

**THE IMPACTS OF BODY WORN CAMERAS ON POLICE-CITIZEN
ENCOUNTERS, POLICE PROACTIVITY, AND POLICE – COMMUNITY
RELATIONS IN BOSTON: A RANDOMIZED CONTROLLED TRIAL**

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Report to the Boston Police Department

July 27, 2018

This work was supported through research funds provided by the City of Boston and the Rappaport Institute for Greater Boston. The authors would like to thank Mayor Martin Walsh, Police Commissioner William Evans, Superintendent Kevin Buckley, Superintendent Frank Mancini, Superintendent John Daley, Amy Condon, Desiree Dusseault, and Dawn Mello for their support and assistance in the completion of this research report.

SUMMARY

- The Boston Police Department collaborated with Northeastern University to develop a randomized controlled trial of its pilot implementation of 100 body worn cameras worn by patrol officers in 5 police districts and plainclothes officers in the Youth Violence Strike Force.
- The Northeastern research team randomly allocated 281 officers into treatment (camera wearers) and control groups from these assignments. The selected officers worked the day and first half shifts and were actively providing police services to Boston residents.
- The randomization procedure generated treatment (140 officers) and control (141 officers) groups that were equivalent in terms of officer sex, race, age, years on the job, shift, assignment, prior complaints, prior use of force reports, and officer activity measures. All treatment officers were trained on the body worn camera policy and the proper use of the technology.
- At the commencement of the pilot program, 100 of the 140 officers trained on the use of body worn cameras were assigned to wear the cameras. Over the course of the one-year intervention period, 21 officers stopped wearing the cameras due to promotions, assignment changes, medical incapacitation, resignation, and retirement. A total of 121 of the 140 treatment officers wore cameras during the pilot program.
- The findings of the randomized controlled trial suggest that the placement of body worn cameras on Boston Police officers generate small but meaningful benefits to the civility of police-citizen civilian encounters: relative to control officers, treatment officers received fewer citizen complaints and generated fewer use of force reports.
- The results suggest a reduction of 15 complaints – slightly more than one complaint per month (1.25) – for the treatment officers relative to control officers during the intervention period. The analysis indicated body worn cameras generated a reduction of 9 use of force reports – slightly less than one use of force report per month (0.75) – for the treatment officers relative to control officers during the one-year intervention period.
- The results also suggest that the placement of body worn cameras on Boston Police officers did not alter their regular work activities or reduce their proactivity. The experimental analyses did not find any statistically-significant differences in dispatched calls received, call events that were self-initiated, crime incident reports completed, arrests made, and FIO encounter reports for the treatment officers relative to the control officers over the course of the pre-intervention and intervention periods.

- The body worn cameras also did not impact the racial and ethnic distributions of individuals subjected to FIO encounters by treatment and control officers during the intervention period.
- The vast majority of community members and members of advocacy groups interviewed in this study supported expanding the body worn camera pilot to a citywide program.
- A number of those interviewed expressed concerns about the privacy of those included in the videos, particularly innocent bystanders.
- The value of videos in training recruits and regular police officers was stressed by many of those interviewed and the value of videos as a training tool was noted by research staff in a review of video quality.
- The review of video quality conducted by members of the research team revealed that the videos and audio recordings were of high quality. The body cameras produced high quality video and audio during the day and night, and in different weather conditions.
- Interviews with defense attorneys and prosecutors indicated that videos were useful in making judicial decisions and that during the pilot program period videos were sometimes beneficial to the defendant and other times beneficial to the state.

Introduction

In January 2015, the Boston Police Department (BPD) committed to implement a pilot body worn camera (BWC) program for its officers. This pilot was intended to help answer policy questions about how the system would operate if and when fully implemented and to address concerns of officers and community members on the use of the technology. Boston Mayor Martin Walsh and Boston Police Commissioner William Evans committed to a rigorous evaluation of this pilot program. The BPD implemented its BWC pilot program in September 2016. This pilot involved the random allocation of 100 BWCs to officers who wore these cameras for a twelve month intervention period. The impact evaluation uses a rigorous randomized controlled trial (RCT) design to evaluate the impact of BWCs on police-citizen interactions, police proactivity, police lawfulness, and police-community relations.¹ RCTs are generally considered the “gold standard” in program evaluation as these designs allow researchers to assume that the only systematic difference between the control and treatment groups – which are statistically indistinguishable on confounding factors - is the presence of the intervention; this permits a clear assessment of program impacts on outcome measures. This research design is commonly used in the medical field to evaluate treatments or to test new drug therapies, and is increasingly being used in social science evaluations.

The BPD developed and implemented a policy to guide officer use of the BWC technology during the pilot program (see Appendix). Distinctive features of the policy included a requirement that BWC officers notify citizens that the interaction was being video-recorded at the outset of the encounter, guidelines to seek consent from citizens before recording in

¹ Shadish, William, Thomas Cook, & Donald Campbell. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Boston: Houghton Mifflin.

residences during non-warrant or emergency situations, and details on the occurrences when video-recording was mandatory during the delivery of police services. During the one-year intervention period, BPD officers outfitted with the BWCs generated roughly 38,200 videos that covered more than 4,600 hours of police work in Boston neighborhoods.

This impact evaluation report presents the overall findings of the BPD BWC RCT. In Section 1, Anthony A. Braga, Lisa M. Barao, and Gregory Zimmerman present a brief review of the available evaluation literature on the adoption of BWCs by other policing departments. They then detail the RCT methodology and impact analysis plan. The evaluation findings for the impact of the BWC technology on citizen complaints against officers, officer use of force incident reports, and key officer activity measures are then presented. The results from an exploratory assessment of the influence of BWCs on the racial and ethnic distributions of FIO reports made by treatment and control officers are also discussed. In Section 2, Jack McDevitt, Stephen Douglas, and Keller Sheppard discuss community reactions to the BWC pilot program, described the impact of videos on judicial decision making, and present a technical review of video quality from a sample of videos captured by BPD officers outfitted with BWCs.

SECTION 1.

THE IMPACTS OF BODY WORN CAMERAS ON POLICE-CITIZEN ENCOUNTERS AND POLICE PROACTIVITY IN BOSTON

Anthony A. Braga, Lisa M. Barao, and Gregory Zimmerman²

Research on the Impact of BWCs on Police-Citizen Encounters and Police Work Activities

Advocates suggest that there are many benefits associated with placing BWCs on police officers.³ BWCs have been suggested to increase transparency and citizens' views of police legitimacy, improve police and citizen behaviors during encounters, enhance evidence collected for the resolution of complaints against the police and the arrest and prosecution of offenders, and provide improved opportunities for police training.⁴ Most of the available evaluation research has examined the impacts of BWCs on the civility of police-citizen encounters and police proactivity.

Several recently-completed randomized controlled trials and quasi-experiments suggest that BWCs improve the civility of police-citizen civilian encounters by reducing complaints against officers and officer use of force. In the Rialto (CA) randomized experiment, officers wearing BWCs during treatment shifts generated a 90% reduction in complaints and a 50% reduction in use of force reports relative to officers not wearing cameras during comparison

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³ Stanley, Jay. (March, 2015). *Police Body-Mounted Cameras: With Right Policies in Place, A Win for All*, ACLU, <https://www.aclu.org/other/police-body-mounted-cameras-right-policies-place-win-all>.

⁴ White, Michael D. (2014). *Police Officer Body-Worn Cameras: Assessing the Evidence*. Washington, DC: Office of Community Oriented Policing Services.

shifts.⁵ The Mesa Police Department's quasi-experimental evaluation of BWCs revealed a 48% reduction in citizen complaints against treatment officers for misconduct during the study period, and a 75% decline in use of force complaints.⁶ In the Orlando (FL) randomized experiment, BWC officers had a significantly lower prevalence of response-to-resistance incidents (involving electronic control devices, chemical agents, impact weapons, and other non-lethal implements) and lower prevalence of serious external complaints relative to control officers without BWCs.⁷ A quasi-experimental evaluation in Phoenix (AZ) reported a 62% reduction in complaints lodged against treatment officers relative to control officers.⁸ Finally, a randomized controlled trial in Las Vegas (NV) found that the BWCs reduced citizen complaints and use of force reports for treatment officers relative to non-BWC comparison officers.⁹

While there is some promising evidence that BWCs de-escalate confrontation and aggression in police-citizen encounters, not all evaluations support this position. A randomized experimental design was used to evaluate the effects of BWCs on complaints against officers in the London Metropolitan Police Service (UK). The study did not reveal any statistically-significant differences in overall complaints made against officers with BWCs relative to officers

⁵ Ariel, Barak, Tony Farrar, & Alex Sutherland (2015) "The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints Against the Police: A Randomized Controlled Trial," 31 *Journal of Quantitative Criminology* 1–27.

⁶ Mesa Police Department (2013) *On-Officer Body Camera System: Program Evaluation and Recommendations*. Mesa, AZ: Mesa Police Department.

⁷ Jennings, Wesley G., Mathew Lynch, & Lorie Fridell (2015) "Evaluating the Impact of Police Officer Body-Worn Cameras (BWCs) on Response-to-Resistance and Serious External Complaints: Evidence from the Orlando Police Department (OPD) Experience Utilizing a Randomized Controlled Experiment," 43 *Journal of Criminal Justice* 480-486.

⁸ Hedberg, E.C., Charles Katz, & David Choate (2017) "Body-Worn Cameras and Citizen Interactions with Police Officers: Estimating Plausible Effects Given Varying Compliance Levels," *Justice Quarterly* (in press).

⁹ Braga, Anthony A., William H. Sousa, James R. Coldren, & Denise Rodriguez. (2018). "The Effects of Body Worn Cameras on Police Activity and Police-Citizen Encounters: A Randomized Controlled Trial," 108 *Journal of Criminal Law and Criminology* 511 – 538.

not wearing BWCs.¹⁰ There were also no statistically-significant differences in self-reported assaults on officers or injuries for BWC officers relative to control officers. Additionally, while there were some research design flaws (see “contamination of control conditions” discussion below), the Washington DC Metropolitan Police Department BWC RCT did not find any discernible impacts of the technology on complaints against officers and officer use of force reports.¹¹ Further, a multisite randomized experiment involving 2,122 officers in eight police departments reported no overall reduction in officer use of force and an increase in assaults on officers wearing BWCs during treatment shifts relative to officers not wearing BWCs during control shifts.¹² However, in a re-analysis of the multisite randomized experiment data, the evaluators showed that use of force by treatment officers decreased by 37% in three sites with high compliance to a BWC policy that required officers to notify citizens that they were being recorded at the beginning of the encounter.¹³

A very small number of studies have examined the effects of BWCs on police officer

¹⁰ Grossmith, Lynne, Catherine Owens, Will Finn, David Mann, Tom Davies, & Laura Baika (2015) *Police, Camera, Evidence: London’s Cluster Randomised Controlled Trial of Body Worn Video*. London, UK: College of Policing and the Mayor’s Office for Policing and Crime (MOPAC).

¹¹ Yokum, David, Anita Ravishankar, & Alexander Coppock (2017) *Evaluating the Effects of Police Body-Worn Cameras: A Randomized Controlled Trial*. Working paper. Washington, DC: The Lab @ DC, Executive Office of the Mayor.

¹² Ariel, Barak, Alex Sutherland, Darren Henstock, Josh Young, Paul Drover, Jayne Sykes, Simon Magicks, & Ryan Henderson (2016) “Wearing Body-Cameras Increases Assaults Against Officers and Do Not Reduce Police-Use of Force: Results from a Global Multisite Experiment,” ¹³ *European Journal of Criminology* 744-755.

¹³ The evaluators also reported a 71% increase in officer use of force in sites with low compliance to the BWC policy. Based on these findings, they hypothesized that unchecked BWC discretion may increase use of force as camera activation during situations with escalating aggression may further increase aggression during these volatile situations. The evaluators further suggested that verbal notification of video recording by officers at the commencement of encounters may be helpful in deterring aggressive behavior and stimulating civil behavior before police-citizen interactions escalate in a negative direction. Ariel, Barak, Alex Sutherland, Darren Henstock, Josh Young, Paul Drover, Jayne Sykes, Simon Magicks, & Ryan Henderson (2016) “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 *Journal of Experimental Criminology* 453-463.

work activities such as their willingness to be proactive and problem solve, and their discretion in making arrests and citations in discretionary incidents. Survey research suggests that police officers generally view the technology as facilitating the arrest and prosecution of criminal offenders by improving the quality of evidence via the creation of a permanent record of the events that transpired.¹⁴ In agencies considering the adoption of BWCs, police officers have been noted to express concern over how camera footage will be used to monitor officer performance.¹⁵ Indeed, officers may fear being reprimanded for not issuing a citation or making an arrest when a video clearly shows that a citizen has violated the law.¹⁶ Both orientations towards the placement of BWCs on officers – that is, the belief that offenders are more likely to be held accountable for their transgressions via the availability of video evidence and the a priori knowledge that supervisors may scrutinize officer discretion in resolving incidents – seem likely to influence officer work activities.

Several controlled studies suggest that officers may increase their law enforcement activities when outfitted with BWCs. The Phoenix (AZ) quasi-experimental evaluation concluded that BWCs increased officer productivity when measured by the number of arrests.¹⁷ The evaluators reported that the number of arrests increased by about 17% among officers in the BWC treatment group compared to 9% among officers in the comparison group. Relatedly, in

¹⁴ Goodall, Martin (2007) *Guidance for the Police Use of Body-Worn Video Devices*. London: Home Office; ODS Consulting (2011) *Body Worn Video Projects in Paisley and Aberdeen, Self-Evaluation*. Glasgow, UK: ODS.

¹⁵ Police Executive Research Forum (2014) *Implementing a Body-Worn Camera Program: Recommendations and Lessons Learned*. Washington, DC: Police Executive Research Forum.

¹⁶ Justin Ready & Jacob Young (2015) The Impact of On-Officer Video Cameras on Police–Citizen Contacts: Findings from a Controlled Experiment in Mesa, AZ, 11 *Journal of Experimental Criminology* 445 - 458.

¹⁷ Katz, Charles, David Choate, Justin Ready, & Lidia Nuno (2014) *Evaluating the Impact of Officer Worn Body Cameras in the Phoenix Police Department*, Phoenix, AZ: Center for Violence Prevention & Community Safety, Arizona State University.

the Essex (UK) randomized controlled trial, Owens and colleagues found that incidents attended by BWC officers were more likely to result in criminal charges as compared to incidents attended by control officers.¹⁸ Similarly, Ready and Young used a quasi-experimental analysis of field contact reports to examine whether BWCs influenced Mesa (AZ) Police Department officer behavior during police–citizen encounters over a 10-month period.¹⁹ The analysis suggested that BWC officers were less likely to perform stop-and-frisks and make arrests but were more likely to give citations and initiate encounters. Finally, the Las Vegas Metropolitan Police Department BWC RCT reported small, but statistically-significant, increases in call events that resulted in arrests and citations for the treatment officers relative to the control officers.²⁰

BOSTON POLICE DEPARTMENT BWC RCT

Randomization Procedure and Assessing Experimental Group Balance

The BPD provides policing services directly to Boston residents through 11 district stations. The Youth Violence Strike Force (YVSF, informally known as the “gang unit”) is comprised of plainclothes officers who use proactive policing tactics to prevent outbreaks of gang violence. Ten districts were matched into 5 pairs based on a range of relevant variables including crime, calls for service, arrests, field interrogation / observation (FIO) reports, citizen complaints, number of officers assigned, population demographics, and levels of neighborhood disadvantage. As part of the initial design work with the BPD, the research team randomly

¹⁸ Owens, Catherine, David Mann, & Rory Mckenna (2014) *The Essex BWV Trial: The Impact of BWV on Criminal Justice Outcomes of Domestic Abuse Incidents*, London: College of Policing.

¹⁹ Justin Ready & Jacob Young (2015) The Impact of On-Officer Video Cameras on Police–Citizen Contacts: Findings from a Controlled Experiment in Mesa, AZ, 11 *Journal of Experimental Criminology* 445 - 458.

²⁰ Braga, Anthony A., William H. Sousa, James R. Coldren, & Denise Rodriguez. (2018). “The Effects of Body Worn Cameras on Police Activity and Police-Citizen Encounters: A Randomized Controlled Trial,” 108 *Journal of Criminal Law and Criminology* 511 – 538.

allocated one district from each matched pair to the BWC treatment group (B-2, B-3, D-4, D-14, and E-18). YVSF was also non-randomly assigned to the BWC treatment group.²¹

A key aspect of the design work for the RCT involved the random allocation of the BWC technology to officers within the 5 treatment districts and YVSF. The BPD provided the research team with a database of $n = 281$ eligible officers from these assignments who worked the day (Patrol, 7:30 AM – 4:00 PM; YVSF, 8:30 AM – 5:00 PM) and first half (Patrol and YVSF, 4:00 PM – 11:45 PM) shifts as of September 1, 2016. The BPD excluded officers who were responsible for administrative duties, medically-incapacitated, on military leave, or assigned to other responsibilities that did not primarily involve law enforcement work on the street. The database included information on age, race, sex, and time on the job. The research team also collected information on citizen complaints and officer use of force incidents generated by these officers for three years prior to the start of the pilot program (2013-2015) through databases maintained by the BPD Bureau of Professional Standards. BPD official data sources were used to develop officer activity measures during the 12-month pre-intervention period. Key officer activity measures included mean monthly responses to call events, mean monthly crime incident reports, mean monthly arrests, and mean monthly Field Interrogation Observation (FIO) reports.

A computer algorithm was used to randomly allocate the $n = 281$ officers to treatment and control groups within the 5 treatment districts and YVSF. The initial randomization was used to divide the officers into two nearly equivalent-sized experimental groups ($n = 140$ treatment officers and $n = 141$ control officers); $n = 100$ officers within the treatment group were

²¹ The non-random selection of the YVSF stemmed from two complementary interests. First, the BPD wanted to develop policy and programmatic information on the issues involved in assigning cameras to plainclothes officers relative to uniformed officers. Second, during conversations with the Social Justice Task Force and other community groups on the BWC implementation, community leaders generally recognized YVSF as a key BPD unit engaged in proactive policing activities centered on youth living in disadvantaged minority neighborhoods. These leaders requested that YVSF officers also wear BWCs.

then randomly assigned to wear the BWC technology at the outset of the pilot program. The BPD was committed to maintaining 100 active BWC officers working in Boston communities for the entire twelve month pilot program. The $n = 40$ treatment officers that did not receive BWCs were trained in the BWC policy and operations of the technology. As described below, these officers served as “alternates” to the treatment officers outfitted with BWCs as attrition occurred over the course of the study period.

Randomization provides a simple and convincing method for achieving comparability in the treatment and control groups.²² If randomization is done correctly, the only systematic difference between treatment and control groups should be the presence or absence of the treatment. To test the balance between the treatment and control groups on key officer variables, we used independent samples t tests and standardized mean differences, known as Cohen’s d .²³ Table 1 presents basic descriptive information on officers participating in the experiment and the results of these tests; for binary variables, means are expressed as percentages. A positive t test indicates that the treatment group has a higher mean than the control group. Covariate imbalance would be exhibited by Cohen’s $|d|$ in excess of .20 and a $|t|$ in excess of 1.96. The equality of variances was tested and confirmed for all variables. This reveals that the randomization created balanced treatment and control groups. The balanced treatment and control groups supports the internal validity of the design and suggests that the randomized controlled trial was well positioned to isolate the impact of body worn cameras on the study outcome measures.

²² Shadish, William, Thomas Cook, & Donald Campbell. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Boston: Houghton Mifflin.

²³ Cohen, Jacob. (1988). *Statistical Power Analysis for the Behavioral Sciences*, Second edition. Hillsdale, NJ: Lawrence Erlbaum Associates.

Table 1. Summary Characteristics of Officers in Treatment and Control Groups, $N = 281$

| <u>Officer Characteristics</u> | <u>Balance Diagnostics</u> | | |
|--------------------------------|----------------------------|----------|------------|
| | <u>Mean (SD)</u> | <i>t</i> | <u> d </u> |
| Treatment Group | 49.8% | -- | -- |
| Control Group | 50.2% | | |
| Male | 91.1% | 0.19 | .011 |
| Female | 8.9% | | |
| White | 65.1% | -1.04 | .062 |
| Black | 25.6% | 0.58 | .034 |
| Hispanic | 7.5% | 0.70 | .041 |
| Asian / Other | 1.8% | 0.46 | .027 |
| Mean Age | 40.4 (9.8) | -1.18 | .071 |
| Mean Years on Job | 12.2 (9.1) | -1.13 | .067 |
| Mean Yearly Complaints | 0.22 (.21) | 1.01 | .049 |
| Mean Yearly Use of Force | 0.12 (.19) | 0.12 | .006 |
| Mean Monthly Calls | 38.78 (33.04) | 1.29 | .077 |
| Mean Monthly Crime Incidents | 9.92 (8.44) | 1.56 | .092 |
| Mean Monthly Arrests | 5.71 (6.81) | 1.08 | .064 |
| Mean Monthly FIO Reports | 2.79 (3.97) | -1.25 | .074 |
| Day Shift | 43.4% | 0.53 | .031 |
| First Half | 56.6% | | |
| B-2 | 21.7% | -0.98 | .058 |
| B-3 | 19.6% | 0.86 | .042 |
| D-4 | 18.9% | -0.73 | .043 |
| D-14 | 13.9% | 1.23 | .073 |
| E-18 | 13.5% | 1.02 | .050 |
| YVSF | 12.5% | -1.77 | .105 |

Note: $N=140$ officers in the treatment group and $N=141$ officers in the control group. SD = Standard Deviation. Continuous variables are summarized by means and standard deviations while categorical variables are represented by percentages.

* = $p < .05$, ** = $p < .01$

Attrition and Statistical Power

Attrition represents a threat to the internal validity of randomized experiments as it could affect the equivalence of treatment and control groups and introduce bias into the analysis of experimental data.²⁴ In general, attrition from the BWC treatment group during the randomized controlled trial was very modest; only $n = 21$ treatment officers ceased wearing BWCs before the end of the intervention period (14.9% attrition from $n = 140$ treatment officer group) and were replaced by trained alternates. Over the course of the one year pilot program, $n = 18$ control officers (12.8% attrition from the $n = 141$ control officer group) were no longer in an active duty assignment eligible for BWC use.

Table 2 presents the reasons for officer attrition from the randomized experiment. The officers left due to an assignment change that did not involve BWC use (the most common reason for attrition), medical incapacitation, promotion, and leaving the department via retirement or resignation. The $n = 21$ treatment officers who left the program had worn the BWCs for an average of 13.6 weeks (slightly more than 3 months), ranging from only 9 days to 28.6 weeks. As such, $n = 121$ treatment officers (86.4% of 140) actually used BWCs for varying time periods while performing their law enforcement duties during the pilot program.

To address the observed attrition issue, we used intention-to-treat (ITT) analyses based on the initial random assignment to treatment. ITT analyses provide fair comparisons between treatment and control groups because it avoids the bias associated with the non-random loss of study participants.²⁵ As such, all $n = 140$ treatment officers and $n = 141$ control officers were

²⁴ Campbell, Donald & Julian Stanley. (1963). *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally.

²⁵ Hollis, Sally & Fiona Campbell. (1999). "What is Meant by Intention to Treat Analysis? Survey of Published Randomised Controlled Trials," 319 *British Medical Journal* 670-674.

included in the analyses presented in this preliminary report. The relatively small number of officers in each group resulted in a research design with very modest statistical power. For a two-tailed test with $\alpha = .05$, this randomized controlled trial had an estimated statistical power of .39 to detect a small standardized effect size of .20.²⁶

Table 2. Reasons for Officer Attrition from RCT

| <u>Reason</u> | <u>Treatment Group</u> | | <u>Control Group</u> | |
|-------------------------|------------------------|----------------|----------------------|----------------|
| | <u>N</u> | <u>Percent</u> | <u>N</u> | <u>Percent</u> |
| Assignment Change | 10 | 47.6% | 7 | 38.9% |
| Medically Incapacitated | 5 | 23.8% | 6 | 33.3% |
| Promotion | 3 | 14.3% | 3 | 16.7% |
| Retired/Resigned | 3 | 14.3% | 2 | 11.1% |
| Total | 21 | 100.00% | 18 | 100.0% |

Contamination of Control Conditions

One possible threat to the internal validity of any randomized experiment is the diffusion of the treatment into the control group.²⁷ Put simply, contaminated control conditions undermine the counterfactual contrast between subjects that receive the treatment and subjects that do not receive the treatment. The stable unit treatment value assumption (SUTVA) assumes that the effect of some intervention on a given individual is not related to the treatment assignments of other people (or observational units).²⁸ In the context of the BPD BWC experiment, this could

²⁶ Lipsey, Mark. (1990). *Design Sensitivity: Statistical Power for Experimental Research*. Thousand Oaks, CA: Sage Publications.

²⁷ Cook, Thomas & Donald Campbell. (1979). *Quasi-Experimentation: Design and Analysis Issues for Field Settings*. Boston, MA: Houghton-Mifflin.

²⁸ Rubin, Donald. (1980). "Randomization Analysis of Experimental Data: The Fisher Randomization Test," 75 *Journal of the American Statistical Association* 575-582.

include effects of treatment officers responding to the same dispatched calls for service as control officers.

The well-known Rialto (CA) body worn camera randomized experiment experienced possible diffusion of treatment effects due to the randomization of BWCs by shift rather than by individual officer.²⁹ In the Rialto experiment, the same officers participated in treatment (body worn camera on during shift) and control conditions (no body worn camera during shift). As such, it was possible that participating officers “carried over” the treatment effect into control shifts. While the evaluation still found significant reductions in citizen complaints and use-of-force incidents during treatment shifts relative to control shifts, Ariel and colleagues (2015) also observed reductions in these outcome measures during the control shifts, which suggests possible contamination. Diffusion of treatment effects have also been noted in BWC experiments involving the randomization of individual officers to treatment and control conditions. For example, the Washington DC Metropolitan Police Department BWC RCT suffered from very high levels of contamination of control conditions; roughly 70% of calls involving control officers had treatment officers present.³⁰ In contrast, the Las Vegas Metropolitan Police Department BWC RCT reported that control conditions were contaminated by the presence of a treatment officer in only 19.1% of calls for service during the experiment.³¹

²⁹ Ariel, Barak, Tony Farrar, & Alex Sutherland. (2015). “The Effect of Police Body-Worn Cameras on Use of Force and Citizens’ Complaints Against the Police: A Randomized Controlled Trial,” 31 *Journal of Quantitative Criminology* 1–27.

³⁰ Yokum, David, Anita Ravishankar, and Alexander Coppock. (2017). *Evaluating the Effects of Police Body-Worn Cameras: A Randomized Controlled Trial*. Working paper. Washington, DC: The Lab @ DC, Executive Office of the Mayor.

³¹ Braga, Anthony A., William H. Sousa, James R. Coldren, & Denise Rodriguez. (2018). “The Effects of Body Worn Cameras on Police Activity and Police-Citizen Encounters: A Randomized Controlled Trial,” 108 *Journal of Criminal Law and Criminology* 511 – 538.

The BPD randomized controlled trial attempted to minimize these kinds of contamination effects by using different officers in the treatment and control groups. The BPD often operates one-officer patrol units; as such, interaction between treatment and control officers during calls for service—and thus the potential for contamination—can be limited during a typical shift but does occur when two officers work together or back up another officer on particular calls. Ideally, our randomized controlled trial would have also separated treatment and control officers into different policing areas to minimize interactions further. Importantly, our research design was not able to prevent contamination of control conditions and, as such, our estimates of body-worn camera impacts on outcomes measures are biased towards the null hypothesis of “no difference” between treatment and control groups. In other words, our estimates are conservative.

We were, however, able to utilize BPD calls for service data to monitor and assess the extent of possible contamination during the September 2016 through August 2017 intervention period. In this study, the call data analyzed represented unique call events where duplicate citizen calls for service for the same event were removed. The evaluation team matched the unique officer identification numbers for officers in the randomized controlled trial to officer identification numbers in the call data. These data allowed us to determine which officers were involved in call events as primary officers and as back-up officers during the intervention period. As such, we were able to estimate the percentage of control officer call events that involved one or more treatment officers.

Our analyses suggest modest contamination of control conditions by the presence of BWC treatment officers in the BPD BWC RCT. During the intervention period, the $n = 141$ control officers were involved in 64,984 total calls: 46,403 calls as the primary officers and

18,581 as back-up officers. Treatment officers were present at 23.7% of the same call events attended by control officers (15,415 of 64,984 call events with control officers).

Citywide Trends in Citizen Complaints and Officer Use of Force Reports

Citizen complaints and officer use of force reports generally decreased in the years leading up to the BWC randomized experiment. Figure 1 presents the yearly citywide counts of citizen complaints filed against BPD officers between 2013 and 2017. The number of complaints decreased by 46.0% from 350 complaints in 2013 to 189 complaints in 2017. Figure 2 presents the yearly citywide counts of use of force incident reports generated by BPD officers between 2013 and 2017. After a modest increase between 2013 and 2014, the number of use of force reports decreased by 52.3% from 107 reports in 2014 to 51 use of force reports in 2017.

Figure 1. Yearly Citywide Counts of Complaints Against Boston Police Officers, 2013 – 2017

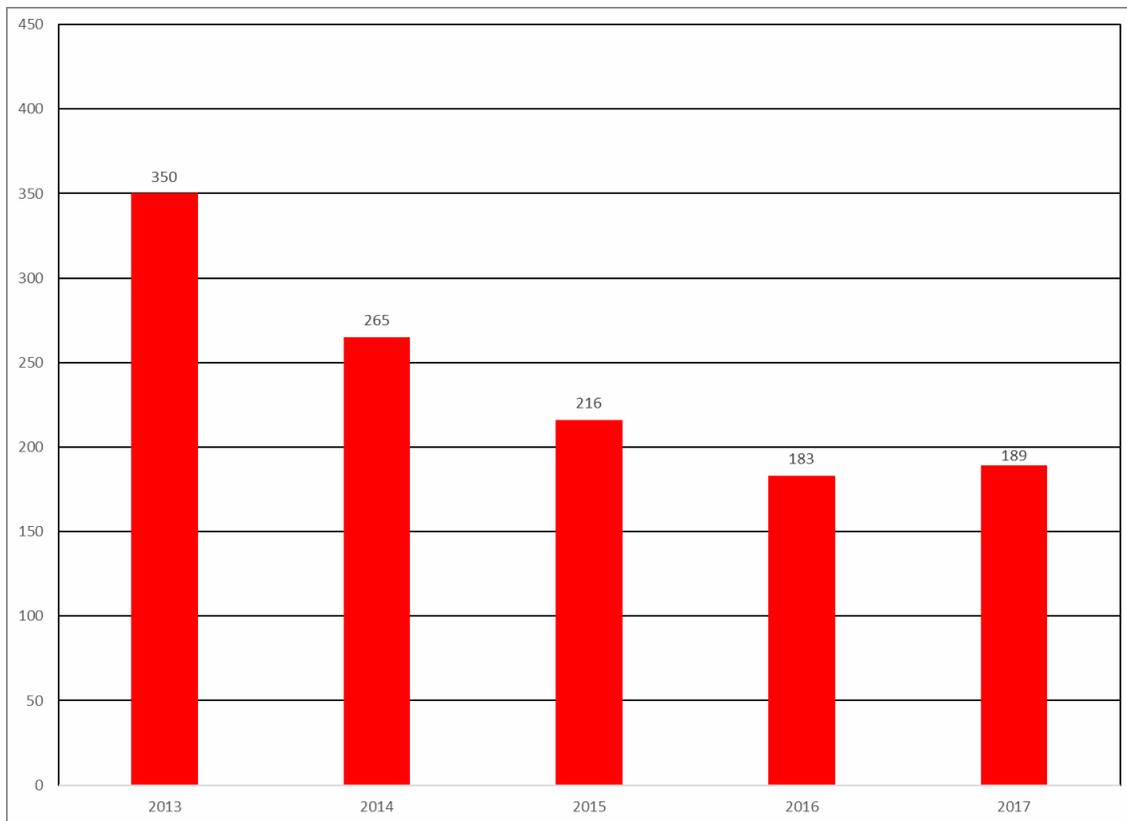
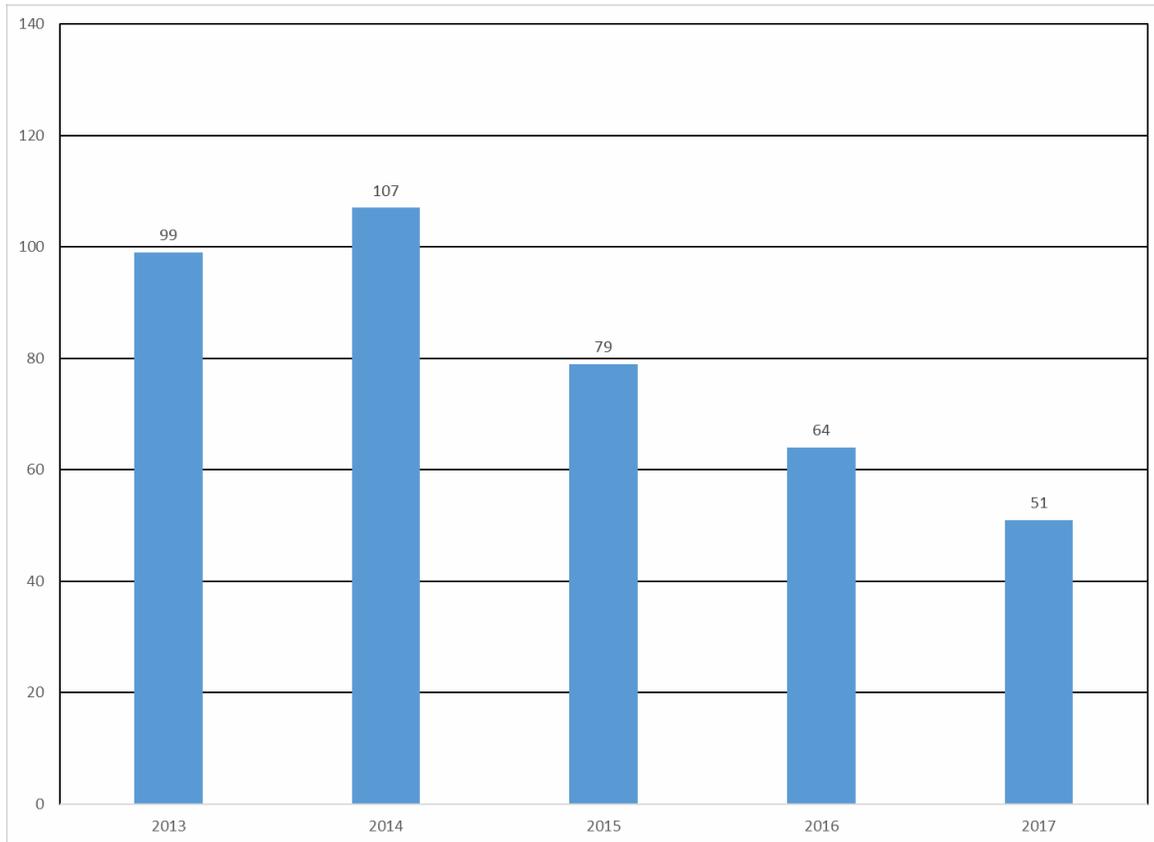


Figure 2. Yearly Citywide Counts of Use of Force Reports Generated by Boston Police Officers, 2013 – 2017



Analytical Approach

Since randomized experiments control for confounding factors by design, analyses of experimental data do not require extensive statistical modeling to ensure rival causal influences are identified and controlled.³² As such, we used independent samples *t* tests and standardized mean differences (Cohen’s *d*) to test the impact of the BWCs on treatment officer outcomes relative to control officer outcomes during the 12-month intervention period. However, the relatively small number of officers in the randomized experiment makes it challenging to

³²Weisburd, David. (2010). “Justifying the Use of Non-Experimental Methods and Disqualifying the Use of Randomized Controlled Trials,” 6 *Journal of Experimental Criminology* 209-227.

estimate the true impact of the BWC treatment. The impact of BWCs on treatment officer outcomes relative to control officer outcomes was also estimated through the difference-in-differences (DID) estimator.³³ The use of a DID estimator in a panel regression model with 12-month pre-intervention and 12-month intervention period observations for each officer had the benefit of increasing the statistical power of the research design (281 officers \times 2 observations each = 562 total observations) to detect potentially small effect sizes.

The DID estimator evaluates the difference in a treatment officer's post-intervention outcomes at time t compared with their pre-intervention outcomes, relative to the same difference for the control officers in the experiment. The equation for our panel regression models was:

$$(1) \quad Y_{it} = \beta_0 + \beta_1 \text{Group}_i + \beta_2 \text{Period}_t + \beta_3 (\text{Group}_i \times \text{Period}_t) + u_i$$

In this model, (Y_{it}) represents our outcome measure for each individual officer (i) during a specific observation period (t). The regressor Group_i is a dummy variable identifying whether an individual officer (i) was in the treatment group (1) or not (0). The omitted group comprises control officers in the experiment. The regressor Period_t is a dummy variable for whether the officer outcome was measured during the intervention period (1) or during the pre-intervention period (0). The coefficient β_3 conforming to the product of the group dummy with the period dummy, is the DID estimate of the effect of BWCs on the officer outcome measure. To ensure that the coefficient variances were robust to violations of the homoskedastic error assumption of linear regression models, robust standard errors clustered by officer were used.

The yearly pre-intervention means suggested that citizen complaints and officer use of force reports were distributed as rare event counts (see Table 1). Indeed, the average officer

³³ See, e.g., David Card & Alan Krueger. (1995). "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." 84 *American Economic Review* 772-793.

participating in the BWC experiment experienced a citizen complaint against them roughly once every 4.5 years (.22) and generated a use of force report roughly once every 8.3 years (.12). As such, Poisson panel regression models were used to estimate treatment impacts on these outcomes.³⁴ Ordinary Least Squares (OLS) panel regression models were used to estimate treatment impacts on mean monthly responses to dispatched call events, mean monthly self-initiated call events, mean monthly crime incident reports, mean monthly arrests, and mean FIO reports during the intervention and pre-intervention study periods. Stata 15 statistical software was used to calculate the maximum likelihood estimate of the parameters estimates.

Results

The standardized mean difference analyses suggested small impacts of BWCs on citizen complaints ($d = -.137$, $SE = .061$, $p = .021$) and officer use of force reports ($d = -.109$, $SE = .092$, $p = .067$) for treatment officers relative to control officers during the intervention period. In practical terms, treatment officers generated 15 fewer complaints (1.25 per month) and 9 fewer use of force reports (.75 per month) relative to control officers when wearing BWCs during the intervention period.³⁵ Table 3 presents the results of the DID panel Poisson regression analyses of the impact of BWC on citizen complaints and use of force reports for treatment officers relative to control officers. As expected, the DID estimators suggested stronger BWC impacts on

³⁴ Post-estimation likelihood ratio tests confirmed that these outcomes were distributed as Poisson rather than negative binomial processes. For the citizen complaints model, the likelihood $\chi^2 (df = 1) = 0.78$, $p = 0.188$. For the officer use of force reports model, the likelihood $\chi^2 (df=1) = 1.75$, $p = 0.093$.

³⁵ These intervention period differences are slightly larger than what was reported in our preliminary impact evaluation report. This was due to a reporting lag in the entry of complaints and use of force reports into the data systems maintained by the BPD Bureau of Professional Standards when the preliminary data were provided to the Northeastern research team in September 2017. There are no time constraints limiting when complainants can file Internal Affairs Division complaints against BPD officers. Officer use of force reports are investigated and reviewed by an established chain of command.

citizen complaint and officer use of force report outcomes. Exponentiating the Poisson regression coefficients into incidence rate ratios suggests that the placement of BWCs on treatment officers resulted in a 52.2% reduction in citizen complaints (IRR = .478, $p = .039$) and a 63.6% reduction in officer use of force reports (IRR = .364, $p = .047$) relative to control officers when comparing pre-intervention and intervention time periods.

Table 3. Impact of BWC on Citizen Complaint Counts and Officer Use of Force Report Counts: Panel Poisson Regression Models

| <u>Variable</u> | <u>Complaints Coef. (RSE)</u> | <u>Use of Force Coef. (RSE)</u> |
|----------------------------------|-----------------------------------|-------------------------------------|
| BWC impact (DID) | -.738 (.341)* | -1.009 (.509)* |
| Treatment group (1 = treated) | .848 (.557) | 1.279 (.751) |
| Period (1 = intervention) | .688 (.412) | -.051 (.343) |
| Constant | -2.141 (.374)** | -1.901 (.552)** |
| Log pseudolikelihood | -321.294 | -224.976 |
| Wald χ^2 | 261.28** | 278.09** |
| Wald df | 3 | 3 |
| Observations (Officers x Period) | 562 | 562 |
| Number of Officers | 281 | 281 |

Notes:

DID = Differences-in-Differences, Coef. = Coefficient, RSE = Robust Standard Error (clustered by officer). Post-estimation likelihood ratio tests confirmed that the dependent variables fit the Poisson distribution. For the citizen complaints model, the likelihood χ^2 ($df=1$) = 0.78, $p = 0.188$. For the officer use of force reports model, the likelihood χ^2 ($df=1$) = 1.75, $p = 0.093$.

* = $p < .05$, ** = $p < .01$

Table 4. Impact of BWC on Mean Monthly Officer Activities: Panel OLS Regression Models

| <u>Variable</u> | <u>Dispatched Calls Coef. (RSE)</u> | <u>Officer-Initiated Calls Coef. (RSE)</u> | <u>Crime Incidents Coef. (RSE)</u> | <u>Arrest Reports Coef. (RSE)</u> | <u>FIO Reports Coef. (RSE)</u> |
|----------------------------------|---------------------------------------------|----------------------------------------------------|--------------------------------------------|-------------------------------------------|----------------------------------------|
| BWC impact (DID) | -1.687 (1.369) | -.873 (.789) | -.055 (.808) | .018 (.061) | .456 (.351) |
| Treatment group (1 = treated) | 3.846 (2.684) | 2.264 (1.388) | 1.621 (1.591) | .126 (1.21) | -1.048 (.775) |
| Period (1 = intervention) | .548 (1.242) | .336 (.697) | -.795 (.716) | -.074 (.048) | -.981 (.279)** |
| Constant | 16.451 (2.325)** | 7.979 (1.72)** | 8.941 (1.363)** | 1.720 (.086)** | 3.067 (.618)** |
| Overall R ² | .014 | .015 | .017 | .016 | .017 |
| Wald χ^2 | 8.64* | 8.66* | 9.38* | 8.48* | 18.43** |
| Wald df | 3 | 3 | 3 | 3 | 3 |
| Observations (Officers x Period) | 562 | 562 | 562 | 562 | 562 |
| Number of Officers | 281 | 281 | 281 | 281 | 281 |

Notes:

DID = Differences-in-Differences, Coef. = Coefficient, RSE = Robust Standard Error (clustered by officer).

* = $p < .05$, ** = $p < .01$

The standardized mean difference analyses did not reveal any statistically-significant impacts in the officer activity outcome measures for treatment officers relative to control officers during the intervention period.³⁶ These null findings were confirmed by the DID panel OLS regression analyses (Table 4). These findings suggest that the placement of BWCs on treatment officers did not change the monthly mean number of dispatched calls received, calls that were self-initiated, the crime incident reports completed, arrests made, and FIO encounter reports when compared to the same monthly mean activity outcomes for the control officers over the course of the pre-intervention and intervention periods. Overall, BPD officers who wore BWCs during the RCT did not change their level of activity in any significant way during the one year pilot program.

Exploring BWC Influences on Racial Disparities in Police-Citizen Encounters

FIO reports provide an opportunity to examine whether the presence of BWCs on BPD officers influences the share of minority residents officially observed, stopped, frisked, and/or searched by officers in treatment groups relative to control groups during the intervention period. The research team also planned to analyze FIO reports to investigate whether BWCs influence BPD officer frisks and searches of subjects in these encounters. Unfortunately, we were not able to pursue the latter analysis as a result of changes to the structure of the FIO data made during the Intergraph upgrade to the BPD records management system in 2014. The FIO relational database comprises two key data tables: an event table with covariates describing the FIO

³⁶ The Cohen's d standardized mean differences contrasting treatment officers and control officers mean monthly outcome measures during the intervention period were: dispatched calls $d = .013$, officer-initiated calls $d = .029$, crime incident reports $d = .065$, arrest reports $d = .031$, and FIO reports $d = -.011$. All estimated standardized mean differences were not statistically-significant at the conventional $p < .05$ level.

encounter and an individual table capturing data on the subjects in the FIO encounter. Unfortunately, frisk and search indicators are included in the event table rather than the individual table. As such, while the event table information can identify whether a search or frisk occurred during an encounter, it is impossible to determine the particular subjects in an FIO encounter who experienced a frisk or search.³⁷

With respect to the racial distributions of subjects in FIO reports, we found no noteworthy differences in treatment officers relative to control officers. During the intervention period, the $n = 281$ experimental officers generated 3,623 FIO reports involving some 7,317 subjects. Treatment officers generated 1,752 FIO reports involving 3,509 subjects (48.6% of 3,623 reports; 48.0% of 7,317 subjects), while control officers generated 1,871 FIO reports involving 3,808 subjects (51.6% of 3,623 reports; 52.0% of 7,317 subjects). The treatment officers were slightly more likely to report the race of the subjects (96.1%; 3,373 of 3,509) in their FIO reports relative to their control officer counterparts (94.2%; 3,589 of 3,808).

Table 5 suggests there were no statistically-significant differences in the racial distributions of subjects involved in FIO encounters generated by the treatment and control officers. There is also no statistically-significant difference in the ethnicity of subjects in FIO reports made by the treatment and control officers (differences-in-proportions $z = -1.5629$, $p = 0.118$). In FIOs conducted by treatment officers, 501 (14.2%) subjects were reported to be Hispanic; in FIOs conducted by control officers, 590 (15.5%) subjects were reported to be

³⁷ This problem has been noted previously by the BPD. “These records are compiled from the BPD’s new Records Management System (RMS) on the BPD’s FIO program. The new RMS, which went live in June, 2015, structures the FIO information into two separate tables: *FieldContact*, which lists each contact between BPD and one or more individuals., *FieldContact_Name*, which lists each individual involved in these contacts. While these two tables align on the field contact number (*fc_num*) column, it is not methodologically correct to join the two datasets for the purpose of generating aggregate statistics on columns from the *FieldContact* table. Doing so would lead to incorrect estimates stemming from contacts with multiple individuals.” <https://data.boston.gov/dataset/boston-police-department-fio> (accessed June 28, 2018).

Hispanic. However, the vast majority of subjects in FIO encounters were reported to be black by officers in both treatment and control groups (85.6%; 5,962 of 6,962 subjects with known race). This highly-skewed racial distribution of FIO subjects is due to the large share of FIO reports made by treatment and control officers assigned to the YVSF (55.5%; 2,012 of 3,623) and Districts B-2 and B-3 (33.8%; 1,226 of 3,623) serving the mostly minority neighborhoods suffering from high levels of gun violence.³⁸

Table 5.

Proportions of FIO Subjects by Race and Officer Assignment
(Excluding Unknown Race)

| | Treatment | | Control | |
|--------------------|------------------|---------|----------------|---------|
| | Frequency | Percent | Frequency | Percent |
| White | 479 | 14.2% | 491 | 13.7% |
| Black | 2881 | 85.4% | 3081 | 85.8% |
| Asian | 7 | 0.2% | 11 | 0.3% |
| Native American | 2 | 0.1% | 3 | 0.1% |
| Pacific Islander | 4 | 0.1% | 3 | 0.1% |
| Total | 3373 | 100.0% | 3589 | 100.0% |
| Pearson chi-square | 1.389 | | | |
| Degrees of freedom | 4 | | | |
| <i>p</i> -value | 0.846 | | | |

p*<.05; *p*<.01

³⁸ For citywide analysis of the role of race, violent crime, and gangs in the FIO practices of the BPD, please see Fagan, Jeffrey, Anthony A. Braga, Rod K. Brunson, and April Pattavina. 2016. "Stops and Stares: Street Stops, Race, and Surveillance in the New Policing." *Fordham Urban Law Journal*, 42 (5): 621 – 696.

Discussion

The findings of this randomized controlled trial suggest that the placement of BWCs on BPD officers generate small but meaningful benefits to the civility of police-citizen encounters in Boston. Relative to control officers, BWC treatment officers received fewer citizen complaints and generated fewer use of force reports. The routine police work and proactivity of BPD officers outfitted with BWCs did not change when compared to their control counterparts. The BWC technology did not enhance or diminish police productivity in handling calls for service, investigating crime incidents, making arrests, or initiating FIO encounters. An exploratory analysis of the racial and ethnic distribution of FIO encounter subjects did not reveal any changes to the profile of individuals in FIO reports made by BWC treatment officers relative to control officers. While the BWC technology did not generate broader changes to the delivery of police services in Boston, the public value generated by improvement to the civility of police-citizen encounters provides considerable support to the City of Boston's plan to implement a formal BWC program later in 2018.

SECTION 2.

DESCRIPTIVE ANALYSIS OF POLICE-COMMUNITY REACTIONS TO BODY WORN CAMERAS, THE POTENTIAL INFLUENCE OF BODY CAMERA VIDEOS ON JUDICIAL DECISION MAKING, AND THE QUALITY OF VIDEO AND AUDIO GENERATED BY BODY WORN CAMERAS IN BOSTON

Jack McDevitt, Stephen Douglas, and Keller Sheppard³⁹

Qualitative Data Collection for BWC Evaluation

In addition to the quantitative analysis of outcomes of the BWC Pilot study presented above, researchers from Northeastern University's School of Criminology and Criminal Justice (SCCJ) gained insight into the perceptions of the BWC deployment from the perspective of officers, advocacy groups, and members of the public. The research team assisted in the analysis of a survey of Boston police officers during the initial implementation of the pilot study. This survey was complemented by a series of interviews with community members about their attitudes regarding the BPD BWC pilot program. During these interviews, it became clear that some of the videos collected by BPD officers during the pilot period had been used in judicial proceedings; accordingly, the research team expanded its interviews to include prosecutors and defense attorneys to learn about their experiences with BWC footage in court. Finally, researchers from SCCJ reviewed a sample of BWC videos to assess the quality of the videos. Ultimately, the information analyzed by the SCCJ was used to assist with the decision of whether or not to move forward with full implementation of BWC for BPD patrol officers.

Methodology

The qualitative analysis for this project employed a purposive snowball sampling framework. The sample was originally developed from lists of community based organizations provided by the Boston Police Department and the Boston City Council and supplemented with organizations known

to be interested in the body worn camera pilot program by researchers from Northeastern University. Members of the research team attended and took notes at each of the three citywide meetings on the implementation of the BWC pilot program sponsored by the Boston City Council. In addition to the City Council hearings data was collected via semi-structures interviews with individuals or focus groups. Each person interviewed was asked to provide names of other individuals or groups who might provide useful information about the implementation or impact of the pilot program. The questions were developed by Northeastern University researchers and included questions on the overall level of support for the pilot program, concerns about privacy of those included in the videos, concerns about costs of the program, additional uses for the videos (e.g. training), and the use of videos in court. Notes were taken of all interviews and focus groups by researchers from the Institute of Race and Justice or PhD students from the School of Criminology and Criminal Justice. The notes from these interviews and focus groups were reviewed by members of the qualitative research team until repeated themes indicated that we had reached a point of saturation. These themes were then summarized in the sections below. In all more than 150 individuals participated in this phase of the pilot program evaluation.

³⁹ Jack McDevitt, Ph.D., is the Director of the Institute for Race and Justice in the School of Criminology and Criminal Justice at Northeastern University, Stephen Douglas is a doctoral student in Criminology and Justice Policy at Northeastern University, and Keller Sheppard is a is a doctoral student in Criminology and Justice Policy at Northeastern University.

Prior Research on Community Sentiments of Body Worn Cameras

One rationale for implementing BWCs is to improve police-community relations, which has a theoretical foundation nested within the literature on procedural justice. This theoretical perspective broadly asserts that officers acting in a transparent and respectful manner toward citizens will improve citizens' perceptions of police legitimacy and ultimately cultivate a more cooperative relationship between law enforcement and the public (Sunshine and Tyler, 2003). This rationale was solidified further within the Report of the President's Task Force on 21st Century Policing, which stated that the principle of building trust and legitimacy with the community ultimately dictates the quality of the relationship between law enforcement and citizens (President's Task Force on 21st Century Policing, 2015). The deployment of BWCs by police departments is an embodiment of this principle and represents the new emphasis on improving police legitimacy through a commitment to procedural justice (Hedberg et al., 2016).

Accordingly, Sousa et al. (2015) found that public opinion is generally supportive of the use of BWCs by police officers due to their perception that the presence of BWCs will improve officer behavior and decrease incidents of police misconduct. Similarly, research conducted in the United Kingdom demonstrated that the majority of citizens believed that police use of BWCs would help to reduce crime and increase community safety (ODS Consulting, 2011). Research conducted in Florida reinforces these findings, indicating that citizens are generally in favor of BWCs, and that their positive perceptions of this technology were shaped by their thoughts on police performance, privacy, and interactions with officers (Crow et al., 2017). In short, these findings suggest that the public perceives BWCs as a facilitator of improved community-police relations. Yet, the limited number of studies currently examining this relationship means that

further research is required in order to fully understand how BWCs can influence the public's perception of police officers.

Research also suggests that the presence of BWC footage can be critical with respect to the public's perception of police use of force incidents. For example, Culhane et al. (2016) examined citizens' views on the justifiability of police shootings before and after the police shooting of Michael Brown in Ferguson, Missouri in 2015. The pre-shooting findings indicated that citizens who viewed a police shooting via BWC video were more likely to perceive the shooting to be justified than those who read a transcript or listened to an audio recording. However, the post-shooting findings indicated that citizens viewing the same police shooting via BWC video were more likely to perceive the shooting as unjustified compared to those reading a transcript or listening to an audio recording of the event (Culhane et al., 2016). This study suggests that the surrounding context in which the videos are viewed may impact how citizens perceive the justifiability of the police citizen interaction (Crow et al., 2017).

Institutional Review Board

In February 2016, an application for human subject research was submitted to Northeastern University's Institutional Review Board. This application included consent forms for those who would participate in the research as well as interview and focus group protocols for those who would be involved in the research project. These consent forms and protocols were used to guarantee confidentiality to all participants as well as notifying participants of any potential risks. Additionally, they served as a reminder to participants that they could refuse to participate or stop participation at any point with no negative implications from their decisions.

Analysis of BPD Survey of Officers Wearing Cameras

The research staff from Northeastern University assisted in the analysis of responses from officers who anonymously responded to a BPD survey in early 2017, a few months into the pilot program. Less than half (42 / 100) of the officers who were using a camera at that time responded to the survey. Findings from this survey are limited because so few officers were involved in the pilot program and fewer volunteered to complete the survey. Keeping this in mind, the findings included reports from officers that they did not initially notice a change in the behavior of community members with whom they interacted after they began to wear BWCs. Specifically, community members were neither more forthcoming nor more aggressive when informed that they were being recorded. Responding officers found few technical problems using the cameras. Officers perceived that their fellow officers were initially not supportive of cameras, in general, but we do not know if that orientation changed during the remainder of the pilot program. Our analysis indicated that more experienced officers were more favorable to cameras than were younger officers, and non-white officers seemed more favorable to cameras compared to white officers. Finally, officers expressed concerns initially that the videos would be used by supervisors to discipline officers, but none of the survey participants reported being disciplined by a supervisor for behavior in a video. Again, confidence in these results must be tempered because of the small number of officers who participated in the pilot program and the survey response rate.

Ride Alongs with BPD Officers Wearing Cameras

PhD students from Northeastern University went on ride-alongs with officers who were wearing the BWCs. The goal of this exercise was to let the students who would be working on the project know how the cameras were being utilized by the police officers wearing them. The

ride-alongs went well, and in the course of these ride-alongs, officers expressed their thoughts about the cameras. In short, officers communicated to students that the cameras were not a problem in day-to-day use, but a number of officers expressed concern that the videos would be used by their supervisors to monitor and possibly discipline officers. This concern persisted but ultimately decreased during the period of the BWC pilot study.

Community Meetings

Researchers from SCCJ spoke with a number of city groups to obtain input about the BWC pilot program. Groups included organizations working to make the City of Boston safer, as well as organizations that reached out to Northeastern University staff asking to provide input on BWCs. Staff from SCCJ met with representatives of the American Civil Liberties Union (ACLU), Boston Police Camera Action Team (BCAT), the Police Practices Coalition from Project Right, the Bowden Geneva Housing Task Force, the 10 Point Coalition, The Institute on Race and Justice, the Social Justice Task Force, the Committee for Public Council Services and the Massachusetts Bar Association and the Suffolk County District Attorney's Office to elicit feedback about the pilot study. In addition to meeting with the groups identified above, members of the research team attended all of the initial program community meetings led by City Counselor Andrea Campbell on April 25, 2016, April 26, 2016, and April 28, 2016.

Social Justice Task Force

Members of the research team attended all Social Justice Task Force (SJTF) meetings. The SJTF, which meets regularly, had been involved in all aspects of the design and implementation of the BWC project. Initially, it was members of the SJTF who suggested raising the number of cameras to be included in the pilot from 50 to 100 and implementing the pilot

citywide, rather than restrict the pilot to higher crime areas of Boston. The SJTF also reviewed the BWC implementation policy and offered suggestions for improvement. Since implementation, members of the SJTF have received progress updates regarding the cameras (e.g., number of videos uploaded, number of hours of video recorded) and have offered advice on how to reach out to the community to understand concerns. The SJTF has also engaged in an ongoing conversation about the cost effectiveness of a citywide roll out of BWC.

CONCLUSIONS

Attitude Towards Cameras

As was the case in a number of previous studies, including Las Vegas, England and Florida, the vast majority of community members interviewed during the evaluation of the BPD's pilot BWC program supported the implementation of the pilot program. While the majority of individuals interviewed reported that they felt the BPD was a strong police department, much more advanced than the average U.S. police department, they felt that cameras were important for transparency and that incidents of police misconduct, while rare, could be deterred by the presence of BWCs. Many of those interviewed felt that BWC should be a part of any state of the art police department in the U.S., specifically that wearing body cameras should be as common as the ability to file a complaint against a police officer for misconduct.

The one caution we heard from a small number of persons interviewed was the cost of the camera program. A small number of community members raised questions about the opportunity costs of implementing a BWC program. These community members questioned whether the funds necessary to implement a camera program might be better spent by increasing the number of police officers or expanding juvenile support programs, for example. This concern was raised in a small number of meetings by a small number of community members.

Quality of Police Community Interaction

In addition to the belief that BWCs would deter misconduct by the police, a number of community members felt that having cameras could improve the overall quality of community-police interactions. The individuals interviewed reported that they had observed disrespectful, or even aggressive, behavior by both the police (toward community members) and community members (toward the police) in the past. A number of individuals felt that the presence of a BWC could have quelled such behavior. For some of the community members interviewed, BWC were seen as a way to move towards more respectful police-community encounters, defined loosely as “procedural justice,” reflecting the importance of quality interactions between police and community members with the goal of having respectful encounters on both sides.

Particularly in meetings sponsored by the City Council, police officers who attended these sessions expressed concern that the videos would be used for discipline and might not show all the details of what occurred in a particular incident. Even given these concerns, the vast majority of community members who attended these meetings were very supportive of officers wearing cameras as they thought it would reduce police misconduct and improve police community relations in Boston.

Improve Investigations of Police Misconduct

A number of community members reported that the BWC videos aid investigations of police misconduct. While some community members reported feeling uncomfortable when any police department investigates their own officers, they communicated that a video of the alleged misconduct would alleviate this concern and increase the transparency they seek from the police department. They also thought that having videos of instances of alleged police misconduct

would aid in investigations, since the testimony of witnesses might not be as necessary as it is today. It was also the case with other police agencies who have implemented BWC programs that having BWC videos made internal affairs investigations proceed more efficiently. .

Privacy

During interviews and focus groups, some community members raised the issue of privacy of individuals captured on video. While community members felt that the primary reason for implementing a BWC program was to deter police misconduct, many felt that there could be collateral consequences via violation of public privacy. The concerns about privacy concentrated in two areas: (1) the privacy rights of innocent bystanders in a police encounter with a citizen, the greatest concern; and (2) the privacy rights of the individuals involved in the police encounter. The community members interviewed agreed with the BPD's decision, codified in the BPD pilot program policy, that the cameras could only be used with permission in a person's home. Additionally, it was stated that uninvolved family members should not be included in any videos filmed in their homes. Those interviewed also felt that uninvolved individuals should be protected in videos that are shot in encounters on the street. In an effort to minimize such privacy invasions, it was suggested several times that the identity of any uninvolved community members be masked before videos were distributed via any public records requests, and the BPD uses this practice.

The second concern of the public involved those individuals actually involved in the encounter captured by the camera. While fewer of those interviewed were concerned about the privacy of these individuals, a number of community members raised the possibility that the media, for example, might request a particular video and make it public before the case has been officially disposed in court.

In conversations with the Massachusetts ACLU, they shared these privacy concerns, particularly regarding the privacy of individuals not involved in the encounter. The ACLU was also concerned about the length of time that videos would be maintained and recommended that storage time of videos be minimized to only include the period of time necessary for the BPD to do its work.

In interviews with defense attorneys and prosecutors, it was suggested that legislators explore ways to adjust the public records statute so that videos were less available to groups such as the media when there was not a compelling community interest. It was suggested that videos might be treated similar to Internal Affairs Investigations in terms of public access, but that ultimately the issue should be considered by local legislators.

Training

An additional benefit of the cameras discussed in the community sessions involved the use of videos as training tools. A number of community members noted that the videos could serve as an important training tool, for example regarding police interactions with individuals suffering from mental illness. It was also suggested that the videos might be a training tool in enhancing procedural justice or respectful policing actions by BPD officers. It was pointed out that some videos might be a valuable addition to the curriculum in both the recruit academy and annual in-service trainings.

Review of Videos

The research team was permitted to review videos through a non-disclosure agreement. Members of the research team coded each video for quality and other characteristics of the encounter (e.g., number of officers involved, technical problems with video). While not a

random sample, the videos in the sample included a selection of videos from each of the five participating districts and the Youth Violence Strike Force. The videos in the sample spanned the entirety of the trial period and captured officer-citizen interactions at various hours of the day and days of the week. In total, three members of the research team reviewed and coded 185 unique BWC videos that totaled approximately 35.7 hours of footage. Our sample of videos included footage from both vendors that provided cameras to the BPD for the BWC pilot program: VIEVU and Taser.

Video Quality

The video quality of the BWC footage was generally high, with a few exceptions where it was difficult to interpret the interaction. Of note was how the quality held up during interactions that took place at night and in darkness, where it was still possible to view the scenario that was taking place. Although there were few examples of footage recorded in adverse weather conditions, such footage held up well, suggesting that the BWCs are capable of recording in different types of conditions. Video quality did not differ across VIEVU and Taser cameras.

Audio Quality

The research team noted the importance of audio in the viewed footage, particularly with respect to understanding the context in which the interactions were taking place. Instances where BWC officers were not close to the main interaction, or who left the scene to respond to another call, meant that sometimes the context of the incident was not provided. On the other hand, a number of videos that were reviewed in this study contained multiple officers wearing BWCs. The full implementation of BWC should reduce many of these concerns since the goal would be to eventually have all patrol officers wearing cameras. We also note that subsequent interviews

of both defense attorneys and prosecutors who had worked on cases that included BWC videos highlighted the importance of the audio in fully understanding the circumstances of the police community member interaction.

Use of Videos in Officer Training

The high quality of the videos suggests use beyond determinations of police misconduct and in judicial settings. Specifically, BWC videos can improve officer training programs and the public's procedural understanding of a police officer's role. Actual footage of police interactions will allow trainee officers to view how legislation and departmental procedures are implemented at the street level, which can be difficult for police academies to effectively teach.

Regarding the greater public, this type of footage, with appropriate privacy safeguards, could provide a frontline view of the police officer role, providing a greater understanding of police decision making. The proliferation of mobile phones has meant that officer interactions with the public are often recorded by civilians from a distance, where the full context of the interaction is not clear. This type of footage often is provided as evidence of police misconduct or use of force, which may on occasion reflect a lack of understanding about what the police are legally entitled to do and what is deemed to be unreasonable behavior. The ability of police departments to provide video illustrations of typical police officer interactions may improve the public's understanding regarding these incidents and provide greater clarity and context to mobile phone footage of police interactions.

From the footage that the research team viewed, there were several examples that illustrate these points. Regarding the potential of BWCs for training new police officers, the research team noted a scenario where a newly hired, probationary officer was being reviewed by his training officer in the arrest and subsequent search of a male suspect. The training officer was

wearing the BWC and was making efforts to ensure that the probationary officer was carrying out his role effectively. The training officer let the probationary officer take the lead and helped sporadically with advice and comments when needed. Notably, the training officer intervened when the probationary officer attempted to search the suspect without having first put gloves on. Although this seems like a mundane scenario, it represents the difficulties that every young officer has to deal with. Having this type of footage available during training illustrates these challenges in previously unprecedented detail and informs them of previously unknown procedural difficulties, which all officers are expected to handle.

BWC videos can also aid officers in their daily roles. For example, one video illustrated how an officer with a BWC used it to document a difficult situation. The scenario included a young female suspect who had locked herself in her partner's car without his consent. The suspect was hiding behind the front seats, laying on the floor of the rear seat. Once the officer realized that she was in the car, he asked her repeatedly to step out of the car while she refused. Initially, the BWC was attached to the officer's body armor, which meant that it was difficult for the officer to record the suspect within the vehicle. The officer realized this and removed the BWC, holding it up to the rear passenger window to record the suspect. The officer recognized that ensuring the BWC recorded the suspect in the vehicle, and also her refusal to leave, would further justify his actions in forcibly opening the car without the owner's consent. This scenario illustrates how officers during the pilot program began to utilize cameras to document their actions and investigations.

Frequent Instances of Dealing with Individual in Crisis

BWC videos often capture interactions with vulnerable populations, including individuals suffering from mental health crises or under the influence of drugs and/or alcohol. Of the videos

reviewed by the research team, officers displayed a high degree of professionalism and sincere concern for the well-being of these individuals. BWC footage could prove to be an invaluable training tool in demonstrating both the manifestations of and proper procedure in response to mental health and drug dependency issues.

BPD's pilot program policy as currently written includes several features intended to provide protections to the privacy of citizens captured by BWC footage. The need to strictly adhere to these policies is especially evident after the review of these videos and reaffirms the need for controls on access to raw BWC footage. Vivid depictions of citizens in these videos, including crime victims, suspects, or witnesses, illustrate the high degree of anguish, trauma, and vulnerability experienced by some individuals during interactions with law enforcement officers. These videos not only provide glimpses into the private lives of citizens, but also create what could potentially become a permanent and graphic record into some of the most stressful and vulnerable moments of their lives.

Subsequent interviews with advocacy groups, defense attorneys and prosecutors suggested that the Massachusetts Public Records Law might be reviewed with an eye on increasing the privacy of those observed on BWC videos.

Use of Videos in Court

Most research considering the role and impact of BWCs is primarily focused on the implications for law enforcement as it pertains to their disposition towards, reception by, and relationships with the public. While understanding these aspects of BWC implementation is critical, it does not sufficiently address the police's function as the gatekeepers to the broader criminal justice system. There exists a paucity of empirical research on the potential effect on criminal cases stemming from the proliferation of BWC technology in the law enforcement

community. The prominence of BWC footage in the legal proceedings of criminal cases has necessitated a response from judges, prosecutors, and defense attorneys, and initial studies indicate it BWC footage alters the manner in which criminal cases progress through the adjudication process.

The ability of BWCs to capture high quality video and audio of law enforcement's interactions with the public often afford officers, prosecutors and defense counsel access to useful evidence. Both the law enforcement and legal communities readily acknowledge the ability of BWC videos to enhance the evidence collection capacity (Jennings, Lynch, and Fridell, 2015);⁴⁰ (Merola, Lum, Koper, and Scherer, 2016).⁴¹ Police function as the primary, if not sole, investigators in the vast majority of cases that are formally indicted, so their ability to more effectively engage in the evidence-gathering process has clear implications for criminal cases (Devine et. al.'s 2001).⁴² A review of the influence of legal and extra-legal factors affirms the importance of clarity and strength of evidence and claims that it represents one of the most influential factors in criminal case outcomes. Prosecutorial⁴³ and judicial⁴⁴ discretion are profoundly influenced by the type of evidence afforded by BWC footage.

The few studies that have considered this question suggest that BWC's evidentiary value has had a marked effect on the criminal case process. BWCs apparent influence in aiding the prosecution and conviction of criminal offenders can be illustrated by a study examining the

⁴⁰ Jennings, Wesley G., Mathew D. Lynch, and Lorie A. Fridell Evaluating the impact of police officer body-worn cameras (BWCs) on response-to-resistance and serious external complaints: Evidence from the Orlando police department (OPD) experience utilizing a randomized controlled experiment

⁴¹ Merola, L., Lum, C., Koper, C. S., & Scherer, A. (2016). Body Worn Cameras and the Courts: A National Survey of State Prosecutors.

⁴² Jury decision making: 45 years of empirical research on deliberating groups Devine, D.J., et al., 2001.

⁴³ Does evidence really matter? An exploratory analysis of the role of evidence in plea bargaining in felony drug cases

The Anatomy of Discretion: An Analysis of Prosecutorial Decision Making – Technical Report

⁴⁴ Find appropriate citation

impact of BWC deployment on the case outcomes of individuals arrested for intimate partner violence (IPV) (Morrow, Katz, and Choate, 2016).⁴⁵ This study utilized arrest and court data in Phoenix, Arizona to examine the effect of pre- and post-BWC deployment on IPV case outcomes. Although cases featuring IPV prove especially challenging to successfully prosecute, BWC cameras were found to be associated with a higher likelihood of change of pleas, guilty pleas, and guilty verdicts at trial for IPV cases. Other studies suggest similar increases in guilty pleas and conviction rates (Owens, Mann, and Mckenna, 2014; ODS Consulting, 2011).⁴⁶ We note, however, that an evaluation of BWCs in Washington D.C. suggested the need for further investigation. Yokum, Ravishankar, and Coppock's (2017)⁴⁷ department-wide randomized control trial with the Metropolitan Police Department of the District of Columbia (MPD) found no statistically significant impact of BWCs on judicial outcomes.

BWC adoption and its role in the courtroom prompts several other concerns stemming from the access to BWC footage. In a national survey of prosecutors, the majority of respondents expressed concern related to their timely access to videos (Merola et al., 2016). The report recommends that police departments establish secure means of transferring video files in a timely basis. Transferring footage from police departments to prosecutors and the subsequent processing of this footage can present significant logistical challenges and increase case preparation time (Trimble, 2018).⁴⁸ Once footage is secured and prepared by prosecutors, sharing the footage with other parties introduces additional challenges. Defense attorneys require footage

⁴⁵ Assessing the Impact of Police Body-Worn Cameras on Arresting, Prosecuting and Convicting Suspects of Intimate Partner Violence → Morrow et al 2016

⁴⁶ Body Worn Video Projects in Paisley and Aberdeen Self-Evaluation
The Essex Body Worn Video Trial

⁴⁷ Evaluating the Effects of Police Body-Worn Cameras

⁴⁸ Body-Worn Cameras: The Implementation Of Both The Police Department's Rollout Of Cameras And The State's Attorney's Office's Processing Of Data For Discovery

in their duties to provide criminal defendants a vigorous defense, and routinely request copies of footage as part of the criminal discovery process.

Gimbel (2016) details the legal framework by which criminal defendants and their legal counsel access BWC footage. Federal and most states' discovery rules provide criminal defendants access to the type of evidence captured in BWC footage. Legal precedent regarding comparable evidence suggests that defendants should legally have access to their footage early in the legal process in most states. Massachusetts Rules of Criminal Procedure are among those allowing the defense to access to BWC in the discovery process.⁴⁹

Meetings with Prosecutors and Public Defenders

SCCJ researchers also sought input from persons involved in criminal court proceedings in Boston courts. To this end, SCCJ researchers conducted focus groups with public defenders from the Committee for Public Counsel Services and prosecutors from the Suffolk County District Attorney's Office. Representative from both groups were asked to share their experiences with and impressions of the BWC pilot program.

Participants echoed claims in the literature that BWC footage provided invaluable evidence in some cases. Footage captured interactions and documented evidence in a manner that benefited both the prosecution and the defense, depending on the specific circumstances in a case. Public defenders attributed, at least in part, successful motions to dismiss to the presence of a BWC video in a particular case. They reported other instances where BWC videos bolstered the state's case against their clients and hastened their client's decision to plea bargain. Some participants highlighted the role of audio of incidents provided by the BWCs. While the use of video footage is routine in criminal cases, several participants found that the complementary

⁴⁹Mass. R. Crim p. 14

audio in BWC footage presented important context to some cases. Indeed, one case referenced during the focus group with public defenders involved an incident where a camera fell from the officer's uniform, but the audio alone conveyed the critical aspects of the case. A number of prosecutors and defense attorneys reported that videos helped judicial decision makers come to a more just resolution of specific cases because the evidence was so clearly visible in the video.

As indicated in the literature, some attorneys commented on the challenges of learning a video was available on a case and obtaining it in a timely basis. Those involved attributed these delays to the small number of officers wearing BWCs during the pilot program. It was suggested that if the use of BWCs becomes citywide, then a process should be developed to routinely transfer videos to the attorneys, as applicable.

Both prosecutors and defense attorneys reported that in the rare occasions when a video was not available on a case that should have had one (e.g., an arrest made by an officer in the treatment group), the judge or jury tended to side with the defense under an impression that "the officer may have been trying to hide something." This was cited by prosecutors as a concern if the city moved to full implementation of patrol officers. They suggested that a process of documenting when a video is not used, as in a case involving a confidential informant, would be very helpful as cases move to judicial determination.

Finally, interviews with Suffolk County Prosecutors indicated that even the 100 cameras involved in the pilot program resulted in significant cost to the Suffolk County District Attorney's office. The technical aspects of preparing videos for trial and responding to public records requests have required additional staff to be delegated to these duties.

Recommendations

- Because of the widespread support for a BWC program, if the decision is made to expand the BWC program to a citywide program a process should be developed to make the public aware of the implementation process.
- A review process should be established to assure that videos exist in all cases as called for in the BPD's BWC policy and that documentation exists in cases where a video was not recorded in conjunction with policy.
- A group including defense attorneys, prosecutions, and police should be formed to develop a formal process for transferal of videos from police to prosecutors and from prosecutors to defense attorneys.
- Meetings should be convened with local legislators, leaders of the BPD, defense attorneys and prosecutors, members of the local advocacy groups and community members to explore possible changes to State's public records law as it pertains to BWC footage.

APPENDIX.

BOSTON POLICE DEPARTMENT BODY WORN CAMERA POLICY



Police Commissioner's Special Order

Number: SO 16-023

Date: July 12, 2016

Post/Mention: Indefinite

SUBJECT: BODY-WORN CAMERA PILOT PROGRAM POLICY

Sec. 1. GENERAL CONSIDERATIONS:

The Boston Police Department will conduct a six (6) month pilot program of the use of Body-Worn Cameras (BWC) by police officers to determine their effectiveness in enhancing policing transparency and increasing public trust and police-community relations. BWC's are an effective tool to preserve factual representations of officer-civilian interactions. BWC's are effective in capturing video and audio evidence for use in criminal and internal investigations and officer training.

The purpose of this policy is to establish guidelines for the proper use, management, storage, and retrieval of video and audio data recorded by BWC's during the Boston Police Department Pilot Program.

It is the policy of the Department to respect the legitimate privacy interests of all persons in Boston, while ensuring professionalism in its workforce. The recording of civilians based solely upon the civilian's political or religious beliefs or upon the exercise of the civilian's constitutional rights to freedom of speech and religious expression, constitutional petition and assembly is prohibited. BWC footage shall not be reviewed to identify the presence of individual participants at such events who are not engaged in unlawful conduct. BWC's will not include technological enhancements including, but not limited to, facial recognition or night-vision capabilities.

Sec. 2. PROCEDURES:

Sec. 2.1. Training: All BWC officers and all supervisors who may supervise BWC officers shall attend Department approved training on the operation of the system and this policy.

Sec. 2.2. BWC Activation and Incidents of Use: Officers will activate the BWC only in conjunction with official law enforcement duties, where such use is appropriate to the proper performance of duties, and where the recordings are consistent with this policy and the law. If there is an immediate threat to the officer's life or safety, making BWC activation impossible or dangerous, the officer shall activate the BWC at the first reasonable opportunity to do so. The BWC shall not be deactivated until the encounter has fully concluded and/or the officer leaves the scene (See Section 2.8, BWC Deactivation). Officers shall record all contact with civilians in the following occurrences:

1. Vehicle Stops;
2. Investigative person stops: consensual, or articulable reasonable suspicion stops pursuant to Rule 323 (FIOE Report), or stops supported by probable cause;
3. All dispatched calls for service involving contact with civilians;
4. Initial responses by patrol officers, including on-site detentions, investigations pursuant to an arrest, arrests, and initial suspect interviews on-scene;
5. Pat frisks and searches of persons incident to arrest (if not already activated);
6. K9 searches;
7. Incidents of Emergency Driving (primary and secondary responding officers);
8. Incidents of Pursuit Driving (primary and secondary responding officers);
9. When an officer reasonably believes a crowd control incident may result in unlawful activity;
10. Any contact that becomes adversarial, including a Use of Force incident, when the BWC had not been activated; or
11. Any other civilian contact or official duty circumstance that the officer reasonably believes should be recorded in order to enhance policing transparency, increase public trust and police-community relations, or preserve factual representations of officer-civilian interactions, provided that recording is consistent with Sections 2.3, 2.4, 2.5, 2.6, 2.7, 7.1 and 7.2 of this policy.

Sec. 2.3. Recording within a Residence: Before entering a private residence without a warrant or in non-exigent circumstances, the BWC officer shall seek the occupant's consent to continue to record in the residence. If the civilian declines to give consent, the BWC officer shall not record in the residence. Officers recording in a residence shall be mindful not to record beyond what is necessary to the civilian contact, and not to use the BWC with exploratory intent in an effort to create an inventory of items in the residence.

Sec. 2.4. Recording in Areas Where There May be a Reasonable Expectation of Privacy: BWC officers should be mindful of locations where recording may be considered insensitive, inappropriate, or may be prohibited by privacy policies. Such locations may include locker rooms, places of worship, religious ceremonies, certain locations in hospitals or clinics, law offices, day care facilities, etc. At such locations, at the officer's discretion and based on the circumstances, BWCs may be turned off. The officer may consider the option to divert the BWC away from any subjects and record only audio, if appropriate. When exercising discretion in such situations, the decision whether to stop recording, divert the BWC, or record only audio should generally be based on the following BWC Discretionary Recording Considerations: the extent to which the officer observes activities or circumstances of a sensitive or private nature; the presence of individuals who are not the subject of the officer-civilian interaction; the presence of people who appear to be minors; any request by a civilian to stop recording; and the extent to which absence of BWC recording will affect the investigation.

Sec. 2.5. Notice of Recording: Unless there is an immediate threat to the officer's life or safety, making BWC notification impossible or dangerous, BWC officers shall inform civilians that they are being recorded. BWC officers shall notify civilians with language such as "Ma'am/Sir, I am advising you that our interaction is being recorded by my Body Worn Camera." BWC officers shall not record civilians surreptitiously.

Sec. 2.6. Consent to Record: Aside from the restriction in Section 2.3 (Recording within a Residence), BWC officers are not required to obtain consent to record. If a civilian has requested the BWC officer to stop recording, officers have no obligation to stop recording if the recording is pursuant to the circumstances identified in Section 2.2. When evaluating whether or not to continue recording, BWC officers should weigh the BWC Discretionary Recording Considerations specified in Section 2.4. The request to turn the BWC off should be recorded, as well as the officer's response.

Sec. 2.7. Recording of Victims / Witnesses: If a BWC officer is in range of visual or audio recording of a victim or witness who is giving their first account of a crime, the officer may record the encounter but should weigh the BWC Discretionary Recording Considerations specified in Section 2.4 in determining whether to activate or discontinue recording. If the decision to activate and/or continue recording is made, notification shall be made as specified in Section 2.5. If the victim is in anyway unsure of the need for the recording to be made or is uncomfortable with the thought of being recorded, the officer shall inform the civilian that they can request to have the BWC turned off. If the camera is already activated, the request to turn the BWC off should be recorded, as well as the officer's response.

Sec. 2.8. BWC Deactivation: To the extent possible, prior to deactivating a BWC, the officer shall state the reason for doing so. Generally, once the BWC is activated, recording will continue until or unless the event has concluded. Below are examples of when an event shall be considered concluded:

1. Victim and/or witness contact has concluded;
2. All persons stopped have been released or left the scene or an arrestee has arrived at the district station for booking. If a transporting officer has a BWC, recording shall continue until the transporting officer arrives inside the station at the booking desk;
3. The event is of a sensitive nature and the BWC officer has weighed the BWC Discretionary Recording Considerations specified in Section 2.4 and decided to deactivate the BWC;
4. The incident has concluded prior to the arrival of the officer;
5. The incident or event is of such duration that deactivating the BWC is necessary to conserve available recording time; or
6. The officer is ordered to turn the camera off by a supervisor.

Sec. 3. BWC DEPLOYMENT:

Sec. 3.1. Officer Responsibilities:

1. At the beginning of each shift, the officer will:
 - a. Ensure that the issued equipment has a fully charged battery and is functioning properly; and
 - b. Notify a Supervisor whenever there is a malfunction or damage to the BWC.
2. During shift, the officer will:

- a. Activate the BWC and record as outlined in Section 2 above;
- b. Document the existence of a BWC recording in all of the appropriate documents, i.e. Incident Report, Citation, FIO, Administrative Reports, etc;
- c. Notify investigative or specialized unit personnel, including the Crime Scene Entry Scribe, of the existence of BWC recording; and
- d. If an officer fails to activate the BWC, fails to record the entire contact, interrupts the recording, or the BWC malfunctions, document the circumstances and reason in the incident report or any other applicable report.

3. Any and all additional responsibilities contingent upon technology requirements.

Sec. 3.2. Supervisor Responsibilities: The Supervisor will:

1. Ensure all officers assigned a BWC utilize the BWC in accordance with this policy;
2. During roll call, ensure each BWC is working properly and any malfunction or damage to a BWC is documented. The Supervisor will remove the BWC from service, report the malfunction or damage, and issue the officer a spare BWC unit, where available; and
3. Access BWC recordings during the course of duties in accordance with the Internal Access/Review section of this policy.

Sec. 4. INTERNAL ACCESS/REVIEW:

Sec. 4.1. BWC Officer Access to Footage: BWC officers may review their own BWC recording as it relates to:

1. Their involvement in an incident for the purposes of completing an investigation and preparing official reports. To help ensure accuracy and consistency, officers are encouraged to review the BWC recording prior to preparing reports;
2. Providing testimony in court to refresh recollection. Officers will ensure that the prosecuting attorney is aware the BWC recording was reviewed; and
3. Providing a statement pursuant to an internal investigation, including officer involved shooting investigations and other critical incidents as outlined in Sec. 4.2. below.

Sec. 4.2. BWC Officer Access to Footage Following an Officer Involved Shooting:

Following an officer involved shooting, or other use of deadly force, involved officers, including supervisors, shall not view the BWC recording on any device or computer prior to the Firearm Discharge Investigation Team ("FDIT") viewing the footage and uploading it into the system, except if exigent circumstances exist, such as an officer being injured, in order to obtain identifying suspect information or other pertinent information from the BWC recordings. BWC officers involved in an officer involved shooting and BWC officers who witness an officer involved shooting or other use of deadly force shall be allowed to view their own BWC recording prior to a walkthrough and/or statement.

4.3. Collecting and Securing BWC Footage following an Officer Involved Shooting or Other Use of Deadly Force: FDIT personnel will be responsible for collecting and securing the BWC's from all involved and witness officers at the earliest opportunity. FDIT personnel will transport the cameras to the involved officer's district commands for upload into the system. The BWC will be returned to the officer once the video is uploaded into the system.

Sec. 4.4. Non-BWC Officer Access to Footage: Non-BWC officers shall only access footage with permission of a supervisor.

Sec. 4.5. Supervisor Access to Footage: Any supervisor within the recording officer's chain of command, and any Bureau Chief, may review the footage. If a supervisor outside of the chain of command requests to see footage, it shall only be allowed with the permission of the recording officer's commanding officer.

Sec. 4.6. Audit and Review Access to Footage: Audit and Review shall conduct periodic checks to ensure BWC's are being used appropriately.

Sec. 4.7. Use of Footage for Training: Any officer can forward a recommendation to the Bureau of Professional Development to use a BWC recording for training purposes.

Sec. 5. EXTERNAL ACCESS:

BWC recordings related to an ongoing investigation or in support of a prosecution may be provided by the recording officer to the applicable law enforcement entity. Should an officer receive a subpoena for BWC footage, the officer shall direct the subpoena as soon as practicable to the commander of the Information Services Group for response, with a copy to the Office of the Legal Advisor. BWC recordings may be requested by the public pursuant to a public records request (M.G.L. c. 66 §10). If an officer receives a request for BWC footage from the Media, the request shall be directed to the Commander, Office of Media Relations. All other requests for BWC recordings, including victim or witness requests, shall be directed to the Office of the Legal Advisor.

Sec. 6. RETENTION:

During the pilot program, no recording or footage shall be deleted. Footage recorded during the pilot program will be retained for no longer than one year after the pilot program concludes; however, footage recorded during the pilot program that relates to any criminal or civil proceeding, any criminal or administrative investigation, or any use of force will be retained during the pendency of any relevant proceeding, investigation, or statute of limitations period. The retention period for footage recorded pursuant to the pilot program may be superseded by any future BWC policy implemented.

Sec.7. RESTRICTIONS:

Sec. 7.1. Improper Recording: BWC's shall not be used to record:

1. During breaks, lunch periods, or time periods when an officer is not responding to a call, or when not in service;
2. Any personal conversation of or between other department employees without the recorded employee's knowledge;

3. Non-work related personal activity, especially in places where a reasonable expectation of privacy exists, such as locker rooms, dressing rooms, or restrooms;
4. Investigative briefings;
5. Encounters with undercover officers or confidential informants; or
6. Departmental meetings, workgroups, in-service training, or assignments of an operational or administrative nature. Using BWC's for training purposes is not a violation of this restriction.

Sec. 7.2. Improper Use of BWC Footage: BWC recording/footage shall not be:

1. Used for the purposes of ridiculing or embarrassing any employee or person depicted on the recording;
2. Randomly reviewed by the Internal Affairs Division for disciplinary purposes;
3. Disseminated by any employee unless approved by the Police Commissioner or his designee, or disseminated in the course of their official duties; or
4. Copied by any employee (i.e. use their iPhone, iPad, or any other electronic device to copy).

Sec. 7.3. Employee Accountability and Sanctions: Officers will not be disciplined for minor violations of this policy.

William B. Evans
Police Commissioner