

St. Louis Metropolitan Police Department Body-Worn Camera Pilot Program

Final Report

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EXECUTIVE SUMMARY

The St. Louis Metropolitan Police Department (SLMPD) began a Pilot Body Worn Camera (BWC) Program after months of planning and development in December of 2015. The goals of the Pilot Program were to assess the technology, assess the needs of the Department to fully implement a BWC program, and to gauge public and officer opinion on the use of the technology.

The Pilot Program was designed to last 90 days. SLMPD Sergeants were outfitted with either a chest mounted or eye-glass mounted BWC provided by a single BWC manufacturer and wore them for 30 days, before passing them on to the next group. Prior to beginning the Pilot Program, all participating Sergeants were provided training on the policy, the operation of the camera technology, and how to manage evidence generated from the BWC Program.

The first step in the development of the Pilot Program was the development of a policy that would guide BWC use during the Pilot. In the weeks and months following the events in Ferguson, many agencies including the IACP, DOJ, PERF, and many others released recommendations for the formation of BWC policy. SLMPD also consulted with over 20 other law enforcement agencies in the development of the policy.

The BWC technology for this Pilot Program was supplied by TASER at no cost to the Department. The SLMPD field tested the TASER Axon-Body and the TASER Axon-Flex (eye-glass mounted) BWCs. The Department also utilized TASER's Evidence.com.

The SLMPD completed the BWC Pilot Program in March of 2016. Three groups of Sergeants representing a broad range of ages and experience tested the technology and provided their feedback. SLMPD surveyed both the Sergeants and the community, and it is clear that both the community and Officers have very similar concerns. SLMPD, SLPOA, and Citizens all have similar concerns regarding video retention, use, and privacy.

For SLMPD, Cloud storage of video evidence is the only feasible option given the amount of data SLMPD will amass. A back-end solution that ties the video evidence to calls for service in CAD and I/LEADS is imperative to guarantee proper classification of videos, evidence retention, efficient data management, and efficient use of limited man power. It is clear that the costs of purchasing cameras are relatively small compared to the monthly costs of maintaining and managing the video recordings.

The implications of launching a BWC program are very significant. If an agency deploys BWCs, the agency creates a reasonable expectation that the videos will be made available to the news media and the public. The Department will need to set strict policies on when officers must turn the cameras on and off. However, the Department must consider Officer safety. Will officers be required to turn on BWCs regardless of the incident? Will officers be expected to turn on the BWC first and worry about defining themselves or the victim of a crime second? If there is a critical incident but the officer failed to capture it on video, the camera program may actually damage the Departments relationship with the community. Decisions about whether to release a particular video to the public can be complex, balancing the public's interest in seeing a video against a crime victim's privacy, for example.

A more detailed description of the Pilot Program, an analysis of the data collected, and recommendations can be found in the following report.

INTRODUCTION

In the spring of 2014, the St. Louis Metropolitan Police Department (SLMPD) began the process of evaluating the need and the feasibility of beginning a Body-Worn Camera (BWC) program. As Planning and Research began the process of collecting preliminary information on the topic of BWCs, one of the most significant events in policing in the last few decades occurred just 8 miles outside of the City of St. Louis. The reverberations of that event could be felt in communities and police agencies across the country, and most notably in the St. Louis Region. The changes to policing in the coming months and years would be profound.

One notable change was the increased emphasis on creating trust and transparency in law enforcement agencies. While it has always been the case for SLMPD, many law enforcement agencies are not as open as accessible as they could be. One option that had been explored and put in place by many agencies was BWC technology. The thought was if the community is able to see what an officer sees, there can be some understanding of the decision making process in police/public interactions.

A growing body of empirical evidence points to the effectiveness of BWCs in reducing use of force incidents and complaints against officers. According to a 2012 study of the Rialto, CA Police Department, use of force incidents declined by 60 percent across the entire department after the implementation of a BWC program. In a comparison of shifts that utilized BWCs and shifts that did not utilize BWCs, use of force incidents were 50 percent lower in shifts that utilized BWCs. Perhaps most impressively, the Rialto department saw an 88 percent decrease in complaints compared to the year prior to BWC deployment. Results from the Mesa, AZ Police department's BWC deployment corroborate the encouraging effects observed in Rialto: Just eight months after the BWC deployment, officers without cameras had 300 percent more complaints filed against them than officers with cameras; during the entire course of the pilot program, there were 40 percent less complaints against officers who utilized BWCs; use of force complaints for officers that utilized BWCs decreased by 75 percent. Similar effects have been seen in jurisdictions across the country.

Though the mechanisms by which BWCs elicit the positive effects discussed above are not yet fully understood, there are several plausible explanations. BWCs seem to have a civilizing effect on both police and citizens during encounters (i.e., both officers and citizens might behave better due to being on camera). As Chief William Farrar of Rialto put it, "Whether the reduced number of complaints was because of the officers behaving better or the citizens behaving better—well, it was probably a little bit of both." Beyond the purported civilizing effect of BWCs, camera footage provides an objective record of police-citizen encounters. The very existence of such a record might discourage the filing of false complaints. Finally, BWC footage is sometimes incorporated into police training routines and can yield significant benefits. BWC footage provides vivid first-person accounts of encounters that can bolster scenario-based training. Moreover, BWC footage provides officers an opportunity to engage in self-critique and self-evaluation of performance, an integral part of any educational process.

The implications of launching a BWC program are very significant. If an agency deploys BWCs, the agency creates a reasonable expectation that the videos will be made available to the news media and the public. The Department will need to set strict policies on when officers must turn the cameras on and off. However, the Department must consider Officer safety. Will Officers be required to turn on BWCs regardless of the incident? Will Officers be expected to turn on the BWC first and worry about defining

themselves or the victim of a crime second? If there is a critical incident but the officer failed to capture it on video, the camera program may actually damage the Department's relationship with the community. Decisions about whether to release a particular video to the public can be complex, balancing the public's interest in seeing a video against a crime victim's privacy, for example.

Though increasingly more police departments throughout the United States are beginning to make use of body-worn cameras, no consensus has emerged regarding best practices for program administration. As one might expect, program administration approaches vary along with departmental characteristics such as size, urban versus rural policing environment, and budgetary constraints. Moreover, many well-documented body-worn camera programs have been pilot programs rather than programs operating at full-scale. Obviously, such pilot programs are considerably less-resource intensive, and while these programs are deeply informative in many ways, it is unclear whether their administrative procedures are replicable for department-wide programs.



Following seven years of testing and evaluation, San Diego's Police Department is proceeding with a full-scale body worn camera program. The SDPD is outfitting their entire patrol staff with 1,000 body-worn cameras. To administer their program, the SDPD is relying on a single officer who is solely dedicated to body worn cameras, and is responsible for most equipment maintenance and the training of all officers excluding detectives. That officer will be aided by three officers who will assist with equipment issues but are not

specifically assigned to the body worn camera program. All SDPD officers are responsible for uploading videos generated during their shift to a cloud-based storage system.

For these reasons the Police Executive Research Forum (PERF) recommends a careful, thoughtful approach to body cameras, in which the community, officers, and other stakeholders are consulted. PERF argues that departments should consider piloting the program and evaluating the results before implementing it department-wide.

Taking into consideration all of the above and the importance of "getting it right" the SLMPD began a Pilot BWC Program after months of planning and development in December of 2015. The goals of the Pilot Program were to assess the technology, assess the needs of the Department to fully implement a BWC program, and to gauge public and officer opinion on the use of the technology.

PILOT PROGRAM

The SLMPD began the BWC Pilot Program on December 14, 2015.

PILOT PROGRAM DESIGN

The Pilot Program was designed to last 90 days. SLMPD Sergeants were outfitted with either a chest mounted or eye-glass mounted BWC provided by a single BWC manufacturer and wore them for 30 days, before passing them on to the next group.

Each group consisted of 24 Sergeants with 12 wearing a chest mounted BWC and 12 wearing an eye-glass mounted BWC. Sergeants were selected from all six districts, SWAT, and Special Operations and all three watches; specifically, three Sergeants from each district, three Sergeants from SWAT, and three Sergeants from Special Operations. The Sergeants from SWAT and Special Operations wore their cameras for the full 90-day Pilot Program.

POLICY DEVELOPMENT

The first step in the development of the Pilot Program was the development of a policy that would guide BWC use during the Pilot. In the weeks and months following the events in Ferguson, many agencies including the International Association of Chiefs of Police, Department of Justice, Police Executive Research Foundation, and many others released recommendations for the formation of BWC policy.

SLMPD began by reviewing the International Association of Chiefs of Police Model Policy on BWCs released in 2014. SLMPD also reviewed a number of reports including:

- Police Executive Research Forum's, *Implementing a Body Worn Camera Program*;
- Office of Justice Programs', *Police Officer Body Worn Cameras Assessing the Evidence*;
- National Institute of Justice's, *Body-Worn Cameras for Law Enforcement*;
- International Municipal Lawyers Association's, *A Model Act for Regulating the Use of Wearable Body Cameras by Law Enforcement*; and
- Fraternal Order of Police, *Body-Worn Camera Recommended Best Practices*.

After reviewing hundreds of pages of reports and recommendations, the SLMPD reached out to a number of jurisdictions around the country that had deployed BWCs prior to the events in Ferguson, Mo. SLMPD requested sample policies for review and inquired about the overall process for implementing a BWC Program in their given departments. The resulting responses were significant. SLMPD received feedback from over 20 agencies including:

- | | |
|---|----------------------------|
| • Aberdeen, SD PD; | • Lake Havasu City, AZ PD; |
| • Aransas Pass, TX PD; | • Louisville, KY PD; |
| • Arizona DPS; | • Merced, CA PD; |
| • Austin, TX PD; | • Mesa, AZ PD; |
| • Caldwell County, NC Sheriff's Office; | • Miami-Dade, FL PD; |
| • Chesapeake, VA PD; | • Modesto, CA PD; |
| • Chocktaw, OK PD; | • New Orleans, LA PD; |
| • Fort Worth, TX PD; | • Newport News, VA PD; |
| • Hartford, CT PD; | • San Diego, CA PD; |
| • Johnson City, TN PD; | • Seattle, WA PD; and |
| • Johnson County, KS Sheriff's Office; | • Topeka, KS PD. |

Representatives from SLMPD participated in other opportunities to meet with and discuss BWC deployment and policy development including professional conferences in Arlington, Texas and Albuquerque, New Mexico. In Arlington, the International Association of Law Enforcement Planners hosted a round table discussion with representatives from multiple Texas law enforcement agencies on

the topic of BWC deployment. SLMPD representatives spoke directly to senior command staff in Albuquerque again to discuss deployment and policy development.

Finally, SLMPD reviewed the laws currently in place that would affect any policy created to manage a Department BWC program. One of the major concerns facing SLMPD is the Missouri Secretary of State's retention schedule. Given the evidentiary requirements from the Secretary of State requiring video to be retained for at least 30 days and evaluated prior to purging, the Department would need to dedicate staff to managing and reviewing the digital evidence created by the BWC program. The Police Clerks Retention Schedule provided by the Missouri Secretary of State, states:

POL 011 Audio/Video Recordings

Also Called: Car Audio/Video recording; Booking Surveillance; Surveillance

Function:

Content:

*Retention: 30 Days--Evaluate**

Disposition:

*Note: *Managers should extract significant information that may impact criminal or major case investigation prior to deleting video/re-using the tape. Extracted video must be retained until administrative/judicial proceedings are complete. This retention does not apply to interrogation videos which are by their nature evidentiary and should be part of the investigative files—See POL001*

Approval Date: August 25, 2009; Revised August 23, 2011 Updated December 1, 2015

SLMPD Planning and Research spoke with Jon Korasick of the Secretary of State's Office specifically about the *Evaluate* term. He said that the initial policy was developed with In-Car video in mind. The term *Evaluate* was used to allow for each department to handle video in the way it sees fit. However, it does imply that before any video is deleted or any portion of a video is deleted, it must be reviewed. He said that this requirement helps in handling the short retention period and reduces the appearance of purging video for questionable reasons, such as destroying evidence.

Pending an opinion from the City Counselor's Office or changes in Missouri State Law, it seems as though the Department must review all video prior to purging it. Jon Korasick did state that it is up to each Department to draft policy and procedure, but he would be more than happy to assist and provide any guidance whenever needed.

Taking all of the above into consideration, SLMPD Planning and Research staff developed the current BWC policy (Attachment 1) covering camera position, mandatory recording, prohibited recording, and evidence/video management. Building heavily on the strengths of other successful programs and policies and while trying to address the requirements of the State of Missouri, the current policy went in to effect on December 5, 2015.

BWC TECHNOLOGY

The BWC technology for this Pilot Program was supplied by TASER at no cost to the Department. The SLMPD field tested the TASER Axon-Body and the TASER Axon-Flex (eye-glass mounted) BWCs. The Department also utilized TASER's Evidence.com. Specifications for each model are in Attachment 2.

BWC TRAINING

Prior to beginning the Pilot Program, all participating Sergeants were provided training on the policy, the operation of the camera technology, and how to manage evidence generated from the BWC Program. Each group took part the training prior to beginning their 30 day participation in the program.

The policy portion of the training consisted of reviewing the Pilot Program Special Order (SLMPD Department Policy). Important areas of consideration were the circumstances requiring the camera to be recording, how to document the existence of a video in the incident report, and how to review video evidence.

Each group received training from the BWC technology provider on how to operate the BWC's including: turning the device on, turning the device off, charging the device, and how to handle any malfunctioning technology.



Finally, each group was trained on how to appropriately access and view evidence created by the BWC and the requisite process for tagging and documenting the BWC video evidence. All evidence generated during this pilot was stored in *The Cloud* via Evidence.com and Sergeants were directed on the process for accessing the video through the provider's website.

SURVEY DEVELOPMENT

In order to effectively assess the attitudes of the Sergeants participating in the Pilot Program, weekly surveys were given. The survey was developed using questions that had been used in other BWC Program evaluations.

The Sergeants were asked to complete a pre-test survey prior to beginning the Pilot Program. Each Sergeant was sent a link to the 42 question (37 Likert and 5 Free Response) survey via email each week during the 4 weeks they were assigned a BWC.

EQUIPMENT INSTALLATION AND SET UP

The BWC provider sent SLMPD the equipment prior to the start of the Pilot Program. It was the job of SLMPD Information Technology Staff to set up all the cameras and docking stations prior to deployment.

USER SET UP

User groups and assigned permissions were setup by Information Technology, Planning and Research, and the BWC Project Manager by looking through each option in the user roles and deciding what that particular group would need.

User setup involved getting a list of the users compiled into a spread sheet with their full name, email address, and DSN. This list was then imported to Evidence.com.

Email invitations were sent from Evidence.com to new users to instruct them to setup their new account. This invitation expires after 48 hours. Anyone that didn't setup their account before that expiration had to be sent a new invitation email. This was a manual process performed by Information Technology staff. Some users contacted the BWC Project Manager, and he would contact Information Technology Staff directly to resend invitations. A few users contacted the Help Desk and an issue would get escalated to the appropriate staff to resend the invitation.

This initial set up required 9 man hours, with an additional 4 man hours per week for the duration of the Pilot Program.

CAMERA SET UP

All cameras had to be manually registered into Evidence.com. This required two Information Technology staff connecting each camera to their computer and launching the Sync software and then assigning it to the Evidence.com user that had already been created. This was a time consuming process initially.

When the cameras were reassigned after 4 weeks and then again after 8 weeks this process had to be repeated to reassign all cameras to the Sergeant that would be beginning their portion of the Pilot.



Each camera was labeled with the DSN of the assigned officer. This also had to be changed each time the assigned Sergeants were changed.

During the Pilot, since SLMPD tested two different models of cameras, it was very frequent that we were asked to swap the cameras between users as one would prefer to test a different type.

Each docking station was setup with a static IP address and Information Technology staff had to permit this device to access Evidence.com through the firewall.

Each docking station slot was labeled with which camera was to dock in that particular slot so that officers wouldn't accidentally grab the wrong camera.

This initial set up required 48 man hours, with an additional five hours per week for the duration of the Pilot Program.

USER MANAGEMENT

Management of users and cameras after the initial setup required little additional attention. Overall Information Technology only had three instances that required a technician to go on site and troubleshoot a camera. In each case, resetting the unit fixed the issue.



Account lockouts were infrequent. Messages are sent to the administrator accounts reporting a lockout event. Evidence.com would lock the account for 60 minutes, then unlock it, and the user could try again. Otherwise, the users reached out to one of the two Information Technology technicians that were responsible for this system.

One Information Technology technician would train officers that had missed the main training events on how to use the cameras, start and stop

recording, and upload. He also walked them through signing into Evidence.com.

This process required three man hours per week for the duration of the Pilot Program.

PILOT PROGRAM EVALUATION

In order to effectively evaluate the BWC Pilot Program, SLMPD collected multiple forms of data throughout the Pilot. SLMPD collected survey data from the Sergeants wearing cameras, use statistics, and random audits of video.

A weekly audit was completed for the duration on the Pilot Program to include a review of video evidence, use reports, and updated survey information.

GROUP USE STATISTICS

The following tables illustrate the overall use statistics for the duration of the Pilot Program. Also included are tables illustrating use by Pilot group. Each group consisted of three Sergeants from each district, three from SWAT, and three from Special Operations. The cameras were evenly distributed across watches for each group.

Table 1. Total video collected during the Pilot Program

	Total Uploads
Number of Videos	1114
Hours of Videos	161.43
GB of Videos	119.83
	Average Per Day
Number of Videos Uploaded	13.11
Hours of Video Uploaded	1.9
GB of Video Uploaded	1.41

Table 2. Total video collected Group 1

	Total Uploads
Number of Videos	300
Hours of Videos	47.31
GB of Videos	34.84
	Average Per Day
Number of Videos Uploaded	10.34
Hours of Video Uploaded	1.63
GB of Video Uploaded	1.2

Table 3. Total video collected Group 2

	Total Uploads
Number of Videos	408
Hours of Videos	53.82
GB of Videos	40.19
	Average Per Day
Number of Videos Uploaded	14.57
Hours of Video Uploaded	1.92
GB of Video Uploaded	1.44

Table 4. Total video collected Group 3

Group 3	Total Uploads
Number of Videos	406
Hours of Videos	60.3
GB of Videos	44.8
	Average Per Day
Number of Videos Uploaded	14.5
Hours of Video Uploaded	2.15
GB of Video Uploaded	1.6

USER SURVEY RESULTS

Results for the 37 Likert Scale questions can be found in Attachment 3.

The information collected in the free response portion of the weekly surveys provided vital information regarding the day-to-day use of the BWCs. Specifically, Sergeants provided feedback on the mounting systems. For example, Sergeants noted that there was no option for mounting the chest mount model on the outside of SLMPD winter jackets. This information is important because it will help SLMPD find a system that provides the best mounting option to fit the needs of the officers.

Similarly, a number of Sergeants expressed their dislike for the cords associated with the glass mount model. They found the cords to be cumbersome and often times the cords became caught on other equipment. Some Sergeants did prefer the glass mount option to the chest mount option according to their responses. Given the information gleaned in the surveys, it would seem appropriate to select a BWC manufacturer that offers multiple options and allow officers to select which model they prefer.

Also included in these responses were comments regarding training benefits, evidentiary benefits, safety concerns, and citizen/officer contact concerns.

COMMUNITY INVOLVEMENT

In January 2016, SLMPD Public Information began planning for the community input portion of the BWC Pilot. Public information contacted Mike Bush of KSDK-Channel 5 News and offered him an up-close and personal opportunity to showcase the Pilot Program, talk to Sergeants involved in the program, and ultimately help garner public feedback.

Public Information also developed a survey available on the SLMPD website to be completed by community members wishing to provide their opinions.

WEBSITE

In late February, 2016, Public Information met with Information Technology to discuss plans for the body camera webpage. A Programmer Analyst I, developed the webpage. He spent 32 hours and 45 minutes on the project. This includes the removal of the survey and taking Body Camera off of the storyboard at the conclusion of the open survey.

The body camera website went live on Sunday, March 13, 2016. The BWC portion of the SLMPD website is still active. It currently includes the SLMPD Special Order governing BWCs, photos, and a couple articles discussing BWC programs.

NEWS COVERAGE

On February 9, a KSDK photographer was allowed to record the training process for approximately an hour. On February 22, 2016, Public Information met with Mike Bush to discuss logistics for the body camera story. The meeting took about 90 minutes.

The Public Information staff then set up interviews with Sergeants that had taken part in the Pilot Program and on March 3, 2016. Mike Bush conducted interviews with Police Commissioner, Colonel Samuel Dotson and the two selected sergeants that had participated in the Pilot Program. Mike Bush also followed one of the Sergeants in his patrol car and recorded his interactions and experiences with the BWC. The entire interview process took approximately two hours.

Later in the evening on March 3, 2016, Mike Bush was allowed to take a BWC with him to record while he broadcast the evening news. Mike Bush recorded with the camera for approximately 2-3 hours. The footage captured during the shadowing of the Sergeant and the broadcast was downloaded and given to KSDK for their use.

The story was slated to air on Sunday, March 13, 2016. The story encouraged viewers to visit the SLMPD website where they could take a survey to provide feedback. Mike Bush spent approximately 4-5 hours editing and producing the news story.

PUBLIC SURVEY DEVELOPMENT AND RESULTS

Public information developed a short survey to be used to gauge community support for BWC deployment in St. Louis. The survey consisted of 12 questions regarding the interactions had by the public with Sergeants wearing BWCs. Also, included were questions covering general approval or disapproval of BWC technology.

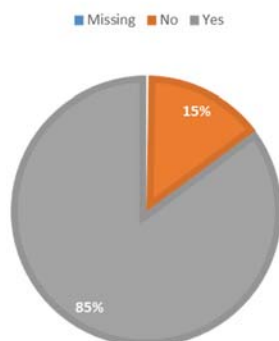
The survey was active on the SLMPD website from March 13 through April 4. Just over 800 citizens responded to the survey. However, it is important to note that 83.6% of respondents had not interacted with an officer wearing a BWC.

Responses are illustrated in the below graphs and table

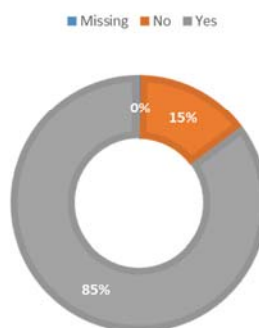
Table 5. Public Survey Question

If you have interacted with a St. Louis police officer who was wearing a body camera, how did you become aware you were being recorded?	Number	Percent
Missing	2	.2
I asked the officer if I was being recorded	9	1.1
I have not interacted with a St. Louis police officer wearing a camera	676	83.6
Other	92	11.4
Someone else present during the interaction asked the officer if he or she was being recorded	5	.6
Someone else present during the interaction told me I was being recorded	5	.6
The officer told me I was being recorded	20	2.5
Total	809	100.0

HAVE YOU INTERACTED WITH A ST. LOUIS POLICE OFFICER IN THE PAST?

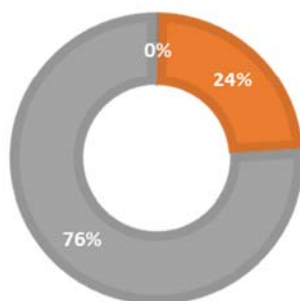


DO YOU THINK BODY CAMERAS WILL HAVE AN INFLUENCE ON OFFICERS' BEHAVIOR OR COMMUNICATION WHEN INTERACTING WITH THE PUBLIC?



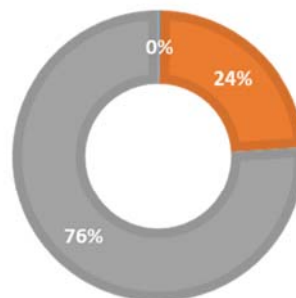
DO YOU THINK BODY CAMERAS WILL HAVE AN INFLUENCE ON OTHERS' BEHAVIOR OR COMMUNICATION WHEN INTERACTING WITH OFFICERS?

■ Missing ■ No ■ Yes



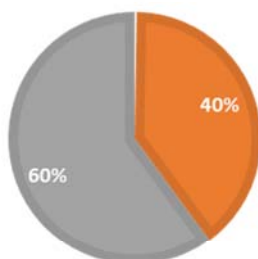
DO YOU FEEL SAFER KNOWING YOUR INTERACTIONS WITH OFFICERS ARE BEING RECORDED?

■ Missing ■ No ■ Yes



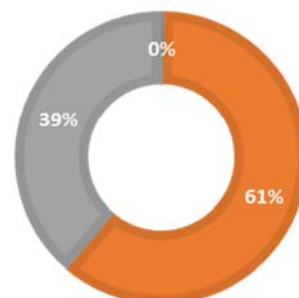
DO YOU BELIEVE ALL BODY CAMERA VIDEO RECORDINGS SHOULD BE AVAILABLE UNDER THE MISSOURI SUNSHINE LAW (FREEDOM OF INFORMATION ACT), INCLUDING VIDEOS DEPICTING VICTIMS AND JUVENILES?

■ Missing ■ No ■ Yes



SHOULD OFFICERS HAVE THE ABILITY TO TURN OFF VIDEO RECORDING AT THE REQUEST OF CITIZENS?

■ Missing ■ No ■ Yes



The public opinion survey free response questions also provided insight in to the opinions of the public regarding privacy concerns, cost, and storage/retention of video evidence.

ASSESSING THE DATA

The following assessment is based on the deployment of 800 BWCs.

ANNUAL VIDEO/EVIDENCE ESTIMATIONS

Using the data collected during this BWC Pilot Program, SLMPD calculated an annual estimation on the number of videos and amount of data for a deployment of 800 cameras.

Table 6. Data Estimations based on Pilot Data and Calls for Service Data

Annual Estimations	Sergeant Pilot [^]	Calls For Service Data ^{^*}
Number of Videos Uploaded	151,122	531,442 ^{**}
Hours of Video Uploaded	21,586	311,746 ^{***}
GB of Video Uploaded	16,015	779,365 ^{****}

[^]estimations based on a deployment of 800 cameras

^{*}2013 calls for service and self-initiated activities

^{**}calculated w/ only one officer per event

^{***} calculated w/ an average call time of 35 minutes

^{****}24min/GB

The estimated number of videos and amount data of expected per year based on Calls for Service data is also included in the above table.

The large difference in these two estimations can be attributed to multiple factors. The primary reason is the difference in the nature of work completed by a Sergeant and a Patrol Officer. Sergeants in this Pilot Program were not answering Calls for Service as a Patrol Officer does each shift. Looking at the video and the associated use data, it was evident that basing the estimated number of videos and data expected annually on the Pilot data alone would produce a significantly lower estimation than what SLMPD should expect. In both cases (using Pilot data and Calls for Service data), the estimations are low due to the calculations assuming one Officer/one camera/video per call. Often times there are multiple Officers responding to a Call for Service.

INFORMATION TECHNOLOGY NEEDS ASSESSMENT

The Information Technology needs assessment is based on 800 cameras distributed throughout the 3 area stations, Special Operations, and HQ locations. It should be noted that the following assessment is based on utilizing a cloud storage solution. Information Technology does not recommend the use of an on-premises storage solution for video evidence generated by BWCs. The below estimates do not include the man power to perform evidence management tasks including: Investigation, seizure, redaction, supplemental reporting, and submission. Information Technology would recommend that evidence seizure be handled by a commissioned unit with a background in investigative police work.



Information Technology also recommends that there be an assignment responsible for storage of all associated equipment including: black cases that contain the camera accessories, spare clips, USB cords, car charger, and mobile devices.

NETWORK HARDWARE NEEDS

At the time of this report, there is currently an inadequate amount of network drops and network hardware to support a full BWC deployment. Additional network drops and switches will need to be

installed for a full implementation with multiple docks at each site. The (one-time) costs for this are listed in the table below:

Table 7. Network hardware needs

Location	Item needed	Quantity	Cost
North Patrol	Network drops	20	\$6000
North Patrol	Network switch	1	\$2000
Central Patrol	Network drops	20	\$6000
Central Patrol	Network switch	1	\$2000
South Patrol	Network drops	20	\$6000
South Patrol	Network switch	1	\$2000
Special Operations	Network drops	15	\$4500
Special Operations	Network switch	1	\$2000
SWAT (HQ)	Network drops	10	\$3000
SWAT (HQ)	Network switch	1	\$3000
Total			\$36500

BANDWIDTH NEEDS

Similarly, additional bandwidth will be needed at each location where cameras will be docked. See the recurring monthly costs in the table below:

Table 8. Bandwidth needs

Location	Current Bandwidth	Proposed Bandwidth	Monthly cost increase
South Patrol	50Mbit/s	100Mbit/s	\$1000
North Patrol	50Mbit/s	100Mbit/s	\$1000
Central Patrol	50Mbit/s	100Mbit/s	\$1000
Special Operations	20Mbit/s	50Mbit/s	\$750
HQ (SWAT)	300Mbit/s	300Mbit/s	\$0
Total cost			\$3750 (recurring)

BROKEN/LOST EQUIPMENT

Camera mounting clips broke frequently or were misplaced. Cords for the glass mounted cameras were also easy to break and required multiple replacements. During the Pilot, Information Technology kept spare equipment at the Help Desk so Sergeants could get replacements 24 hours a day and seven days a week.

When it was time to return equipment or to give equipment to the next group of Sergeants that were testing, Information Technology staff often had locating and acquiring equipment.

This process required one man hour per week for the duration of the Pilot Program.

INFORMATION TECHNOLOGY STAFFING NEEDS

Finally, in order to adequately handle the assumed increase in workload, Information Technology would need to increase staffing. Overall staffing needs are below.

Table 9. Estimated number of staff needed for Information Technology

Position	Current FTE Count	Proposed FTE Count	Hours dedicated to BWC per week
Network Admin II	2	5	161
Network Admin I	3	5	138

DEPARTMENT-WIDE STAFFING NEEDS

The costs of purchasing cameras are relatively small compared to the monthly costs of maintaining and managing the video recordings. SLMPD has also already experienced a number of open records requests regarding BWCs. Sunshine requests for video and video related information will require a substantial amount of Department time and resources to fulfill.

Requests of this nature and other administrative tasks (video redaction, assigning cameras, managing evidence requests, etc.) associated with BWCs have led to other agencies hiring staff to handle the increased workload. A rough estimate on staffing required, taking into account about 20 other agencies, would be one full-time person per 100-150 cameras deployed. With a deployment of 800 BWCs, SLMPD would need to employ six to eight fulltime staff to handle the administrative tasks associated with BWCs. These estimations are heavily dependent on type evidence management and redaction software utilized by the Department.

ESTIMATED BUDGET

The budget for any Body Camera Program is dependent on a number of factors. The proposed budget below is estimated based on costs from other Police Departments including San Diego, New Orleans, Seattle, Phoenix, Los Angeles and others.

Technology costs were variable from department to department. Cameras ranged from \$400-\$1000 per unit. The below estimation was based on SLMPD purchasing 800 units at a cost of \$800 per unit with an expected life-cycle of two years. The camera docks were a little more consistent in price at \$1200 per dock. With a deployment of 800 cameras, SLMPD would need at least 134, six slot docks.

Evidence storage is the most costly part of the BWC Program. The cost for unlimited Cloud Storage is \$100 per camera, per month.

In total, the cost for the technology and Information Technology infrastructure upgrades (Tables 7 and 8) will be an estimated \$1.84 million for the first year and between \$1 million and \$1.8 million for the following four years.

Staffing is another significant cost. This cost is however flexible depending on type and number of staff assigned, but the success of any BWC Program is heavily dependent adequate staffing. The staffing estimates below are conservative based on other Departments. As previously stated, staffing needed would be one full-time person per 100-150 cameras deployed. With a deployment of 800 BWCs, SLMPD would need to employ six to eight fulltime staff to handle the administrative tasks associated with BWCs. These estimations are heavily dependent on type evidence management and redaction software utilized by the Department.

SLMPD would need to create a unit to manage all facets of the BWC Program, requiring a Sergeant, six Officers, and one administrative person.

Table 10. Estimated Budget and Staffing needs for BWC Program

Technology	2017	2018	2019	2020	2021
Camera Technology	\$640,000.00	\$0.00	\$640,000.00	\$0.00	\$640,000.00
Camera Docks	\$160,800.00	\$0.00	\$160,800.00	\$0.00	\$160,800.00
Network Hardware	\$36,500.00	\$0.00	\$0.00	\$0.00	\$0.00
Bandwidth needs	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00
Evidence Storage	\$960,000.00	\$960,000.00	\$960,000.00	\$960,000.00	\$960,000.00
Technology Total	\$1,842,300.00	\$1,005,000.00	\$1,805,800.00	\$1,005,000.00	\$1,805,800.00
Staffing (Base Pay)	2017	2018	2019	2020	2021
1 Sergeant*	\$56,570.00	\$56,730.00	\$59,996.00	\$62,346.00	\$64,773.00
6 Police Officers*	\$239,304.00	\$256,152.00	\$263,640.00	\$277,212.00	\$283,920.00
1 Admin. Staff*	\$23,712.00	\$24,076.00	\$24,440.00	\$24,804.00	\$25,168.00
2 IT Staff*	\$72,800.00	\$73,892.00	\$74,984.00	\$76,128.00	\$77,272.00
Staffing Total	\$392,386.00	\$410,850.00	\$423,060.00	\$440,490.00	\$451,133.00
Annual Total	\$2,234,686.00	\$1,415,850.00	\$2,228,860.00	\$1,445,490.00	\$2,256,933.00

*Estimates are based on staffing numbers from other law enforcement agencies and the expected workload managing the BWC program.

SUMMARY

The SLMPD completed the BWC Pilot Program in March, 2016 after 90 days of deployment. Three groups of Sergeants representing a broad range of ages and experience tested the technology and provided their feedback. SLMPD surveyed both the Sergeants and the community, and it is clear that both the community and officers have very similar concerns. SLMPD, SLPOA, and Citizens all have similar concerns regarding video retention, use, and privacy.

There are a number of considerations to take into account when evaluating the success of this Pilot Program. The primary concern to keep in mind is that this Pilot Program involves Sergeants and not Patrol Officers. The nature of call response and responsibilities differ for Patrol Officers when compared Sergeants. Also, Sergeants are typically not the first person on the scene resulting in shorter video duration during the Pilot Program.

Secondly, it is important to note that many calls require/have more than one officer responding; which will result in three, four, five, etc. videos per call when cameras are rolled out to officers. When reviewing video captured during this Pilot Program, the majority of videos had at least two to three officers in them illustrating that the video evidence generated will be exponentially more than what SLMPD experienced during the Pilot Program

As a result, the experiences during this Pilot Program are difficult to generalize. SLMPD has attempted better estimate the annual evidence/data generated by using Calls for Service data to supplement.

The Pilot Program has provided SLMPD with some very important information regarding the day-to-day use of the cameras. Based on comments from the Sergeants involved, it is evident that SLMPD needs to find a solution that allows for cameras to be mounted on the officers' outermost garment. Also, Officers tend to prefer the chest mount option over the eye-glass mounted camera. However, depending on the assignment the eye-glass mounted option provides a better view.

For SLMPD, Cloud storage of video evidence is the only feasible option given the amount of data SLMPD will amass. Also, Cloud storage makes video review and evidence handling process more efficient and safe for both the officer and public. During the Pilot Program, Sergeants were required to manually review and tag video in Evidence.com. This is an administrative task that will take a significant amount of time depending on the amount of video generated. Estimates from other law enforcement agencies are from 30-90 minutes per shift on administrative tasks related to BWCs. A back-end solution that ties the video evidence to calls for service in CAD and I/LEADS is imperative to guarantee proper classification of videos, evidence retention, efficient data management, and efficient use of limited man power.

The costs of purchasing cameras are relatively small compared to the monthly costs of maintaining and managing the video recordings. SLMPD has also already experienced a number of open records requests regarding BWCs. Sunshine requests for video and video related information will require a substantial amount of Department time and resources to fulfill. Requests of this nature and other administrative tasks (video redaction, assigning cameras, managing evidence requests, etc.) associated with BWCs have led to other agencies hiring staff to handle the increased workload. Even if the SLMPD contracts out the task of storing the data, the SLMPD may need to hire or re-assign staff to respond to public requests for particular videos. This can involve the time-consuming task of redacting certain sections of a video. A rough

estimate on staffing required, taking into account about 20 other agencies, would be one full-time person per 100-150 cameras deployed.

At the time of this report, Missouri Law is woefully behind regarding the handling of video evidence and retention. There have been some suggestions made to the legislature in the spring of 2016 regarding BWCs including agencies required to use them, what should be recorded, what should be available in open record requests, and many others. What is clear is that BWCs are a very controversial issue and legislation is needed to help guide the direction of BWC use and evidence handling.

Based on the experience gained from this Pilot Program and learning from other agencies, it is clear that taking the requisite time to fully plan and develop a BWC Program is imperative for success. As previously stated, San Diego took seven years to plan their program, and as a result, San Diego is considered to be a model nationwide for BWC deployment.

RECOMMENDATIONS

Recommendation 1: Following the St. Louis City RFP process, SLMPD should field test BWC technology provided by the top two proposals to evaluate usability, real-time viewing, technical attributes, In-Car Video system integration, use of “triggers” for activating BWCs such as exiting a vehicle and drawing a service weapon, and technical assistance across models and manufactures.

Recommendation 2: SLMPD should review and evaluate other Law Enforcement agencies systems and experiences with BWC and CAD/RMS integration to allow for proper assessment of administrative time.

Recommendation 4: SLMPD needs to evaluate the use of BWCs based on the daily use of Patrol Officers. SLMPD needs to begin discussions with the SLPOA and create work groups for selecting technology, weighing in on policy decisions, and other administrative functions.

Recommendation 5: SLMPD needs to assess redaction software solutions in accordance with State Law. A significant amount of time managing BWCs and evidence requests will be the process by which SLMPD redacts video evidence.

Recommendation 6: SLMPD should coordinate semi-annually with the City Counselor’s Office to ensure policy is in accordance with State and Federal Laws regarding privacy and retention.

Recommendation 7: SLMPD needs to develop a process for evidence sharing with the Circuit Attorney’s, the City Counselor’s, and the US Attorney’s Offices.

ATTACHMENTS

