



Edmonton Police Service Body Worn Video Project

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Security Management Branch

Project Team

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Body Worn Video Camera Technology

- ❖ **Body worn video cameras** are recording devices worn as part of an officer's uniform in order to capture an audio-visual record of events as they occur.
- ❖ **Policing interest is growing** in the potential of BWV. Information exchange is part of the EPS pilot commitment.
- ❖ **BWV technology is evolving** rapidly; tracking advances is a component of the EPS Project.





EPS Project Purpose and Goals

Project Purpose

To provide an evidence base that systematically assesses the effectiveness of BWV to:

- ❖ Aid Investigations and provide evidence to support prosecutions
- ❖ Record events requiring pursuit and/or use of force away from a police vehicle
- ❖ Reduce complaints from citizens
- ❖ Reduce hostility
- ❖ Provide real life training examples

Outcome Goals

Evidence based evaluation report (Q4 2014) to provide:

- ❖ Value to policing
- ❖ Standards, policies and procedures to provide a base for good practice in BWV use
- ❖ User feedback
- ❖ Technology specifications and performance
- ❖ Legal and social implications.



BWV Device Deployment

56 Personal issue devices

Staggered roll-out - 2012-10-10 to 2012-07-02

Expectation to carry and use

Primary Intervention and Control Groups

- ❖ Downtown Division Patrols and Beats

Additional Special Context Testing

- ❖ West Edmonton Mall Beat
- ❖ Whyte Avenue Beat
- ❖ Traffic (Impaired Driving Counter Measures Unit)
- ❖ DEOPS – tri-service CBRN training exercise 2012



Findings and Feedback

A variety of methods are applied to evaluating this project. Data is not yet fully analysed; however early indications highlight the following areas:

- ❖ Hardware quality
- ❖ Data storage and management
- ❖ Policy and procedure for complex operational and privacy contexts
- ❖ Training and Member buy-in
- ❖ Calculating total costs for BWV programs



BWV Hardware Quality

- ❖ The RS3SX produces **good quality audio video** with the potential to contribute to investigations and prosecutions.
 - . NIGHT SEGMENT showing responses to a weapons complaint. Shows quality of video and sound in low light
 - DAY SEGMENT Beats using bicycles to monitor a parade route. Illustrates flexible roles devices can play along with pros and cons of devices in bad weather (wind and rain).
- ❖ The device has its **pros and cons** with feedback from members identifying desirable design improvements.
- ❖ **Vendors are responsive** to feedback at this stage of technology development.



Hardware: Member Feedback

I thought that it would be better – it looks better on TV. It needs to be secure and have a buffering loop of 30-60 seconds. And no screen – or one that is covered and rear-facing.

It is secure in terms of not falling off, but when running it bumps up and down and hits me in the face.

I was chasing a guy with a gun. A very bad situation and the camera hit me in the face. I wanted to rip it off and leave it.

On a warmer day the battery was completely adequate, but one really cold day when I was out quite a bit I did have to change it.

I was most surprised buy the audio quality. Because of the loud contexts and sometimes my jacket flopping over it, I thought the mike would be muffled, but it's possibly better than my hearing!



Data Storage and Management

Management of BWV files requires significant resources to ensure secure storage, transfer, evidence management, retention and deletion

- ❖ **EPS developed a script** to utilize Microsoft Windows for BWV management. At time of launch manufacturers' software did not perform sufficiently within existing EPS infrastructure.
- ❖ **Data management options and software are evolving** and improving to meet identified policing needs, but there are still many unanswered questions.
- ❖ **More than Data management software is involved:** Entire IT infrastructure, from bandwidth and upload speeds to desktop/mobile equipment adequacy, are considerations.



Data Management: Member Feedback

It's good on the computer. Poor on the device – horrible when the button covers fell off and I didn't know which was which!

It's over a year and my personal desk top still won't run the videos. So I have to go use another computer.

Uploading and viewing is simple. No problems except when there is a malfunction. But that's always fixed.

No problem to plug in. Only one time, I forgot and left it on my jacket.

There are procedural issues. Confusion about process and responsibilities for Crown requests.



Privacy

FOIP:

- ❖ EPS submitted a Privacy Impact Assessment (PIA)
- ❖ No FOIP requests for BWV have been received

Public Opinion

- ❖ A public survey was conducted as part of the PIA commitment.
- ❖ Over 90% expected positive court outcomes from BWV. Few expressed privacy concerns (8%) while almost half were pleased at the idea of an accurate record.

Member Privacy

- ❖ Personal conversations/activities; minor policy infractions

Prosecutorial Disclosure

- ❖ Crown requests are increasing as the pilot progresses but as yet no case has gone to trial.
- ❖ Members are concerned about repercussions from disclosures to defence counsel and unrepresented accused.



Policy and Procedure

Policing contexts are complex.

- ❖ No simple rule for operating BWV that is effective for all scenarios.
- ❖ BWV policy must harmonize with other policies.
- ❖ Members must have confidence in their operating procedures

“I don’t think I’m doing anything wrong but what if someone watching the video thinks I am?”

“There were discussion points about when to turn it on or not do so. Whether it should be all the time. There are grey areas. My feeling was that if I forgot there would be questions.”

“If we could leave it on the whole time when we walk the entertainment strip it would be great. But we would have to be sure only the footage related to the specific incident was disclosed. It should be like our notes – we don’t have to disclose the page before or after that incident.”



Training

Successful use of BWV requires:

- ❖ **Planning and resourcing to provide adequate training**
- ❖ **Confidence in the trainers and police leaders**
- ❖ **Trust in the procedures and outcomes**
- ❖ **Familiarity with physical operation.**

“It’s like any other piece of equipment. The issues can only be solved by training from the beginning in using the BWV.”

“ Supervisors must be equipped with BWV and provide positive use examples.”

“ Having the Training Unit hand-pick members to be trained and then be the training leader for their units would probably be helpful.”



Calculating Cost

A range of costs must be considered in implementing a BWV program:

- ❖ **Project management** (from assessment through purchase, testing and operational coordination)
- ❖ **Personnel** (to administer all aspects of the program)
- ❖ **Hardware purchase** (devices; accessories; replacements)
- ❖ **Hardware management** (purchase; issue; storage; monitoring; life-cycle; returns; re-assignments)
- ❖ **Uniform adaptations** (to accommodate BWV devices)
- ❖ **Video storage** (internal servers or external cloud? Retention length? Long-term evidentiary storage method?)
- ❖ **Data management** (security, retrieval, review; investigative administration, FOIP and Crown disclosure requests; redaction, transcription demands)
- ❖ **Supporting infrastructure** (IT support; bandwidth; desktop and vehicle capacity; upload stations)
- ❖ **Policy and procedure development** (operational and data management)
- ❖ **Training** (training package development; trainer training; roll-out, on-going)



Calculating Outcome Benefits

Hard evidence about outcome benefits of BWV is still lacking:

- ❖ We do not know how the courts will respond to BWV evidence – there is no Canadian case law.
- ❖ Crown response to the availability of BWV evidence remains uncertain.
- ❖ Reliably tracking case outcomes and any role BWV might play is challenging – numbers are hard to come by.
- ❖ The much cited Rialto, CA study demonstrates that BWV can significantly reduce use of force and complaints. But, does it also prevent the warranted use of force?
- ❖ EPS members report BWV effect on citizen behaviour varies with the context and individual. Drawing attention to the presence of recording is as likely to escalate as it is to de-escalate situations.



Going Forward: Important Issues

Body worn video is still a ‘bleeding edge’ technology. There are important issues and unanswered questions to consider:

- ❖ **Improved digital infrastructure** (integrated understanding among policing, prosecution, government for evidence management and utilization).
- ❖ **Hardware** (light, one piece, adequate battery, versatile secure mounting).
- ❖ **Data management software** (evidentiary integrity, intuitive to use, flexible between types of devices, sufficient security options and reports).
- ❖ **Prosecutorial value of BWV evidence** (capacity of Crown and court to utilize footage; judicial and defence responses; privacy questions).
- ❖ **Policy, procedure and training** (must address complex policing contexts and prosecutorial processes).
- ❖ **Reliable measures** to calculate outcome benefits against investment costs (this is challenging in the operational policing context).



In Summary

Members' views: A composite

“We wonder what are the goals of using BWV? To reduce complaints? To increase convictions? As an investigative tool? Potentially all of these but how BWV is used would differ for each. I think BWV is the way of the future, but there has to be discretion and a redaction process in place. I like to think I was hired because EPS trusts me.”

“Initially I was unsure about BWV. I thought I might have to worry about how I deal with every individual – that it would be used in a negative light. But if we have discretion on use and when to activate it, I think it is a very beneficial tool that captures exactly what is happening as it unfolds.”

“There is room for improvement: less bulky would be better; it should have a stable mount, no swivel head; and capacity to buffer so as to catch the beginning of an event if I am a little late activating it. Once there is a more standard practice for using it and all members are aware, it will be better.”