



**North Port Police Department's**  
**Body Worn Camera Research Report**

**Introduction**

The use of Body Worn Cameras (BWC) has been the focus of extensive research within the realm of law enforcement in the last five (5) years. It is important to address whether the BWC will enhance the mission and vision of the North Port Police Department. In contemplation of the BWC within our police department, a Body Camera Implementation Committee was established to ensure the integrity of the evaluation process. The Implementation Committee represented members of following units and bureaus: Patrol, Accreditation, IT, Records, Legal, Training, Sergeants, Management, and Executive Staff. The following analysis of the BWC project includes the advantages & concerns of the program, highlights the desired and essential features that our officers seek in a camera system & navigates through the litany of BWC. The BWC evaluation consists of a one (1) month trial phase. The analysis aims to provide suitable recommendations on hardware, storage options, policy, as well as, a rollout that optimizes the success of the BWC program within our department.

**Advantages**

Recording law enforcement action is not new. Approximately 120 million smartphones, most with video recording capability, were sold in the United States in 2014 alone. By having a BWC program, a department has the opportunity to provide the full unedited version of the video from the officer's perspective. The program will also increase transparency and police legitimacy. Transparency is a benefit because it will show to the community the department's willingness to open itself up to outside scrutiny. Transparency can also demonstrate to the community that officers aim to act in a fair and just manner when interacting with citizens, also known as procedural justice. Transparency leads to public trust and trust benefits the community (Clark, 2013).

Studies into the BWC programs nationwide (Rialto, Mesa, Phoenix, Orlando, Albuquerque) have shown improved police officer behavior measured through citizen complaints and use of force incidents. In addition, it has also shown a reduction in assaults against officers. The Rialto study showed a reduction of citizen complaints by 88 percent and a reduction of use of force by 60 percent when they implemented their BWC program in 2012. BWCs may have a civilizing effect, resulting in improved behavior among police officers and citizens. It may also be due to a decrease in citizens filing frivolous complaints against officers wearing cameras. The latest research from the National Institute of Justice in December of 2018, showed that further research is still needed to study the impact of BWCs. However, for the most part results continue to help law enforcement executives decide whether to adopt the BWCs in their agencies. (Chapman, 2018)



Another advantage of having a BWC program is the expedited resolution of complaints and lawsuits. Complaints against officers are often adjudicated as “not sustained” after considerable resources are devoted to the investigation. With the advent of BWC, the process of considering any complaint will be made much easier and judicious by using the evidence from the camera.

Lastly, supporters of BWC have also suggested the technology can serve as an important training tool. A review of officer behavior could be especially useful when critical incidents, such as a use of force, are recorded. This is a powerful tool for a Training Section to help highlight effective and ineffective actions. The above is not an all-encompassing list of BWC program advantages, as the initiative grows many more benefits will become evident, these are just a few of the most impactful currently.

## **Privacy Issues**

A major concern facing any organization embarking into the BWC world are the issues that come up relating to citizen’s privacy and balancing that with the public’s right to information. Issues include notices or disclosures when recording, audio recording, video recording in one’s home, recording sexual/domestic/juvenile victims or recording those individuals providing confidential information or confidential informants. These concerns highlight the importance of developing detailed policies governing when the BWC should be turned on and off or criteria for activation, which is one of the standards under the Commission for Florida Law Enforcement Accreditation (CFA) guidelines. Unfortunately, the law related to privacy issues and body cameras are somewhat ambiguous right now.

Officer privacy and safety are other concerns that arise from the BWC program. Some of the resistance of BWC comes from the officers themselves over their concern that supervisors would go on unsolicited “fishing expeditions” to find policy violations (White 2013). Once again, developing detailed policies preventing these behaviors can assuage some of these fears. West Palm Beach Police Department has an “Anti-Trolling” clause built into their policy preventing supervisors from exhibiting the above behavior. As far as safety concerns, these manifests themselves with the hardware specifically. Adding another piece of equipment to their belt or wherever they may carry it becomes an encumbrance. Some cameras have wires, cords, or other harness devices further creating officer safety concerns. Having officers involved in the vetting process of the hardware, can provide them a voice in the decision of what they will be carrying, thus curtailing some of the issues related to this concern.

## **Logistical and Resource Requirements**

Storage is the biggest cost for law enforcement agencies nationwide and the use is exponential. Just using basic projections based on our trial period, we would need around 65 terabytes (TB) of storage for year one. The 65TB is for just the primary server. A second backup server with the same amount of storage would be needed for redundancy. That number would grow the longer the program was operational. Also, hardware is ever changing, with new BWC technology popping up every 6 months to a year, which makes selecting the right equipment not just

important for today's need but for tomorrow's as well. Unfortunately, most BWC hardware has a five-year life span. The approximate cost to start up a self-storage server for two 500TB is \$125,000.00. This price does not include any maintenance or back end software to operate and manage the storage and redaction. Other concerns along the lines of storage are concerns related to managing the videos, managing the data, administering the program, records retention, the influx of records request for BWC footage, and the time needed to redact videos. Currently, non-evidentiary video must be maintained for 90 days and crime incidents captured need to be retained per the schedule related to the particular crime. Many surrounding police departments have been adding additional civilian personnel to handle the influx of public records requests now that they are using body cameras.

## **Human Performance Factors**

BWCs are not the panacea, but most outside of law enforcement believe they are. There are some inherent issues with the cameras. They do not necessarily portray reality because they are not unbiased. They come from just one officer's perspective and from a fixed location on that officer.

Other problems with BWCs include the barreling effect, which causes the edges of the photo/video to look curved and bowed to the human eye. It almost appears as though the photo image has been wrapped around a curved surface. Some others include depth perception and the fact that the camera records in 2-D. Dr. Bill Lewinski of *The Force Science Institute* also list the following as BWC limitations that all BWC stakeholders should be cognizant of:

- A camera does not follow an officer's eyes or see as they see. The human visual system can only individually process approximately 10-12 separate images per second, but BWCs can record rate between 30 and 60 frames per second. Therefore, repeated viewing means picking up more information than was picked up live by an officer often under extreme stress.
- Some important danger cues cannot be recorded. Dependent upon the BWC mounting location, the BWC does not take in consideration for head, eye movement, saccade focus points and fixations. Saccades are small rapid jerky movement of the eye as it moves from one focus point to another.
- A camera may not see as well as a human does in low light or in some cases a camera may see better due to enhance IR or night vision.
- An officer's body may block the camera depending upon the mounting location, especially when their weapon is drawn or during a physical altercation.
- One camera may not be enough
- A camera may encourage second guessing from officers
- A camera can never replace a thorough investigation

It is important to note, humans do not see like a camera, record like a camera, or play back like a camera, which is chronological and because of that can also been seen as a weakness of BWCs. What an officer perceives and is capable of remembering cannot be compared to what a camera captures and reproduces. In reality, BWC's do not allow a full review of all decisions made by an officer from start to finish, just a limited review. Law Enforcement Administrators, city

officials, community leaders, and the media must understand that video is not a direct reproduction of what an officer's perception and focus was during the high-stress incident in question (Calibre Press 2016).

## **Unforeseen challenges**

The Criminal Justice Information System (CJIS) info on cloud based storage platforms has been an issue for FDLE and the FBI. At the 2016 CJIS Annual Symposium in Orlando, this topic was heavily discussed. To date, there is no clear-cut answer or universal stamp of approval. What was gleaned from this symposium is that the FDLE CJIS position via Christopher Eaton is that the video capturing by body or dash cameras of any criminal justice information (CJI) is considered "incidental" and does not need to comply with the CJIS security Policy. Of course, if video is reviewed as part of a records request and CJI is identified, it should be redacted. The stance on this topic has shifted and is still viewed by the FBI with a conservative eye. Since it is still a new program, some unforeseen challenges can arise from police unions, freedom of information act, activist groups, legal organizations, as well as within our organization.

## **Hardware**

With the assistance of BWC Implementation Committee, we engaged in vetting BWC companies. The Implementation Committee discussed essential and desirable features. Some of the features discussed that were most important were battery life, ease of use, durability, waterproof, in the field viewing and tagging of videos, uploading time, wear-ability, and trigger switches (such as taser holster, gun holster, and the vehicle's emergency lights). Additional features of importance were the use of backend software, use of redactions capabilities and integration with our Computer Automated Dispatch (CAD) system and RMS. The only vendor that meet all the above features and capabilities was AXON.

## **T and E Phase**

We had Ten (10) officers volunteer from Patrol, two of which were our K9 officers, to Test and Evaluate (T&E) the AXON 2 Camera system. On November 20<sup>th</sup>, 2018 Axon representatives provided training to our 10 officers, records staff, IT, supervisors, management and executive staff. The first camera deployment during the T&E phase began on November 28, 2018. Prior to deployment, a Standard Operating Policy SOP was 402.05 was created. The T&E phase ended on January 1<sup>st</sup>, 2019 at 6:00am. The following page has graphs of the data collected, which include the amount of hours recorded, and the number of events recorded by incident.

AXON VIDEO SUMMARY REPORT 11/01/2018 - 01/04/2019	
	Total Uploads
Number of Videos	1155
Hours of Videos	348.93
GB of Videos	610.73
	Active AXON Evidence
Number of Active Videos	1155
Hours of Active Videos	348.93
GB of Active Videos	610.73
	Average Per Day
Number of Videos Uploaded	17.77
Hours of Video Uploaded	5.37
GB of Video Uploaded	9.40

AXON CATEGORY SUMMARY REPORT 11/01/2018 - 01/04/2019				
Categories	Files	GB	% Files	% GB
Other	548	297.50	44.26	42.78
Traffic Stop	342	144.64	27.63	20.80
Misdemeanor	75	77.01	6.06	11.08
Felony	38	69.61	3.07	10.01
Traffic Crash	49	49.72	3.96	7.15
Uncategorized	61	27.04	4.93	3.89
FI/Search	17	9.49	1.37	1.36
Administration	6	8.59	0.48	1.23
Officer Injury	2	7.98	0.16	1.15
Pursuit/Use of Force	3	1.35	0.24	0.19
Training Demo	45	1.22	3.63	0.18
Testing Camera	41	0.93	3.31	0.13
Training Test	11	0.26	0.89	0.04
Total:	1238	695.343	100	100

## **Officers Feed Back**

On January 23, 2019 staff met with the 10 officers who wore the BWC for the T&E phase. Officers liked the functionality of the BWC and did not have any issues. Staff did state some challenges such as remembering to turn on their BWC. In wearing the BWC in public, Officers did not find the general public to be reluctant to speak with them while wearing the BWC. They noted first responders both Police and Fire were notably hesitant to speak while on a scene with the BWC. There were a few reports of technical issues all of which were solved by IT personnel. Staff really liked the feature of reviewing the BWC video from their work cellphones post the incident to help recollect what had occurred and to be precise when documenting. Some minor changes to the Department Policy were suggested and Administration will be reviewing those suggestions. What staff liked most about the BWC was that it protected the officer's actions. It should be noted that during the T& E phase there was a call placed to the Administrative Captain regarding an officer's conduct relating to courtesy and respect. The citizen has expressed to the Captain that our Officer was rude, calling them names and using vulgar language to them over the telephone. It just so happened the officer that the citizen was complaining of was wearing a BWC on the call the complainant was involved in. Within 3 minutes of reviewing the video from the Officer's BWC, that had already been uploaded in Evidence.com, the Captain was able to quickly determine that the officer was never discourteous to the complainant or used vulgar language. This complaint was quickly dismissed within five minutes. However, by not having this video readily available, several hours of personnel time would have been spent to investigate and interview this officer and complaint to determine the outcome of the complaint.

## **Cloud Versus Local Storage**

Initial tests with 10 officers working regular shifts resulted in the generation of almost 630 Gigabyte (GB) of data in one month. Using an estimate of 80 cameras, we would generate over 5TB of data each month. Using a 90-day retention policy as an example, for the first 90 days we will keep every video (approximately 15TB of video). On the 91st day, we will delete the video generated on the 1st day (assuming it is not evidentiary) but we will add the video generated the 91st day. If we keep only 10% of videos due to the evidentiary nature, we would add approximately 1.5TB of data per month. It should be noted that our existing storage system has the ability to continually add what are called expansion units to it. Expansion units are nothing but banks of disk drives. An expansion unit that has 48 Terabytes of drive space costs approximately \$15,000 to \$16,000. Conservatively, we would consistently be between 30 – 40 TB drive space. At the end of one year, it could be as high as 50 TB. Each year more expansion units would be needed to keep pace with the growing demand. Linking storage expansion units together is costly and would require additional server hardware. The cost and storage would be doubled when factoring in duplicate storage for redundancy. In addition to the storage, it would have to be maintained and the department would burden full responsibility of the back-end software portion of the BWC program.

## Recommendation

The world of body worn cameras is still very new and because of this it is still very untested. There is still a continuing assessment of needs, there are no real experts in the field yet, the continuing argument of privacy issues is ongoing and needs to be resolved and technology is still working its bugs out. Since its emerging technology, just like cell phones, what's innovative today will be obsolete tomorrow. From a policy perspective, after some more years in the field, we hope to have clear and less ambiguous guidelines. With some time, best practices from the law enforcement community would be established that would certainly assist in the maturation process of the BWC program. Until then, proceeding cautiously would be prudent.

If we were to decide on moving forward with the BWC program at this point, I would recommend starting out on a cloud-based storage platform that utilizes web-based software for the reasons that I mentioned in the above section titled "Cloud Versus Local Storage". Axon uses Evidence.com which offers the solution that would meet our needs, they are reliable with a tremendous client list, and allows us to connect to partnering agencies such as Fort Myers Police Department, Cape Coral Police Department, and the State Attorney's Office. Evidence.com also has integration capabilities with our Records Management System (RMS). As far as equipment recommendation, based on testing and feedback, the Axon Body 2 meets the department's and member's needs. It is a one-piece unit that is easy to wear and durable. It has many capabilities in the field that include; video marking, still shots, and audio muting to name a few. The camera utilizes low light retina for night time video, it has a good field of view, and the video quality is HD. Finally, with Axon, the plan allows our agency to keep up with the latest and most advanced BWC equipment to date by having our equipment replaced with a new generation every 2.5 years. This allows us to stay at the cutting edge of this highly advance technology device.

The fiscal impact of utilizing Axon Body 2 on Evidence.com is \$199 per camera per month for unlimited storage on a five-year plan. This plan is also called the Officer Safety Plan (OSP). This plan includes a new taser for each officer with a BWC and carries a five-year warranty. The OSP plan includes unlimited batteries, duty cartridges and four training cartridges per officer per year. This plan allows for a hardware upgrade at 30 months and all hardware has a full warranty for the life of the plan. There are also additional annual charges for admin user licenses, evidence.com licenses, and docking stations. I projected 84 total cameras will be needed for road patrol officers, K9 officer, Traffic Unit, Special Enforcement Team (SET Unit), School Resource Officers (SRO) and Community Policing Officers. The approximate annual cost of this program for years two through five would be \$202,536.00, with the first-year payment of \$189,854.00. The five-year contract total with Axon is \$999,998.20

It should be noted that the OSP plan will replace a recurring cost in our department's budget for our taser replacements per year which includes battery replacements, duty cartridges and training cartridges. The approximate reoccurring cost per year is \$27,000.00

In order to have a successful rollout, education of all the stakeholders should be at the forefront. Officers should understand the "why" behind them wearing the camera and the Community

should be aware that cameras are not the end all be all. Axon will provide training on the hardware and software to all staff before rollout, which is included in the pricing. In addition to the rollout measures, there is much needed support to maintain the maintenance, training, management and most importantly public records redaction of the BWC equipment. In order for the BWC program with NPPD to be successful, staff strongly recommends the following personnel be added to help support and manage the BWC program.

A Full Time Employee (FTE) for our Information Technology Unit. This position will handle of network and technology equipment associated with the additional 180 additional pieces of electronic equipment.

FTE for our Records Department. This staff member will be responsible for handling the anticipated influx of records requests and all other retention concerns related to the BWC program to include audio and video redaction. They will also ensure that the BWC are properly tagged in Evidence.com

FTE Sworn Officer Position. This position will be needed for our Training Unit. The Training Officer will be responsible for training officers, issuing out BWC, addressing issues or concerns with officers and the vendor relating to the BWC and overseeing the new Taser T-7 which is part of the Officer Safety Plan.

As a department we should adopt policies and embrace initiatives that hold us to a higher standard. The body worn camera program is such an initiative. With PERF's 30 Guiding Principles on Use of Force and the President's 21<sup>st</sup> Century Policing Report, the sanctity of life and procedural justice are at the forefront of all police use of force incidents; police transparency and legitimacy will be under scrutiny. Because of this, I consider adopting a body worn camera initiative as a necessity in modern law enforcement. I want to thank former Chief Kevin Vespia and Chief Todd Garrison for allowing me to research and chair this committee; it was a pleasure to work with members from the different components of our agency and an opportunity to contribute to a meaningful initiative.



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### *Recommendations*

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