to the individuals they encounter, when that is not the case.

Interpretation of video is also subject to misinterpretation because of a phenomenon I have come to call "deceptive intensity," which refers to our tendency to overestimate the amount and speed of movement, and thus the intensity of the action, in body-worn camera footage. Deceptive intensity results from a confluence of the camera's location, the way BWCs move, and the way we perceive motion. With regard to the camera's location, Hollywood directors have known for years that positioning the camera underneath the subject so the upward angle of the show exaggerates the subject's height and the breadth of their shoulders. A shoulder- or chest-mounted camera will duplicate that effect, particularly when officers are physically close to the subject being recorded. To see why, stand within arm's reach of someone roughly your height and lock eyes with them. Maintain eye contact and, while they remain standing, bend your knees until your eyes are roughly even with their chest (and where your chest had been when you were standing upright). The person in front of you will look substantially taller and may appear broader, and thus more intimidating. Further, as fear increases, our perception of distance changes; threatening individuals appear closer to us than nonthreatening individuals.¹⁹⁴ And, of course, an individual who is too close to the camera will effectively block out the image entirely, leaving viewers to base their interpretations of events on the recorded sounds of the interaction.

Deceptive intensity also results from the exaggerated movement of the camera itself. Body-worn cameras clip onto glasses, hats, headbands, lapels, or shirts; even those that clip into mounts secured behind shirts or in bullet-proof vests are attached to clothing. Whatever the body-worn camera attaches to, it is not so tightly connected to an officer's body that it will mimic exactly her movements. Instead, it will bounce around, thrown about by the sway of an officer's head or the jostling of an officer's chest.

^{194.} Shana Cole et al., Affective Signals of Threat Produce Perceived Proximity, 24 PSYCHOL. SCI. 34, 35 (2013).

Because of the way our brain interprets motions, however, we are unable to cognitively compensate for the exaggerated movement when we watch BWC video. The inner ear gives us our vestibular sense of body movement and balance, while proprioceptors in our muscles and joints give us a sense of proprioception, or where our body parts are.¹⁹⁵ These senses are reason that you are not generally dizzy when you wake up in a horizontal position and why you do not have to look for your hands; without any conscious activity on your part, your brain knows what position you are laying in and where your body parts are.¹⁹⁶ When you open your eyes, they provide additional data that your brain uses to calibrate your position and balance.¹⁹⁷ Your eyes are subject to the vestibulo-ocular reflex, which stabilizes your retina by moving your eyeballs slightly slower than you move vour head.¹⁹⁸ Further, your brain engages in visual saccadic suppression; in the split second that your eyes are actually moving, your brain interrupts visual processing-you are temporarily blind without ever being aware of it.¹⁹⁹ This can be easily demonstrated by standing in front of a mirror and looking from one eye to the other; saccadic masking makes it impossible for you to ever see your own eve movements.

Your brain takes in and processes a massive amount of information to interpret movement and compensate for that movement as it processes visual signals, but that information is simply missing when you watch a video. Because we are not "in" the movement, we cannot feel the movement, and because it is not our bodies, eyes, and brains experiencing and recording the movements, the images are not steadied by the vestibulo-ocular reflex and saccadic masking. As a result, the movements can appear dramatically exaggerated. To see this for yourself, start recording a video on your smart phone and place the phone on your forehead so the camera is facing in the same direction that you are looking. Fix your eyes on something in front of you; keeping your eyes focused on whatever you selected and keep your phone firmly against your forehead. Now

^{195.} Human Vestibular System in Space, NAT'L AERONAUTICS & SPACE ADMIN. (Feb. 26, 2004), https://www.nasa.gov/audience/forstudents/9-12/features/F_Human_Vestibular _System_in_Space.html [https://perma.cc/8MGP-LAFM].

^{196.} Id.

^{197.} Id.

^{198.} Michael Fetter, Vestibulo-Ocular Reflex, in 40 NEURO-OPTHALMOLOGY: NEURONAL CONTROL OF EYE MOVEMENTS 35 (A. Straube & U. Büttner eds., 2007).

^{199.} Bruno G. Breitmeyer & Leo Ganz, Implications of Sustained and Transient Channels for Theories of Visual Pattern Masking, Saccadic Suppression, and Information Processing, 83 PSYCHOL. REV. 1, 26 (1976).

use the tip of your nose to spell your full name in the air as quickly as you can. When you finish, remove the phone from your forehead and stop recording. Did you have any trouble keeping your eyes focused on the object you were looking at? No, almost certainly not. Now watch the video; the object you had no trouble keeping in focus is probably jumping in and out of the frame, whipping around like mad. Could someone who watched the video without any prior knowledge of how it was filmed conclude that you were sitting or standing calmly and wiggling your nose in the air?

I demonstrate the application of this phenomenon in the police context using a video of a simulated foot pursuit in which I play the role of an officer, wearing a Bodycam brand BWC, chasing a fleeing suspect played by one of my students. The link to the video is in the footnote;²⁰⁰ I urge readers to view the video and to evaluate each separate section—body-worn camera video of the foot pursuit without audio, body-worn camera video of the foot pursuit with audio, and a bystander's video of the foot pursuit—on a scale from one (a normal walking pace) to ten (Usain Bolt sprinting downhill with a tailwind). Is your perception of the speed of the foot pursuit from the BWC video faster or slower than your perception of speed in the bystander's video?

At this point, one might be forgiven for assuming that our interpretation of video would be more accurate if viewers had more time to process the recorded events. That assumption, though, is not borne out by the evidence. Not only is there no evidence to suggest that slowing the video down will allow for an improved interpretation of movement, but work published last year in the Proceedings of the National Academy of Sciences suggest that a "slow motion intentionality bias" leaves us ill-equipped to properly interpret slowmotion video.²⁰¹ In a series of eight different experiments, Eugene Caruso asked study participants to review a video of a real-world incident—either a murder or a violent contact in professional football—and evaluate the extent to which the actor intended their actions.²⁰² Some study participants were shown a full-speed video, while others were shown a slow-motion video.²⁰³ Unsurprisingly, the participants who reviewed the slow-motion video reported that the

^{200.} SethS, BWC Interpretation: Foot Pursuit, YOUTUBE (Nov. 18, 2017), https://www.youtube.com/watch?v=4_x9_DrwoNU&feature=youtu.be.

^{201.} Eugene M. Caruso et al., *Slow Motion Increases Perceived Intent*, 113 PROCEEDINGS OF THE NAT'L ACAD. SCI. 9250, 9250 (2016).

^{202.} Id.

^{203.} Id.

actor acted with a higher degree of intent and deliberation than did the participants who watched the regular speed video.²⁰⁴ What is surprising, however, is that participants reported similar results even when they were informed, by way of a timer in the video, exactly how much the video had been slowed.²⁰⁵ And, perhaps most surprising of all, viewers who watched a slow-motion video continued to report a higher degree of intent even after they watched the regular speed video: "allowing viewers to see both regular speed and slow motion replay mitigates the bias, but does not eliminate it."²⁰⁶

These biases may be even more troubling given our propensity to be highly confident in our own conclusions, a tendency that may be artificially bolstered even further when our conclusions are based on our review of video evidence.²⁰⁷ Watching a video of an event does not make us an eye witness to the event, despite our inclinations to the contrary. This can be particularly problematic in the legal context; as Erwin Chemerinsky has written, "[I]t is deeply troubling when an appellate court, acting on its own, watches a tape and decides the facts of a case for itself."²⁰⁸ The same may be true in an administrative review of an officer's actions; the relevant question is often whether an officer's perceptions are reasonable, not whether they are accurate.²⁰⁹ Properly reviewing an officer's use of force, for example, requires treating the officer as the initial finder of fact and reviewing their findings (that is, their perceptions) to determine whether they were reasonable under the circumstances.²¹⁰ The risk of a reviewer interjecting themselves as a witness is exacerbated further by cognitive illiberalism, the risk that believing that our own perceptions and conclusions are inherently more objective and reasonable than conflicting perceptions and conclusions will lead us to discount or ignore those who disagree with us.²¹¹

^{204.} Id. at 9251.

^{205.} Id. at 9252.

^{206.} Id. at 9250.

^{207.} Sommers, supra note 183, at 1345-46.

^{208.} Erwin Chemerinsky, A Troubling Take on Excessive-Force Claims, 43 TRIAL 74, 76 (2007).

^{209.} See, e.g., Graham v. Connor, 490 U.S. 386, 396 (1989).

^{210.} SETH W. STOUGHTON ET AL., INVESTIGATING AND EVALUATING POLICE USES OF FORCE, CH. 2 (forthcoming 2018).

^{211.} Dan M. Kahan et al., Whose Eyes Are You Going to Believe? Scott v. Harris and the Perils of Cognitive Illiberalism, 122 HARV. L. REV. 837, 842-43 (2009).

IV. POLICY CONSIDERATIONS

The prior Part identified two types of practical considerations that will play a significant role in determining whether BWCs can achieve the desired results. This Part looks beyond the inherent limitations by examining how the way we *use* body-worn cameras will inevitably affect the end results of that use. There is no single "correct" and obviously superior way of using body-worn cameras; the question, instead, is whether the adoption and implementation of body-worn cameras will advance the anticipated benefits or whether their use will actually undermine those goals.²¹²

This Article fully endorses the conceptual framework that Richard Myers suggests: applying the "life cycle of the video" approach to BWC implementation decisions.²¹³ My work here is intended neither to supplant that approach nor to offer a comprehensive application of it. There are, of course, a massive range of policy considerations that are best addressed through consultation with stakeholders, including officers themselves, interest groups such as the prosecution and defense bar, and individual community members. Policies relating to officer and civilian privacy, notification that an officer is recording and that civilians have (or do not have) the right to request the officer to not record in different situations, the transmission and storage of digital video, retention periods, automated analysis, provision of video to private technology companies for machine-learning purposes, et cetera, can all affect the ultimate results of an agency's BWC program. This Article's goal is to engage in a very limited analysis of policy concerns by identifying four particularly thorny issues that will exert a substantial impact on the end effect of body-worn camera programs: video creation, supervisory review, officer review, and discretionary release.²¹⁴

^{212.} See, e.g., THE CONSTITUTION PROJECT, GUIDELINES FOR THE USE OF BODY-WORN CAMERAS BY LAW ENFORCEMENT 16 (2016), https://constitutionproject.org/wpcontent/uploads/2016/12/BodyCamerasRptOnline.pdf [https://perma.cc/T2TC-MR4N] (noting that body-worn cameras "ha[ve] the potential to undermine trust in casual encounters or foment distrust of officers engaged in community policing").

^{213.} 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).

^{214.} For additional reading on these and other BWC policy issues, see generally MICHAEL D. WHITE ET AL., KEY TRENDS IN BODY-WORN CAMERA POLICY & PRACTICE: A TWO-YEAR POLICY ANALYSIS OF US DEPARTMENT OF JUSTICE-FUNDED LAW ENFORCEMENT AGENCIES (2017), http://bwctta.com/sites/default/files/Files/Resources/Policy%20Analysis%20Year%202%20FINAL.pdf [https://perma.cc/CUD2-L8U6].

2018]

A. Video Creation

When will officers activate their BWCs? Which interactions will be recorded and which will not? If an agency or community adopted body-worn cameras with the goal of gathering more informationregardless of how that information will be used-not recording an interaction obviously fails to advance that goal. Worse, it may affirmatively undermine the other potential benefits, both behavioral and signaling. An officer who has not bothered to activate her camera not only has no extra motivation to behave properly but may actually be perversely incentivized to behave in ways that she knows are inappropriate; freedom from observation may serve to relax the bounds of professional behavior. More directly, while some agencies and communities adopted body-worn cameras with the intent to improve police-community relations, an officer's failure to record may actually reduce public trust. In one recent officer-involved shooting, an in-car camera system recorded an officer initiating a traffic stop then pursing the fleeing suspect on foot until both are out of the range of the in-car camera. The officer's body-worn camera was activated some time later, capturing the shooting itself.²¹⁵ The officer's report indicates that the suspect attempted to point a handgun at him, leading to a physical struggle, but those events are described as happening after the officer chased the suspect out of range of the in-car camera system and before the officer activated his body-worn camera.²¹⁶ As in the pre-BWC era, the only available evidence is the officer's own description of events. The problem with that, of course, is that it is all too easy for community members to draw damning inferences from the absence of video in an incident that could have, and should have, been recorded, especially when BWCs were adopted, in large part, to reduce civilian distrust of the police.

Agencies must identify, ex ante, those situations in which officers are required to record, those situations in which officers are permitted to record, and those situations in which officers are prohibited from recording. Further, they should draft that policy with an eye to advancing the potential benefits that led them to adopt body-worn

^{215.} City of Burlington Iowa, 2017 Oct 01 Body Cam Video Officer Riffel, YOUTUBE (Oct. 12, 2017), https://www.youtube.com/watch?v=d9g37tVHiR8; City of Burlington Iowa, 2017 Oct 01 Body Cam Video Officer Chiprez, YOUTUBE (Oct. 12, 2017), https://www.youtube.com/watch?v=g54JfDAT1AQ.

^{216.} Letter from Scott D. Brown, Special Assistant Attorney Gen., Iowa Dep't Justice, to Amy Beavers, Des Moines Cty. Attorney (Oct. 12, 2017), http://www.burlingtoniowa.org /DocumentCenter/View/1958 [https://perma.cc/6RHH-MNEW].

cameras in the first place. An agency that adopted this expensive new technology for the express purpose of changing officer behavior during police-civilian interactions, for example, might lean toward adopting a policy that broadly requires officers to record all or most of those interactions. An agency that is seeking to leverage the informational benefits of BWCs to support their investigations and prosecutions, on the other hand, might adopt a more limited policy that gives officers substantially more discretion to record when they believe it is to their benefit.²¹⁷

B. Supervisory Review

An agency policy that sets out clear standards for mandatory, permitted, and prohibited recording is a necessary component of a robust body-worn camera policy, but that policy means very little in the absence of enforcement. When the Phoenix, Arizona, Police Department first implemented its body-worn camera program, it adopted a fairly broad mandatory recording policy: with a few exceptions, officers were directed to record essentially all of their investigative or enforcement-related encounters with civilians.²¹⁸ Officers, however, did not record most of the incidents that they were required to record; they complied with the mandatory recording policy only 42.2% of the time.²¹⁹ By the end of the trial period, their compliance rate had slipped even further: only about 13.2% of the interactions that officers were required to record were actually being recorded.²²⁰ The Phoenix Police Department's mandatory recording policy was nothing more than a broadly worded paper tiger, in large part because supervisors were not recognizing, evaluating, or addressing officers' failure to abide by the policy. Not only did the lack of activations fail to advance the informational benefits that the BWC program could have provided, it undermined the potential behavioral benefits by establishing a policy violation as the standard operating procedure.221

The Round Lake Park, Illinois, Police Department offers another example of how the failure to properly manage a BWC

1416 .

^{217.} A highly discretionary policy, however, may conflict with the agency's interest in the symbolic benefits including the potential for a body-camera system to improve public trust.

^{218.} KATZ ET AL., EVALUATING THE IMPACT, supra note 87, at 17.

^{219.} Id. at 21.

^{220.} Id.

^{221.} See PETER MOSKOS, COP IN THE HOOD 25 (2008); Seth W. Stoughton, The Incidental Regulation of Policing, 98 MINN. L. REV. 2179, 2229 (2014).

program can impact the program's ultimate success. More than eight months after the agency adopted a body-worn camera system, officers discovered that the cameras had been recording constantly, even when they were purportedly turned off or in "sleep" mode. Officers had inadvertently recorded themselves using the bathroom while onduty and, even more troubling, recorded themselves and their families on their days off.²²² There are a number of troubling implications in that example, but one of them is that no one was reviewing the video footage; the police chief said "that he had been unaware of the recordings until an officer discovered them."²²³

When can and should supervisors review an officer's BWC recordings? Such a review could be made mandatory; supervisors could be required to check a random sampling of an officer's interactions with civilians to ensure both that the officer is recording when he are supposed to be and that an officer is performing his duties appropriately. Alternatively, such a review could be recommended, but discretionary. Or a supervisor could be prohibited from reviewing an officer's videos without some reason to do so, such as a civilian complaint. Under a restrictive review policy, the receipt of a complaint may allow a supervisor to review *all* of the officer's videos (to see, for example, whether the officer is engaging in problematic behavior as a matter of habit) or only the videos related to the specific complaint. Each policy choice has the potential to have some effect on the ultimate outcome of an agency's body-worn camera program.

C. Officer Review

One of the more controversial policy decisions is whether to allow officers to review body-worn camera footage prior to writing their reports. The most common approach appears to allow officers to do so without restriction; that is, officers may review BWC videos prior to writing any or all of their reports. Florida law, for example, now requires police agencies that have adopted body-worn cameras to "permit[] a law enforcement officer using a body camera to review the recorded footage from the body camera, upon his or her own initiative or request, before writing a report or providing a statement regarding any event arising within the scope of his or her official

^{222.} Robert McCoppin, Round Lake Park Cops Sue Village Over Body Camera Bathroom Videos, CHI. TRIBUNE (June 24, 2016), http://www.chicagotribune.com/news /local/breaking/ct-round-lake-park-police-camera-suit-met-20160624-story.html [https://perma.cc /463R-EV6Z].

^{223.} Id.

duties."²²⁴ Other entities, including the National Association of Criminal Defense Lawyers and UpTurn, advocate for the opposite approach: officers should never be allowed to review video footage of an interaction before writing a report.²²⁵

The core concern relates to the potential for officers to base their reports on the body-camera video itself instead of their own perceptions or recollections. In the context of incident or arrest reports, which turn on objective facts rather than the officer's perception, a pre-report review may be relatively unproblematic. An officer writing up a burglary report, for example, should be able to review the recorded interview with the victim so that the officer can include in the report a complete list and description of any stolen items. In the same vein, an officer writing up a DUI arrest would benefit from the ability to review BWC footage so that she can accurately record the ways in which the stopped motorist failed field sobriety exercises. Although officer reports are generally accurate, the availability of video can make them even *more* accurate, allowing agencies to reap the informational benefits of BWCs.²²⁶

Use-of-force reports, however, are a different story. The propriety of a use of force does not turn on the objective facts of the situation but on the reasonableness of an officer's perceptions and actions. In this context, officers should not be able to review BWC footage before writing a report. Most obviously, it creates both the opportunity for deception and, even more importantly, the perception that there is nothing to prevent officers from engaging in deception. To the extent that deception occurs, it may well occur in some occasions as a result of the officer being put in a moral dilemma. Consider, for example, an officer who is interacting with a bellicose subject and notices, out of the corner of her eye, the subject ball his hands into fists. Fearing an attack, the officer preemptively uses force, bringing the subject to the ground. Upon reviewing the video, however, the officer sees that the subject's hands, more clearly visible in the video than in her peripheral vision, were never balled into fists after all. What is that hapless officer to do? Ideally, perhaps, the officer would document her perceptions as well as her knowledge that

^{224.} FLA. STAT. ANN. § 943.1718(2)(d) (West, Westlaw through 2018 Second Reg. Sess. of 25th Legislature through Mar. 30, 2018).

^{225.} JOEL M. SCHUMM, NAT'L ASS'N OF CRIMINAL DEF. LAWYERS, POLICING BODY CAMERAS: POLICIES AND PROCEDURES TO SAFEGUARD THE RIGHTS OF THE ACCUSED 24–25 (2017); UPTURN, THE ILLUSION OF ACCURACY: HOW BODY-WORN CAMERA FOOTAGE CAN DISTORT EVIDENCE 7–9 (2017).

^{226.} See, e.g., D. Dawes et al., Body-Worn Cameras Improve Law Enforcement Officer Report Writing Accuracy, 4 J. L. ENFORCEMENT 1, 7-9, 15 (2016).

her perceptions were inaccurate. Officers are only human, however, and it is entirely plausible to suspect that some number of officers in that position would leave out any mention of balled fists and instead find *something* in the video that they could use to justify their actions.

Beyond concerns about deception, allowing officers to view a video of events may unconsciously change their memory of those events.²²⁷ Human memory is not encoded like digital data; it is subject to decay and alteration without our ever being aware of it.²²⁸ Have you ever, for example, had an argument with a family member or significant other about a factual issue that both you and the other person remember clearly but entirely differently? Even though both parties in such an argument may be highly confident in their own memories, it is clear that one of them, and perhaps both of them, are not, in fact, remembering the events accurately. Because the constitutionality of an officers' use of force requires identifying their contemporaneous perceptions, allowing officers to potentially change their memory of those events can only hinder the accuracy of their report. Someone clearly needs to watch the video to determine whether the officer's perceptions were reasonable under the circumstances, but that is not a question for the officer herself.

Whether an agency allows an officer to review body-worn camera footage before writing a report, particularly a use-of-force report, can have a significant effect on the potential symbolic benefits, behavioral benefits, and informational benefits of a BWC program.

D. Discretionary Release

The last policy consideration I will discuss involves the discretionary release of BWC footage to the public or interested parties. Keith Scott was shot and killed by Charlotte-Mecklenburg police officers on September 20, 2016.²²⁹ Shortly after the shooting, the agency announced that several officers had been equipped with body-worn cameras and that there was video of the incident; however, the agency refused to release that video.²³⁰ The agency

^{227.} UPTURN, supra note 225, at 5; Dawes et al., supra note 226, at 2.

^{228.} See generally Elizabeth F. Loftus, Creating False Memories, 277 SCI. AM. 70 (1997) (discussing flaws and weaknesses of memory).

^{229.} Protests Break Out After Man Killed in Officer-Involved Shooting In Charlotte, WCCB CHARLOTTE (Sept. 21, 2016), http://www.wccbcharlotte.com/2016/09/21/suspectdead-officer-involved-shooting-university-area/ [https://perma.cc/48V2-NG3J].

^{230.} Ames Alexander, CMPD Withholding More Than Two Hours of Video From Scott Shooting, CHARLOTTE OBSERVER (Sept. 28, 2016), http://www.charlotteobserver.com/news/special-reports/charlotte-shooting-protests /article104672831.html [https://perma.cc/9V8U-Y6QZ].

instead furnished only a description of BWC video, saying the videos contained nothing of "relevance."²³¹ The shooting had already received public attention and criticism, especially after Mr. Scott's wife released a video she had taken on her cell phone, and the refusal to release the officers' videos quickly exacerbated community tensions.²³²

Charlotte-Mecklenburg's experience is by no means atypical; agencies that have used body-worn camera videos to promote positive images of their officers on social media and to defend their officers' actions in the court of public opinion have also demonstrated some reluctance to release video that is ambiguous or suggestive of wrongdoing.²³³ And yet agencies that refuse to release video or do so only reluctantly can seriously undermine public trust; it is no great exaggeration to say that having body-worn cameras but refusing to release video will often prove worse, from a police-community relations standpoint, than not having BWCs in the first place. As the New Jersey Supreme Court wrote:

[I]n the case of a police shooting, non-disclosure of dash-cam videos can undermine confidence in law enforcement and the work that officers routinely perform. It can also fuel the perception that information is being concealed—a concern that is enhanced when law enforcement officials occasionally reveal footage that exculpates officers.²³⁴

The Seattle Police Department offers a powerful example of an agency that chose exactly the opposite approach, at least at one point: for an extended period of time, they posted redacted versions of all activity within seventy-two hours.²³⁵ Delaying the release allows investigators to find and interview the most important witnesses without undermining the integrity of the investigation, but having a specific, short-term deadline for release also mitigates public demands

^{231.} Id.

^{232.} Richard Fausset & Yamiche Alcindor, "Don't Shoot Him": Wife's Pleas to Charlotte Police, N.Y. TIMES, Sept. 24, 2016, at A1.

^{233.} Chicago's prolonged refusal to release video from the Laquan McDonald shooting is another poignant example. Jason Meisner & Jeremy Gorner, *Chicago Forgoes Appeal After Judge Orders Release of Video of Fatal Police Shooting*, CHI. TRIBUNE (Nov. 20, 2015), http://www.chicagotribune.com/news/ct-judge-orders-release-of-video-showing-fatal -shooting-by-police-officer-20151119-story.html [https://perma.cc/76JB-K3K4].

^{234.} N. Jersey Media Grp., Inc. v. Twp. of Lyndhurst, 163 A.3d 887, 907 (N.J. 2017).

^{235.} Cole Zercoe, How the SPD Is Using Youtube to Usher in a New Era of Police Transparency, POLICEONE (May 11, 2015), https://www.policeone.com/police-products/body-cameras/articles/8545907-How-the-SPD-is-using-YouTube-to-usher-in-a-new-era-of-police-transparency/ [https://perma.cc/7B2E-QLTR].

for information. Community members know that they will have the opportunity to view the video evidence for themselves, regardless of whether the video inculpates the officer, exculpates the officer, or is entirely ambiguous. Such a policy avoids any appearance that the agency is hiding information or improperly protecting its officers, which can only bolster public trust.

There are, of course, a host of other policy issues that agencies will need to grapple with, from addressing the security of transmission and storage to the role, if any, of automated analytical tools and from how to best train officers to use BWCs on the street to how to best educate supervisors, investigators, and the public in the limits of video footage. This Part explored four especially thorny policy questions: When must, can, and mustn't officers activate their BWCs? When can and must supervisors check the existence or content of BWC footage? When can officers review BWC footage? And how should the agency handle the discretionary decision to release video footage when that release is not legally required? None of these questions are reducible to a single correct answer. Instead, the answers should be developed with an eye toward achieving the benefits that the agency, working with internal and external stakeholders, has identified and prioritized.

CONCLUSION

The adoption of BWCs is both widespread and growing, and it is not difficult to see why. Police executives and community leaders, elected officials and activists, officers and, of course, BWC manufacturers have identified with a wide array of potential benefits. Body-worn cameras promise to improve police-community relations, to reduce police uses of force, to enhance the accuracy of use-of-force investigations, to facilitate officer training, to definitely resolve complaints about officer rudeness, to discourage frivolous complaints, to support criminal prosecutions, to improve officer supervision, to assist in civil litigation, to build public trust, and so on. The assurances that a particularly technology will meaningfully improve various aspects of policing are nothing new. The same promises, or ones like them, were made in the context of in-car camera systems.²³⁶ How can the various claims be fairly assessed so that police agencies and the

^{236.} Long-time police officers and policing scholars will recognize other innovations that were billed as "the solution" to a particular problem. Pepper spray and TASERs were both heralded in their time as significant, if not complete, solutions to the problem of police use-of-force.

communities they serve can determine whether and how to implement a body-worn camera program?

This Article offers a framework for thinking about body-worn cameras. It does so providing a taxonomy of benefits, by identifying limitations, and by discussing policy considerations. It classifies the potential benefits into three different categories and explaining the causal mechanism for each. The first category is symbolic benefits. Symbolic benefits include improvements to public trust and the perception of police legitimacy, which can strengthen the policecommunity relationship. An agency's adoption of BWCs can serve as a signal to constituents that the agency takes community concerns seriously and that the agency is taking affirmative steps to promote professional behavior among officers and reduce uses of force. The second category is behavioral benefits. Body-worn cameras, it is thought, can change both officer and civilian behavior; BWCs will encourage officers to comply with legal and administrative rules and will encourage both officers and civilians to be more civil in their interactions and to reduce resistance and aggression that can contribute to violent encounters. To the extent that we see behavioral changes, those changes may be the result of some combination of the observer effect, deterrence, conformity, or experiential updating. The final category is informational benefits. Video footage, it is commonly believed, is more accurate, objective, and comprehensive than other forms of evidence. Having video footage of police-civilian interactions will shine a critical light on "some of the most opaque domains of criminal procedure."237 The resulting information can be used for police accountability, criminal and civil litigation, investigations, training, machine learning, and in a host of other ways.

It would be a mistake, though, to assume that the adoption of body-worn cameras will lead inexorably to the fulfillment of their various promises. The Article identifies the inherent limitations of body-worn cameras, as well as the people who watch BWC videos, and describes how those limitations can weaken or even undermine cameras' potential value. Even when the limitations are not inherent in the technology or the individuals using the technology, merely *having* a piece of technology cannot begin to guarantee that an agency will enjoy the potential benefits. For that, a BWC program must be carefully considered ex ante, then implemented with an eye toward achieving the agency's goals. A successful implementation will, in most cases, require not just the acquisition of BWCs, but also

237. Fan, supra note 11, at 929.

appropriate policies, procedures, training, and supervision, not to mention some periodic assessment of performance and reconsideration of whether and how the technology is having the desired effect. Failure on one or more of those points may well result in a BWC undermining, rather than facilitating, the desired outcome. This Article identifies a non-exhaustive series of important policy considerations.

In that way, BWCs are no different than other tools. Tools should be used to accomplish normatively desirable tasks when they are an efficient way of accomplishing or facilitating that task. This Article has provided a framework that police executives, elected officials, and community members can apply to make more informed decisions about whether and how body-worn cameras can, in Judge Scheindlin's words, "serve a variety of useful functions."²³⁸

238. Floyd v. City of New York, 959 F. Supp. 2d 668, 685 (S.D.N.Y. 2013).

Electronic copy available at: https://ssrn.com/abstract=3094334

·