Considerations for Implementation of a
Body Worn Camera System

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Benefits of BWC Systems

Police agencies can recognize a number of benefits from using body-worn camera (BWC) systems. The information captured on a BWC can promote officer safety, document crime scenes, collect evidence, supplement written reports, aid officer training, and document interactions between police officers and the public. Given these benefits, the Council on Law Enforcement and Reinvention (CLEAR) supports the expanded use of BWC systems—provided that appropriate measures are taken to control the financial and administrative burdens that BWC’s can bring.

Technology

Agencies evaluating BWC systems have a variety of options to consider. In addition to the BWC unit itself, agencies must consider numerous other costs including peripherals, data storage, software, maintenance, and technical support. Some costs include:

- **The BWC unit itself**: Costs generally vary from $250-$1,000 per unit. Units vary in size, battery life, quality of video, download capacity, and many other aspects. Since very few units have a battery life that will last an officer’s entire shift, units with replaceable batteries are recommended. Most units need to be replaced every year or two. It is recommend that each agency perform long-term testing to determine replacement needs and cost. Agencies must also consider the fact that BWC technology changes quickly. Like smart phones, BWC systems are rapidly changing (and improving) as demand increases.

- **Batteries**: Rechargeable batteries range in price from $30-$125. Depending on the model of BWC, each officer will probably need to carry at least one replacement battery each shift. Batteries generally need to be replaced every eighteen months to two years.

- **Docking Stations (Optional)**: Prices vary from $500-$3,000. Docking stations charge BWC’s. Higher end units also transfer BWC data to the server. Most units are able to charge multiple BWC units at once. Vendors are now working to bring wireless-uploading models to the market.

- **Initial backend software or server software**: Prices vary widely. Software is used to process, secure, and tag files with metadata.

- **Infrastructure Costs**: Prices can vary widely. Video files recorded by BWC systems range from 700 MB to 2.5GB per hour of recorded video, so understanding storage requirements is crucial. The type of infrastructure
necessary for storage and data transfer will vary depending upon whether an on-premise or cloud-based storage solution is chosen. The Council recommends that FBI Criminal Justice Information Services (CJIS) security compliance be mandatory for all storage solutions.

The Michigan State Police (MSP) estimates that it would generate 5,000 to 7,000 Terabytes of digital information after three years if all troopers utilized BWC systems and MSP followed its standard document retention policy.¹ Current Department of Technology, Management, and Budget (DTMB) Storage Area Network (SAN) storage costs $1.20 per GB, which would result in prohibitive storage costs of six to eight million dollars per month.

- On premise storage requirements and considerations:
  - Servers with the backend software;
  - On premise mass storage (100TB+ depending on agency size) with backup and disaster recovery storage;
  - Gigabit access points & switches for data transfer; and
  - Storage costs vary greatly.

- Cloud based storage requirements and considerations:
  - Local servers may still be needed to cache files locally before uploading to the cloud storage;
  - Gigabit access points & switches for data transfer and uploading;
  - There may be substantial additional cost to upgrade network connectivity to provide for constant video uploading to internet based storage. Video uploading may need 25+Mbps connectivity to transfer successfully; and
  - Costs vary widely, but are often pennies on the dollar compared to local physical storage options.

- Redaction Software
  - Licenses can cost hundreds to thousands of dollars, depending on the agency.

¹ This estimate is based on 1,200 personnel working 260 days per year.
Because of the potential costs savings, the Council recommends exploring the feasibility of a statewide cloud based storage solution. If the state were to procure cloud-based storage for MSP and all interested local law enforcement agencies, the increased buying power would allow for substantial savings.

**Administrative**

BWC system administration can add extensive costs beyond equipment and storage.

**Training:** Proper training of officers is critical to the success of a BWC program. Agencies must consider who will conduct training (supervisor, technology specialist, legal counsel) and what should be covered by training. At a minimum, the Bureau of Justice Assistance (BJA) recommends all officers receive training in the following four areas:

- The agency’s BWC policy;
- Inspection of the BWC to ensure it is in proper operating condition;
- How and where to wear the BWC; and
- How to properly document recorded events and download the evidence for storage according to departmental policy.²

**Ongoing Evaluation:** After rollout, agencies must continuously monitor compliance with policy, assess effectiveness of technology and training and the impact on officer’s daily practices. As lessons are learned, policies will need to be amended and training adjusted. Agencies will also see officers spending more time engaging in administrative tasks such as downloading video, tagging video for retention, and engaging in routine maintenance of body cameras.

**Legal/Legislative**

**Background**

Regular use of BWC systems by police will create large amounts of data. Unless special legal exemptions are enacted into law, all of this data is subject to the Freedom of Information Act (FOIA). This could impose a significant administrative burden on police agencies.

For an example of the possible impact, consider how the use of BWC systems would have changed the amount of video data arising from the I-94 pileup crash that occurred

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in the winter of 2015. The responding MSP troopers had in-car video footage, for which a FOIA request was made. The cost of the FOIA request was $962.05, which included 11 hours of dispatch and in-car video, 1700 photos, 2 UD-10, 332 pages of reports, 11 DVDs, and almost 17 hours of administrative time. If all of the responding troopers had been wearing BWC systems, then the cost of the FOIA request would have been an additional $12,885.92, including 249 hours of a FOI Coordinator's time ($49.08/hour) and 133 DVDs at $5 each. The change in cost from $962.05 to $13,847.97 represents more than a 14-fold increase (or 1439%).

The administrative time required to process a FOIA request for a simple drunk driving stop would triple if two officers were wearing BWC systems, as the data from each of these videos would have to be reviewed and redacted in the same manner as the data from the in-car camera.

There are now a number of bills pending in the Michigan Legislature that would address BWC issues. At least one bill covers some, but not all, of the FOIA concerns. Other pending bills would mandate (1) which law enforcement officers must wear BWC’s, (2) when they must be recording, and (3) how long a recording must be retained. Some bills would require the state to fund the purchase of BWC’s and reimburse local law enforcement for costs associated with implementing a BWC program. Any state mandates on law enforcement policies regarding the use of BWC’s would create Headlee Amendment funding concerns.

**Legislative Recommendations**

**The Council supports the enactment of legislation that would exempt all BWC recordings from the Freedom of Information Act (FOIA).**

- BWC’s have more potential to invade the privacy of individuals (both the general public and police officers) than do in-car camera systems. A clear statutory exemption from FOIA for recordings in private places will ensure individuals don’t have to worry about recordings of themselves, their families, and their homes being released to media outlets or curious neighbors pursuant to a FOIA request. Moreover, since redacting video is time consuming and can require costly editing software, responding to records request is one of the most costly aspects of implementing a BWC program. Without some restrictions on what is available to the public a BWC program likely would be prohibitively expensive for most agencies. As of this writing, two states have passed statewide BWC legislation,
South Carolina and Texas. Both laws exempt many BWC recordings from being disclosed to the public.

- The privacy concerns and high FOIA redaction costs likely will discourage law enforcement agencies from utilizing BWC systems at all, which would undermine any potential benefit available from the technology.

- A strong FOIA exemption would not prevent BWC recordings from being produced in response to discovery requests and used in court.

The Council opposes legislation that would specifically regulate how and when police agencies use BWC systems, such as when an officer can or must record.

- In-car cameras have been utilized successfully since the 1990's without legislative mandates on use or operation.

- While the privacy interests of individuals who are the subject of BWC recordings is paramount, legislation that restricts an officer’s ability to record in a private place goes too far. Crucial evidence, such as a victim interview, is often obtained in a private place. Citizen allegations of police misconduct, such as use of excessive force, also often stem from incidents that occur in private places. Decisions such as who must wear a BWC and when to record should be left to individual agencies and their community stakeholders to address in policy.

The Council opposes any legislation that would set mandatory minimum retention periods.

- Storage of BWC data is one of the most costly ongoing expenses for agencies looking to implement a BWC system. Legislation that mandates data retention for a set period of time, especially in the case of data that has no evidentiary value, could lead to astronomical data storage costs, especially for larger agencies.

- Legislatively mandated regulations on policy may discourage local law enforcement agencies from purchasing or utilizing BWC systems, as mandates may prove cost prohibitive.

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3 South Carolina’s Act 71 of 2015 exempts all data recorded by a BWC from FOIA, with limited exceptions. Texas Senate Bill 158 (signed by the Governor on 06/19/2015) prohibits release of a BWC recording made in a “private space” without written authorization from the person who is the subject of the recording.
Policy

It is imperative that agencies develop a comprehensive written policy prior to implementing a BWC program, to ensure consistent BWC usage. Even if an agency elects to engage in a pilot program with BWC's, a comprehensive policy with clear and consistent standards is essential. There are numerous considerations that should be covered by policy. The Police Executive Research Forum identifies a number of key areas, including:

- **Basic Camera Usage**: What types of cameras can be worn, who will wear cameras, where will cameras be worn;
- **Recording Protocols**: When to activate/deactivate a camera, when recording is required, discretionary, and prohibited;
- **Data Retention**: Retention periods for different categories of data (e.g. evidentiary, non- evidentiary, use of force, etc.);
- **Access, Review, and Release of Data**: Who is authorized to review and when, when data can be released to the public; and
- **Audits/Controls**: Method for documenting chain of custody, safeguards for tampering with data, who is authorized to edit or delete data.

Technology limitations will impact policy areas such as basic camera usage, recording protocols, and data retention, so agencies should be familiar with what technology is available and within an agency’s budget prior to developing policy. Many agencies that have already implemented a BWC policy will share that policy upon request. Examining these policies can assist an agency in developing their own policy.

Additionally, there are a number of model policies and policy resources available on the internet. **The Council recommends that agencies considering implementing a BWC system review the following resources:**

- Bureau of Justice Assistance, Body-Worn Camera Toolkit: [https://www.bja.gov/bwc/](https://www.bja.gov/bwc/)
Public Outreach

Communication and collaboration with external stakeholders is an essential component of BWC system implementation. Early in the development of a BWC program, agencies should seek input from local prosecutors, courts, and defense attorneys/public defenders. Agencies may also consider collaborating with local political leaders, community leaders and civil rights/privacy advocacy groups early in the developmental process. These stakeholders can all be of assistance in developing policies and protocols.

External stakeholders, such as the ACLU, legislators, and the media, must be trained and educated on BWC’s and their limitations. Just because an agency has implemented a BWC system does not mean that every incident involving use of force will be recorded. Cameras will break or malfunction, batteries will die, and some incidents will require action before an officer has time to activate a camera. Likewise, the implementation of a BWC system does not mean that the media will have access to every law enforcement encounter with citizens. Many encounters may be exempt from disclosure under FOIA due to privacy considerations. Officers may opt not to record certain encounters, such as victim interviews, if an agencies policy gives officers that discretion.

Even where BWC’s do provide video data, it must be understood that the police officer’s mind will not perceive the events in precisely the same way that the images are recorded on a BWC system. A BWC will capture images that the human mind will not perceive and, conversely, human vision will be able to make observations that are not available to or outside of the field of view of the camera lens.

The Council recommends that law enforcement agencies and associations engage in robust public outreach and education regarding the capabilities of BWC systems to ensure that the public has reasonable expectations of the impact BWC’s will have on law enforcement operations.
**Conclusion**

While BWC systems have their limits and pose new financial and administrative challenges for police agencies, CLEAR believes that the potential benefits will outweigh the costs if (1) the legislature enacts broad FOIA protections, (2) police agencies—rather than the Legislature—adopt and follow sensible policies for use of BWC systems, and (3) police agencies, with the help of the state, find a reasonable way to avoid prohibitive storage costs.

We also recommend that CLEAR continue to monitor and evaluate the existing body camera pilots to enable the presentations of a follow-up report by the end of FY2016 based on data collected during the fiscal year.

**Body-Camera Report Committee Members**

Chief Tim Bourgeois – Kalamazoo  
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Sgt. Aric Dowling – MSP  
Under Sheriff Jeff Cook – Eaton County  
Sgt. Amy Dehner – MSP  
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Executive Director, Terry Jungel – MSA  
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