FAIRFAX COUNTY POLICE DEPARTMENT’S BODY-WORN CAMERA PILOT PROJECT: AN EVALUATION

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EXECUTIVE SUMMARY

In 2017, the Fairfax County (Virginia) Police Department, known as FCPD, decided to launch a pilot implementation of body-worn cameras (BWCs) to learn what the technology involved, the response of its officers to it, what community members and local organization leaders would think, and the changes in policing practices and outcomes that would occur. Some police agencies in the Metropolitan Washington, DC area had already adopted BWCs and there was a push nation-wide to implement them quickly in the face of numerous high-profile and controversial interactions between police and citizens. FCPD officials wanted to proceed more cautiously and conduct a BWC pilot program first. They asked a team of researchers at American University in Washington, DC, to assist them.

The formal evaluation began before and continued after the six-month pilot period when Squad B officers in three districts were assigned BWCs and Squad A officers in those same districts continued their duties without them. The study design included 17 data collection efforts: paper surveys of police officers at those districts before and after the pilot, an on-line survey of community stakeholders, a telephone survey of 609 community members who had interacted with officers during the pilot, 12 focus groups with officers and supervisors during and after the pilot and approximately 70 hours of ride-a-longs with FCPD officers. The results from analyses of all those data are presented below.

PERSPECTIVES OF THE POLICE OFFICERS:

The officers’ attitudes regarding BWCs were very consistent across the two squads and across the two surveys with no significant differences found. There was consensus that BWCs will increase the gathering of evidence, help settle complaints against officers and increase the department’s transparency to the public. Their responses were more mixed on whether BWCs will make officers more professional or reduce proactive encounters with the public. They disagreed that BWCs will improve their legitimacy among community members, improve community relations generally or increase officer safety.

A key question asked about adoption of BWCs throughout the department. Both Squad A and Squad B officers held similar opinions at Time 1, but at Time 2, their opinions differed significantly: Squad B officers were slightly more in favor of adoption while, Squad A officers were dramatically less favorable towards adoption.

Comments gathered from the 12 focus groups provided insights helpful in interpreting the survey results. A notable number of participants contended that BWCs are needed only by departments with serious community relations problems, violent incidents or corruption. Believing that none of those descriptors fit FCPD, they wondered why BWCs might be implemented in Fairfax County. There was a belief among some officers that BWCs and pay raises would be paid from out of the same “pot“ in a zero-sum manner. Given the choice, they preferred (“long overdue“) raises. Most officers believed their behavior and that
of community members did not change because of BWCs. They acknowledged initial resistance to BWCs, but said it has decreased with familiarity over time. They believed that BWC recordings have positively and negatively affected justice system operations. They appreciated the improvements BWCs bring compared with in-car videos, recognized the additional work required by staff and the reality that BWCs are not perfect.

DATA ON OFFICER PERFORMANCE:

Officer performance data were gathered from the department’s own records concerning the number of traffic stops, other incidents, citizen complaints and use of force reports documented before, during and after the pilot period. Statistical analyses revealed no indications of de-policing during or after the pilot period. Both Squad A and Squad B officers continued their normal performance profiles with regard to traffic stops and responses to both violent and non-violent incidents. Similarly, there was no change in use of force in general, direct force, indirect force or use of force by pointing a firearm.

Significant statistical changes were found, however, in citizen complaints during the post-pilot period. On average over each two-week period, complaints declined by 0.4 complaints for Side B officers with BWCs and increased by 0.2 complaints for Side A officers. While statistically significant, these effects should not be over-interpreted because the number of overall complaints is small.

PERSPECTIVES OF COMMUNITY STAKEHOLDERS:

The community stakeholders provided a valuable perspective on the BWC pilot program in addition to their assistance on BWC policies. Less than half of them agreed that BWCs would reduce complaints against police officers, make the police more legitimate in the eyes of their community members or lessen the use of force. Only the statement that BWCs would make the police more accountable was agreed to by more than half of the stakeholders. Clearly, the use of BWCs alone was not seen by the stakeholders as a way to resolve community-policing problems.

The distinction between stakeholders heading up government-related organizations and those leading non-governmental organizations (NGOs) proved useful. The NGO leaders were much more positive about the effects of BWCs than were the government-based leaders. The NGOs unanimously agreed that BWCs will reduce complaints against police officers and make the police more accountable. The majority of them also agreed that BWCs would make the police more legitimate in the eyes of their community members and would lessen police use of force. None of these four statements were agreed to by more than two-fifths of the government stakeholders. When presented with three statements about the FCPD, however, the vast majority of both groups were positive. Nearly three-fourths of the government subgroup agreed that they were adequately involved in making BWC policy for the pilot, that FCPD shares the values of their community and does its job well. More than four-fifths of the NGOs did too. It would be interesting to learn why the government stakeholder are underwhelmed by the likely positive effects of BWCs and why the NGOs are so optimistic.

PERSPECTIVES OF COMMUNITY MEMBERS:

A total of 603 community members participated in a telephone interview regarding their recent interactions with an officer, either wearing a BWC or not, during the pilot period. The majority of respondents expressed satisfaction regarding the interaction. For example, strong majorities reported being satisfied with how the officer treated them and with how the encounter with the police was resolved. Nearly all of those surveyed believe that the officer treated them in a procedurally just manner.
by acting respectfully, fairly, professionally and by listening to the respondent’s side of the story and talking about the decisions being made. These findings indicate that on a personal level, the majority of those who interacted with an FCPD officer during the pilot period recalled the interaction in a positive light.

The majority of respondents also viewed FCPD in a positive light. Strong majorities believe that FCPD does its job well and that FCPD shares the values of the respondent’s community. In other words, among community members who had a recent interaction with the police, most of them report feeling positive not only about their personal experience but also about the department as a whole.

Further, there is overwhelming support among these community members for the widespread adoption of BWCs. Interestingly, there is no evidence that the presence or absence of a BWC during their police encounter had a meaningful impact on their satisfaction with the interaction or the FCPD.

Finally, both the age and race/ethnicity of the community member appear to influence their perceptions. Although majorities of all age and racial/ethnic groups report mostly positive feelings regarding both their personal interactions with an officer and toward FCPD, there are noticeable differences. Older community members are more likely to recall their interaction and the FCPD in a positive light than do their younger counterparts. The same was true for race/ethnicity, with Caucasian and Asian community members expressing more positive feelings about their interactions and FCPD than do African Americans, Hispanic and Native Americans. Surprisingly, this finding was somewhat reversed when the question turned to whether BWCs should be worn by all officers. The largest percentages of “strongly agree” responses is among young adults (ages 18 to 24) and three race/ethnic minority groups (African Americans, Asians, and Native Americans) but when the percentages that strongly agreed and agreed are combined, no group stood apart from the others.
SECTION ONE: INTRODUCTION
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In 2017, the Fairfax County (Virginia) Police Department, known as FCPD, decided to launch a pilot implementation of body-worn cameras (BWCs) to learn what the technology involved, the response of its officers to it, what community members and local organization leaders would think, and the changes in policing practices and outcomes that would occur. Many police agencies in the local Washington, DC area had already adopted BWCs, and there was a push nationwide to implement them quickly in the face of numerous high-profile and controversial interactions between police and citizens. FCPD officials wanted to proceed more cautiously and conduct a BWC pilot program first.

PART A. THE SCOPE OF FCPD’S PILOT PROGRAM AND ITS EVALUATION

The evaluation efforts underlying this report began in August 2017 when the FCPD invited an American University research team to advise them on the study design for a six-month pilot test which would be rigorous, comprehensive, informative and actionable. The resulting study design was a quasi-experimental randomized trial based in three of the department’s eight districts. The evaluation timeline called for multiple data collection efforts before, during and after the pilot test and sufficient time afterwards to analyze the data and prepare this report.

Only a few documented BWC evaluation projects have used a true random controlled trial design because that caliber of the design requires that individual officers be chosen to wear BWCs through a random selection process. Like most police agencies, FCPD has long assigned their officers to squads, and dismantling squads for the sake of the pilot program was not feasible. Instead, the research team and department officials decided to take advantage of the two-squad structure already in place, Squad A and Squad B. An official flipped a coin, a classic way to do random selection, and it landed on “tails.” Thus, Squad B became the treatment group for the pilot project and its members were assigned BWCs and trained how to use them. Squad A became the control group and received neither. The final study design choice to be made concerned how many and in which districts to base the program. The decision was collectively made that three specific districts serving very different communities would provide a sufficiently realistic test.

The research team and FCPD officials then began identifying the key design components. The FCPD had successfully collaborated with community stakeholders in the past to get birds-eye feedback on local needs and concerns. A group of stakeholders was identified for the pilot program and FCPD worked closely with them in formulating BWC policies which would address personal privacy rights and constitutional safeguards for community members and police officers alike. It was decided that the researchers would survey them early in the pilot program.

Three additional data collection activities were undertaken. Qualitative and quantitative data were to be collected from officers in both squads via focus groups and surveys before, during and after the pilot. Another set of data was collected from community members that engaged with Squad A and Squad B officers in the field during the pilot period. Finally, field data were collected on officer activity in the three pilot districts along with complaints against officers and officer use of force reports. This required a challenging coordinated effort between the department’s official records staff and a team of telephone interviewers working in four languages from the university’s campus.
PART B. EVALUATION APPROACH AND METHODOLOGY

The set of concentric circles in Figure 1.1 illustrates both how the researchers designed the evaluation and how this report is organized. The researchers conceived of the FCPD as having four important audiences, internal and external, whose attitudes and experiences constitute the full context of the pilot program. The inner circle connotes the use of BWCs by the department during the pilot period.

The second ring is comprised of the police officers themselves, some of whom (Squad B officers) were selected to wear the cameras during the six-month pilot. Their attitudes toward and experiences with using BWCs in the field, when contrasted with those of Squad A officers, their non-BWC wearing colleagues, was viewed as the most informative feedback in the study. The research design thus included multiple data collection efforts focused on them using both qualitative (i.e., focus groups and ride-alongs by a researcher) and quantitative (i.e., paper and pencil surveys) research methods.

The third ring is comprised of officer performance data gathered from the department’s records concerning the number of traffic stops, other incidents, citizen complaints and use of force reports documented before, during and after the pilot period. The formal records also indicate the squad identification of every officer involved in the events. These data define the performance context of the pilot.

The fourth ring includes community members who engaged with officers during the pilot period. Their feedback on satisfaction with how they were treated, how the situation was resolved, and how they regard the FCPD, among other issues, also constitutes a key context for the evaluation. The researchers conducted telephone interviews with community members as soon after their interactions with police officers as possible. The squad identification of the officers involved was also noted by the researchers.

The fifth and outer ring includes community stakeholders, such as heads of government-related organizations, business groups, faith communities and neighborhood organizations, whose expansive knowledge of their community members’ policing concerns, experiences and attitudes was deemed important and worth collecting via a survey before the pilot period began.
PART C. SPONSORSHIP OF THE EVALUATION

The School of Public Affairs and other offices within American University provided significant support of many types. The School of Public Affairs funded the community member telephone survey portion of the project. Members of the university’s Institutional Review Board examined all consent forms and data collection instruments to make sure they were justified, appropriate and protected the welfare and rights of the intended survey respondents and focus group participants. Officials within the Office of Campus Life & Inclusive Excellence were invaluable in our recruitment of student interviewers who were fluent in English as well as Spanish, Korean and Vietnamese. University staff made space and equipment available for the interview team to do its work.

The Charles E. Koch Foundation provided additional financial support for the research team’s work in completing the evaluation. The Foundation has long supported studies on body-worn cameras and other police reform efforts.

PART D. OVERVIEW OF THE REPORT

In addition to this Section One, the report includes five subsequent sections:

- Section Two: Perspectives of the Police Officers presents the results from the surveys and focus groups conducted with Squad A and Squad B officers as well as insights from ride-a-longs.

- Section Three: Organizational Data on Officer Performance details the official FCPD records used to ascertain whether four measures of performance (the number of traffic stops made, incidents investigated, community complaints received and uses of force reported) changed over the pilot period or afterwards for Squad A and Squad B officers.

- Section Four: Perspectives of Community Members reports the results from a telephone survey of community members that engaged the police officers during the pilot period.

- Section Five: Perspectives of Community Stakeholders present the results from a pre-pilot survey of stakeholders on their attitudes toward BWCs and the FCPD.

- Section Six: Synthesis of Evaluation Results and Study Conclusions provides an integration of all research conclusions presented in the four prior sections and conclusions about the BWC pilot program.

- There are seven appendices.
SECTION TWO:
PERSPECTIVES OF THE POLICE OFFICERS
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PERSPECTIVES OF THE POLICE OFFICERS

SUMMARY OF FINDINGS:

- The group of officers that participated in the pre-pilot survey were similarly split among Squad A (41%) and Squad B (41%), with the remainder assigned to neighborhood patrol units, animal control or motorcycle units.
- Analyses tested whether the demographic profile of Squad A officers differed from that of Squad B officers to a statistically significant degree. There were no differences in their years of experience, gender, race/ethnicity or education; characteristics which might predict attitudes towards BWCs.
- There was no difference in attitudes between Squads A and B in their acceptance of BWCs just before the pilot program began. By its end, the two squads held significantly different attitudes: Squad A was more negative while Squad B was slightly more positive compared to their initial attitudes.
- Overall, the officers’ attitudes varied based on the type of impact they anticipated BWCs making. A majority of Squad A and Squad B officers agreed that:
  - BWCs will help to gather evidence (A: 80%, B: 91%).
  - BWCs will help settle complaints against them (A: 80%, B: 86%).
  - BWCs will increase the transparency of the department (A: 44%, B: 50%).
- A majority of Squad A and Squad B officers disagreed that:
  - BWCs will improve their legitimacy (A: 53%, B: 69%).
  - BWCs will improve relations between police and the public (A: 44%, B: 53%).
  - BWCs will increase officer’s safety (A: 52%, B: 54%).
- A majority in both squads were unsure whether:
  - BWCs will make police officers more professional.
  - Officers will reduce proactive encounters with community members.
- Many focus group members wondered why BWCs are needed in a police department with such high levels of professionalism and low levels of problems as FCPD.
- There was initial resistance to BWCs, which may have partially stemmed from a misperception that BWCs and pay raises are paid from the same budget category.
- Officers believed that both their behavior and that of community members would not change due to BWCs.
PART A. SURVEY METHODOLOGY

The officers from the three treatment districts were surveyed prior to their knowing which squad would be issued the BWCs (Time 1) and just after the cameras were no longer deployed (Time 2). The paper and pencil surveys were administered in person at the officer’s roll call or debriefing sessions. The surveys were administered at nearly the same time in the three districts. A total of 29 questions were asked in five content areas: Community Members Behavior, Police Officer Behavior, Evidence Usage, General Perceptions of Camera Usage and Recommendations concerning adopting the BWCs. The response rate varied by district. Several selected questions asked in the first four areas will be explored by comparing officers who received the cameras (Squad B) and those who did not (Squad A) both before being assigned a BWC (Time 1) and after the pilot terminated (Time 2). Figures 1 through 5 present the officer demographics.

PART B. ANALYSES OF THE SURVEY DATA

Figure 2.1 shows officer assignment. Forty-one percent of the respondents to the survey indicated that they are assigned to Squad A and 41% of the respondents are assigned to Squad B. The remaining 18% of respondents are assigned to specialized units like the Neighborhood Patrol Units (NPU), Animal Control and Motorcycles.

![Figure 2.1: Officers' Current Assignment](image)

Figure 2.2 presents the years of experience the respondents have as police officers. Twenty-eight percent of the respondents are new to the occupation with years of service ranging from less than one year to 4

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1 The officers in the three districts were first surveyed (Time 1) on January 30th and 31st, 2018. The second administration (Time 2) took place October 2nd and 3rd. The two-day sequence was used so that both squads could be surveyed as close together in time as possible.

2 The response rate for Mason at Time1 was 94% and Time 2 was 85%; for Mt. Vernon at Time 1 was 87% and at Time 2 was 73%; for Reston at Time 1 was 88% and at Time 2 was 83%. The reductions in response rate between Time 1 and Time 2 are particularly due to the replacement of personnel in the Districts. When new personnel were assigned to the district who had not participated in the first round of surveys, they were asked not to complete the Time 2 survey.
years. The largest group of officers (32%) have served Fairfax County for more than 17 years. The other three age categories contain similarly small percentages of respondents. A Student’s t test was performed to determine if Squad A and B differed on their age composition. Figure 2.3 shows that there is no significant difference in age composition by respondents.

![Figure 2.2: Officers’ Years of Experience](image)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squad A</td>
<td>100</td>
<td>11.3525</td>
<td>8.34901</td>
<td>0.83490</td>
<td>-1.162</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>Squad B</td>
<td>157</td>
<td>12.5669</td>
<td>7.87118</td>
<td>0.62819</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.4 presents the gender composition of the respondents to the survey. The vast majority of respondents are men (86%) while women make up only 12% of the respondents. Finally, 2% identify themselves as neither a man nor woman. Again, a Student’s t test was performed to see if the gender composition of Squads A and B differed. The findings in Figure 2.5 indicate that the gender composition is not significantly different.
Figure 2.4: Officers’ Gender

- 86% Men
- 12% Women
- 2% Transgender/other

Figure 2.5: Student’s t Test Showing the Comparison between Squads A and B at Time 1 to Determine if They Differed on Gender

<table>
<thead>
<tr>
<th>Squad</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>99</td>
<td>1.16</td>
<td>0.422</td>
<td>0.042</td>
<td>-0.585</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>B</td>
<td>160</td>
<td>1.19</td>
<td>0.442</td>
<td>0.035</td>
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</tr>
</tbody>
</table>

Figure 2.6 shows that the racial/ethnic composition of the respondents is dominated by Caucasians (77%) followed by Hispanics (7%). African Americans and Native Americans each accounted for 6% of the respondents, Asians account for 4% of the respondents and less than 1% of the respondents identify themselves as other. Again, a statistical test was used to determine if the racial/ethnic composition of Squad A differed from respondents in Squad B (see Figure 2.7). The test yields a t value of 1.167 which does not reach the .05 level of probability commonly used in social science research.
The final officers’ demographic characteristic explored is their educational level. Figure 2.8 presents the findings on officers’ educational accomplishment. The majority of FCPD officers (55%) have a four-year college degree and impressively, 8% of the officers have an advanced degree. Twenty-two percent of the respondents have some college while 10% have a two-year degree. Only 5% of the pilot program officers have a high school or GED diploma. A statistical test was run to determine if the educational level of Squad A differed from respondents in Squad B. Figure 2.9 shows that there is no statistical difference.
Prior research studies have found that the experience of wearing a BWC increases officers' acceptance of the device (c.f., Gaub, Todak and White, 2018). It was hypothesized that the same effect would be discovered in Fairfax. The following figures present the arithmetic mean for Squad A and Squad B on the variable in question. Time 1 refers to the survey administrated prior to the officers knowing if they would be wearing a BWC. Time 2 refers to the survey administrated at the end of the pilot.

Figure 2.10 presents the findings concerning the acceptance of BWCs by the respondents to this survey. The variable of acceptance was created by combining the responses to two of the questions on the officer survey focusing upon BWC acceptance. A Student’s t Test was performed to determine if Squad A differed from Squad B on acceptance prior to their knowing if they would be the squad assigned them. The test shows that Squads A and B do not significantly differ on their level of acceptance at Time 1 (t = 1.151). A second test was performed to see if Squad A and B differed on levels of acceptance after the pilot program was over (Time 2). The test shows that there is a significant difference between Squads A and B (t = -2.599). One might rush to conclude that what was found in past studies was also found in Fairfax. However, it was decided to drill deeper into this relationship by comparing Squads A and B between Times 1 and 2. Figure 2.10 shows that when comparing each squad between their Time 1 and 2 responses, Squad B slightly increased their acceptance but not to a significant degree. However, when comparing Time 1 and 2 responses for Squad A, the difference was negative and significant. Thus, the differences found in Time 2 comparisons were not due primarily to an increase in acceptance by the

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3 See questions 28 and 29 in the Fairfax County Police Officer Survey in Appendix D
camera-wearing Squad B but by the drop in acceptance by respondents in Squad A. These relationships are graphically displayed in Figure 2.11. One explanation for this unusual finding is that Squad B accepted the BWCs because they were ordered to do so and thus did not change their attitudes concerning acceptance between Time 1 and 2. Some officers in Squad A, however, may have heard that the use of the cameras required more work on the officer’s part such as “tagging the incidents” which might explain their negative response to acceptance at Time 2.

Figure 2.10: Student’s t-Tests between Squad A and Squad B Officers and between Their Responses between Time One and Two

<table>
<thead>
<tr>
<th>Squad</th>
<th>Mean T1</th>
<th>SD T1</th>
<th>Mean T2</th>
<th>SD T2</th>
<th>Btn A₁ &amp; B₁</th>
<th>Btn T₁ &amp; T₂</th>
<th>Btn. A₂ &amp; B₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3.465</td>
<td>1.650</td>
<td>2.854</td>
<td>1.588</td>
<td>1.151</td>
<td>-2.694*</td>
<td>-2.599*</td>
</tr>
<tr>
<td>B</td>
<td>3.222</td>
<td>1.693</td>
<td>3.456</td>
<td>1.747</td>
<td></td>
<td>1.003</td>
<td>1.151</td>
</tr>
</tbody>
</table>

* = p. < .05

Figure 2.11: Changes in Acceptance Levels of BWCs Over Time

Content Area 1: BWC’s Effect on Citizen Behavior

Six statements were presented in this area and the officers were asked to respond to each statement by selecting one of seven response categories ranging from strongly disagree to strongly agree. The seven categories were collapsed into three to make the resulting figures more interpretable. The figures present responses to a statement divided by whether the respondent was a member of Squad A or B and

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4 To conserve space only two of the statements will be presented. The two presented are considered the most important of the statements in this area.
then further subdivided by time: responses prior to knowing if they would wear the camera and after the end of the pilot program.

Figure 2.12 presents the respondents’ belief about whether the BWCs will increase police-community relations. At Time 1 and Time 2, the majority of Squad B officers disagreed with the statement that BWCs will improve relations. However, there was a slight increase in agreement across time in Squad B’s responses to the statement (13% to 24% agreement). Squad A’s agree response decreased slightly over time (17% to 15%). A Chi Square $X^2$ test statistic was calculated for the response category of agree across squad and time. For data in Figure 2.12, the $X^2$ value is 2.256 and the $p$ value is .133 which is not significant at the .05 probability level. Thus, there is no significant difference across percent agree with the statement that BWCs will improve community relations by squad and time.

Figure 2.13 shows that both squads strongly disagree with the statement that BWCs will improve police legitimacy in the eyes of the community at time one (67% and 68%). Squad B maintains its disagreement at time two while Squad A disagrees less and shifts that response to the unsure category. Both squads agree responses are similar over time with Squad A being 1% higher. In short, neither Squad A nor B respondents feel that the BWC will have any effect on the public’s perception of police legitimacy. A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.13, the $X^2$ value is .061 and the $p$ value is .805 which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will increase legitimacy by squad and time.
Content Area 2: BWC’s Effect on Police Officer Behavior

This section addressed the question as to whether the BWCs will affect police officers’ behavior. Again, only two of the nine statements will be analyzed for this report. Figure 2.14 asks the respondents to assess whether the BWCs will make the officers act more professionally. The respondents either agree with the statement or disagree at both Time 1 and Time 2; few respondents are unsure. Squad A agrees with the statement slightly more than Squad B (47% to 44% and 42% to 41% at Time 2). A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.14, the $X^2$ value is .019 and the $p$ value is .890, which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will increase professionalism by squad and time.

Another issue that has surfaced in prior research is whether the use of BWCs will reduce the number of proactive police stops. That is, will officers reduce the number of encounters with community members...
because they are afraid of having a bad encounter recorded for their supervisors to review? Figure 2.15 presents data that answer that question. Again, the respondents to the statement that BWCs will reduce proactive encounters with community members have polarized responses. The respondents either agree that BWCs would reduce proactive encounters or they disagree with that statement. Both squads decrease their agreement between time 1 and time 2 and increase their disagreement from time 1 to time 2. A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.15, the Chi$^2$ value is .019 and the $p$ value is .890, which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will reduce proactive encounters by squad and time.

**Figure 2.15: BWCs Will Reduce Proactive Encounters with Community Members, by Squad and Time**

![Bar chart showing the percentage of respondents who agree, unsure, or disagree with the statement that BWCs will reduce proactive encounters, by squad and time.]

**Content Area 3: BWC’s Effect on Strength of Evidence**

This section addresses the question as to whether the BWCs will affect the strength of evidence used in police work. Again, only two of the four statements will be analyzed for this report. Figure 2.16 asks the respondents to assess whether the BWCs will increase the gathering of evidence. The figure shows that there is overwhelming agreement among the respondents in both Time 1 and 2 that BWCs will increase it. It should be noted that although both squads increase in agreement, the ones wearing the camera (Squad B) increase by more than Squad A (4% points to 17% points, respectively). A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.16, the X$^2$ value is .482 and the $p$ value is .487 which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will increase the gathering of evidence by squad and time.
Figure 2.16: BWCs Increase the Gathering of Evidence, by Squad and Time

![Graph showing the increase in gathering of evidence by squad and time.]

Figure 2.17 shows the officers’ responses to the statement on whether BWCs will help in settling complaints against officers. Again, there is overwhelming agreement by members of both Squad A and B to the statement at Time 1 (84% and 79%, respectively). At Time 2, Squad B shows an increase over their response at Time 1 by 7%. However, Squad A showed a reduction in agreement at Time 2 (-4%). A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.17, the \( \chi^2 \) value is 3.67 and the \( p \) value is 0.545 which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will help settle complaints by squad and time.

Figure 2.17: BWCs Will Help Settle Complaints Against Police Officers

![Graph showing responses to the statement on whether BWCs will help settle complaints against police officers.]

Content Area 4: Officers’ General Perceptions about BWCs

This section addresses the question as to whether BWCs will affect a range of other issues relating to police work. Again, only two of the seven statements will be analyzed for this report. Figure 2.18 displays the responses on whether the use of BWCs will increase officer safety. A majority of both squads indicate that the BWCs will not increase their safety on the street. However, they disagree more at Time 1 than they do at Time 2. The undecided category remained about the same for both groups at both times. A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.18, the $X^2$ value is .919 and the $p$ value is .338 which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will increase officer safety by squad and time.

Figure 2.18: BWCs Increase Officer Safety, by Squad and Time

![Bar chart showing responses to BWCs increase officer safety](chart.png)

Figure 2.19 shows whether the respondents believe that BWCs will increase the transparency of the department with the public. At Time 1, Squad A is in more agreement with that statement than Squad B (58% to 44%, respectively). However, at Time 2, this relationship reverses, so that Squad B is in more agreement with the statement than Squad A (44% to 50%, respectively). Again, experience with wearing the camera might have strengthened the belief that BWCs will increase the FCPD’s transparency to the public. A Chi Square test statistic is calculated for the response category of agree across squad and time. For data in Figure 2.19, the $X^2$ value is 1.983 and the $p$ value is .159 which is not significant at the .05 level. Thus, there is no significant difference across percent agree with the statement that BWCs will increase transparency of the department by squad and time.
PART C. FOCUS GROUP METHODOLOGY AND RESULTS

The research team conducted 12 focus groups over the year-long pilot program evaluation. Two groups, one with senior officers and one with line officers, were held in each of the three stations in May 2018 before the pilot began. Six new groups were held following the same design in May 2019 after the pilot ended. All attendees were volunteers and were given a consent form on their rights as participants and verbally agreed to the recording of each session for research purposes. The three focus group moderators used identical guides for the first and second groups.

The first six groups consisted of Squad B officers who were asked for their initial thoughts at three time points: when they learned that the FCPD was considering issuing body-worn cameras, when they learned that their district would be one of only three to participate in the pilot program, and when they learned that Squad B officers like themselves would be issued cameras. The six post-pilot focus groups consisted of Squad A officers who were asked whether they had worn a camera, the extent of their interaction with Squad B officers during the pilot period, and their perceptions regarding whether and how Squad A and Squad B have changed their policing practices because of the cameras.

One rationale for holding separate focus groups for each squad was to give the groups a common frame: all of the participants in a group had used cameras or all of the participants had not. The second rationale was stronger: to hear from each squad independently whether they intermingled while on duty. It was critical to the study’s design that only Squad B officers wore BWCs and that community members exposed to BWCs did so only because they engaged with Squad B officers. The researchers learned, after the designation of Squad B as the treatment group, that the two squads occasionally mixed while on duty. In “staff 90” situations, one squad is short-handed and its supervisors ask members of the other squad to serve overtime in order to bring the shift to full staffing. To counter this threat to the integrity of the study design, the department’s administration issued a directive to Squad B personnel not to wear their BWCs when they staff 90-ed for Squad A. Never having been assigned a BWC, Squad A officers did not
wear one when they staff go-ed for Squad B. The focus group uncovered only a few instances in which this directive was not followed.

The 12 recordings or sets of notes from the focus groups were content analyzed to identify the major themes, and then quotes illustrating each theme were selected for this report. The first eight themes listed below were based on comments made by Squad A and Squad B members both before and after the pilot period. The ninth theme consists of other issues deemed important for FCPD to know. Many of the qualitative insights gained from the focus groups are used in this report’s interpretation of the quantitative survey results.

1. **Many officers believe that BWCs are needed in police agencies with serious community relations problems, corruption or where egregious law enforcement incidents have occurred; that is not true for FCPD.**

There was mention by participants in almost every focus group that BWCs are most necessary for troubled police agencies facing charges of racism, undue force, etc. Comparisons were drawn to other departments in the Washington DC metropolitan area where BWCs have already been adopted because “they have those problems big-time.” When this point was made, it was quickly followed by one or more participants pointing out that FCPD is a highly professional organization without those types of problems.

“We don’t need it. Ferguson wouldn’t happen here.”

“I don’t think we have that type of department where we need a third eye watching us. The majority of officers do their job correctly.”

“It’s a solution to a problem we don’t have.”

“Fairfax County doesn’t have a reputation of improper use of force or corruption issues. That’s why I chose it.”

2. **Some police officers think that the funding of BWCs means their pay raises will be further delayed.**

Concerns about the funding source for BWCs vied for first mention with comments about the cameras not being needed. Some focus group participants, both pre- and post-pilot, were certain that BWC funds and salary funds reside in the same budget category and would be treated in zero-sum fashion if the decision was made to deploy BWCs to all police officers. One supervisor (see the last quote) referenced efforts to tell officers otherwise.

“I don’t have a problem with the cameras, but I think the money ought to be spent elsewhere, like on tasers, pay raises, and getting a better fleet of cruisers first.”

“I first thought BWCs were a ridiculous idea. I thought why are they spending all of that money when they haven’t gotten our guys raises in however long?”

“When the pilot got close to the end and the question was do we get them or not, the rumor was still growing that if we get cameras, we won’t get a raise for 10 years.”

“We can’t seem to [quash] rumors among officers that haven’t had a raise in 10 years that the BWC system is coming from a different pool of money and can never be turned into a raise.”
3. There was a general resistance to the BWC pilot program, but it seems to have lessened.

At the beginning of the pilot program, there was some resistance among officers to BWCs unrelated to funding or the department’s professionalism. This type of resistance appears to have disappeared over time as officers’ gained experience with the technology.

“The program raises a concern: Where have I gone wrong? What have I done wrong? You feel violated a bit.”

“I don’t think they’ve given us enough background on why we need them.”

“At first I thought it’s something more we can get in trouble for by our commanders and supervisors, but actually the only kind of behavior camera-wearing officers are being dinged for are small procedural mistakes like forgetting to tag their recordings appropriately.”

“The officers given cameras are seeing some of the benefits of them, not only disproving allegations that they would be jammed for trivial mistakes but also seeing in court how the cameras are making their cases stronger.”

4. Most police officers believe that their behavior has not changed because of BWCs.

There was frequent mention of the in-car videos (ICVs) as an earlier version of BWCs, so the officers were already accustomed to having their actions and words recorded, reviewed and used in courtrooms when the BWC pilot was announced.

“If anything, I was worried at first about officer hesitation because of Ferguson, etc. It’s not really a camera issue but more about the times.”

“I always felt I was being recorded or observed already. If we’re doing the right thing, BWCs won’t be a problem.”

“Every building we go into has cameras all over the place. Everyone’s used to it.”

“We have cameras in our vehicles and mics on our vests and those can pick up a pretty long ways, like in a house. We’re very used to being on camera long before we were introduced to BWCs.”

“The citizens were video and audio recording us long before we were introduced to the cameras.”

5. The officers also believe that community members’ behavior hasn’t changed because of BWCs.

In nearly every focus group, the officers mentioned the proliferation of public and private recording devices that have shaped the behavior of community members before BWCs were introduced. They also discounted that newly deployed BWCs are even noticed in officer-community member engagements.

“The external vests have so many attachments, citizens don’t see the camera.”

“They are oblivious and are going to do what they’re going to do.”

“Ninety-five percent of the people don’t know they are being recorded. You give them a card [telling them they are] and they say ‘Oh, does my hair look alright?’”

“Citizens have been recording officer interactions with their cell phones. Our body-worn cameras don’t make a difference.”
“The only advantage to us of the video is its clarity. Everyone thinks we had body cameras already and that’s why the camera doesn’t change how anyone acts around us.”

6. There are positive and negative perceptions of how BWCS have impacted justice system processes, especially the credibility of police officer testimony.

The focus group participants provided an interesting mix of comments on this theme, some focused on the importance of video footage to a case and some lamenting the discounting of their professional testimony.

“Our testimony doesn’t mean anything. That’s been proven by years of in-car videos. Before then, officers sworn under oath meant something was a fact.”

“My word used to be enough. Now if something is not caught on tape, it didn’t happen.”

“When defense attorneys learn that the officer was wearing a camera, they’re quicker to plea bargain with the prosecutors.”

“Before, defense attorneys didn’t want anything on video. Now if it’s not on video, it didn’t happen.”

7. BWCS are a significant improvement over ICVs but are not perfect.

The step-up in technology is appreciated but brings with it a few new worries.

“An ICV only records what’s in front of the cruiser. The BWCS capture more but they fall off in a tussle and sometimes don’t work.”

“I’ve had to return to the station several times a day to fix something with it, spending time I’d rather be patrolling.”

“The head-mounted or glass-mounted cameras are preferable. Then you’re going to be looking at where the danger is.”

“I’d prefer a camera positioned closer to my eyes rather than on my chest. I have a lot of traffic stop footage showing car pillars.”

“An officer’s eyes see more than a BWC camera does. When testifying about a DUI in court, a defense attorney says ‘You said the person did, A B and C but the video doesn’t show that.’”

8. BWCS create additional work for officers and supervisors.

Participants agreed that the additional work for an officer is minimal, but it’s added on to what they see as an already-lengthy checklist of preparations for going on duty. Supervisors commented that their new responsibility for auditing BWC tapes as well as IVC recording would add 30-45 minutes to their heavy work week.

“As an officer, BWCS have added to an extremely long list of about 30 things we have to do before we start our shift. As a supervisor, I’ve now got five or six more things to do.”

“When I found out I wasn’t going to get a camera, I was a little bit relieved I didn’t have additional administrative responsibility.”

“If I didn’t have to spend hours [as a supervisor] running audits, I could be out on the street working with the public.”
9. Other important points were made by group participants.

“There could be trust issues with confidential informants – is the camera really off?”

“We’ve used the videos for teaching. They’re definitely useful, something I didn’t think about at the beginning.”

“There’s a lot of behind-the-scenes politicking. If the cameras are brought in, it will look like the department chose the community over us.”

“I’ve had a lot of cellphones shoved in my face. I think we should have BWCs. Now that our word is not taken as gold, it’s like a third person standing there. It’s kind of sad.”

“When I would be interacting with citizens, they’d ask where’s my BWC. They thought I was some kind of bad cop because I wasn’t wearing one.”

“Citizens pull out their phones. Once they see we have cameras, they put theirs away. That’s been beneficial.”

“I found the BWC interesting. I’m happy that I got one, a new challenge to take on.”

“Don’t come out with a 4 to 6-page general order that’s emailed out. Make it simpler. Maybe the people who have to abide by a policy should have a hand in writing it.”

PART D. CONCLUSIONS

Similar to past research, a significant difference was observed after the officers used the BWCs during the six-month pilot program. However, contrary to past research, changes in this relationship are not due primarily to officers wearing the cameras becoming more accepting, but rather because those who did not wear BWCs became more negative towards them. Attitudes concerning the effects of wearing the cameras on community members’ behavior, the police themselves, evidence usage and general issues were compared by squad and by time. Officers expressed overwhelming agreement on the use of BWCs in gathering evidence and settling complaints. They expressed mixed feelings about whether BWCs will reduce proactive enforcement, make police officers more professional and make the department more transparent to the public. They expressed negative feelings that BWCs will improve community-police relations and increase their safety on the street.

Comments gathered from the 12 focus groups provided insights helpful in interpreting the survey results. A notable number of participants contended that BWCs are needed by departments with serious community relations problems, violent incidents or corruption; none of those things describe the FCPD, so they wondered why BWCs were being piloted. There was a belief among some officers that BWCs and pay raises would be paid for out of the same “pot” in a zero-sum manner. Given the choice, they preferred (“long overdue”) raises. Most officers believed their behavior and that of community members did not change because of BWCs. They acknowledged initial resistance to BWCs but said it has decreased with familiarity over time. They believed that BWC recordings have positively and negatively affected justice system operations. They appreciated the improvements BWCs bring compared with in-car videos, recognized the additional work required by staff and the reality that BWCs are not perfect.
SECTION THREE:
ORGANIZATIONAL DATA ON OFFICER PERFORMANCE
SECTION THREE: ORGANIZATIONAL DATA ON OFFICER PERFORMANCE

SUMMARY OF FINDINGS:

- The implementation of BWCs has no discernable effect on the number of traffic stops conducted or the number of incidents responded to, both non-violent and violent. Thus, de-policing is not apparent when BWCs are deployed.

- The use of BWCs has no discernable effect on the level of citizen complaints during the implementation of the BWCs but does have a significant effect on levels of complaints after the cameras were taken off the street. Those who wore the cameras have fewer complaints than those who did not. However, the effect is quite small.

- The use of BWCs has no discernable effect upon the general use of force, using direct contact force, using indirect contact force or use of force by pointing a firearm.

PART A. METHODOLOGY

This section presents the findings concerning the effect of BWCs on officer behavior. It includes analyses of whether the use of BWCs affect de-policing, complaints against police officers, and finally, the police use of force.

In addition to responding to calls for service, police officers engage in a wide array of proactive activities including community-oriented policing, problem-oriented policing and traffic enforcement. Often, these types of policing activities involve an additional amount of officer discretion, as they require the officer to make decisions about when and how to engage the community. Although little is known about how BWCs may impact proactive policing, some have suggested that by heightening the level of scrutiny or oversight, BWCs may cause officers to de-police, i.e., reduce the amount of proactive engagement with the community.\(^5\)

The data for these analyses were supplied by the FCPD. The traffic and incident data were compiled in each district station by their crime analyst. They were received in Microsoft, Excel files. The complaint and use of force data were supplied by the Internal Affairs Bureau of the FCPD. Their data accreditation manager sent the data in Microsoft Excel files.

\(^5\) For a review of the de-policing hypothesis, see Wallace, D., White, M. D., Gaub, J. E., & Todak, N. (2018)
To test the de-policing hypothesis, an interrupted time series regression model examining changes in the weekly seasonal differences in traffic stops was run. The data for the analyses were collected for 12 months before the pilot began, during the six-month pilot and for three months after the pilot ended.

The results of these analyses are found in Figures 3.1, to Figure 3.4 and in Figures 3.1a and b to 3.4a and b. The data were collected 12 months prior to the pilot period to control for possible seasonal differences. The first vertical dotted line in the figures represents the start of the BWC pilot in March 2018 (Week 54). The second vertical dotted line represents the end of the BWC pilot at the end of August 2018 (Week 79). The solid dots refer to the weekly seasonal differences of traffic stops by Squad B. The open dots refer to the weekly seasonal differences of traffic stops by Squad A. The solid horizontal line represents the predicted values for the treatment group (Squad B) and the dashed horizontal line represents the predicted values for the control group (Squad A).

PART B. ANALYSES OF THE PERFORMANCE DATA

Figure 3.1 presents the weekly seasonal differences for traffic stops prior to, during and after the pilot program. A visual scan of the figure shows that there are no differences in the level of traffic stops between Squads A and B. This is confirmed in Figures 3.1a and b, which show that there is no significant difference between the number of traffic stops the two squads made during the implementation period or after the pilot period ended. When reading these figures, look at the fifth column from the left (labeled “p > (t).”). If the values in that column are .05 or less, the change in time is statistically significant. As presented in figures 3.1a and b, neither statistic is significant.

6 A seasonal weekly difference (subtracting the prior week from the current week) was used since there was a fluctuation in the counts every other week, potentially from the change in schedules across squads. This was done instead of collapsing the data into biweekly aggregates to retain as many timepoints as possible.

7 Stata software was used to conduct the interrupted timeseries analyses using the “itsa” command (Linden, 2015).

8 Additional graphics concerning traffic stops, incidents, complaints and use of force can be found in Appendix G.
Figure 3.1: Interrupted Time Series Analysis of BWCs on Traffic Stops

Figure 3.1a: Comparisons of Linear Post Intervention Trends Week 54 to 79

| Linear Trend | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|-------|-----|---------------------|
| Treatment    | 1.1277 | 2.7331    | 0.4126| 0.6804| -4.2662 to 6.5216   |
| Controls     | -0.4485| 2.8076    | -0.1597| 0.8733| -5.9894 to 5.0924   |
| Difference   | 1.5762 | 3.9182    | 0.4023| 0.688 | -6.1566 to 9.3089   |

Figure 3.1b: Comparisons of Linear Post Intervention Trends Week 80 to 94

| Linear Trend | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|-------|-----|---------------------|
| Treatment    | -0.1544| 3.5644    | -0.0433| 0.9655| -7.1889 to 6.88     |
| Controls     | 1.7696 | 6.1136    | 0.2895| 0.7726| -10.2959 to 13.8351 |
| Difference   | -1.924 | 7.0768    | -0.2719| 0.786 | -15.8904 to 12.0423 |

Figure 3.2 also presents data that address the issue of de-policing. The data in these analyses are incident data, generated when a police officer responds to resolve an incident. If de-policing was happening because BWCs were deployed, then one should see a decrease in incident activity of Squad B during the pilot period. Again, a visual inspection of the figure indicates that there is no change in Squad B’s activity level. Figures 3.2a and b support this finding. The figures show that there is no significant difference
between the number of incidents handled by Squad A or Squad B during the implementation period or after the pilot period ended.

**Figure 3.2:** Interrupted Time Series Analysis of BWCs on Incidents Responded to by the Police

![Graph showing interrupted time series analysis](image)

**Figure 3.2a:** Comparisons of Linear Post Intervention Trends Week 54 to 79

| Linear Trend | Coeff.  | Std. Err. | t      | P>|t| | [95% Conf. Interval] |
|--------------|---------|-----------|--------|-----|---------------------|
| Treatment    | -0.4823 | 1.2994    | -0.3712| 0.711 | -3.0468 to 2.0822   |
| Controls     | -0.0146 | 1.5521    | -0.0094| 0.9925| -3.0777 to 3.0485   |
| Difference   | -0.4677 | 2.0242    | -0.231 | 0.8175| -4.4626 to 3.5272   |

**Figure 3.2b:** Comparisons of Linear Post Intervention Trends Week 80 to 94

| Linear Trend | Coeff.  | Std. Err. | t      | P>|t| | [95% Conf. Interval] |
|--------------|---------|-----------|--------|-----|---------------------|
| Treatment    | -0.8235 | 2.6606    | -0.3095| 0.7573| -6.0743 to 4.4273   |
| Controls     | 0.2574  | 2.5827    | 0.0996 | 0.9207| -4.8397 to 5.3544   |
| Difference   | -1.0809 | 3.708     | -0.2915| 0.771 | -8.3987 to 6.237    |

When all incidents are analyzed together, there is a chance that different trends in specific incidents might be masking other trends in the data. To investigate this, the incidents were divided into two
categories: non-violent and violent. Figure 3.3 presents the findings concerning non-violent incidents and whether de-policing was evident. That is, did Squad B respond to fewer non-violent incidents during the period that they were wearing BWCs? Again, a visual inspection of the findings indicates that there is no difference between Squad A and Squad B’s responsiveness. This finding is supported by data in Figures 3.3a and b. The figures show that there is no significant difference between the number of non-violent incidents handled by Squad A or Squad B during the implementation period or after the pilot period ended.

Figure 3.3: Interrupted Time Series Analysis of BWCs on Non-Violent Incidents Responded to by the Police

![Graph showing the analysis of non-violent incidents](image)

Figure 3.3a: Comparisons of Linear Post Intervention Trends Week 54 to 79

| Linear Trend | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|-------|------|---------------------|
| Treatment    | -0.5908| 1.0991    | -0.5375| 0.5916| -2.76               | 1.5784               |
| Controls     | 0.0077 | 1.3595    | 0.0057 | 0.9955| -2.6754             | 2.6908               |
| Difference   | -0.5985| 1.7483    | -0.3423| 0.7325| -4.0487             | 2.8518               |

9 Violent incidents included homicide, assault, kidnapping/abduction, robberies, forcible sex offenses and arson. The non-violent incidents category included all property crimes and those identified as non-reportable.
The previous analyses indicated that there is no de-policing for non-violent incidents, but could the effect manifest itself when the incidents are far more serious? Figure 3.4 and supporting data in Figures 3.4a and b present the findings concerning this question. Again, a visual check of the data points indicates that there is no difference between the violent incidents handled by Squad B and Squad A. This finding is supported by data in Figures 3.4a and b. The figures show that there is no significant difference between the number of violent incidents handled by Squad A or Squad B during the implementation period or after the pilot period ended.

Figure 3.4: Interrupted Time Series Analysis of BWCS on Violent Incidents Responded to by the Police
Based upon the preceding four figures and their supporting statistical analyses, one can conclude that there is no indication of de-policing in the FCPD because of the introduction of BWCs.

Next we turn to community complaints. Figure 3.5 presents the findings of the effects of BWCs on community members’ complaints against police officers\(^{10}\). During the eighteen-month period, only 152 cases were reported.\(^{11}\) Because, many bi-weekly measuring units had zero complaints, the regression-based analyses can be unstable. The visual assessment of this figure is not as straightforward as the preceding figures. This is due to bi-weekly reporting periods with an outlier number of complaints, then a reporting period with no reports. When the statistical analyses are interpreted, the period running from the beginning to the end of the pilot program shows no meaningful difference in the number of complaints by squad. However, the period after the pilot (weeks 41-47) shows that Squad B had significantly fewer complaints (-.44 complaints per two-week period) while Squad A had more (.2 complaints per two-week period). This difference between the two squads was approximately half a complaint each two-week period. Thus, although the relationships are significantly different, the effect is small.

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\(^{10}\) Caution must be exercised in interpreting these data because the number of complaints is relatively small.

\(^{11}\) For complaint and use of force data, nine months of pre-pilot data were employed. These data are presented in bi-weekly segments because of the large number of weeks where no complaints were fielded.
Figure 3.6 presents the interrupted times series findings on the effect of BWCs on the use of force in general. A visual scan of the data points shows two things. First, as one would expect using data representing a rare event, there are outliers in the data set. There were only 610 cases of use of force over
the 18 months of data collection. Second, there doesn’t appear to be a distinct pattern for either Squad A or B. Relying on the statistics presented in Figures 3.6a and b, it can be concluded that there is no statistically significant difference either during the pilot period or after (all $p$-values are greater than .05).

Figure 3.6: Interrupted Time Series Analysis of BWCs on Use of Force

![Graph showing use of force comparison between Squad B (treatment) and Squad A (control).](image)

### Figure 3.6a: Comparisons of Linear Post Intervention Trends Bi-weekly 27 to 40

| Linear Trend  | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|---------------|--------|-----------|-------|-----|---------------------|
| Treatment     | -0.044 | 0.2823    | -0.1557 | 0.8767 | -0.6074  - 0.5195 |
| Controls      | -0.1209| 0.4291    | -0.2817 | 0.779 | -0.9772  - 0.7354 |
| Difference    | 0.0769 | 0.5137    | 0.1497  | 0.8814 | -0.9481  1.102 |

### Figure 3.6b: Comparisons of Linear Post Intervention Trends Bi-weekly 41 to 47

| Linear Trend  | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|---------------|--------|-----------|-------|-----|---------------------|
| Treatment     | -0.044 | 0.2823    | -0.1557 | 0.8767 | -0.6074  - 0.5195 |
| Controls      | -0.1209| 0.4291    | -0.2817 | 0.779 | -0.9772  - 0.7354 |
| Difference    | 0.0769 | 0.5137    | 0.1497  | 0.8814 | -0.9481  1.102 |
Again, when all use of force incidents are analyzed together there is a chance that different trends in specific incidents of force might be masking other trends in the data. Figure 3.7 presents an interrupted time series analyses on the effect of BWCs on the direct force. A visual scan of the data points shows no distinct pattern for either Squad A or B. Again, relying on the statistics presented in Figures 3.7a and b, it can be concluded that there is no statistically significant difference either during the pilot period or after (all $p$-values are greater than .05).

Figure 3.7: Interrupted Time Series Analysis of BWCs on Use of Direct Contact Force

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<table>
<thead>
<tr>
<th>Squad B (treatment) and Squad A (control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention starts: Week 27 and ends week 40</td>
</tr>
</tbody>
</table>

Regression with Newey-West standard errors - lag(1)

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12 Types of force were separated into three categories for analysis: direct contact, indirect contact, and pointed firearm. Direct contact includes: ASP/Baton, Force to Cuff, Force to Hobble, Force to Hold/Restrict, Hands-On Escort/Guide, Pressure Points by Hand, Spit Mask, Strike with Foot/Knee, Strike with Hand/Fist, and Take Down. Indirect contact includes: Pointed Taser, Taser, Lit with Taser, OC, PIT, and Intentional Vehicle Contact. Pointed firearm contained only the pointed firearm force type. No incidents of deadly force were reported during the time period of this study.
Figure 3.7a: Comparisons of Linear Post Intervention Trends Bi-weekly 27 to 40

| Linear Trend | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|-------|-----|----------------------|
| Treatment    | 0.0659 | 0.063     | 1.0464| 0.2991 | -0.0598 to 0.1917    |
| Controls     | -0.0165| 0.1132    | -0.1456| 0.8846 | -0.2423 to 0.2094    |
| Difference   | 0.0824 | 0.1295    | 0.6362| 0.5268 | -0.1761 to 0.3409    |

Figure 3.7b: Comparisons of Linear Post Intervention Trends Bi-weekly 41 to 47

| Linear Trend | Coeff. | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|-------|-----|----------------------|
| Treatment    | 0.0357 | 0.0952    | 0.3753| 0.7086 | -0.1542 to 0.2256    |
| Controls     | -0.3214| 0.1693    | -1.8988| 0.0618 | -0.6592 to 0.0164    |
| Difference   | 0.3571 | 0.1942    | 1.839 | 0.0703 | -0.0304 to 0.7447    |

Figure 3.8 presents the findings of an interrupted time series analyses of the effect of BWCs on incidents of indirect contact force. Here the biweekly data points appear to form a predictable chain across time and between Squads A and B. Reliance upon the statistical analyses is more critical here because of the lack of a clearly visual pattern. Figures 3.8a and b indicate that the difference between Squad B and Squad A are not statistically significant.
Finally, Figure 3.9 shows the effect of BWCs on the use of force defined as pointing a firearm. This use of force is the one most often reported. About one in six reports on the use of force refers to the force category of pointing a firearm. The pattern of this use visually appears to be constant across time with only a few outliers. Most of these outliers occur during the fielding of the BWCs. Once again, the
statistical analyses must be used to determine if the wearing of a BWC affected the rate of pointing a firearm. Referring to Figures 3.9a and b, neither the implementation phase of the project nor the period following implementation shows a significant difference between members of Squad B or Squad A on the use of force by pointing a firearm. Given this finding, it can be concluded that BWCs do not have a meaningful effect on this category of the use of force.

Figure 3.9 Interrupted Time Series Analysis of BWCs on Use of Force: Pointing a Firearm

![Interrupted Time Series Analysis of BWCs on Use of Force: Pointing a Firearm](image)

| Linear Trend | Coeff. | Std. Err. | t    | P>|t| | [95% Conf. Interval] |
|--------------|--------|-----------|------|-----|---------------------|
| Treatment    | 0.1429 | 0.0937    | 1.5253 | 0.132 | -0.0441 - 0.3299    |
| Controls     | 0.3516 | 0.2639    | 1.3327 | 0.1872 | -0.1752 - 0.8785   |
| Difference   | -0.2088 | 0.28      | -0.7457 | 0.4585 | -0.7678 - 0.3502   |

Figure 3.9a: Comparisons of Linear Post Intervention Trends Bi-weekly 27 to 40
PART C. CONCLUSIONS

Officer performance data were gathered from the department’s own records concerning the number of traffic stops, other incidents, citizen complaints and use of force reports documented before, during and after the pilot period. Based upon the first four figures and their supporting statistical analyses, one can conclude that there is no indication of de-policing in the FCPD after the implementation of BWCs. Concerns about de-policing after the inclusion of BWCs is directly connected to concerns about officer productivity and public safety, however both Squad A and Squad B continued normal operations in making traffic stops and responding to both violent and non-violent incidents during the study.

No statically significant differences are found between squads on levels of complaints during the pilot period of the analyses. However, statistical significance is found in the level of community members’ complaints during the post intervention period. Based upon these results, the removal of BWCs from the field is correlated with a 0.4 bi-weekly decline in the average number of complaints for those previously equipped with BWCs. There was an average increase of 0.2 complaints per two-week time period for the control group. The difference in the change in the number of complaints after the removal of BWCs between the squads was statistically significant. However, these effects are minimal and based on a small number of complaints.

No statistically significant differences were found in use of force incidents during the BWC period or following the removal of BWCs from the FCPD officers. Based upon this, BWC usage does not affect use of force in general, direct force, indirect force or use of force by pointing a firearm.
SECTION FOUR: PERSPECTIVES OF COMMUNITY MEMBERS
SECTION FOUR: PERSPECTIVES OF COMMUNITY MEMBERS

SUMMARY OF FINDINGS

- Community members in the three pilot districts were asked a series of questions regarding a specific interaction they recently had with a police officer and were then asked to agree or disagree with three statements about it:
  - I am satisfied with how I was treated by the officer (83% agree).
  - I am happy with how my situation was resolved (74% agree).
  - I was treated in a procedurally just manner, i.e., with respect, fairness, professionalism, and the officer listened and explained actions and decisions (92% agree).
- On all three questions, substantially higher percentages of older respondents agree than did younger respondents.
- On all three questions, substantially higher percentages of Caucasian and Asian respondents agree than did African Americans, Hispanics and Native Americans.
- On all three questions, the levels of agreement by men and women are virtually identical.
- The community members were also given two statements about the FCPD:
  - The FCPD does its job well (84% agree).
  - The FCPD shares the values of my community (81% agree).
- Responses showed the same pattern of support by age group and race/ethnicity as above.
- The final statement asserted that BWCs should be worn by all officers in the department (92% agree).
- Community members were asked whether the officer was wearing a BWC and approximately one-third accurately responded yes or no, while two-thirds responded incorrectly or said they are unsure.
- The status of the officer as either wearing a BWC or not did not affect responses to any of the six statements listed above.
- In sum, there is widespread support for the actions of FCPD officers and the department itself in the attitudes of community members with recent police interactions, even though some age and racial/ethnic groups are less positive than others.
- The support for the adoption of BWCs department-wide is very strong.

PART A. SURVEY METHODOLOGY

In preparation for the telephone survey, cards were printed and given to the police officers in the three participating districts to hand to community members with whom they would come in contact for the duration of the pilot period. The cards were the size of a typical business card and told the recipient to anticipate a call from the American University research team. The front and back sides are shown in Figure 4.1.
An FCPD district crime analyst provided the research team with a list of those community members that had an encounter with a police officer within the prior two weeks. The list included only the first name of the community member, the phone number they gave the police, whether the officer was wearing a camera or not and the date of the incident. Students from American University who spoke English as well as Spanish, Korean or Vietnamese (the four most spoken languages in the district’s communities) were recruited and trained as interviewers to conduct the telephone surveys. The survey questions were programmed into a software program (Qualtrics) that automated question flow, skip patterns, and the input of responses to open-ended questions. A total of 603 community members were interviewed, producing a response rate of 19.5% from all people whose first name and phone number were relayed. In addition, during the interview period, there was a dramatic increase in spam calls in the area. This external condition may have reduced the number of calls answered by community members during the survey period.

PART B. ANALYSES OF THE SURVEY DATA

Figures 4.2 through 4.4 present the demographics of the sample of community members by age, gender and race/ethnicity. As shown in Figure 4.2, the majority of survey respondents (68%) are in the 25 to 56 years category. Lesser percentages are between 18 to 24 years (14%) and over 57 (18%).

13 For example, see https://wjla.com/news/local/virginia-lawmakers-want-to-stop-spoofed-robocalls
14 The survey was administered by phone and in four of the most widely spoken languages in the Fairfax County: English, Spanish, Korean and Vietnamese.
Men composed the majority of the respondents (55%) and women composed 44% (see Figure 4.3). One percent of the respondents identified themselves as other than man or woman.¹⁵

Respondents’ race/ethnicity was divided into five categories. Caucasians comprised 41% of the sample while Hispanics comprised 24%. African Americans also comprised 24% of the sample while Asian and Native Americans comprised 11% as can be seen in Figure 4.4.

¹⁵ Only 7 of the 603 respondents identified themselves as neither man nor women and were removed from the specific questions concerning attitudes analyses because when dealing with percentages, the category of “other” may appear to be more influential than it actually is.
Figure 4.5 shows that the majority of the respondents (83%) felt satisfied with the way they were treated by the police officer (i.e., agreed or strongly agreed with the statement) while 17% were not satisfied (i.e., disagreed or strongly disagreed).

![Figure 4.5: Community Members’ Satisfaction with Treatment by the Officer](image)

Did the respondents’ age affect their perceptions of their treatment by the police officer? Figure 4.6 indicates that it did. Specifically, individuals in the oldest age group are the most likely to say they strongly agree (52%), compared to just 30% of the youngest community members. Conversely, the youngest community members surveyed are more than twice as likely to say they disagree with how they are treated compared to the other age groups. This finding is very similar to other studies’ findings concerning age and satisfaction.

Men and women do not appear to differ much with regard to their satisfaction with treatment by the officer. For men, 43% strongly agree with how they are treated, while 41% agree and 16% disagree. Similarly, for women, 44% strongly agree, while 40% agree and 16% disagree.

Our findings also indicate some variation on this question with regard to race/ethnicity. Among Caucasian community members who had a recent interaction with a FCPD officer, 57% said they strongly agree with the statement “I am satisfied with how I was treated by the officer” compared to 26% who agree and 18% who disagree. For African Americans, the percent of those who strongly agree drops to 38% while 46% agree and 16% disagree. Among Hispanics, a quarter of those surveyed strongly agree, while 61% and 14% said they agree or disagree. For Asians, 55% strongly agree, 33% agree and 13% disagree. Finally, among Native Americans, nearly a quarter (24%) strongly agree, while 53% agree and 24% disagree. In sum, our findings indicate that both Caucasians and Asians are the most likely to strongly agree that the officer treated them well, while Native Americans are the most likely to disagree.

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16 The total might not equal 100% due to rounding error. This is true for all figures in this section.
Next, we examined whether the presence of a BWC impacted the individual’s sense of how well FCPD does its job. As shown in Figure 4.7, 82% of community members who interacted with a BWC officer agree or strongly agree with the statement “The FCPD does its job well” while 18% disagree or strongly disagree. Among those community members who interacted with a non-BWC officer, 86% agree or strongly agree while 13% disagree or strongly disagree. Thus, with respect to perceptions of overall job performance, the response from community members is fairly stable regardless of whether the officer on scene wore a BWC or not.

Figure 4.7: Community Members’ Satisfaction with Treatment, by Officer’s BWC Status
Significance tests (see Figure 4.8 below) confirmed that the two groups did not differ significantly from one another on this question.

**Figure 4.8: Student’s t-Test Showing Comparisons between Treatment and Control Groups on Satisfaction with Treatment**

<table>
<thead>
<tr>
<th>BWC Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO BWC</td>
<td>316</td>
<td>1.804</td>
<td>0.862</td>
<td>0.048</td>
<td>0.759</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>BWC</td>
<td>260</td>
<td>1.827</td>
<td>0.928</td>
<td>0.058</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Community members were also asked whether or not they were satisfied with how their situation was resolved. As Figure 4.9 illustrates, the majority of those surveyed agree (40%) or strongly agree (34%) with this statement. This contrasts with a smaller number of respondents who disagreed (15%) or strongly disagreed (11%).

**Figure 4.9: Community Members’ Satisfaction with How Their Situation Was Resolved**

Taking a closer look at this question, Figure 4.10 illustrates the breakdown in satisfaction in how the situation was resolved by age, gender and race/ethnicity. Similar to our findings above for officer treatment, age has a noticeable effect, with the oldest age group (57-93) being most likely to say they strongly agree (52%) compared to just 30% of the youngest age group (18-24). By the same token, the youngest age group is also more than twice as likely to disagree with this statement (37%) compared to the other three age groups.

Men and women are similar in their perceptions of satisfaction with how their situation was resolved. Among men, 43% strongly agree, while 41% agree and 16% disagree. For women, 44% strongly agree, while 40% agree and 16% disagree.

For race/ethnicity, the effects are similar to those presented above, with 57% of Caucasian community members strongly agreeing with the statement “I am satisfied with how my situation was resolved” compared to 26% who agree and 18% who disagree. For African Americans, the percent of those who strongly agree drops to 38% while 46% agree and 16% disagree. Among Hispanics, a quarter of those surveyed strongly agree, while 61% and 14% said they agree or disagree respectively. For Asians, 55%
strongly agree, 33% agree and 13% disagree. Finally, among Native Americans, 24% strongly agree, while 53% agree and 24% disagree.

Figure 4.10: Community Members’ Satisfaction with How Their Situation Was Resolved, by Age, Gender and Race/Ethnicity

Figure 4.11 shows the breakdown for satisfaction with how the situation was resolved by the BWC status of the officer on scene. Among community members who interacted with a BWC officer, 36% agree and 34% strongly agree with the statement “I am satisfied with how my situation was resolved” while 16% said they disagree and 13% strongly disagree. In comparison, among those who interacted with a non-BWC officer, 34% agree and 42% strongly agree while 15% said they disagree and 9% strongly disagree. Although it appears that community members who interacted with a BWC officer are slightly less likely to report that they are satisfied compared to those who interacted with a non-BWC officer, the significance test (see Figure 4.12 below) confirms that the difference between the two groups is not statistically significant.

Figure 4.11: Community Members’ Satisfaction with How Their Situation Was Resolved, by Officer’s BWC Status
Respondents were also asked a series of questions regarding their feelings towards FCPD. As shown below in Figure 4.13, when asked if they thought that FCPD does its job well, a strong majority said that they either agreed (53%) or strongly agreed (31%) with this statement compared to only 11% who disagreed and 5% that strongly disagreed.

Figure 4.13: The Department Does Its Job Well

Figure 4.14 illustrates the breakdown in whether community members feel that the FCPD does its job well by age, gender and race/ethnicity. Once again, we find that age has an impact on community perceptions, with the oldest age group (57-93) being most likely to say they strongly agree (44%) compared to just 16% of those aged 18-24. Conversely, the youngest age group is nearly two, to three times more likely to disagree with this statement (32%) compared to the other three age groups.

Our results do not find any major differences by gender regarding the statement that FCPD does its job well. For men, 31% strongly agreed with this statement, while 55% agreed and 14% disagreed. For women, 31% strongly agreed, while 53% agreed and 16% disagreed.
Among Hispanics, 24% strongly agree, while 59% and 18% said they agree or disagree. For Asians, 41% strongly agree, 46% agree and 13% disagree. Finally, among Native Americans, 38% strongly agree, while 44% agree and 19% disagree.

Figure 4.14: Community Members’ Belief the FCPD Does Its Job Well, by Age, Gender and Race/Ethnicity

Figure 4.15 presents results on how well FCPD does its job by the BWC status of the officer on scene. Among those who interacted BWC officer, 50% agree and 32% strongly agree with the statement “I am satisfied with how my situation was resolved” while 13% said they disagree and 5% strongly disagree. In comparison, among those who interacted with a non-BWC officer, 56% agree and 30% strongly agree, while 9% said they disagree and 4% strongly disagree.

Figure 4.15: Community Members’ Belief that the FCPD Does Its Job Well, by Officer’s BWC Status
Although findings for both groups are similar, it appears that community members who interacted with a BWC-wearing officer are slightly less likely to report that they agree that FCPD does its job well compared to those who interacted with a non-BWC officer. Yet the significance test (see Figure 4.16 below) confirms that the difference between the two groups is not statistically significant.

**Figure 4.16: Student’s t-Test Showing Comparisons between Treatment and Control Groups on Belief that FCPD Does its Job Well**

<table>
<thead>
<tr>
<th>BWC Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SDM</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO BWC</td>
<td>298</td>
<td>1.88</td>
<td>0.747</td>
<td>0.043</td>
<td></td>
<td>0.615</td>
</tr>
<tr>
<td>BWC</td>
<td>231</td>
<td>1.91</td>
<td>0.797</td>
<td>0.052</td>
<td></td>
<td>Not Sig.</td>
</tr>
</tbody>
</table>

The next question asked respondents whether FCPD shares the values of their community. As seen in Figure 4.17, a strong majority of those surveyed either agreed (54%) or strongly agreed (27%) with this statement, while 14% disagreed and only 4% strongly disagreed.

**Figure 4.17: The Department Shares the Values of My Community**

[Pie chart showing responses: 54% Strongly Agree, 27% Agree, 14% Disagree, 4% Strongly Disagree]

Figure 4.18 illustrates the statistical breakdown in whether community members feel the FCPD shares the values of their community by age, gender and race/ethnicity. A majority of respondents across all age groups agree or strongly agree with this statement. Again, age shows a noticeable impact on community members’ perceptions, with the oldest age group (57-93) being most likely to say they strongly agree (42%) compared to just 11% of those aged 18-24. Conversely, the youngest age group is nearly three times more likely to have disagreed with this statement (28%) compared to older community members (11%).
In terms of gender, there are no major differences in whether or not community members feel that FCPD shares the values of their community. For men, 27% strongly agree with this statement, while 54% agree and 17% disagree. Similarly, for women, 27% strongly agree while 55% agree and 18% disagree.

There are strong majorities across all race/ethnicity groups that feel FCPD shares the values of their community. Among Caucasians, 32% strongly agree with this statement, while 54% agree and 14% disagree. For African Americans, the percent of those who strongly agree drops to 20% while 52% agree and 28% disagree. Among Hispanics, 19% strongly agree, while 62% and 20% said they agree and disagree respectively. For Asians, 39% strongly agree, 49% agree and 13% disagree. Finally, among Native Americans, 31% strongly agree, while 63% agree and 6% disagree. These findings indicate broad agreement that FCPD shares the values of their community. At the same time, in comparison to all groups, we also find that African American and Hispanic community members are more likely to disagree with this statement.

Figure 4.18: Community Members’ Belief the FCPD Shares the Values of My Community, by Age, Gender and Race/Ethnicity

![Graph showing community members' belief in FCPD values by age, gender, and race/ethnicity.]

Figure 4.19 displays the results for the question of whether FCPD shares the value of my community by the BWC status of the officer on scene. Again, the differences between groups appear to be minimal. Among community members who interacted with a BWC officer, 29% agree and 52% strongly agree with the statement while 14% said they disagree and 5% strongly disagree. In comparison, among those who interacted with a non-BWC officer, 26% agree and 56% strongly agree while 14% disagree and 4% strongly disagree.
Tests for statistical significance (see Figure 4.20) corroborate the findings presented above, showing a lack of statistical significance. Taken together, the results indicate that the presence of a BWC has no meaningful impact on whether or not community members feel that FCPD shares the values of their community.

Next, we examined whether respondents feel they were treated in a procedurally just manner by the officer on scene. As Figure 4.21 illustrates, a majority of respondents (52%) report that they are treated with high levels of procedural justice by the officer while 40% of respondents said they are treated with medium levels of procedural justice. These figures contrast with just 8% who report low levels of procedural justice.

Procedural justice is a concept referring to being treated respectfully, fairly, professionally and that the officer listened to your side of the story and informed you of the decision that he/she was making.
Figure 4.2: Being Treated in a Procedurally Just Manner by Police

Figure 4.2 illustrates a more detailed statistical breakdown of whether community members feel they were treated in a procedurally just manner by age, gender and race/ethnicity. The majority of all age groups feel that they are treated with either high or medium levels of procedural justice. The findings also indicate that age has an impact on community perceptions, with the oldest age group (57-93) being most likely to say they are treated with high levels of procedural justice (61%) compared to just 33% of those aged 18-24. Conversely, the youngest age group was six times more likely to report experiencing low levels of procedural justice (19%) compared to older community members (3%). Thus, although the majority of all age groups believe that they are treated in a procedurally just manner, younger community members stand apart as being much less likely to share this belief.

The results do not find any major differences between men and women regarding perceived levels of procedural justice. Fifty-two percent of men report high levels of procedural justice, while 40% report medium levels and 9% low levels. For women, 53% report high levels, 39% medium levels and 7% low levels.

Regarding race/ethnicity, strong majorities across all race/ethnicity groups feel that FCPD treated them with either strong or medium levels of procedural justice although there are substantial differences across the racial groups. Among Caucasians, 63% report high levels of procedural justice, while 30% report medium levels and only 7% report low levels. For African Americans, the percent of those reporting high levels drops to 48%, while 43% report medium levels and 8% low levels. Among Hispanics, just 35% report high levels, 58% medium and 6% low levels. Asians are closer to Caucasians in their perceptions with 67% reporting high levels, 26% medium levels and 7% low levels. Finally, among Native Americans, 44% report high levels of procedural justice, 38% medium levels and 19% low levels.
The next analysis investigated whether community members’ perceptions of procedurally just treatment varies by the presence of an officer wearing a BWC. As shown in Figure 4.23, perceptions of procedural justice do not vary much by BWC status. Among those who interacted with a BWC officer, 53% report high levels of procedural justice, 38% medium levels and only 9% low levels. Similarly, for those who interacted with a non-BWC officer, 52% report high levels of procedural justice, 40% medium levels and 8% low levels.
The tests for statistical significance (see Figure 4.24) corroborated the visual conclusion of no statistical significance. Taken together, the results indicate that the presence of a BWC had no meaningful impact on whether community members felt that the officer treated them in a procedurally just manner or not.

**Figure 4.24:** Student’s t-Test Showing Comparisons Between Treatment and Control Groups on Perceptions of Procedurally Just Treatment by Officer

<table>
<thead>
<tr>
<th>BWC Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO BWC</td>
<td>302</td>
<td>1.7232</td>
<td>0.71244</td>
<td>0.04100</td>
<td>0.391</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>BWC</td>
<td>251</td>
<td>1.7761</td>
<td>0.72998</td>
<td>0.04608</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Another survey question asked respondents whether they think BWCs should be worn by all officers. As shown in Figure 4.25, the vast majority of respondents (92%) agreed or strongly agreed with the statement that BWCs should be worn by all officers, not just the community members who interacted with a BWC-wearing officer. Only 8% of those surveyed either disagreed or strongly disagreed, indicating broad support for this technology.

**Figure 4.25:** BWCs Should Be Worn by All Officers

Figure 4.26 displays support for BWCs across age, gender and race. As expected, a majority of community members across all age groups either agree or strongly agree with the statement “BWCs should be worn by all officers.” The 18 to 24 age group voiced the most support for this statement, with 52% strongly agreeing and only 6% disagreeing. Conversely, the 39 to 56 age group voices the lowest support for this statement with 39% who strongly agree and 10% that disagree. Men and women are largely in agreement on the question, with large majorities in favor of the idea. Among men, 43% strongly agree, 50% agree and only 7% disagree. For women, 44% strongly agree, 48% agree and 9% disagree.

Our findings also indicate that strong majorities across all race/ethnicity are in favor of BWCs being worn by all officers. Among Caucasians, 37% strongly agree with this statement, while 51% agree and 12% disagree. For African Americans, the percent of those who strongly agree rose to 55% while 43% agree and 2% disagree. Among Hispanics, just 35% strongly agree, while 57% and 8% said they agree and disagree respectively. For Asians, 54% strongly agree, 42% agree and 5% disagree. Finally, among Native
Americans, 50% strongly agree, while 50% agree. These findings indicate broad support for the use of BWCs, although Caucasians are most likely to disagree with the idea.

Figure 4.26: Community Members' Belief that BWCs Should Be Worn by All Officers, by Age, Gender and Race/Ethnicity

Next we examine whether support for the idea that BWCs should be worn by all officers is influenced by whether the officer in the interaction wore a BWC or not (see Figure 4.27). Once again, the differences between the treatment and control groups appear to be minimal. Among community members who interacted with a BWC officer, 48% agree and 45% strongly agree, while 7% said they disagree and only 1% strongly disagree. In comparison, among those who interacted with a non-BWC officer, 49% agree and 43% strongly agree while 7% said they disagree and 1% strongly disagree. Thus, it does not appear that the presence of a BWC has any meaningful impact on whether community members support the use of BWCs for all officers. The test for statistical significance (see Figure 4.28, next page) supports this conclusion.

Figure 4.27: Community Members' Belief that BWCs Should Be Worn by All FCPD Officers, by BWC Status
The last question asked respondents if the officer they interacted with wore a BWC. Among those who interacted with a non-BWC officer, the majority (51%) are unsure whether the officer had one while 38% said (correctly) that there was no camera (see Figure 4.29). Interestingly, 11% said a camera was present, even though the officer was not wearing one. Among those who interacted with a BWC-wearing officer, nearly (43%) are unsure about the officer’s BWC status, while over a third (37%) incorrectly identified the officer as not wearing one. Only 21% of the treatment group was correctly aware that the officer they interacted with had a BWC.

**Figure 4.28: Student’s t-Test Showing Comparisons between Treatment and Control Groups on BWCs Should Be Worn by All Officers**

<table>
<thead>
<tr>
<th>BWC Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
<th>Results</th>
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<td>294</td>
<td>1.67</td>
<td>0.664</td>
<td>0.039</td>
<td>0.561</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>BWC</td>
<td>243</td>
<td>1.63</td>
<td>0.644</td>
<td>0.041</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PART C. CONCLUSIONS**

First, a majority of respondents express satisfaction regarding their personal interaction with an officer. For example, strong majorities report being satisfied with how the officer treats them and with how the encounter with the police was resolved. Nearly all of those surveyed believe that the officer treated them in a procedurally just manner. These findings indicate that on a personal level, the majority of those who interacted with an FCPD officer during the pilot period recall the interaction in a positive light.

Second, a majority of respondents also view FCPD is a positive light. Strong majorities believe that FCPD does its job well and that FCPD shares the values of the respondent’s community. In other words,
among community members who had a recent interaction with the police, most of them report feeling positive not only about their personal experience but also about the department as a whole.

Third, there is overwhelming support among these community members for the widespread adoption of BWCs. Interestingly, there is no evidence that the presence or absence of a BWC during their police encounter has a meaningful impact on their satisfaction with it or the FCPD as a whole.

Fourth, both the age and race/ethnicity of the community member appear to influence their perceptions. Although majorities of all age and racial groups report mostly positive feelings regarding both their personal interactions with an officer and toward FCPD, there are noticeable differences. Older community members are more likely to recall their interaction and the FCPD in a positive light than do their younger counterparts. The same is true for race/ethnicity, with Caucasian and Asian community members expressing more positive feelings about their interactions and FCPD than do African Americans, Hispanic and Native Americans. Not surprisingly, this finding is somewhat reversed when the question turns to whether BWCs should be worn by all officers. The largest percentages of “strongly agree” responses are among young adults (ages 18 to 24) and three minority groups (African Americans, Asians, and Native Americans), but when the percentages of strongly agree and agree are combined, no groups stood apart from the others.
SECTION FIVE:
PERSPECTIVES OF COMMUNITY STAKEHOLDERS
SECTION FIVE: PERSPECTIVES OF COMMUNITY STAKEHOLDERS

SUMMARY OF FINDINGS

- Overall, the community stakeholders’ beliefs in the effectiveness of BWCs are cautious and vary by the question asked:
  - Nearly half (41%) agree that BWCs will reduce the number of complaints against police officers.
  - A majority (58%) agree that BWCs will make the police more accountable.
  - Nearly half (47%) agree that BWCs will make the police more legitimate in the community’s eyes.
  - A smaller minority (29%) believe that BWCs will reduce the use of force by police.
- Overall, the NGO sub-group of stakeholders (heads of non-governmental organizations) agree at much higher rates than do the governmental sub-group of stakeholders that BWCs are effective in achieving the four outcomes listed above.
- Overall, the vast majority of stakeholders agree that the FCPD involved them adequately in the development of BWC policy (76%), shares the values of their community (76%) and does its job well (88%).

PART A. METHODOLOGY

The FCPD recognized early in its decision to conduct the BWC pilot program that input from the community on the policy guiding officer behavior during the pilot would be essential. To that end, it assembled a group of community stakeholders to develop BWC policies while also addressing personal privacy rights and the constitutional safeguarding of individuals in the community. The stakeholders are leaders of special interest, civic and business organizations and as such provide a distinct yet complementary perspective regarding the probable effects of BWCS in their communities. The evaluation research team received permission from FCPD to survey the stakeholders during the pilot period in order to understand their attitudes and expectations regarding the use of BWCs, the potential effects on policing in their communities and the FCPD as a police agency.

The 23 stakeholders were emailed the link to an online survey in June, approximately halfway through the pilot period. Eighteen stakeholders responded to the survey for a 78% response rate. For analysis purposes, the stakeholders are divided into two groups by whether they worked for Fairfax County (government-related) or they represented a non-governmental organization (NGO) in order to see whether differences by type of group exist. This report section presents the results on four questions about the expected effectiveness of BWCs and three questions about the FCPD.
PART B. ANALYSIS OF THE SURVEY DATA

Figure 5.1 shows the percentage breakdown by the stakeholders’ affiliation. Two-thirds (67%) were affiliated with the Fairfax County government while the remaining 33% were leaders of special interest, civic or business organizations.

![Figure 5.1: Stakeholders’ Affiliation](image)

Perceptions Concerning the Likely Effectiveness of BWCs

Seventeen Likert-like items were asked of the stakeholders along with several open-ended questions. Likert survey items typically present a statement and ask the respondent to indicate the strength of their agreement or disagreement to it on a 5-point scale with “neither agree nor disagree” as the middle category. Our survey used four-point response scales ranging from strongly agree through agree, disagree, and strongly disagree to make the respondents choose a position. There was also an option for the respondent to indicate “don’t know.” This section of the report focuses upon four statements the researchers considered most relevant to the deployment of BWCs:

- BWCs will reduce complaints against police officers.
- BWCs will make the police more accountable.
- BWCs will make police more legitimate in the eyes of my community.
- BWCs will lessen the use of force by police.
Figure 5.2 presents the stakeholders’ assessment as to whether the use of BWCs will reduce community members’ complaints against FCPD officers. Less than half (41%) of the stakeholders agree with that as a likely outcome, with the majority (53%) disagreeing or strongly disagreeing with it and 6% indicating they don’t know. Thus, the shareholders believe that BWCs alone are unlikely to reduce the number of complaints against police officers.

![Figure 5.2: BWCs Will Reduce Complaints Against Police Officers](image)

Figure 5.3 presents the preceding statement broken down by the affiliation of the stakeholder. Although all NGO stakeholders agree with the statement, very few (9%) of the government stakeholders agree and the vast majority of them (82%) disagree or strongly disagree. The difference in attitudes between the stakeholder sub-groups is stark.

![Figure 5.3: BWCs Will Reduce Complaints Against Police Officers, by Affiliation](image)
Figure 5.4 shows the percentage distribution for the statement that BWCs will make the police more accountable. Here, the majority (58%) agree or strongly agree, 30% disagree or strongly disagree, and 12% indicated they don’t know. The results presented in Figure 5.5 indicate that the NGOs continue to be more positive about the impact of BWCs, with 100% of them agreeing or strongly agreeing that with the accountability statement. As found previously, the government-based stakeholders are less positive, with only 36% agreeing, 45% disagreeing or strongly disagreeing, and the remaining 18% indicating they don’t know.

**Figure 5.4: BWCs Will Make the Police More Accountable**

**Figure 5.5: BWCs Will Make the Police More Accountable, by Affiliation**
Figure 5.6 presents the findings for a third statement: that BWCs will make the police appear more legitimate in the eyes of one’s community members. Nearly half (47%) of the stakeholders agree or strongly agree with the statement while 35% disagree or strongly disagree and 18% don’t know.

The breakdown of these responses by stakeholder affiliation, shown in Figure 5.7, marks a small departure from the pattern apparent in earlier results. This time, the NGO stakeholders are nearly in unanimous agreement (84%) but 17% of them indicate they don’t know whether the deployment of BWCs would increase perceived police legitimacy. In contrast, only 27% of the governmental stakeholders agree or strongly agree with the statement, the majority (54%) disagree or strongly disagree, and a similar percentage (17%) indicated they don’t know.
After the killings of community members in Baltimore, Ferguson, Cincinnati, and North Charleston, one of the most frequently heard reasons for adopting BWCs is the hope that they will reduce the use of force, especially lethal force, by police officers. Figure 5.8 shows that only 29% of the stakeholders agree or strongly agree with that statement and a much larger percentage (42%) disagree or strongly disagree with it. This statement also generated the largest percentage (29%) of don’t knows of the four statements.

Figure 5.8: BWCs Will Lessen the Use of Force by Police

Figure 5.9 shows how the two groups of stakeholders differ on the statement. Again, the NGOs are more positive with 67% of them agreeing or strongly agreeing that the cameras will have a dampening effect on the use of force while a majority of governmental stakeholders (63%) disagree or strongly disagree that they will. “Don’t know” was chosen by relatively large percentages of governmental (27%) respondents. This finding confirms a definite trend in responses by stakeholder group: NGOs consistently believe that the effect of BWCs is positive, while the governmental group holds more negative views.

Figure 5.9: BWCs Will Lessen the Use of Force by Police, by Affiliation
Attitudes regarding the FCPD

The stakeholders’ survey included three other statements rated on the same four-point scale:

- I believe I was adequately involved in the development of the BWC policy.
- The Fairfax Police Department shares the values of my community.
- The Fairfax County Police Department does its job well.

The analyses of responses below follow the same format as the previous section, with a figure and text on the responses of all stakeholders combined and then a figure and text showing responses by the government and NGO sub-groups.

The stakeholders were asked if they were adequately involved in making BWC policy because the articulated role of the stakeholder was to aid the department in drafting policy that ensured that privacy rights and the constitutional protections of community members were adequately addressed. Figure 5.10 shows that the stakeholders agree or strongly agree that they are adequately involved in the process (76%). Only 18% of the group disagree or strongly disagree with the statement.

![Figure 5.10: As a Stakeholder, I Was Adequately Involved in Making the BWC Policy](image)

Figure 5.11 evaluates the adequacy of involvement by stakeholder group. As one can see, both groups believe that they were adequately involved. A higher proportion of the NGO sub-group strongly agree (67%) than in the government group (18%), but both groups have a similarly positive viewpoint when the two agree categories are combined (73% and 84% for the governmental and NGO sub-groups, respectively). Several (17%) NGO members responded that they don’t know whether they were adequately involved or not.
The vast majority of stakeholders (76%) agree or strongly agree that the FCPD shares the values of their community. As seen in Figure 5.12, only 18% disagree with the statement while 6% have no opinion.
Both groups seemed to agree that the FCPD shares their community’s values as seen in Figure 5.13. A merging of the strongly agree and agree categories shows that a vast majority of both groups hold similar positive views (72% and 83% for governmental and NGO, respectively). Only 27% of the government stakeholders disagree or strongly disagree while none of the NGOs do.

Finally, Figure 5.14 shows that the overwhelming majority (88%) of stakeholders believe that the FCPD does its job well. In contrast to many of the earlier analyses, it is the governmental stakeholders that are positive, with 64% strongly agreeing that the FCPD is doing a good job, a level that is almost twice that of the NGO stakeholders (33%). However, when the two agree categories are combined, the governmental stakeholders (91%) and the NGO stakeholders (83%) are almost equally positive regarding FCPD’s performance. Only 9% of the governmental stakeholders disagree with the statement while none of the NGO stakeholders do. Only 17% of the NGOs indicated they don’t know enough about the FCPD to respond while none of the government stakeholders feel that way. These results suggest that the stakeholders will continue to be a valuable resource for the department as it continues to take the pulse of its community on police matters.

Figure 5.13: The FCPD Shares the Values of My Community, by Affiliation

![Chart showing values](chart1.png)

Figure 5.14: The FCPD Does Its Job Well

![Chart showing job satisfaction](chart2.png)
PART C. CONCLUSIONS

The community stakeholders provide a valuable perspective on the BWC pilot program in addition to their assistance on BWC policies. Their responses regarding possible effects of BWCs on their communities are cautious: less than half agree that BWCs will reduce complaints against police officers, make the police more legitimate in the eyes of their community members, or lessen the use of force. Only the statement that BWCs will make the police more accountable, agreed or strongly agreed to by 58%, garnered an agreement rate above the 50% level. Clearly and not surprisingly, the use of BWCs alone is not seen by the stakeholders as a way to resolve community-police problems.

The distinction between stakeholders heading up government-related organizations and those leading NGOs provides valuable insights. The NGO leaders are much more positive about the effects of BWCs than are the government-based leaders. The NGOs unanimously agree that BWCs will reduce complaints against police officers and make the police more accountable. The majority of them also agree that BWCs will make the police more legitimate in the eyes of their community members and would lessen police use of force. None of these four statements were agreed to by more than 36% of the government stakeholders. When presented with statements about the FCPD, however, the vast majority of both groups are positive. More than 71% of the government sub-group agree to each of the three statements and more than 83% of the NGOs do too. It would be interesting to learn why the government stakeholder are underwhelmed by the likely positive effects of BWCs and why the NGOs are so optimistic.

There is an important caveat to these interpretations. It is possible that the community members thought the survey focused on the effects of BWCs only over the six months of the pilot period and only in the three specific pilot stations, rather than the effects of BWCs over a longer period of time and when deployed across all FCPD stations. This is a second question whose answer would be worth knowing.
SECTION SIX:
SYNTHESIS OF EVALUATION RESULTS AND STUDY CONCLUSIONS
The five previous sections of this report have presented detailed information on how the FCPD’s pilot BWC program was implemented, what its evaluation included, and what the analyses of data showed. The purpose of this final section is to synthesize the results and offer a clear presentation of the major findings from the quasi-experimental randomized trial study.

Conducting a comprehensive evaluation of a pilot program is challenging. It requires the coordinated development of research instruments and data collection timelines, plus verification that planned program changes actually occurred. The evaluated organization must be responsive to requests for data, personnel and facilities. Above all, the research must be carried out with complete independence. The FCPD cooperated fully with the study design and research team. None of the standard threats to validity and reliability of study results were encountered.

The concentric circles figure from Section One (here labeled Figure 6.1: Context of BWC Decisions and Policies) is a helpful reminder of the multiple sources which have provided perspectives or empirical baselines via this study. Their attitudes, comments and trend lines form the context within which the BWC adoption decision will be made. If BWCs are implemented throughout the department, the same context will exist as the department writes its standard policies and officers then work in conformity with them.

The evaluation has shown that the three key audiences expect the impact of BWCs, if implemented, will be minimal. Police officers believe that neither their behavior nor that of community members will change. They anticipate some positive outcomes such as better evidence collection, complaint settlement and greater transparency of the organization to the public but they do not expect BWCs alone to enhance police-community relations. Specifically, they do not expect BWC will improve their legitimacy in the eyes of community members, improve community relations or increase officer safety as they patrol and respond to incidents in their assigned communities.
Officer performance patterns established in the 12 months (9 months for complaints and use of force) preceding the pilot period were unchanged during the 6-month pilot and the 3 months after it. The numbers of traffic stops conducted, incidents responded to, citizen complaints filed and use of force reports evidenced low and level trend lines over the 18-month period examined.

The presence of a BWC made little impact on the community members who were interviewed soon after interacting with an officer. Many did not know whether the officer was wearing a BWC and community members that were aware responded to questions in the same way as their less-aware neighbors. When asked whether FCPD should adopt BWCs department-wide, nearly all agreed. At the same time, the community members expressed strong support for FCPD and its officers. The vast majority believe the department does its job well and shares the values of their community. This was also apparent in the high percentages that indicated their satisfaction with how they were treated by the officer and how the situation was resolved.

The stakeholders hold modest expectations for BWCs. Less than half believe the cameras will reduce the number of complaints against officers, reduce their use of force, or increase their perceived legitimacy. About half expect increased police accountability. Like the community members surveyed, they are very supportive of the FCPD. Over three-quarters agree that the FCPD shares the values of their community and does it job well. The vast majority also feel adequately involved in the development of BWC policy that governed their use during the pilot period.

The overall context is supportive for whatever FCPD decides to do regarding BWCs. The department’s key audiences – its police officers, community members and community stakeholders – hold somewhat different but appropriate and achievable expectations should BWCs be deployed agency-wide. If the decision is not to deploy them, the high regard for the department will lead nearly everyone to conclude that it was the right decision for all.
APPENDIX A: LITERATURE REVIEW
APPENDIX A. LITERATURE REVIEW

The implementation of body-worn cameras (BWCs) has far outpaced evidence-based research on its impacts and effectiveness. As of June 2018, approximately 70 studies had been conducted by academics, the majority of which used U.S. data. One study found that by 2016 about 80% of departments with BWCs cited the main reasons for implementation were to: increase evidence quality, reduce civilian complaints, improve officer safety and reduce agency liability. As a counterpoint, concerns have been raised that increased oversight of officer behaviors and fear of agency liability may result in increased sanctions by supervisors for small technical violations.

Improved quality and availability of evidence is often an expectation of both officers and external stakeholders. This expectation has some solid support in the literature, as implementation of BWCs has resulted in an increase in domestic violence evidence, arrests, charges, prosecution, guilty pleas, and guilty verdicts in two different studies. BWCs may also increase accuracy in officer reports if footage is used to bolster an officer’s memory of specific incident details or statements.

The presence of BWCs has also been theorized to have a “civilizing” effect on both citizen and officer behavior during interactions, possibly leading to a reduction in complaints and use of force incidents while increasing overall officer safety. When the risk of being recorded and held accountable for improper behavior increases, deterrence theory would suggest greater community member compliance with officer orders and increased policy compliance by officers. Increased observation by peers, including through camera-recorded methods, has also been linked by social influence and social impact theorists to modified behavior better reflecting societal norms. This would suggest that the use of BWCs will pressure both community members and officers to shift their behavior to more socially and organizationally acceptable actions, thereby reducing violence and other improper actions during interactions. However, research evaluating whether these expectations are borne out in practice have shown mixed results.

Modified officer behaviors that reflect procedural justice treatment of community members such as better listening, voicing decision making options and fair treatment, have consistently shown significant increase in community satisfaction and cooperation with a department. A recent study conducted in one agency found that officers incorporated more procedurally just behaviors following BWC implementation. Another study also found that a citizen’s rating of procedural justice during an

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18 For a comprehensive review of BWC studies, see Lum et al.’s Research on body-worn cameras: What we know, what we need to know (2019).
19 Hyland, 2018
20 Jennings et al, 2014; Terril & Reisig, 2003; Maskaly et al., 2017, citing Jennings et al., 2014; Paoline, 2001
21 Gaub et al., 2018; Goodall, 2007; Jennings et al., 2015; White et al., 2018b
22 Morrow et al., 2016; Owens et al., 2014
23 Lum et al., 2019
24 Ariel et al., 2017
25 Ernest-Jones et al., 2011; Ratcliffe et al., 2009; Wahl et al., 2010; Munger and Harris, 1989; Wicklund, 1975
26 Hinds & Murphy, 2017; Jackson et al., 2012; Mazerolle et al., 2013; Tyler, 2006; Tyler, 2004; Sunshine & Tyler, 2003; Tyler, 1988; Sunshine & Tyler, 2003; Tankebe, 2013; Tyler, 1990; Tyler & Fagan, 2008; Johnson et al., 2014; Mastrofski et al. 1996; Tyler & Huo, 2002; McCluskey, 2003; Reiss, 1971; Wells, 2007
27 McClusky et al., 2019
encounter was more powerful than the presence of a BWC in predicting satisfaction, even when a BWC was not accurately observed and/or reported.\textsuperscript{28}

Regarding citizen behavior, some studies\textsuperscript{29} have shown that BWCs may result in increased community member resistance and assaults against police officers. Notably however, there are several studies have indicated no effect or null findings for similar situations.\textsuperscript{30} BWCs produced small reductions in overall crime in three studies conducted within the United Kingdom, but more recently, Ariel et al (2016) found no significant effect between crime rate and BWCs.\textsuperscript{31} Current limited findings from at least three studies indicate that BWCs may have no effect or reduce citizen willingness to provide investigatory information, resulting in decreased cooperation between civilians and police.\textsuperscript{32} Additional studies showed that officer attitudes about the possible civilizing effect of BWCs on community members after BWC implementation became more cynical and less optimistic over time.\textsuperscript{33}

Potential reductions in use of force and complaints have been theorized as effects from changed behavior by both officers and civilians. Officers may be less likely to utilize force when unnecessary and/or citizens may be more compliant with officer direction or less likely to complain when video evidence is being gathered. Study results have varied widely on use of force incidents, with impacts ranging anywhere from a 26\% to 59\% overall reduction in use of force; some studies have even shown no statistically significant differences after the introduction of BWCs.\textsuperscript{34} Researchers have documented reductions in citizen complaints after BWC implementation ranging from 12\% to 93\%, again with a few studies that found no effect at all.\textsuperscript{35}

These wide variations in outcomes may be a result of differences in how BWCs are implemented, departmental policies on their use, or lack of buy-in by officers during the introduction of the new technology.\textsuperscript{36} One study found that when BWC activation was officer-prompted, officer compliance with activation policy was only 30\%.\textsuperscript{37} Another study found that officers that followed BWC policy saw a decline of use of force incidents, while those that did not follow policy experienced an increase in use of force incidents.\textsuperscript{38}

Demographic characteristics may also affect both officer and community member opinions and behaviors. Findings have largely been mixed on the effect of officer demographics on their behavior, decision making, and citizen complaints, with some indication of differences between officers of different genders, age, and race.\textsuperscript{39} Officer perceptions of BWCs vary by individual agency, of course, but

\begin{enumerate}
\item McClure et al., 2017
\item Ariel et al., 2016a; Ariel et al., 2018; Toronto Police Service, 2016. One study documented an increase in assaults against officers equipped with BWCs but a decrease in the department’s overall numbers. (Ariel et al. 2018)
\item Grossmith et al, 2015; Headley et al., 2017; Hedberg et al., 2016; Katz et al, 2014; White et al., 2017
\item Ellis et al., 2015; Goodall, 2007; ODS Consulting, 2011
\item Edmonton Police Service, 2015; Grossmith et al., 2015; Toronto Police Service, 2016
\item Gaub et al., 2016; Headley et al., 2017; White et al., 2018b
\item Reduction: Ariel et al., 2015; Braga et al., 2018b; Jennings et al., 2014; White et al., 2017. No effect: Ariel et al., 2016a; Edmonton Police Service, 2015; Grossmith et al., 2015; Yokum et al., 2017
\item For example, see: Ariel et al., 2015; Ariel et al., 2017; Hedberg et al., 2017; Jennings et al., 2015; Katz et al., 2014, Edmonton Police Service, 2015
\item White et al., 2018b
\item Hedberg et al., 2017
\item Ariel et al, 2016a
\item For example, see: Worden, 1989; Brown & Frank, 2007; Smith & Klein, 1983; Sun & Payne, 2004; Brooks, 2001; Engel & Worden, 2003; Sherman, 1978; Alpert, 1989; Fyfe, 1988
\end{enumerate}
studies have consistently found that acceptance increases, or opinions neutralize, over time with BWC experience.\textsuperscript{40} Officers that were higher-ranking, more educated, or women have been shown to have higher levels of acceptance for BWCs and other new technology.\textsuperscript{41}

While there is general support among the public for BWCs, a national survey found that younger citizens had greater confidence in the ability of BWCs to improve overall relations and trust and to decrease racial tensions. The same survey found that African American respondents were less likely than others to believe in the ability of BWCs to increase transparency, improve relations or increase trust.\textsuperscript{42} Both age and education have shown positive linear correlations with satisfaction with police, while minority and lower-class status is tied to less favorable satisfaction levels.\textsuperscript{43} Gender influence on satisfaction has shown mixed results.\textsuperscript{44}

Overall, the number of studies on BWC implementation, acceptance by both police officers and community members, and consequent changes in outcomes has grown exponentially over the past several years. Many of the studies are descriptive, simply reporting survey results or changes in departmental crime statistics after BWC implementation. Implementation often precedes the recognition that researchers could be helpful, so attitude surveys are based on recall which is well known to not be fully reliable. The reality is that well-designed, rigorously conducted evaluations have been rare. This study by the Fairfax County Police Department, however, is one of them. It promises to inform the department’s decisions regarding implementation, other police officials cautiously considering whether to adopt BWCs, and the community of researchers and practitioners eager to disseminate good practices.

\textsuperscript{40} Gaub et al., 2016; Ellis et al, 2015; Gaub et al., 2018; Jennings et al., 2014; Jennings et al, 2015; Headley et al., 2017
\textsuperscript{41} Kyle & White, 2017; Gramagila & Phillips, 2017; Telep, 2017
\textsuperscript{42} Sousa et al., 2017
\textsuperscript{44} Apple & O’Brien, 1983; Thomas & Hyman, 1977; Boggs & Galiher, 1965; Winfree & Griffiths, 1977; Hurst & Frank, 2000
APPENDIX B: REFERENCES
APPENDIX B: REFERENCES


Ariel, B. (2016b). Increasing cooperation with the police using body-worn cameras. Police Quarterly, 19, 326–362


Toronto Police Service. (2016). Body-worn cameras: *A report on the findings of the pilot project to test the value and feasibility of body-worn cameras for police officers in Toronto*. Toronto, ON, Canada: Author.


Appendix C: Stakeholder Survey
POLICE OFFICER BODY-WORN CAMERA STUDY, FAIRFAX, VIRGINIA

STAKEHOLDER SURVEY INSTRUMENT

Developed by
Richard Bennett, Ph.D.
Brad Bartholomew, Ph.D.

Contents
Introduction and Consent
Effects of Body-Worn Cameras
Opinions on Fairfax County Police
Organizational Indicators
INFORMED CONSENT

Consent to Participate in an Online Survey

You are being asked to participate in an online survey. It is part of a larger research study being conducted by Prof. Richard Bennett and Prof. Bard Bartholomew from American University in Washington, DC. The study is evaluating the effectiveness of Body-Worn Camera (BWC) Pilot Program by the Fairfax County Police Department (FCPD).

Research Procedures

If you agree to participate in this study, you will be asked about your attitudes towards the use of body-worn cameras in your community and its potential effect on policing in your community. You will also be asked about your knowledge of the FCPD and its BWC program. The survey will take 10-15 minutes to complete. All responses are anonymous and no information about you or your computer will be collected. All data collected during the study will be stored in a secure place, accessible only by the researchers, for future analysis. The Fairfax County Police will never know how you answered these questions.

Risks and Benefits

Your participation involves no more than minimal risks to you. There may be benefits to you and your community by participating. The findings of this survey will be reported to the FCPD and might be used to change the type and extent of police services delivered to your community. Overall, the study will contribute to our general knowledge about the effectiveness of using BWCs.

Your Participation

Your participation in the survey is entirely voluntary. You may choose not to answer specific questions or to exit from the survey at any point, without consequences of any kind.

Questions about the Study?

If you have questions about the study, please feel free at any time to contact Prof. Brad Bartholomew at (Bartholo@american.edu or 443-812-4616). If you have questions about your rights as a research subject, please contact Matt Zembrzuski, IRB Coordinator at American University via email at irb@american.edu or by phone at (202) 885-3447.

Giving of Consent

By taking the survey, you are indicating that you have read and understood this consent form and agree to participate in this research study.
**EFFECTS OF BODY-WORN CAMERAS**

When answering the following questions, please do so in your role as a stakeholder in the community. That is, how would members of your organization answer these questions. There are no right or wrong answers. Please answer the following questions by checking the appropriate box using a five-point scale ranging from Strongly Agree to strongly disagree.

<table>
<thead>
<tr>
<th>1. The police will be more respectful to citizens when wearing a video camera.</th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Citizens will be more cooperative when they become aware that an officer is wearing a video camera.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>3. For the BWC to work, the community must be made aware of their use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>4. People will feel safer knowing that the police are wearing a video camera.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>5. The use of video cameras will reduce complaints against the police.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>6. The BWC program will make the police more accountable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>7. The BWC program will make the police more transparent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>8. The BWC program will make the police more legitimate in the eyes of my community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>9. The use of video cameras will help citizens resolve complaints against the police.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>10. The use of video cameras will lower the amount of force used by the police in encounters with citizens.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>11. The use of video cameras will lower the number of police imitated encounters with citizens.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
</tbody>
</table>
[OPINIONS ON FAIRFAX COUNTY POLICE DEPARTMENT]

The following questions are about your opinions about The Fairfax County Police Department. There are no right or wrong answers. Please answer the following questions by checking the appropriate box using a five-point scale ranging from of Strongly Agree to strongly disagree

<table>
<thead>
<tr>
<th>Question</th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. As a community stakeholder, I believe that I was adequately involved in the development of the BWC policy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>13. As a community stakeholder, I believe that my concerns about the BWC program were adequately heard by the FCPD.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>14. The Fairfax County Police Department shares the values of my community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>15. The Fairfax County Police Department does its job well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>16. The Fairfax County Police Department is effective at preventing crime.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
<tr>
<td>17. The Fairfax County Police Department is effective in solving crimes and arresting perpetrators.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
</tr>
</tbody>
</table>

18. Have you read the Fairfax County Police BWC policy?  
   YES ______, NO _______ (GO TO 16)

19. In your opinion, what is the most important benefit and drawback of the Fairfax County Police BWC policy?  
   What is the most important benefit?  
   What is the most important drawback?

20. Have you talked with members of your community about the BWC program?  
   YES ______, NO_______
21. If yes, what was their reaction to the BWC program?

22. If no, do you plan on talking with your community members about the BWC program in the future?

   YES _____, NO _____, DON’T KNOW _____

23. What are your suggestions for improving the services you and your community receive from the Fairfax County Police?

Organizational Indicators

24. What is the name of the organization you represent?

25. What do you see as its role in the community?

26. How long have you represented this organization?

27. What is your leadership role in it?
APPENDIX D: FAIRFAX COUNTY POLICE OFFICER SURVEY
Fairfax County Police Officer Survey

Survey of Officers from the Mason, Mt. Vernon & Reston Districts

In partnership with American University, Department of Justice, Law and Criminology
Please note: Not $1 of Fairfax County money is being spent on this study. Financial support comes from American University and several foundations.

Consent to Participate in Research on Body-worn Cameras (BWCs)

You are being asked to participate in a research study conducted by faculty from American University in partnership with the FCPD. The purpose of the survey below is to understand your attitudes about the use of BWCs by police officers. This survey will take only 5 to 7 minutes of your time.

All of your responses will be kept strictly confidential and used only for research purposes. Your responses will never be seen by your commander or others in the FCPD. The department will only see the findings in aggregated form, as may other police agencies and individuals interested in the topic.

Your participation is voluntary. You are free to choose not to participate or to stop participating at any time without consequences. You may also decline to answer specific questions without consequences.

By filling out this survey, you are indicating that you have read and understood this consent form and agree to participate in the study.

If you have questions or concerns during the time of your participation in this study, or after its completion, please contact:

Prof. Richard Bennett
Department of Justice, Law and Criminology
American University. Bennett@american.edu, 202-885-2956

If you have questions about your rights as a research subject, please contact:
Matt Zembrzuski
IRB Coordinator
American University. irb@american.edu, 202-885-3447
The Fairfax County Police Department has formed a partnership with American University to study officers' attitudes toward police use of body-worn cameras (or BWCs) and their effects on contacts with citizens. This survey asks for your opinions about the use and effectiveness of BWCs in police work.

Your honest opinions and perceptions are important to our research team. Please circle the number that best represents your feelings about each statement.

<table>
<thead>
<tr>
<th>Citizen Behavior ---</th>
<th>Strongly Disagree</th>
<th>Unsure</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When BWCs are in use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Relations between police and the public will improve.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Suspects will be less likely to resist arrest.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Citizens will be less cooperative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Citizens will become more respectful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. The number of citizen complaints against officers will increase.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Citizens will be more likely to view the police as legitimate enforcers of the law.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Police Officer Behavior --- When wearing a BWC, officers will:</th>
<th>Strongly Disagree</th>
<th>Unsure</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Act more professionally.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Respond more slowly to calls for service.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Unsure</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>9. Be less proactive when it comes to engaging with citizens.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Be less likely to use force when engaging with citizens.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Have fewer contacts with citizens.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Be less likely to give warnings to citizens.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Feel they have less discretion.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Find ways to avoid/subvert BWC policy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Be upset if not selected to wear a camera</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Evidence---The use of BWCs will help to:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Unsure</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Gather evidence</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Identify criminal suspects</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Increase likelihood of conviction</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Settle complaints about an officer’s behavior when interacting with a citizen.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Perceptions --- The use of BWCs will:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Unsure</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Increase officer safety</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Reduce crime</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Unsure</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>22. Increase the transparency of the department to itself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Increase the transparency of the department to the public.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Improve the overall job performance of an officer.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. A major reason for the use of BWCs is so supervisors can more closely monitor, control and sanction officers under them.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Get in the way of an officer’s routine actions/movement.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall Recommendations:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Unsure</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Even though officer-citizen interactions are currently recorded by in car video, there will be significant resistance by officers to the use of BWCs.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Fairfax County Police should adopt BWCs throughout the entire department.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. The advantages of adopting BWCs outweighs the disadvantages.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For analysis purposes only, please answer these demographic questions. Again, your answers to this survey are strictly confidential and FCPD administrators will never see this instrument or the data it contains. Please place a X on the line that corresponds to your selection.

30. What is your current assignment?
   _____ A Squad
   _____ B Squad
   _____ Other

31. What is your patrol squad?
   _____ Days
   _____ Eves
   _____ Mids
   _____ NPU
   _____ Other Days
   _____ Other Eves

32. What is your current rank?
   _____ Officer (FCO, PFC, MPO)
   _____ First Line Supervisor (SGT, 2nd LT.)
   _____ Other

33. How many years of police experience do you have?
   _____ (If less than a year, insert a zero)

34. What is your gender?
   _____ Male
   _____ Female
   _____ Transgender, other
35. Which racial category describes you best?
   _____ African-American
   _____ Asian/Pacific Islander
   _____ Caucasian, White
   _____ Hispanic
   _____ Native American
   _____ Other/Multiple

36. What is the highest level of school you have completed?
   _____ High school diploma/GED
   _____ Some college
   _____ Two-year degree
   _____ Four-year degree
   _____ Advanced degree

37. The BWC pilot program will last for six months. What one or two things should the department do, not do or watch out for so that the pilot program that might undermine the integrity of it?

38. Finally, is there anything that we did not ask but you think is important for us to know?
Please fold and insert this survey in the locked box labeled “Fairfax County Police Department Officer Survey.”

Thank you very much for participating in this important study.
APPENDIX E:
COMMUNITY MEMBER TELEPHONE SURVEY
POLICE OFFICER BODY-WORN Camera STUDY, FAIRFAX, VIRGINIA

RESIDENT TELEPHONE SURVEY INSTRUMENT

Developed by
Richard Bennett, Ph.D.
Brad Bartholomew, Ph.D.

Contents
Introduction and consent
Satisfaction with police encounter
Impact on behavior
Demographic indicators

Text on Card Handed-out for FCPD Officers:
Face of Card (size of business card):

The American University in Partnership with the Fairfax County Police Department is evaluating their Body-Worn Camera Pilot Program. The officer handing you this card is part of the program. We, at American University, might be calling you next week about your experiences.

PLEASE KEEP THIS CARD

Reverse of Card:

Your responses to the survey will be held in the strictest confidence and the officer and the department will never know what you said. We hope you will cooperate with the researchers at American University. If you would like to know more about the survey, please contact Dr. Brad Bartholomew at 202-885-2367 at the American University in Washington, DC.

Introduction and Informed Consent:

Hi, my name is [INTERVIEWER’S FULL NAME] and I’m calling from the American University in Washington, DC. I’m talking with residents who had recent contact with the Fairfax County police. The survey will only take 5 minutes of your time.

IF NO... Is there a good time for me to call you back? We are hoping to obtain your feedback to improve police interactions with the public and your participation in the survey would be really helpful.

IF YES... Thank you. The survey will be used to improve police interactions with the public. The survey is completely voluntary, and you may stop at any time or skip any questions you don’t want to answer. Everything you say will be kept confidential and used only for research purposes. Additionally, your name will never be associated with any of your answers and the Fairfax County Police Department will never know how you answered this survey. By beginning the survey, you have understood the above and are willing to participate. Do you have any questions?
### i. Are you at least 18 years old?

- **YES**............................
- **NO**............................
- **Don’t KNOW**............................
- **REFUSED**............................

### ii. Were you directly involved in a recent encounter with the police?

- **YES**............................ (SKIP TO Q1)
- **NO**............................
- **DON’T KNOW**............................
- **REFUSED**............................

### iii. Could I please speak with a member of this household who was involved in this encounter?

- **YES**............................ (GO TO iv)
- **NO**............................ (THANK YOU AND GOOD BYE)
- **DON’T KNOW**............................
- **REFUSED**............................

### iv. When person involved in incident picks up the phone, go back and redo introduction and informed consent. And repeat questions i & ii.
**[SATISFACTION WITH POLICE ENCOUNTER]**

The following questions are about your recent contact with Fairfax County Police on (Date). There are no right or wrong answers. Your opinions and personal experiences are important to us. Please tell me if you strongly agree, agree, disagree, strongly disagree or Don’t know to the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON’T KNOW</th>
<th>REFUSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>The police officer I spoke with treated you with respect.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>2. The officer treated me fairly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>3. The officer explained his or her actions and decisions to me during our interaction.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>4. The officer listened carefully to what I had to say.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>5. The officer acted professionally.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>6. The officer cared about my well-being.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>7. I am satisfied with how I was treated by the police.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>8. I am satisfied with how my situation was resolved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>9. I believe that the police share the values of my community?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>10. I believe that the Fairfax County Police Department does its job well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>11. I believe that the Fairfax County Police Department is effective at preventing crime.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
</tbody>
</table>

12. Was the officer you had the most contact with

   Male ................................................................. 0

   Female .............................................................. 1

   DON’T KNOW ......................................................... -8

   REFUSED ............................................................ -9
13. Would you best describe the officer as

White ................................................................. 1
Black ................................................................. 2
Hispanic ............................................................ 3
Asian ............................................................... 4
Other .............................................................. 5
DON’T KNOW .................................................... -8
REFUSED ......................................................... -9

I will now ask you questions and you can answer either yes or no.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>DON'T KNOW</th>
<th>REFUSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. During the encounter, did the officer use or threaten to use force?</td>
<td>1</td>
<td>0</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>15. Were you injured as a result of this incident?</td>
<td>1</td>
<td>0</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>16. To the best of your knowledge, were any of the officers wearing a video camera? (IF NO, GO TO Q29)</td>
<td>1</td>
<td>0</td>
<td>-8</td>
<td>-9</td>
</tr>
</tbody>
</table>

17. How did you know the officer was wearing a video camera?

THE OFFICER TOLD YOU AT THE TIME ............... 1
YOU NOTICED THEカメラ ON YOUR OWN ...... 2
THROUGH A FORMAL PROCESS SUCH AS A PUBLIC RECORDS REQUEST OR COURT HEARING ............................................. 3
Other .......................................................... 4
DON’T KNOW.................................................... -8
Refused.......................................................... -9
18. Do you think the video camera influenced how you reacted to the police?

   YES.............................................................................. 1
   NO............................................................................... 0
   DON’T KNOW............................................................... -8
   REFUSED......................................................................... -9

19. Did the video camera influence how the police reacted to you?

   YES.............................................................................. 1
   NO............................................................................... 0
   DON’T KNOW............................................................... -8
   REFUSED......................................................................... -9

I am interested in how the video camera that the officer was wearing made you feel while you were interacting with the police. Tell me if you strongly agree, agree, disagree or strongly disagree with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON’T KNOW</th>
<th>REFUSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. You felt safer knowing that the police were wearing video cameras.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>21. The video camera made you uncomfortable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>22. You were more cooperative because the camera was on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>23. You were more cautious about what you said or did in front of the officer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
<tr>
<td>24. You felt angry or annoyed that you were being recorded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>-8</td>
<td>-9</td>
</tr>
</tbody>
</table>
25. The video camera made you feel more confident in the police.  
26. Citizens will be more cooperative when they become aware that an officer is wearing a video camera.  
27. Police will be more respectful to citizens when wearing video cameras.  

28. How safe do you feel walking alone during the day in your neighborhood?  
Very Safe    Somewhat safe    Unsure    Somewhat unsafe    Very unsafe  

29. How safe do you feel walking alone at night in your neighborhood?  
Very Safe    Somewhat safe    Unsure    Somewhat unsafe    Very unsafe  

29. What do you think the police should do to improve the services they offer your community?  

[DEMOGRAPHIC INDICATORS]  
30. Okay, now I’d like to finish up with a few questions about your background. In what year were you born?  

_________________  
REFUSED.................................................................-9  

31. Would you best describe your gender identity as  

Male, or.................................................................0  
Female?.................................................................1  
OTHER .................................................................3  
REFUSED.................................................................-9
32. Are you currently

Single (never married) ........................................... 1
Married .................................................................. 2
Cohabitating ......................................................... 3
Divorced ................................................................ 4
Widowed, or .......................................................... 5
Separated? ............................................................. 6
REFUSED .............................................................. -9

33. How much education have you completed?

Some high school .................................................... 1
High school diploma .................................................. 2
Some college ........................................................... 3
Associate or Bachelor’s degree, or ......................... 4
Graduate or Professional Degree .............................. 5
REFUSED ................................................................ -9

34. Would you best describe your race as

American Indian or Alaska native ......................... 1
Asian .................................................................... 2
Native Hawaiian or other Pacific Islander ............... 3
Black or African American, or ............................. 4
White ................................................................... 5
REFUSED ................................................................ -9
35. In terms of your work situation, are you currently

- Working full-time ........................................... 1
- Working part-time ............................................ 2
- Not working ..................................................... 3
- Not working but enrolled in school full-time........ 4
- Not working but disabled................................. 5
- Retired?............................................................. 6
- OTHER ............................................................ 7
- REFUSED.......................................................... 9

36. How long have you lived at your current address? [Fill in years and months]

_________________

DON’T KNOW .................................................. 8

REFUSED.......................................................... 9

At this point we are done with the survey. Do you have any questions for me? Okay, thank you for your time and cooperation. We really appreciate your participation in the study. Have a great _______. 
Appendix F: BWC Project: Moderator’s Guide
BWC Project: Moderator’s Guide (6.17.18)

1. Preliminaries
   a. Self-introduction by moderator and introduction of observer (Prof. Bartholomew from American University)
   b. Thank everyone for coming to the group
   c. Give brief description of how the focus group will be conducted
   d. Give purpose of this group: to learn about the attitudes and experiences of police officers like you on a variety of issues. This research is part of a larger project being conducted by American University, independently of the Fairfax County Police Department.
   e. Give ground rules:
      i. Everyone should speak so moderator will understand the range of attitudes and experiences among the participants, but of course when you speak is your choice.
      ii. Please: only one person speak at a time
      iii. For everyone to be comfortable speaking freely, group must agree that all comments made will not be shared outside the room.
      iv. After this group ends, only Prof. Bartholomew and I will analyze in what was said. That is our concern, not who said what. We’d like your permission to do an audio taping of this session for our analysis. As soon as the analysis is finished, the recording will be destroyed. I turned on the recorder several minutes ago so I could document what I just said. Do each of you agree to this session being recorded? (If a participant does not agree, excuse him/her from the group.)
      v. I’d like to begin with everyone introducing themselves. You know each other but we don’t. Please state your just first name and your years of service as a Fairfax County police officer.

2. Thinking back, what was your first thought when you heard that the department was considering issuing body-worn cameras to its officers?

3. When you learned that your district would be one of only three to be issued cameras as part of an evaluation, what were your first thoughts?
   a. Did you think that police work in those districts would change? If so, in what ways?
      1. Did you expect changes in the behavior or attitudes of police officers?
      2. Did you expect changes in the behavior and attitudes of residents in the community?

4. When you learned that B Side officers like yourselves would be issued cameras, what were your first thoughts?
   a. Did you expect your own way of policing would change?
   b. Did you expect changes in the way residents would interact with you?
5. Have there in fact been changes, anticipated or not, in how you work and how residents interact with you?
   a. What has changed?
   b. How would you rate the changes you’ve seen on a 10-point scale where 1 = no changes to 10 = huge changes?

6. Do you think that the A Side officers in your district have changed their behavior over the months you’ve been using cameras?
   a. How about residents: do you think A Side officers have noticed changes in the attitudes or behavior of residents they encounter?

7. The chief and senior officers will soon decide whether to issue cameras to all officers. What advice would you offer them, based on your experience?
   a. Probe how implementation should be done.
   b. Probe how training should be done.
   c. Probe whether any changes in policy should be made.

8. Final question: should the department make a formal announcement to the public that it will or will not be issuing body-worn cameras to all officers, or not? Why do you recommend that?

9. Thank you so much for participating in this group. You have given me and the American University research team lots of insight into your experiences and concerns. Do you have any additional comments you want to make before this session ends? Thank you again.
Appendix G: Additional Figures
APPENDIX G: ADDITIONAL FIGURES

Figure G-1: Overall Traffic Stops for A and B Squads

Figure G-2: Overall Incidents for A and B Squads
Figure G-3: Overall Citizen Complaints for A and B Squads

Figure G-4: Overall Use of Force Allegations for A and B Squads