

# Assessing the Utility of Body-Worn Cameras for Collegiate Police Agencies

Police Quarterly

24(4) 1–31

© The Author(s) 2021

Article reuse guidelines:

[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

DOI: 10.1177/1098611211037586

[journals.sagepub.com/home/pqx](https://journals.sagepub.com/home/pqx)**Janne E. Gaub** 

## Abstract

Nearly all scholarship on body-worn cameras (BWCs) has focused on municipal police departments, as they comprise a majority of sworn agencies. Given the unique environment of collegiate law enforcement agencies, however, it is possible that their paths to BWCs—and the benefits and challenges they experience—vary from that of more traditional agencies. Using a survey of 126 collegiate police departments and in-depth interviews with 15 collegiate police executives, this study describes their goals, challenges, and benefits related to BWCs. Importantly, it also describes the decision-making of agencies that chose not to implement BWCs, giving voice to an understudied population and providing guidance to special agencies in making the decision to adopt BWCs. The most notable benefits and challenges interrelate with their placement as part of institutions of higher education, such as the impact of collegiate privacy concerns (e.g., FERPA) and the utility of BWC footage in both law enforcement and educational processes.

## Keywords

police, body-worn cameras (BWCs), higher education, implementation, police technology

---

Department of Criminal Justice & Criminology, University of North Carolina at Charlotte, Charlotte, United States

### Corresponding Author:

Janne E. Gaub, Department of Criminal Justice and Criminology, University of North Carolina at Charlotte, 9201 University City Blvd., Charlotte, NC 28223, United States.

Email: [jgaub@uncc.edu](mailto:jgaub@uncc.edu)

## Introduction

While body-worn cameras (BWCs) are new technology in the broader picture of policing, they have a longer history than most people realize. Widespread implementation of BWCs in the United States began in 2014–2015, though some agencies, especially in Canada and the United Kingdom, had begun implementing them nearly a decade earlier. In fact, the 2013 Law Enforcement Management and Administrative Statistics (LEMAS) survey shows roughly one-third of American police agencies had a BWC program, though the vast majority were smaller scale, pilot versions (Reaves, 2015b). In contrast, by 2016, one-half of all agencies and 80% of agencies with more than 500 sworn personnel had BWCs, and most had completed full implementation or were in process of doing so (Hyland, 2018a). Another study found that in 2018 about 60% of agencies with more than 100 sworn personnel had BWCs, compared to 47% of smaller agencies (Nix et al., 2020).

Interwoven with this history are the repeated stories emphasizing the need for such accountability measures. The death of Michael Brown in Ferguson (MO)—and the ensuing civil unrest and surging popularity of the Black Lives Matter movement—is often considered the “line in the sand” marking the beginning of a renewed call for police reform and accountability, including BWCs, but the story begins long before that and has continued ever since. Nearly all of these interactions have occurred between black citizens (primarily young men) and police officers employed by municipal police departments, unsurprising since the majority of American law enforcement agencies are municipal. But there are notable examples of incidents involving other types of agencies, including police departments servicing college and university campuses. For example, University of Cincinnati police officer Ray Tensing was charged with murder in the death of Samuel Dubose based largely on the footage from his own BWC (Ortiz, 2015). A non-lethal encounter in 2014 between an Arizona State University police officer and Ersula Ore (a black female professor at the school) made national headlines after released dashboard camera footage sparked outrage of the professor’s seemingly excessive treatment for jaywalking (Jaschik, 2014).

It is important that every facet of law enforcement be informed and molded by evidence-based practice. Unfortunately, the evidence in policing research is nearly always derived from municipal police agencies, just as it is skewed to favor medium/large-sized agencies over small ones and urban agencies over suburban or rural ones. While these trends make sense for several reasons, they present a more limited view of the contexts in which strategies, programs, or technology may or may not work and why. This tendency is no different in the BWC literature. Since 2014, there has been a proliferation of research on police use of BWCs, from only five published studies (White, 2014) to over 120 by January 2020 (Gaub & White, 2020; see also Lum et al., 2020; Lum et al., 2019), yet the research has focused on municipal law enforcement agencies with

only a handful of exceptions (see Pelfrey & Keener, 2016, 2018). A preference for municipal agencies means that very little is understood about how BWCs function in non-municipal contexts such as sheriff's offices, state police departments, highway patrol agencies, and campus police agencies. These types of agencies often include mandates that are not required of municipal agencies, such as detention, which can have significant impacts on the deployment and use of BWCs. This oversight is troublesome.

Collegiate agencies, like any other police agency, must keep pace with public expectations of professionalism and transparency, yet may have very different experiences when implementing BWC programs. The question of whether our understanding of the benefits and challenges of BWCs among municipal agencies holds water when applied to other contexts is particularly salient as BWCs are marketed to agencies beyond the traditional municipal police department. For example, the most recent iteration of the federal BWC grant program administered by the Bureau of Justice Assistance strongly encouraged applicants from regional cooperatives (e.g., regional organizations or multiple jurisdictions jointly applying for funds), agencies in school settings (either K-12 or higher education), and correctional facilities (Bureau of Justice Assistance, 2018, 2019). Accordingly, the current study examines the utility of BWCs in the collegiate setting using an online survey administered to 611 agencies serving 4-year public and private postsecondary institutions.

## Literature Review

### *BWCs in Policing*

*Officer and Citizen Behavior.* Currently, the most common reasons for implementing a BWC program are officer safety, evidentiary value, and a reduction in citizen complaints and agency liability (Hyland, 2018a). The rapid diffusion of BWCs was largely based on the promised declines of officer use of force and citizen complaints against officers based on a handful of studies (Lum et al., 2015, 2019; White, 2014). Since then, the research base has grown substantially: While there were only five published studies or agency reports in 2014, there were over 70 by 2018 and over 120 by early 2020 (Gaub & White, 2020; Lum et al., 2019). The plethora of studies on these two major outcomes has come to somewhat inconsistent findings. For example, about half of studies on the impact of BWCs on officer use of force find statistically or substantially significant changes (decline). Rialto (CA) experienced the most dramatic decline: 60% reduction in use of force that persisted at least four years after full implementation of BWCs (Ariel et al., 2015; Sutherland et al., 2017). Agencies such as the Las Vegas Metropolitan Police Department, the Orlando Police Department, and the Toronto Police Service experienced similar, but less dramatic, declines (Braga et al., 2018; Jennings et al., 2015; Toronto Police Service, 2016).

Conversely, other agencies experienced no effect of BWCs on use of force. Notably, the DC Metropolitan Police Department and Boston Police Department documented no difference in officer use of force after deploying cameras (Braga et al., 2019; Yokum et al., 2017). This inconsistency is echoed in a recent systematic review of BWC impact on officer and citizen behaviors:

The current evidence is insufficient for concluding that BWCs reduce officer use of force [ . . . ] but there remains substantial uncertainty in this effect (moderator analyses suggest that BWCs may be more likely to reduce police use of force if agencies highly restrict officers' discretion in how they use the cameras). (Lum et al., 2020, p. 3)

Research addressing citizen complaints against officers has followed a slightly more consistent trend. Most studies report reductions (of varying magnitude) in citizen complaints following BWC implementation (Lum et al., 2019; White et al., 2019). Lum et al. (2020) support this contention, noting "BWCs can reduce the number of citizen complaints against police officers [ . . . ] although it remains unclear whether this finding signals an improvement in the quality of police-citizen interactions or a change in reporting" (p. 3). This uncertainty as to the mechanism by which citizen complaints are reduced is echoed elsewhere (Gaub & White, 2020; Malm, 2019; White & Malm, 2020), including by officers themselves (e.g., Fallik et al., 2020; Gaub, Todak, et al., 2020).

*Perceptions of BWCs.* BWCs are also widely accepted by a variety of stakeholders. Generally speaking, BWCs enjoy widespread acceptance among officers (Braga et al., 2018; Gaub et al., 2016; Gaub, Todak, et al., 2020; Goetschel & Peha, 2017; Gramagila & Phillips, 2018; Jennings et al., 2014), including among collegiate police officers (Pelfrey & Keener, 2016, 2018). Officers believe the technology has enormous evidentiary value, especially for the investigation of citizen complaints. Their perceptions as to the impact of BWCs on citizen behavior, however, are less clear. In many respects, the inconsistency in findings is likely due, at least in part, to the reality of police interactions with the public (Edmonton Police Service, 2015; Fallik et al., 2020; Gaub, Todak, et al., 2020). In some instances, citizens respond favorably to BWCs (e.g., calming down); in others, the presence of a BWC has no effect, or can cause a negative reaction (e.g., becoming more belligerent). The positivity among line officers is by no means universal (see, e.g., Huff et al., 2018; Koen & Mathna, 2019), but on the whole, the positives outweigh the negatives. In contrast to line officers, command staff view BWCs slightly less favorably, in large part due to their need to balance a range of factors such as cost and privacy issues (Smykla et al., 2016).

Aside from officers, other criminal justice stakeholders also view BWCs favorably. Studies of other courtroom actors, including prosecutors, judges,

and public defenders, find that they are generally quite positive about the benefits of BWCs, though often for different reasons (Gaub et al., in press; McCluskey et al., 2019; Merola et al., 2016; Todak et al., 2018). Additionally, citizens typically hold positive views about BWCs, particularly as mechanisms of accountability (Crow et al., 2017; Miethe et al., 2019; White et al., 2017, 2018). The level of police transparency about police activity and the use of BWCs can temper this support, however (Kerrison et al., 2018).

***BWC Program Implementation.*** Police agencies' experiences implementing a BWC program are also important. The Bureau of Justice Assistance created a BWC Toolkit, which includes a BWC Implementation Checklist (Bureau of Justice Assistance, 2015). These resources provides guidance based on best practices in police program implementation. A study of the Tempe (AZ) Police Department found that adherence to the checklist and general best practices positively affected a range of outcomes, including increased officer buy-in, positive stakeholder perceptions of BWCs, and better court outcomes (White et al., 2018). Conversely, agencies that fail to acknowledge the full range of hurdles—in particular, the monetary investment required for a quality BWC program—will have a much more difficult implementation experience. In some instances, this results in agencies ultimately abandoning their BWC program altogether (Kindy, 2019; Koen et al., 2021; Saunders, 2019).

Research has found that officers who believe their agency treats them fairly (e.g., positive perceptions related to organizational justice) also have positive views about BWCs (Kyle & White, 2017). This has enormous implications for successful program implementation; as the users of the technology, a program will not fulfill its intended goals if officers do not buy-in to the benefits and actively participate (e.g., activate the camera when appropriate, accurately log footage, etc.). One way that agencies demonstrate good faith and organizational justice is by not engaging in so-called “fishing expeditions,” wherein supervisors view the footage with the express purpose of “jamming up” officers who commit minor policy infractions. This is often a significant concern among officers, at least initially—particularly in agencies with lower levels of perceived organizational justice or poor relations between command staff and the rank-and-file (Gaub et al., 2016; Koen & Willis, 2020). This dichotomy between “management” and “street cops” has long been a point of contention (Reuss-Ianni, 1983) and can result in exceptionally negative experiences when implementing new policies or programs, including BWCs (Koen & Willis, 2020). However, officers' perspectives often change when they experience *positive* interactions with their supervisors related to BWCs, and they accept the benefits of BWCs as, on the whole, outweighing potential disadvantages (Koen et al., 2019; Todak & Gaub, 2019).

## Campus Policing

As of the most current estimates, 861 (4.7%) of the roughly 18,500 state and local law enforcement agencies in the United States serve public institutions of higher education (serving more than 2,500 students; Reaves, 2015a). According to the Law Enforcement Management and Administrative Statistics survey from 2013, nearly 70% of all campuses (and 92% of public colleges and universities) have agencies staffed with sworn personnel with arrest powers; a 2006 survey of collegiate agencies show 82% of agencies had full police powers and over half having jurisdiction beyond their own campus (Peak et al., 2008). Collegiate agencies also employ far more officers per capita than do municipal agencies (between 2.5 and 6.7 officers per 1,000 students; Reaves, 2015a).

But historically, college campuses typically used “watchman”-style security forces without true policing powers; it was not until the civil unrest sweeping across college campuses in the 1960s and 70s that most campus security forces were transitioned to full-service police departments (Bromley, 2003; Sloan, 1992). It is likely this transition was due in large part to more serious on-campus crimes and a general public belief that campuses should have their own police separate from the local municipal departments (Bromley, 2003; Youstin & Kopp, in press). But despite several studies finding that campus police are similar to their local municipal counterparts in many respects, especially in terms of structure and training (Bordner & Petersen, 1983; Bromley, 2003; Bromley & Reaves, 1998; Lanier, 1995; Sloan, 1992; Sloan et al., 2000; Wada et al., 2010), the perception of campus police not being “real police” has persisted—even among campus police themselves. For example, Wilson and Wilson (2015) found that nearly one-quarter of surveyed campus police officers did not perceive themselves as “real police.” Studies of both the campus community specifically and the wider municipal community find the public often does not understand what campus police actually do, which likely contributes to this misperception of campus police as a whole (Aiello & Lawton, 2018; Patten et al., 2016; Wada et al., 2010; Wilson & Wilson, 2015; Youstin & Kopp, in press).

But while collegiate agencies are similar to municipal agencies in many respects, there are substantive differences between a campus setting and a traditional town or city setting (Bromley, 2003; Sloan et al., 2000). Campus police deal with a different set of expectations, especially regarding public safety, from a variety of stakeholders (e.g., students, faculty, staff, administrators, and community members). In particular, student enrollment, retention, and matriculation trends impact financial decisions throughout the university, including the tactics and strategies implemented by campus police. Thus, campus policing often mimics a specialized assignment for community policing rather than traditional patrol (Peak et al., 2008; Sloan et al., 2000). In fact, some scholars have argued that college campuses are like a “city within a city,” making community

policing practices ideal for campus settings (e.g., Bromley, 2003; Lanier, 1995; Sloan, 1992). Additionally, colleges and universities are often viewed as petri dishes for social disorder and civil unrest, the very incidents that prompt calls for police reform efforts such as BWCs. Recently, students at a number of universities have petitioned their institution to reduce the reliance on a campus-wide, armed, sworn police agency and instead divert funds to other campus needs, such as mental healthcare, that could simultaneously reduce the need for policing on campus (Sainato, 2020). These calls are, perhaps, even more vivid than other calls to defund the police because many of them focus on dismantling or disbanding campus police departments and focus on agencies in settings that already fall within the jurisdiction of another sworn agency.

*Campus Policing and BWCs.* As with municipal police departments, BWCs gained traction among collegiate agencies, though the extent of this diffusion is unknown. According to the Bureau of Justice Assistance (2021), 23 collegiate police departments received BWC Policy and Implementation Program grant funds in FY2015-21. Anecdotally, most collegiate agencies indicate their BWC journeys are very similar to their municipal counterparts: They get the technology for similar reasons, often share or borrow components of BWC policies, and generally use them in much the same way (Gaub, Book, et al., 2020a, 2020b). To date, the only study to assess the use of BWCs in collegiate agencies is a perceptions study of officers in an unnamed university police department (Pelfrey & Keener, 2016, 2018). The mixed-methods study found support for the technology among both supervisors and line-level officers. The pre- and post-test design allowed the research team to determine that many of the initial concerns expressed by officers—particularly surrounding how the footage would be used by the department and their supervisors—never came to fruition (Pelfrey & Keener, 2018). This single-agency study, however, leaves many questions unanswered.

### *Current Study*

The similarities between campus and municipal police might imply that there would be no need to study their implementation of BWCs as a separate group. However, the initial consensus that BWCs would lead to several expected outcomes—particularly a decline in use of force and citizen complaints—has, over time, evolved into a greater understanding of the complexities impacting the relationship between BWCs and officer use of force (Malm, 2019; White & Malm, 2020). As such, scholars and practitioners need to understand the nuances surrounding BWC decision-making, implementation, and outcomes. Additionally, this study builds on the work of Pelfrey and Keener (2016, 2018), who conducted a case study of a single university agency, in order to

address the criticism that BWC literature is “dominated by studies in individual departments” (Malm, 2019, p. 126).

## Data and Methods

The data for this study were obtained using a mixed-methods approach. First, an online survey was distributed to police agencies serving four-year college and universities with more than 5,000 students. The universe list was constructed using the same methodology developed by the U.S. Bureau of Justice Statistics for the 2011 Survey of Campus Law Enforcement Agencies, the most recent iteration available (Bureau of Justice Statistics, 2015). The U.S. Department of Education’s Integrated Postsecondary Education Data System was used to compile a list of all four-year public and private institutions of higher learning serving more than 5,000 students ( $n = 632$ ). Each school’s website was searched for law enforcement agency contact information.<sup>1</sup> No such information could be found for 21 institutions, yielding a final distribution list of 611 agencies.

### Survey

The survey consisted of approximately 35 questions and was deployed in May 2018<sup>2</sup> using the online platform *Qualtrics*. Of the 611 agencies in the distribution list, 126 completed the survey (20.6% response rate, consistent with other online surveys of police agencies; see Nix et al., 2019). Respondents were geographically and demographically diverse: They represent colleges and universities in 40 states with between 5,200 and 60,000 students, and employ between two and 800 sworn personnel.

### Interviews

The last question on the survey was an opportunity to “opt-in” to be contacted for a follow-up interview. Of the 126 respondents, 49 consented to be interviewed. Each was assigned a ranking from a random number generator and the first 20 were invited to participate in an interview, of which 15 responded to the interview request. It was intended that additional interviews would be scheduled after the first batch of interviews was completed; however, information saturation was reached during the first batch of interviews and additional interviews were not needed. The interview protocol was semi-structured, permitting probing questions where appropriate (see Table 1). They were conducted by telephone during Fall 2018 and audio recorded and transcribed. Interviews were thematically coded using both deductive and inductive coding processes, consistent with other qualitative studies of BWCs (Fallik et al., 2020; Gaub, Todak, et



**Table 1.** Semi-Structured Interview Protocol.

---

*Con conversationally, interviewer should cover the following issues:*

---

1. Please tell me a bit about yourself, including how long you have been in your current position.
  2. What can you tell me about your college or university?
  3. Are there noteworthy aspects about your department?
  4. What units have BWCs? How did you make that decision (to include/exclude certain units)?
  5. How long has your department had BWCs? What were the circumstances surrounding your decision to implement them? (for example, was there a precipitating event)
  6. Related to BWCs, what has been the reaction from the following constituencies:
    - a. The student body
    - b. Faculty and staff
    - c. The larger community
    - d. The local municipal police department
  7. Do you believe your experience with BWCs has been qualitatively different from the experience of municipal police departments?
  8. What factor(s) influenced your decision to have BWCs? Did campus-specific issues or factors influence your decision? If so, in what way(s)?
  9. What advice might you give to other college/university police departments considering BWCs?
  10. Is there anything else you would like to mention?
- 

al., 2020; Pelfrey & Keener, 2018; Todak et al., 2018). This process allows a guided approach while still permitting new information to shine through.

## Results

While there are many similarities between municipal and collegiate agencies, many take on a different flavor. Table 2 describes the BWC deployment status for responding agencies. Nearly half of responding agencies had fully implemented BWCs, and another 10% were partially completed. Interestingly, almost one-fifth of agencies ( $n = 21$ ) had considered implementing BWCs but chose not to do so. When asked about their local municipal agency's BWC status, 69% indicated the municipal agency had some level of BWC deployment. This is consistent with both the LEMAS and Nix et al. surveys (Hyland, 2018a; Nix et al., 2020). In addition to officers in standard patrol functions, agencies reported deploying BWCs to officers in a number of specialized assignments, including: Canine, SWAT, investigators/detectives, bike, training, traffic, and community policing. Deployment to a variety of assignments is also aligned with best practice among municipal agencies (Gaub, Todak, et al., 2020). Further

**Table 2.** Collegiate and Municipal Agencies' BWC Status.

	N	%
Collegiate agency		
Considered but chose not to implement	21	18%
Considering a program	10	9%
Planning phase	4	3%
Planning phase with partial implementation	5	4%
Partial implementation with no plans for additional units to receive BWCs in the future	0	0%
Partial implementation with additional units receiving BWCs in the future	7	6%
Full implementation	57	49%
Other	12	10%
Municipal agency		
No, and they do not plan to use BWCs	16	14%
No, but they are planning to implement	6	5%
Yes, they are in the planning stage	7	6%
Yes, they have partial implementation	24	21%
Yes, they have full implementation	55	48%
Unknown	7	6%

analysis of the data yielded several themes involving respondents' planning and implementation decision-making processes, perceived benefits of BWCs, and the unique challenges faced by collegiate agencies.

### *Deciding to Implement BWCs*

From the survey, it is clear that the overwhelming majority of agencies implemented BWCs for multiple reasons (see Table 3). Like with municipal agencies, increasing transparency and accountability was a key goal (70–90%), followed closely by evidence collection (60–82%) and officer oversight (50–75%). Very few agencies were concerned with obtaining BWCs simply because of a state or local mandate to do so. However, the interview data reveals more nuance related to transparency and accountability. While agencies acknowledged that these were important goals, they emphasized that they didn't have particularly poor relations with the campus community. Rather, the prioritization of BWCs stemmed from a belief that it was important to stay ahead of the curve; most respondents (10/15) specifically indicated that everyone expects police to wear BWCs, so *not* having them could introduce negative consequences they wanted to avoid. For example, these interviewees noted:

I think if we *didn't* have body cams it would be more of a concern than us actually having them.

**Table 3. Program Goals and Policy Development, by Implementation Phase.**

	Considering BWCs (N = 10)		Planning phase (N = 4)		Planning w/ partial imp. (N = 5)		Partial imp. (N = 7)		Full imp. (N = 57)		Other (N = 12)	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Goals of BWC program</b>												
Transparency/accountability	7	70%	4	100%	4	80%	6	86%	52	91%	4	33%
Officer oversight	5	50%	3	75%	3	60%	5	71%	41	72%	3	25%
Training opportunities	5	50%	3	75%	3	60%	4	57%	41	72%	4	33%
Evidence collection	6	60%	3	75%	3	60%	5	71%	47	82%	3	25%
Compliance with state/local laws regarding BWCs	1	10%	2	50%	1	20%	1	14%	12	21%	2	17%
Other	0	0%	0	0%	1	20%	0	0%	5	9%	7	58%
<b>Groups involved in policy development</b>												
Command staff	3	30%	4	100%	5	100%	5	71%	51	89%	3	25%
Line officers	2	20%	2	50%	5	100%	3	43%	36	63%	2	17%
Union/collective bargaining unit	1	10%	2	50%	4	80%	2	29%	7	12%	0	0%
Other LEAs in geographic area (including online resources, such as their policy)	3	30%	3	75%	3	60%	3	43%	29	51%	4	33%
Local (municipal/county) prosecutors	1	10%	3	75%	1	20%	2	29%	16	28%	0	0%
Defense attorneys, including public defenders	0	0%	1	25%	0	0%	0	0%	3	5%	1	8%
State criminal justice actors (e.g., State Bureau of Investigation, Department of Criminal Justice Services, etc.)	1	10%	1	25%	1	20%	1	14%	7	12%	1	8%

(continued)

Table 3. Continued.

	Considering BWCs (N = 10)		Planning phase (N = 4)		Planning w/ partial imp. (N = 5)		Partial imp. (N = 7)		Full imp. (N = 57)		Other (N = 12)	
	N	%	N	%	N	%	N	%	N	%	N	%
Special interest groups (e.g., NAAACP)	1	10%	1	25%	2	40%	0	0%	4	7%	0	0%
Privacy groups (e.g., ACLU)	1	10%	0	0%	1	20%	1	14%	4	7%	0	0%
Model policies (e.g., those from ACLU, PERF, IACP, etc.)	2	20%	1	25%	2	40%	5	71%	34	60%	2	17%
Federal resources (e.g., BJA Toolkit, BWC Training and Technical Assistance website and resources)	1	10%	2	50%	1	20%	1	14%	11	19%	0	0%
Other	3	30%	0	0%	1	20%	2	29%	8	14%	5	42%

It was general risk management. New technology, let's keep ahead of the 15-second clip and show what really is occurring.

But in many cases, this drive also came from officers themselves (8/15), as one interviewee explained:

I think it was driven by, kind of the societal shift in [the view] of police officers and [my officers] saw that as a tool that could—and more likely, would—protect them against complaints or false accusations. And most of our officers are relatively young so they're all techno geeks and so this is just another piece of technology that they wanted to have.

One interviewee specifically noted that they believed the high level of officer buy-in from the beginning of the BWC journey was essential to ensuring administrative buy-in for the program: “Really the selling point to the administration was telling them that our officers wanted these. It wasn't the administration of the police department pushing it, this was being driven by the officers themselves. Which I think is impressive.”

Among interviewees, developing a good policy prior to implementation (9/15) was a key best practice or recommendation for other departments. For agencies committed to BWCs (planning phase through full implementation), it is clear that law enforcement perspectives were prioritized when developing policy. This process has seemingly been collaborative: Most agencies included line officers and consulted with other nearby agencies. This is a good best practice, as line-level officers will be the users of the technology and should be included in the policy-drafting process (White et al., 2018). Model policies were also a common source of insight for policy development, especially for agencies who were beyond the planning or pilot-testing phase. Conversations within the university often included diverse groups, as this survey respondent noted: “Policy is key. Discussions need to take place between multiple departments (legal, HR, Risk, Compliance, Provost, Student government) and at all levels within the agency.” However, non-law enforcement perspectives are decidedly lacking. For example, very few agencies consulted with special interest (like the NAACP) or privacy groups (like the ACLU;  $n=8$  and  $n=7$ , respectively). Only five agencies consulted with defense attorneys, though 23 agencies consulted with local prosecutors. This lack of engagement with external stakeholders—particularly those viewed to be “adversarial” with the police—is not uncommon, but can have wide-reaching negative impacts (Gaub et al., in press). A small number of survey respondents indicated that cross-jurisdictional agreements created complications, making comments like, “Our office receives police powers from an MOU with local municipal agency which requires us to follow their policies. It was a challenge in conforming those policies to a university setting.”

## Benefits of BWCs

Many of the noted benefits of BWCs were very similar to those mentioned by municipal agencies (Table 3). Specifically, respondents noted how BWCs are essential for complaint resolution, facilitate better evidence collection, and are instrumental in protecting officers (for summary, see Gaub, Huff, et al., 2020; see also, e.g., Gaub et al., 2016; Jennings et al., 2014; Snyder et al., 2019). All of these achieve legitimate justice-related goals, but are also cost-saving measures—especially for collegiate agencies. For example, BWCs permit agencies to not only resolve citizen complaints more quickly, but in many cases, resolve issues before a formal complaint is even filed (11/15). One interviewee phrased it this way: “It protects you [the chief], it protects the officer, it protects the department, and plus it protects the public from officers doing things they shouldn’t do.” This translates to fewer complaints filed, or those that are filed being resolved more quickly, which is literal dollars saved in lost officer productivity. This is consistent with previous, patrol-related research (for summary, see Gaub, Huff, et al., 2020), including a cost-benefit analysis of the Las Vegas Metropolitan Police Department’s BWC program (Braga et al., 2017). This cost-savings is important for campus agencies that are often very small (especially when compared to their local law enforcement agencies) and operate on very tight budgets. For public universities dependent on state budget allotments, police agencies cannot subsidize their budget through tax increases or other methods like their local municipal agencies.

Some of the benefits that were noted, however, were quite different from those mentioned by law enforcement personnel in municipal agencies. One difference stems from the duality of roles for campus police (5/15): These agencies respond to calls that can simultaneously result in criminal proceedings (i.e., a case filed with the local prosecutor) and grievances with the student conduct board. For example, if a student were to assault another student while on campus, the student has violated both a criminal statute and the student code of conduct. As such, it is not uncommon for campus police BWC footage to be shared with administrators and/or student conduct boards. This is a different form of evidence collection because of the difference in both proceeding and sanction possibility. It can also create public relations problems for agencies. Interviewees explained this process and how complicated it can get, especially with incidents that occur off-campus:

Last year [my officers] made over 500 referrals to the student resolution [board involving encounters] they had with students off-campus. And so a student may get cited into municipal court for an offense, but they’re also having to deal with the student conduct policy here on campus, because of what they did off-campus. So it’s been really effective.

We work really closely with housing on campus. They love the idea that we have the body cameras because in some of these situations they can actually see what's going on. If they have someone that has gotten in trouble and the person goes to them during their hearing and says "This isn't what happened, I wasn't intoxicated," or whatever it may be, they can view the video and see... Well, that person wasn't being entirely honest.

Another benefit was the technology's mobility (4/15). While police have had in-car cameras for decades, a good amount of police business is conducted away from their vehicle. This is true for municipal police, but for campus police, this can be even more important as a greater portion of most campuses are pedestrian-only compared to most municipal jurisdictions. Campuses have quads and other green spaces, walking paths between buildings, and of course the buildings themselves—and depending on the campus, there may be very few roads. As one interviewee notes:

We may drive the car, but we're not going to stand in front of it while we do whatever it is we're doing, it's in an area of campus where you can't get a car there. [...] And especially our patrol techniques are – you know, we're out walking or riding a bike. [...] In our environment you're going to be more than 100 yards away from your car on almost every call.

Finally, many universities have medical facilities attached to them, such as teaching hospitals or medical schools with clinics. One interviewee explained the benefits of BWCs within the medical context (4/15):

We're on a medical campus which means we've got a working hospital attached and it's the only level one trauma facility in the area. So we get a lot of that and we get a lot of psych patients so a lot of the [footage is] associated with [...] the emergency room [like] psych patients [or] DUIs, so although we don't have the violence or the high-risk stuff that the [sheriff's office handles], we do have a lot of uses for them in regards to the activities and stuff inside of an emergency room.

### *Same Challenges, Different Flavor*

Respondents also noted a number of challenges, primarily related to their ability to start and maintain a BWC program (see Table 4). For example, nearly all respondents (13/15) described budget constraints, especially among public universities. Because public institutions cannot operate on budget surplus, there is usually very little in the way of reserve funds available for the front-end costs of starting a BWC program. Between 50 and 75% of agencies in the planning or implementation phase noted the short-term cost (e.g., upfront capital

**Table 4.** Agency Concerns Related to Body-Worn Cameras, by Implementation Phase.

	Considering BWCs (N = 10)		Planning phase (N = 4)		Planning w/ partial imp. (N = 5)		Partial imp. (N = 7)		Full imp. (N = 57)		Other (N = 12)	
	N	%	N	%	N	%	N	%	N	%	N	%
Concerns during planning phase												
Evaluation of vendors	5	50%	2	50%	4	80%	3	43%	35	61%	2	17%
Security of data storage	4	40%	3	75%	4	80%	3	43%	43	75%	5	42%
Redaction of footage	4	40%	4	100%	4	80%	3	43%	23	40%	4	33%
Compliance with public records requirements	5	50%	4	100%	3	60%	4	57%	36	63%	2	17%
Buy-in from officers	5	50%	3	75%	3	60%	2	29%	33	58%	3	25%
Buy-in from external stakeholders	1	10%	1	25%	1	20%	1	14%	10	18%	3	25%
Buy-in from community	3	30%	1	25%	2	40%	2	29%	17	30%	1	8%
Use by prosecution, defense, and/or courts	1	10%	2	50%	3	60%	2	29%	25	44%	0	0%
Competition with other tech needs	4	40%	3	75%	2	40%	3	43%	27	47%	2	17%
Competition with other non-tech needs	2	20%	2	50%	2	40%	2	29%	18	32%	1	8%
Long-term costs (e.g., data storage)	6	60%	4	100%	5	100%	4	57%	41	72%	4	33%
Short-term costs (e.g., upfront capital)	4	40%	3	75%	3	60%	4	57%	28	49%	4	33%
Other	1	10%	0	0%	1	20%	0	0%	3	5%	4	33%
Concerns during implementation												
Evaluation of vendors	2	20%	2	50%	1	20%	3	43%	29	51%	5	42%
Security of data storage	4	40%	3	75%	3	60%	2	29%	38	67%	6	50%
Redaction of footage	3	30%	4	100%	2	40%	4	57%	24	42%	6	50%
Compliance with public records requirements	4	40%	4	100%	2	40%	3	43%	27	47%	5	42%

(continued)



**Table 4.** Continued.

	Considering BWCs (N = 10)		Planning phase (N = 4)		Planning w/ partial imp. (N = 5)		Partial imp. (N = 7)		Full imp. (N = 57)		Other (N = 12)	
	N	%	N	%	N	%	N	%	N	%	N	%
Buy-in from officers	4	40%	4	100%	2	40%	2	29%	32	56%	3	25%
Buy-in from external stakeholders	0	0%	1	25%	0	0%	1	14%	12	21%	3	25%
Buy-in from community	2	20%	1	25%	1	20%	2	29%	14	25%	2	17%
Use by prosecution, defense, and/or courts	1	10%	1	25%	1	20%	1	14%	18	32%	1	8%
Competition with other tech needs	2	20%	2	50%	0	0%	3	43%	20	35%	4	33%
Competition with other non-tech needs	2	20%	2	50%	0	0%	2	29%	15	26%	4	33%
Long-term costs (e.g., data storage)	3	30%	3	75%	3	60%	3	43%	36	63%	7	58%
Short-term costs (e.g., upfront capital)	1	10%	3	75%	2	40%	2	29%	22	39%	6	50%
Other	1	10%	0	0%	1	20%	0	0%	3	5%	4	33%

expenditures) was a concern during the planning phase. Interviewees noted that they got around the initial cost burden by using existing funding (8/15)—which means *not* spending the money on other needs—or by getting administration onboard with the need for BWCs (9/15), both for the initial set of cameras as well as agencies that tried to update their system after a few years. For example:

We never asked for additional funding for cameras. We never asked for capital funding for cameras, so um we were able to do that with the existing funds that we have. The way that we've done that is just kind of piecemeal. So, we started with five cameras, everybody put one on [during] your shift, and then we've added three more, now we've got a couple more, and then eventually we were able to get to where we can distribute those out and assign them to officers. [Interviewee]

Really, the selling point to the administration was telling them that our officers wanted these. It wasn't like the administration of the police department was pushing it, this was being driven by the officers themselves. Which I think is impressive. It struck a note with them and they want us to be progressive, they want us to be as professional as we can be, so they did what they could to support us. [Interviewee]

Another interviewee explained that BWCs “fit very well with [the administration's] vision of how they relate to the campus community.”

This has been a notable concern for municipalities as well, with a sizable number eventually abandoning their programs due to cost (Kindy, 2019; Koen et al., 2021). But even more substantial than the start-up cost for BWCs is the cost of storing video footage (9/15). Between 43 and 75% indicated that long-term costs—like data storage—was a concern at the implementation phase. One interviewee described it this way: “The simple purchase of the equipment is painless—it's the data storage issue you have to address.” In response to the data storage concern, some respondents explained that they leverage the large IT infrastructure of the university (or university system) to make it more manageable (7/15), a solution that is not always available to municipal agencies. As one interviewee explained, “We have a really good IT infrastructure here which helps tremendously. If you're a [municipal department with] 20 officers you don't have a dedicated IT staff of 200.” Another interviewee mentioned that their university actually *asked* that they house the footage on-site rather than using cloud storage:

Our university prefers [on-site storage] because of bandwidth going off-campus and that's only grown over time—students now playing online video games, streaming movies, you name it. You know, the university campus uses a lot of bandwidth so the feeling is, if we can keep it on campus, please do. They don't 100% prohibit, but they make it inexpensive for me, so if I buy the server, they'll manage it for me for free.

Combining resources was also a common solution (7/15). Some agencies described choosing vendors at least in part due to their ability to combine multiple camera systems (e.g., in-car, body-worn, fixed-position, interview room, etc.):

In 2014 when I got here we had a camera system that was just an in-car camera system that was probably close to 12 years old and I was told everyone hated it. It was extremely expensive to repair and it broke all the time. My first request for extra funding was for a new in-car camera system and I bought a system that was in the process of developing their own [BWC] that would work with the same software, same server, everything—so the backbone I would not have to replace or upgrade with that system. [Interviewee]

I appreciate having a single system that does our body-worn and in-car cameras. This way we have only one interface for all video. We can also download other video (like campus-wide surveillance video) into our video management system. We can bundle [video with] other electronic data (voice, photos, etc.) into one bundle and label all with one case number for storage or transmission to our prosecutors. We even opted for a module that ties single incidents together (from multiple cars or persons) in our CAD/RMS system so Records, Investigations and others don't have to sift through multiple recordings to find data pertaining to a single incident. [Survey respondent]

A handful of interviewees (4/15) compared their experience to small municipal agencies. Most collegiate agencies have relatively few sworn officers, very similar to small general purpose agencies that make up the majority of law enforcement agencies in the United States and elsewhere (Hyland, 2018b). As such, they have acute cost concerns and it can be exceptionally difficult to convince municipal leaders of the need for BWCs, as acknowledged by this interviewee:

But also, many of the agencies are small agencies, I mean, it's incredible how many two-person police departments there are here and how—I mean, you've got sheriff's departments that have four people working for them. So, it's a lot of really small cash-strapped agencies, so I think they're a little hesitant to say, "You have to have body cams."

Another noted this comparison to their own experiences convincing administrators of the utility of BWCs in a time of austerity:

We had to take the time to explain to them that even a small department with 36 officers generates a tremendous amount of digital evidence and it's expensive and it requires not only a cost to a vendor for a cloud storage component, but it requires

additional FTEs to do all the logging and cataloguing [and handling public records requests].

Another notable concern related to privacy and public records compliance (5/15). Privacy concerns in higher education often relate to the Family Educational Rights and Privacy Act (FERPA), enacted in 1974. Because BWC footage becomes a record of the institution, certain discussions on BWC footage could be protected by FERPA. Alternatively, when BWC footage is submitted as evidence in student conduct hearings, it becomes a record subject to FERPA. Campus police must also comply with Title IX and Cleary reporting requirements related to violence against women. Additionally, collegiate communities more generally can generate differing expectations of privacy. Agency policies—both municipal and collegiate—typically dictate that BWCs can record anywhere an officer is legally permitted to be (White et al., 2020). But on campus, the idea of “private property” can be more nebulous; while a student does not own their dorm room, for example, they often perceive it to be a personal space protected from unreasonable search. Two survey respondents explained it this way:

The expectation of personal privacy is highly regarded in a university setting. Developing a BWC policy that addresses that and is accepted by the community and administration is difficult.

When some students learned that officers would be wearing body cameras they were concerned about the usage of video recorders in the areas of student housing. Conversations were had with student leaders to earn buy-in from the students of the overall importance of BWCs.

But agencies must also comply with state-level public records and privacy legislation. Sometimes this causes problems when state laws do not account for collegiate agencies, as was the case for one survey respondent in Pennsylvania:

The Pennsylvania legislature and governor signed legislation which allows jurisdictions the use of BWC with immunity from the [state] wiretap act and failed to include the sworn officers with the 14 [public] universities. This creates a significant concern that the recording of students or community members in residence halls and other areas could result in officers being exposed to criminal culpability of violating the wiretap act. The state university police chiefs have asked for the new law to be amended to include [public] university sworn law enforcement officers.

Lastly, the use of BWCs in off-duty settings has been a minor concern for municipal agencies, primarily as they negotiate the policy development process (White et al., 2020). For many collegiate agencies, however, this can be a very

real issue, as large events such as sporting events or concerts may draw enormous crowds for a limited amount of time. The most commonly described situation is a college football game (4/15), like this interviewee describes: “For a football game, all hands must work and, well, we bring in about 100 [officers] from outside agencies and none of them have cameras.”

### ***Caveat: Agencies Without BWCs***

A unique component of this survey were the questions related to agencies that indicated they did *not* have BWCs, and did not intend to get them anytime soon. For these agencies (n = 21), the disinclination to adopt BWCs was rooted in cost, already-strong community support for the department, and competition with other resources; all of these reasons are commonly mentioned by municipal agencies that opt not to use BWCs (Hyland, 2018a; Kindy, 2019). While cost was a challenge faced by nearly all respondents, these agencies felt that the perceived benefits did not warrant the extensive cost. Many of them indicated they already had strong support from the community, thus BWCs were not necessary as an accountability or transparency mechanism, as noted by this survey respondent:

In discussions with all members of our community, including LGBT, women’s groups, Multicultural Affairs, Student Senate, faculty, staff and members of the President’s Cabinet, I continue to hear that they do not wish for the campus police to have body cams. When asked, they indicate that the relationship between the campus police and the community is such that cameras are not wanted or needed and would be a distraction. Our community does not buy into the use of the cameras.

They also noted very low numbers of complaints against officers, and they felt the money could be better spent on other resources:

Our agency is extremely small, we have very low incident of crime, student/citizen complaints are non-existent, and it would be very difficult to justify the expense of a BWC system verses fixed security cameras on campus property. As the school size grows, this will be one of many items under consideration but currently there is no interest from the administration, faculty or student groups, [and] officers seem ambivalent. [Survey respondent]

## **Discussion and Conclusion**

While BWC research has grown exponentially over the past few years, nearly all of it has focused on municipal police agencies and their implementation of

BWCs in patrol. This limits our understanding of the full range of contexts in which BWCs operate—and the benefits and challenges associated with them. In turn, this can have a very real impact on the applicability of generated evidence to a variety of settings. If the vast majority of evidence is generated using samples from large, urban, patrol divisions, the power of evidence-based policing is bounded by those parameters. As such, studies must look beyond the large, urban, patrol division and use methods appropriate for other samples. This is not easy, but is essential in order for the evidence-based policing movement to include—and apply to—all types of agencies. This study uses both survey and in-depth interview data to assess the utility of BWCs for college and university law enforcement agencies, a virtually unstudied group within the BWC literature. Collegiate agencies described both benefits and challenges—most were aligned with the perspectives of municipal agencies, though several highlight the unique role and function of agencies serving institutions of higher education.

Collegiate law enforcement agencies are, in many ways, very similar to their municipal counterparts, and that plays out in their survey responses and interviews. In both sets of data, some of the most commonly-cited benefits included the utility of BWCs for resolving complaints, collecting evidence, and protecting officers (typically from frivolous or unfounded complaints). These are also some of the strongest benefits described by municipal agencies—both among command staff and officers themselves (for summary, see Gaub, Huff, et al., 2020; see also, e.g., Gaub et al., 2016; Jennings et al., 2014; Snyder et al., 2019). This is unsurprising, as they are the direct benefits of having footage available for viewing. For example, BWC footage serves as a “neutral observer” in the “he said, she said” scenario of a one-on-one police encounter (Gaub et al., in press). This can often resolve complaints without requiring significant investigative time and potentially eliminating the need for an officer to be placed on administrative leave or given an alternate duty assignment. Police agencies, regardless of their jurisdiction, experience complaints, thus it is a fairly universal benefit. Similarly, some of the challenges noted by respondents—for example, the immense cost of a BWC program—are problematic for both collegiate and municipal agencies. The expense to maintain the technology (e.g., storing footage) is quite high and poses a significant burden for all agencies.

That said, each of these areas have a number of policy and research implications specific to collegiate agencies. For example, collegiate agencies noted that the evidentiary value of BWC footage went beyond just the criminal courtroom. Since collegiate agencies provide evidence to both local prosecutors (for civil or criminal violations) *and* collegiate administrative bodies (for violations of university policy), BWC footage can be used as evidence in both arenas. This increases the utility of BWCs for the university because they can aid the institution’s internal processes as well as external criminal proceedings. Having better evidence for administrative hearings is also beneficial to those involved, as it can streamline the process and ensure a fairer outcome. This possibility,

however, has not been tested empirically. Future research should assess these questions to determine if the use of BWC footage in hearings for policy violations—such as housing complaints or violations of the Student Code of Conduct—lead to more equitable and fair outcomes.

The mobility of BWCs—in other words, not being tethered to a vehicle, as are in-car cameras—was a key benefit cited by collegiate agencies. Municipal agencies often emphasize that BWCs are not a replacement for in-car cameras, whereas collegiate agencies generally indicated that BWCs gave the officers more coverage than do in-car cameras. Part of the reason for this is that a primary function of police agencies in colleges and universities is security, thus officers often conduct patrols or respond to calls *away* from their vehicles. For example, officers may conduct after-hours security checks within buildings; unlock doors for faculty, staff, and students; or respond to classroom disturbances. Additionally, a much larger proportion of a college campus is inaccessible by car (or not easily accessible) than would be true for a general municipal jurisdiction. Combined, these two factors make the portability of BWCs an essential benefit for collegiate agencies. Many respondents still noted the importance of in-car cameras more generally, but future research could investigate the relative utility of body-worn and in-car camera systems by evaluating the extent of their back-end use by investigators, supervisors, and university administrators. This feature of BWCs also has practical value for other non-municipal agencies such as highway patrol, state police, or specialized departments like Fish and Game or Forest Service.

Additionally, the cost burden felt by collegiate agencies is, in some ways, more pronounced than among their municipal counterparts. The public university budget must be balanced—they cannot, with few exceptions, operate on a surplus and save money “for a rainy day.” They also are unable to raise funds through external means, such as bonds, other than raising tuition or applying for grants. These budgetary constraints forced collegiate agencies to be creative in how they kept costs down. Leveraging the university’s larger IT framework and the internal push for on-site storage meant the university administration was often able to help fund the technology investment.

Small municipal agencies could follow a similar model. Reliance on local storage is a common strategy for these agencies, but lack of IT support has long been a problem (Gaub et al., 2017; Hyland, 2018a). Increasingly complex technical capabilities will only pose additional problems. Many models now offer various automatic trigger options (e.g., TASER or firearm deployment, activation of lights and sirens, opening vehicle door, etc.), Bluetooth connection to in-car computers, and automatic footage upload to the cloud. However, these capabilities require additional capacity (e.g., more bandwidth) that may be increasingly difficult for small agencies to manage without a substantial IT framework. Thus, one solution to these problems may be for multiple small agencies within a particular geographical region to enter into cooperative

agreements to share IT resources—and the subsequent costs—in order to keep pace. In other words, small agencies could band together, forming a much larger entity (similar to the larger university within which a collegiate agency operates) that can manage a more complicated IT infrastructure. Similarly, one interviewee specifically noted their lack of combined negotiating and purchasing power because they were not part of the larger university system:

The state might go to a company like Axon and say, ‘Yeah, that’s a nice camera, but we’re only going to pay X for it. Now, we’ll give you an exclusive...’ [For a substantial number of universities] And Axon goes, ‘Alright, that’s worth it.’ Whereas I come to them from [university] and say, ‘Yeah, I’m going to need 10 cameras,’ and they say, ‘This is it. This is the price you pay.’

A larger cooperative agreement would also permit small general-purpose agencies to harness more negotiating power that comes with larger numbers.

Protection of privacy and public records compliance can also take a different tone for police departments in higher education. In addition to the traditional privacy concerns that are of interest to law enforcement entities, campus police agencies must also manage education-specific regulations from laws like FERPA, Title IX, Cleary, and others. These require additional nuance when considering which records can be released, and how they must be redacted. In other words, these agencies have considerations above and beyond those of municipal agencies. How BWC footage is cataloged, stored, and used, can have impacts on the type of record it is perceived to be. For example, once footage is used in a student conduct hearing, is it considered an educational record, and thereby under the protection of FERPA? Similarly, footage of sexual assault incidents could be used in Title IX complaint investigations, criminal proceedings, and student conduct hearings. Each of these has differing implications for privacy protection. Additional research should investigate the privacy impacts of using footage in varying disciplinary settings. Pragmatically speaking, it is important that collegiate agencies come to a consensus with other entities within the agency to understand how BWC footage is classified regarding privacy by considering the various ways in which it can be used.

Finally, agencies have long grappled with the question of off-duty use of BWCs, especially when a department’s officers will be participating in off-duty assignments with an agency that does *not* use BWCs. Should the originating agency require its officers to use BWCs during off-duty assignments? What about differences in policy? But this issue can take on a new meaning for collegiate agencies who invite sometimes hundreds of additional officers onto their campuses to assist in managing large events. In almost all cases, they cannot afford to maintain enough spare cameras to equip these extra officers, but if the loaning agency does not use BWCs, it can put the campus department in a tough position. What happens if students get into an altercation with a non-campus



officer and there is no footage of the incident? For agencies with generally positive relations with the campus community, this can severely damage their relationships with campus stakeholders.

This particular concern is exacerbated in light of the antiracism protests beginning in the summer of 2020. Remember that campus policing was originally created largely as a response to civil disturbances and protests of the Civil Rights and anti-war movements of the 1960s and 1970s. Many of these demonstrations began on college campuses, thus precipitating a perceived need for campus policing beyond mere security. While campus agencies typically contract off-duty officers for positive events, such as football games or concerts, it is not unlikely that additional officers would also be needed in the event of large-scale protests on college campuses. This is especially relevant for protests related to the removal of Confederate statues or monuments, many of which are on college campuses (e.g., Silent Sam, previously on the University of North Carolina at Chapel Hill campus). Given the subject matter of the protests themselves, a lack of BWC footage should something go wrong would only ignite already tense relations between police and protesters and have extremely damaging impacts for the campus police agency itself. As these demonstrations continue, scholars should pay attention to the use of BWCs in these demonstrations and the impact on campus police departments in particular. It is important that best practices are developed among agencies regarding the use of BWCs during large-scale events, paying particular attention to the policy (i.e., wording in the written policy) and practical (i.e., availability of cameras) considerations related to mutual aid or off-duty overtime situations.

As with all research, this study has limitations. First, this study has a lower-than-preferable response rate (20%). However, this is in keeping with response rates for other studies using an online survey method (Nix et al., 2019). Online surveys typically have lower response rates than in-person surveys. One key reason for this is because it is so easy for emails to get redirected to spam folders, filtered out entirely, or lost in the daily deluge of other email communication. Additionally, our survey was sent to generic email addresses (e.g., “police@[school].edu”) when a personal email address for the chief was unavailable. Chiefs may have forwarded the project email to others within the agency who managed the day-to-day operations of the BWC program—and these emails could have been lost or ignored. It would have been preferable to include an addendum or supplement to the Bureau of Justice Statistics Survey of Campus Law Enforcement Agencies (SCLEA); however, it was unknown at the time of survey deployment when the next SCLEA would be administered. A SCLEA supplement, similar to the BWC supplement used in the 2016 LEMAS survey, would be helpful in better understanding how campus agencies use technology, including BWCs. Second, this survey was administered one time in 2018, thus requiring cross-sectional data analysis. Given the rapidly-advancing technology, a more regular iteration of this survey would permit analysis of changing

perceptions over time. This is especially important as the institution of policing adapts to changing sentiments related to police legitimacy.

This study addressed a key gap in the BWC literature—namely, the impact of BWCs on campus police agencies. It builds on the knowledge produced by Pelfrey and Keener (2016, 2018) by conducting a large-scale survey and in-depth interviews of campus police chiefs from across the country. Results show that many benefits of BWCs are seemingly universal, such as the immense value of BWC footage for resolving complaints and gathering evidence. However, other benefits—and many challenges—are quite unique for collegiate agencies, or take a different flavor than their usual manifestation for municipal police. Further, this study demonstrates the need for BWC researchers to move beyond studies of municipal agencies' patrol divisions and focus on other types of agencies and units and bureaus outside of standard patrol. Ultimately, it broadens the scope of the BWC literature by addressing the perceptions of the technology and agency implementation in a nonstandard policing setting, thus pushing the boundary for evidence-based policing.

### **Declaration of Conflicting Interests**

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author received no financial support for the research, authorship, and/or publication of this article.

### **ORCID iD**

Janne E. Gaub  <https://orcid.org/0000-0002-6223-2574>

### **Notes**

1. Where possible, a specific individual's email address was obtained (e.g., [jsmith@school.edu](mailto:jsmith@school.edu) or [chief@school.edu](mailto:chief@school.edu)). When individual contact information was unavailable, a general email address (e.g., [police@school.edu](mailto:police@school.edu)) was obtained. The school was contacted by phone to obtain the requisite information if email addresses were not available on the website.
2. Up to three reminder emails were sent to those who had not completed a survey. Agencies could opt-out of receiving reminders by unsubscribing using a link provided in the email(s).

### **References**

- Aiello, M. F., & Lawton, B. A. (2018). Campus police cooperation and legitimacy: Extending the procedural justice model. *Deviant Behavior*, *39*(10), 1371–1385. <https://doi.org/10.1080/01639625.2017.1410618>

- Ariel, B., Farrar, W. A., & Sutherland, A. (2015). The effect of police body-worn cameras on use of force and citizens' complaints against the police: A randomized controlled trial. *Journal of Quantitative Criminology*, 31(3), 509–535. <https://doi.org/10.1007/s10940-014-9236-3>
- Bordner, D. C., & Petersen, D. M. (1983). *Campus policing: The nature of university police work*. University Press of America.
- Braga, A. A., Barao, L. M., Zimmerman, G. M., Douglas, S., & Sheppard, K. (2020). Measuring the direct and spillover effects of body worn cameras on the civility of police–citizen encounters and police work activities. *Journal of Quantitative Criminology*, 36, 851–876. <https://doi.org/10.1007/s10940-019-09434-9>
- Braga, A. A., Coldren, J. R., Sousa, W. H., Rodriguez, D., & Alper, O. (2017). *The benefits of body-worn cameras: New findings from a randomized controlled trial at the Las Vegas Metropolitan Police Department*. [https://www.cna.org/cna\\_files/pdf/IRM-2017-U-016112-Final.pdf](https://www.cna.org/cna_files/pdf/IRM-2017-U-016112-Final.pdf)
- Braga, A. A., Sousa, W. H., Coldren, J. R., & Rodriguez, D. (2018). The effects of body-worn cameras on police activity and police-citizen encounters: A randomized controlled trial. *Journal of Criminal Law and Criminology*, 108(3), 511–538.
- Bromley, M. (2003). Comparing campus and municipal police community policing practices. *Journal of Security Administration*, 26(2), 37–75.
- Bromley, M., & Reaves, B. A. (1998). Comparing campus and city police operational practices. *Journal of Security Administration*, 21(2), 41–54.
- Bureau of Justice Assistance. (2015). *Body-worn camera toolkit: Law enforcement implementation checklist*. [www.bja.gov/bwc](http://www.bja.gov/bwc)
- Bureau of Justice Assistance. (2018). Program update: Body-worn camera policy and implementation program, fiscal year 2018.
- Bureau of Justice Assistance. (2019). Program update: Body-worn camera policy and implementation program, fiscal year 2019.
- Bureau of Justice Assistance. (2021). *Body-worn camera policy and implementation program training and technical assistance*. <http://www.bwctta.com>
- Bureau of Justice Statistics. (2015). *Data collection: Survey of campus law enforcement agencies*. <https://www.bjs.gov/index.cfm?ty=dcdetail&iid=247#Methodology>
- Crow, M. S., Snyder, J. A., Crichlow, V. J., & Smykla, J. O. (2017). Community perceptions of police body-worn cameras: The impact of views on fairness, fear, performance, and privacy. *Criminal Justice and Behavior*, 44(4), 589–610. <https://doi.org/10.1177/0093854816688037>
- Edmonton Police Service. (2015). Body worn video: considering the evidence.
- Fallik, S. W., Deuchar, R., & Crichlow, V. J. (2020). Body-worn cameras in the post-Ferguson era: An exploration of law enforcement perspectives. *Journal of Police and Criminal Psychology*, 35(3), 263–273. <https://doi.org/10.1007/s11896-018-9300-2>
- Gaub, J. E., Book, E., Wade, J., & Millington, B. (2020a). *LE tech talks: Body-worn cameras in a university setting* [podcast]. <https://bwctta.com/tta/podcasts/body-worn-cameras-university-setting>
- Gaub, J. E., Book, E., Wade, J., & Millington, B. (2020b). *LE Tech Talks: Body-worn cameras in a university setting, part 2* [Podcast]. <https://bwctta.com/tta/podcasts/body-worn-cameras-university-setting-pt-ii>

- Gaub, J. E., Choate, D. E., Todak, N., Katz, C. M., & White, M. D. (2016). Officer perceptions of body-worn cameras before and after deployment: A study of three departments. *Police Quarterly, 19*(3), 275–302. <https://doi.org/10.1177/1098611116653398>
- Gaub, J. E., Huff, J., White, M. D., & Malm, A. (2020). *Officer perceptions of BWCs: Directory of outcomes*. <https://bwctta.com/officer-perceptions-body-worn-cameras-directory-outcomes>
- Gaub, J. E., Patterson, Q., White, M. D. & Malm, A. (2021). Impacts of BWCs on citizen perceptions: Directory of outcomes. Retrieved July 27, 2021, from <https://bwctta.com/impacts-bwcs-citizen-perceptions-directory-outcomes>
- Gaub, J. E., Naoroz, C., & Malm, A. (in press). Police BWCs as “neutral observers”: Perceptions of public defenders. *Policing: A Journal of Policy and Practice*. <https://doi.org/10.1093/police/paaa067>
- Gaub, J. E., Todak, N., & White, M. D. (2020). One size doesn't fit all: The deployment of police body-worn cameras to specialty units. *International Criminal Justice Review, 30*(2), 136–155. <https://doi.org/10.1177/1057567718789237>
- Gaub, J. E., & White, M. D. (2020). Open to interpretation: Confronting the challenges of understanding the current state of body-worn camera research. *American Journal of Criminal Justice, 45*(5), 899–913. <https://doi.org/10.1007/s12103-020-09518-4>
- Gaub, J. E., White, M. D., Padilla, K. E., & Katz, C. M. (2017). *Implementing a police body-worn camera program in a small agency*. Arizona State University.
- Goetschel, M., & Peha, J. M. (2017). Police perceptions of body-worn cameras. *American Journal of Criminal Justice, 42*(4), 698–726. <https://doi.org/10.1007/s12103-017-9415-5>
- Gramagila, J. A., & Phillips, S. W. (2018). Police officers' perceptions of body-worn cameras in Buffalo and Rochester. *American Journal of Criminal Justice, 43*(2), 313–328. <https://doi.org/10.1007/s12103-017-9403-9>
- Huff, J., Katz, C. M., & Webb, V. J. (2018). Understanding police officer resistance to body-worn cameras. *Policing: An International Journal, 41*(4), 482–495. <https://doi.org/10.1108/PIJPSM-03-2018-0038>
- Hyland, S. S. (2018a). *Body-worn cameras in law enforcement agencies, 2016*. Bureau of Justice Statistics.
- Hyland, S. S. (2018b). *Full-time employees in law enforcement agencies, 1997-2016*. Bureau of Justice Statistics.
- Jaschik, S. (2014). *Black professor body-slammed*. <https://www.insidehighered.com/news/2014/06/30/video-highlights-arizona-state-police-arrest-black-professor-critics-see-racial>
- Jennings, W. G., Fridell, L. A., & Lynch, M. D. (2014). Cops and cameras: Officer perceptions of the use of body-worn cameras in law enforcement. *Journal of Criminal Justice, 42*(6), 549–556. <https://doi.org/10.1016/j.jcrimjus.2014.09.008>
- Jennings, W. G., Lynch, M. D., & Fridell, L. A. (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. *Journal of Criminal Justice, 43*(6), 480–486. <https://doi.org/10.1016/j.jcrimjus.2015.10.003>
- Kerrison, E. M., Cobbina, J., & Bender, K. (2018). Stop-gaps, lip service, and the perceived futility of body-worn police officer cameras in Baltimore city. *Journal of Ethnic*

- & *Cultural Diversity in Social Work*, 27(3), 271–288. <https://doi.org/10.1080/15313204.2018.1479912>
- Kindy, K. (2019, January 21). Some U.S. police departments dump body-camera programs amid high costs. *The Washington Post*. [https://www.washingtonpost.com/national/some-us-police-departments-dump-body-camera-programs-amid-high-costs/2019/01/21/991f0e66-03ad-11e9-b6a9-0aa5c2fcc9e4\\_story.html?utm\\_term=.077f9adebe75](https://www.washingtonpost.com/national/some-us-police-departments-dump-body-camera-programs-amid-high-costs/2019/01/21/991f0e66-03ad-11e9-b6a9-0aa5c2fcc9e4_story.html?utm_term=.077f9adebe75)
- Koen, M. C., & Mathna, B. (2019). Body-worn cameras and internal accountability at a police agency. *American Journal of Qualitative Research*, 3(2), 1–22. <https://doi.org/10.29333/ajqr/6363>
- Koen, M. C., Newell, B. C., & Roberts, M. R. (2021). Body-worn cameras: Technological frames and project abandonment. *Journal of Criminal Justice*, 72(August 2020), 101773. <https://doi.org/10.1016/j.jcrimjus.2020.101773>
- Koen, M. C., & Willis, J. J. (2020). Making sense of body-worn cameras in a police organization: A technological frames analysis. *Police Practice and Research*, 21(4), 351–367. <https://doi.org/10.1080/15614263.2019.1582343>
- Koen, M. C., Willis, J. J., & Mastrofski, S. D. (2019). The effects of body-worn cameras on police organisation and practice: A theory-based analysis. *Policing and Society*, 29(8), 968–984. <https://doi.org/10.1080/10439463.2018.1467907>
- Kyle, M. J., & White, D. R. (2017). The impact of law enforcement officer perceptions of organizational justice on their attitudes regarding body-worn cameras. *Journal of Crime and Justice*, 40(1), 68–83. <https://doi.org/10.1080/0735648X.2016.1208885>
- Lanier, M. M. (1995). Community policing on university campuses: Tradition, practice, and outlook. In B. S. Fisher & J. J. Sloan (Eds.), *Campus crime: Legal, social and policy perspectives*. Charles C. Thomas.
- Lum, C., Koper, C. S., Merola, L., Scherer, A., & Reioux, A. (2015). *Existing and ongoing body worn camera research: Knowledge gaps and opportunities*. George Mason University.
- Lum, C., Koper, C. S., Wilson, D. B., Stoltz, M., Goodier, M., Eggins, E., Higginson, A., & Mazerolle, L. (2020). Body-worn cameras' effects on police officers and citizen behavior: A systematic review. *Campbell Systematic Reviews*. <https://doi.org/10.1002/cl2.1043>
- Lum, C., Stoltz, M., Koper, C. S., & Scherer, A. (2019). Research on body-worn cameras: What we know, what we need to know. *Criminology & Public Policy*, 18(1), 93–118. <https://doi.org/10.1111/1745-9133.12412>
- Malm, A. (2019). The promise of police body-worn cameras. *Criminology & Public Policy*, 18(1), 119–130. <https://doi.org/10.1111/1745-9133.12420>
- McCluskey, J., Smith, S., Robertson, O., Uchida, C. D., & Mosler, D. (2019). *The evidentiary value of body-worn camera footage: A survey of prosecutors and public defenders*. Bureau of Justice Assistance.
- Merola, L., Lum, C., Koper, C. S., & Scherer, A. (2016). *Body worn cameras and the courts: A national survey of state prosecutors*. George Mason University.
- Miethe, T. D., Lieberman, J. D., Heen, M. S. J., & Sousa, W. H. (2019). Public attitudes about body-worn cameras in police work: A national study of the sources of their contextual variability. *Criminal Justice Review*, 44(3), 263–283. <https://doi.org/10.1177/0734016819846241>

- Nix, J., Pickett, J. T., Baek, H., & Alpert, G. P. (2019). Police research, officer surveys, and response rates. *Policing and Society, 29*(5), 530–550. <https://doi.org/10.1080/10439463.2017.1394300>
- Nix, J., Todak, N., & Tregle, B. (2020). Understanding body-worn camera diffusion in U.S. policing. *Police Quarterly, 23*(3), 396–422. <https://doi.org/10.1177/1098611120917937>
- Ortiz, E. (2015). *University of Cincinnati officer's bodycam was crucial to murder indictment: Officials*. <https://www.nbcnews.com/news/us-news/cincinnati-cop-ray-tensing-pleads-not-guilty-shooting-death-samuel-n400926>
- Patten, R., Alward, L., Thomas, M., & Wada, J. (2016). The continued marginalization of campus police. *Policing: An International Journal of Police Strategies & Management, 39*(3), 566–583. <https://doi.org/10.1108/PIJPSM-04-2016-0055>
- Peak, K. J., Barthe, E. P., & Garcia, A. (2008). Campus policing in America: A twenty-year perspective. *Police Quarterly, 11*(2), 239–260. <https://doi.org/10.1177/1098611107306840>
- Pelfrey, W. V., & Keener, S. (2016). Police body worn cameras: A mixed method approach assessing perceptions of efficacy. *Policing: An International Journal of Police Strategies & Management, 39*(3), 491–506.
- Pelfrey, W. V., & Keener, S. (2018). Body-worn cameras and officer perceptions: A mixed-method pretest posttest of patrol officers and supervisors. *Journal of Crime and Justice, 41*(5), 535–552. <https://doi.org/10.1080/0735648X.2018.1479287>
- Reaves, B. A. (2015a). *Campus law enforcement, 2011–2012*. <https://www.bjs.gov/content/pub/pdf/cle1112.pdf>
- Reaves, B. A. (2015b). *Local police departments, 2013: Equipment and technology*. Bureau of Justice Statistics.
- Reuss-Ianni, E. (1983). *Two cultures of policing: Street cops and management cops*. Transaction Books.
- Sainato, M. (2020, June 24). US students call on universities to dismantle and defund campus policing. *The Guardian*. <https://www.theguardian.com/us-news/2020/jun/24/campus-policing-us-university-students-call-to-defund>
- Saunders, T. (2019). Body cameras create additional workload, cost for localities. *WDBJ Channel*, p. 7.
- Sloan, J. J. (1992). The modern campus police: An analysis of their evolution, structure and function. *American Journal of Police, 11*(2), 85–104. <https://doi.org/10.1525/sp.2007.54.1.23>.
- Sloan, J. J., Lanier, M. M., & Beer, D. L. (2000). Policing the contemporary university campus: Challenging traditional organizational models. *Journal of Security Administration, 23*(1), 1–20.
- Smykla, J. O., Crow, M. S., Crichlow, V. J., & Snyder, J. A. (2016). Police body-worn cameras: Perceptions of law enforcement leadership. *American Journal of Criminal Justice, 41*(3), 424–443. <https://doi.org/10.1007/s12103-015-9316-4>
- Snyder, J. A., Crow, M. S., & Smykla, J. O. (2019). Police officer and supervisor perceptions of body-worn cameras pre- and postimplementation: The importance of officer buy-in. *Criminal Justice Review, 44*(3), 322–338. <https://doi.org/10.1177/0734016819846223>
- Sutherland, A., Ariel, B., Farrar, W. A., & De Anda, R. (2017). Post-experimental follow-ups—Fade-out versus persistence effects: The rialto police body-worn camera experiment four years on. *Journal of Criminal Justice, 53*(September), 110–116. <https://doi.org/10.1016/j.jcrimjus.2017.09.008>

- Todak, N., & Gaub, J. E. (2019). Predictors of police body-worn camera acceptance: Digging deeper into officers' perceptions. *Policing: An International Journal*, 43(2), 299–313. <https://doi.org/10.1108/PIJPSM-06-2019-0085>
- Todak, N., Gaub, J. E., & White, M. D. (2018). The importance of external stakeholders for police body-worn camera diffusion. *Policing: An International Journal*, 41(4), 448–464. <https://doi.org/10.1108/PIJPSM-08-2017-0091>
- Toronto Police Service. (2016). *Body-worn cameras: A report on the findings of the pilot project*.
- Wada, J. C., Patten, R., & Candela, K. (2010). Betwixt and between: The perceived legitimacy of campus police. *Policing: An International Journal of Police Strategies & Management*, 33(1), 114–131. <https://doi.org/10.1108/13639511011020629>
- White, M. D. (2014). *Police officer body-worn cameras: Assessing the evidence*. U.S. Department of Justice.
- White, M. D., Flippin, M., & Malm, A. (2020). *Does agency size matter? Key trends in body-worn camera policy and practice*. Bureau of Justice Assistance.
- White, M. D., Gaub, J. E., & Padilla, K. E. (2019). *Impact of BWCs on citizen complaints: Directory of outcomes*. <http://www.bwctta.com/resources/bwc-resources/impact-bwcc-citizen-complaints-directory-outcomes>
- White, M. D., & Malm, A. (2020). *Cops, cameras, and crisis: The potential and the perils of police body-worn cameras*. NYU Press.
- White, M. D., Todak, N., & Gaub, J. E. (2017). Assessing citizen perceptions of body-worn cameras after encounters with police. *Policing: An International Journal*, 40(4), 689–703. <https://doi.org/10.1108/PIJPSM-07-2016-0105>
- White, M. D., Todak, N., & Gaub, J. E. (2018). Examining body-worn camera integration and acceptance among police officers, citizens, and external stakeholders. *Criminology & Public Policy*, 17(3), 649–677. <https://doi.org/10.1111/1745-9133.12376>
- Wilson, C. P., & Wilson, S. A. (2015). Evaluating legitimacy and marginalization: Campus policing in the state of Rhode Island. *Cogent Social Sciences*, 1(1), 1–15. <https://doi.org/10.1080/23311886.2015.1006091>
- Yokum, D., Ravishankar, A., & Coppock, A. (2017). *Evaluating the effects of police body-worn cameras: a randomized controlled trial*. The Lab @ DC.
- Youstin, T. J., & Kopp, P. M. (in press). Role variations and perceptions of campus police versus local and state law enforcement. *Policing: A Journal of Policy and Practice*. <https://doi.org/10.1093/police/paaa054>

### Author Biography

**Janne E. Gaub**, PhD, is an Assistant Professor in the Department of Criminal Justice & Criminology at the University of North Carolina at Charlotte. She received her Ph.D. in criminology and criminal justice from Arizona State University in 2015. Her research centers on policing, primarily addressing body-worn cameras (BWCs), specialty units, and use of force. Her work has appeared in outlets including *Criminology*, *Criminology & Public Policy*, *Journal of Experimental Criminology*, and *Policing: An International Journal*.