Andrew Kleine, Chief

O AGENCY
NAME & Bureau of the Budget and Mana

Bureau of the Budget and Management Research Room 432 City Hall (410-396-4941)

City Council Bill #14-0443

CITY of

DATE:

BALTIMORE

MEMO



October 23, 2014

TO

œ

Ш

ADDRESS

SUBJECT

The Honorable President and Members of the City Council Room 400, City Hall

City Council Bill 14-0443 requires all Baltimore City Police Officers to wear digital video and audio body cameras while on duty.

OCT 2 7 2014

The bill comes on the heels of a number of local and national cases involving alleged police misconduct and suggests that capturing interactions between BPD officers and community members will result in fewer complaints and use-of-force incidents. The adoption of body-worn cameras is seen as a national trend, which has led law enforcement policy makers to issue guidance documents for agencies considering the transition.

The Police Executive Research Forum (PERF) and the U.S. Department of Justice's office of Community Oriented Policing Services (COPS) recently released a comprehensive policy analysis and implementation recommendations document for organizations considering requiring on-duty police officers to wear digital and audio body cameras. The study calls to light administrative, legal and financial questions that an organization must answer before implementing a policy requiring bodyworn cameras.

In creating the policy analysis, PERF and COPS surveyed 500 law enforcement agencies nationwide to understand national behavior surrounding body-worn cameras. Of those surveyed, 254 agencies responded and, while body cameras are a growing trend, 75% reported they did not utilize the cameras at that time. This left 63 agencies reporting the use of body-worn cameras. Next, PERF interviewed 40 agency leaders who have successfully implemented or considered implementing a body-worn camera policy, as well as hosted a conference of more than 200 law enforcement leaders and scholars to discuss the policy.

This cost assumption is based on data provided by the PERF and COPS study, as well as the Oakland Police Department (OPD), which serves an urban jurisdiction of 400,740 residents.

Financial Considerations

Implementing the body-worn camera policy will require collaboration between MOIT, BPD, Law and Finance. The City would need to create a specific protocol for how the cameras are to be used, agree

on Mayor's working Group Finding \$400-10-53

how video will be stored and determine the long-term fiscal impact of the policy. Please note that those decisions will impact the cost of data storage, the largest financial factor of this assumption.

Cost Assumption	TE STATE	Start-up	4	On-going
Equipment		Est. Cost		Est. Cost
Cameras	\$	2,000,000		
Data Storage - Cloud			\$	2,220,000
Data Storage - Internal	\$	1,016,100	\$	1,016,100
Officer training	\$	400,000		
Maintenance & Repair			\$	53,667
Replacement Fund			\$	400,000
Positions			\$	441,479
Salaries			\$	293,068
<i>OPCs</i>			\$	148,411
Total w/ Cloud Option	\$	2,400,000	S	2,661,479
Total w/Internal Option	\$	3,416,100	S	1,457,579

In year one of the program, the City will be financially responsible for start-up costs and on-going costs. If the City chose the Cloud-based option, the year-one investment would be \$5,061,479. If the City chose to procure its own data storage solution, the year-one investment would be \$4,873,680.

Assumptions

- → Equipment: The average cost of body-worn cameras is between \$800 and \$1,200; BBMR used the average cost of \$1,000 per camera to determine the financial commitment of purchasing one for every sworn officer. According to BPD, they intend to outfit 2,000 sworn officers with body cameras.
- → **Storage:** Video is then downloaded and stored on an internal or a third-party cloud-based server. MOIT confirmed the City does not currently possess the necessary infrastructure to house the data collected from body-worn cameras and would need to procure adequate technology.
 - Cloud: To estimate the cost of a cloud-based solution, Finance used information from the PERF and COPS study that estimated the cost of cloud storage at \$1,110 per camera, per year. It is important to note that the cost of this would depend on the retention policy associated with evidentiary video footage. Additionally, depending on what Cloud provider the City chooses, there may be an upfront membership cost. BBMR did not include this in the assumption.
 - o **Data Solution:** The City would need to procure a system that enables BPD to internally store and monitor footage. Oakland spent \$372.21 per camera on a data solution with five years of annual software maintenance; the OPD Sergeant who oversees the Body-Worn Camera operation said the department requires all interactions to be recorded and downloaded to their internal server. BBMR deduced the data to cost per terabyte of storage

(\$1,945), determined the number of terabytes needed per officer (.26) and applied that information to the number of BPD officers.

- → Positions: Professional standards suggest police departments should hire dedicated staff for data monitoring, camera management and responding to public information requests. Based on conversations with BPD, the cost estimate assumes the department will detail one commanding officer and three analysts to oversee the body-worn camera program. The City would need to determine whether it will hire additional staff or reassign positions to monitor the program. BBMR used the budgeted cost of recently added crime analyst positions to estimate the fully-loaded cost-per-position of \$98,548 for these individuals, as well as the average fully-loaded cost of a Sergeant position of \$117,203 to account for the unit's commanding officer.
 - For the on-going cost assumption, salaries are increased by 6% for sworn, per the recently-negotiated FOP contract, and 2% for civilian. OPCs were calculated using a 5% inflationary factor.
- → Training: Once the cameras are purchased, BPD would need to conduct in-depth training on the agency protocol for implementing the new technology specifically, ensuring all officers understand rules about disclosure, recording and data retention. BBMR assumed a ½ day of training at the departmental average \$50/hr overtime rate for this training. Ongoing training would become part of the Police Academy and, therefore, no additional costs are assumed in the out years.
- → Maintenance and Repair: The useful life of these cameras depends on the type of technology chosen by the department but market warranties range from 90 days to two years. Cameras will be under warranty during year one; however, in out years, the City will assume responsibility for maintenance and repair. BBMR used OPD's annual maintenance cost, derived per officer cost (\$26.83) and applied it to the number of officers BPD identified to be outfitted. Please note that the OPD commanding Sergeant warned the first few years produced higher maintenance costs because the force did not take good care of the cameras.
- → Replacement Fund Contribution: The market-average lifetime for body-worn cameras is estimated five years. BBMR depreciated the initial value of each camera (\$1,000) over that timeframe (5 years) to identify the amount the City would need to commit annually to ensure that it is capable of purchasing new cameras once our first batch exceeds useful life.

Savings

CB 14-0443 suggests the body-worn cameras could save the city money by potentially reducing costly settlements from police misconduct cases. Though body-worn cameras have been linked to fewer citizen complaints, there currently exists no evidence that links body-worn cameras to lower settlement costs.

If the City chooses to adopt a body-worn camera policy, BPD would be the largest force nationally to have done so. According to the COPS study, 39% of respondent departments that do not utilize body-worn cameras cite implementation and on-going costs as the primary reason.

Outstanding Policy Questions that Impact Implementation Cost

- 1. Which type of camera will BPD select?
- 2. What type of data retention infrastructure will the City procure (cloud-based, internal)?
- 3. What footage retention policy will the agency adopt?
- 4. Will BPD hire new analysts for this unit or reassign existing personnel?
- 5. Will the City need to procure additional technology for monitoring the Cameras?
- 6. If an officer damages a camera, will he/she be required to pay for it?
- 7. What is the long-term replacement plan for cameras?

Recommendation

The Mayor has appointed a working group to assess and explore the implementation of body-worn cameras for BPD officers. The working group is comprised of law enforcement officials, legal representatives, information technology specialists, community members, financial analysts and clergy. The group has been charged with carefully examining the costs and benefits associated with a body-worn camera program and providing the Mayor with a comprehensive written report detailing cost, privacy, video storage and the appropriate scope of a program for BPD. BBMR recommends Council await the findings of this group before further addressing the issue.