

INTRADEPARTMENTAL CORRESPONDENCE

March 16, 2016
1.17

TO: The Honorable Board of Police Commissioners

FROM: Chief of Police

SUBJECT: RESPONSE TO REQUEST FROM PUBLIC SAFETY COMMITTEE AND BUDGET AND FINANCE COMMITTEE RE TASER INTERNATIONAL, INC. SERVICES TO PROVIDE BODY-WORN VIDEO AND CONDUCTED ELECTRICAL WEAPONS

RECOMMENDED ACTIONS

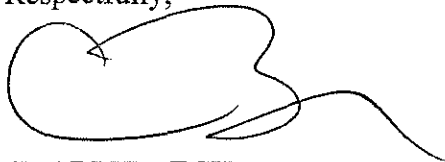
1. That the Board of Police Commissioners (Board) RECEIVE and FILE the attached supplemental report to Public Safety Committee and Budget and Finance Committee regarding TASER International, Inc. services to provide Body-Worn Video (BWV) and Conducted Electrical Weapons (CEW).
2. That the Board TRANSMIT the report to the City Clerk for scheduling with the Public Safety Committee and Budget and Finance Committee.

DISCUSSION

On December 16, 2015, the City Council referred the BWV and CEW report, Council File No. 15-1471, to the Public Safety Committee and Budget and Finance Committee. Attached is the requested report.

If you have any questions, please contact Chief Information Officer Maggie Goodrich, Information Technology Bureau, at (213) 486-0370.

Respectfully,

A handwritten signature in black ink, appearing to read 'Charlie Beck', with a long, sweeping tail extending to the right.

CHARLIE BECK
Chief of Police

Attachment

**LAPD's Body Worn Video Program – Supplemental Report
March 16, 2016
Council File Number 15-1471**

INTRODUCTION

This supplemental report is submitted at the request of the Los Angeles City Council to provide additional information regarding: (1) the LAPD's selection of Taser International (Taser) as the primary vendor to supply body worn video (BWV) cameras, docking stations, online storage and technical support pursuant to the proposed five-year contract pending before the City Council; and (2) a revised staffing plan to support the deployment of 7,000 BWV cameras; conduct audits and inspections of BWV recordings; review, redact and release BWV recordings in accordance with current legal obligations; review and produce BWV evidence for criminal prosecution of defendants; and review and produce BWV recordings for administrative investigations involving uses of force, pursuits, traffic collisions, work-related injuries and citizen complaints.

As set forth in more detail below, the Department conducted a thorough review and evaluation of existing and proven BWV cameras and storage technologies, which included extensive research and field-testing. In addition, the Department strictly adhered to the City's well-established procurement processes, in close consultation with the Los Angeles City Attorney's Office, to utilize a fully compliant, competitive bidding process and to directly negotiate a deeply discounted contract for goods and services necessary to meet the Department's stringent requirements for an effective BWV program.

SECTION 1 – VENDOR SELECTION

I. Research, Testing and Evaluation of BWV Systems

The LAPD began researching BWV technology in 2010 as the logical extension of the Department's existing Digital In-Car Video (DICV) system currently deployed in Central, West, and South Bureaus. The Chief of Police directed the Department's Tactical Technology Section (TTS) to determine whether a proven secure, reliable, and easy-to-use BWV system was available to record important video evidence of investigative and enforcement contacts with members of the public.

After three years of researching the available technology, the Department identified two vendors with proven and existing BWV systems that could potentially serve the LAPD's large-scale needs. While there were many companies eager to test their new technology or develop new products for the LAPD, the Department chose to consider only vendors who had existing products and technology that had been deployed and tested in the field by police agencies. The Department did not wish to spend time and resources for newly developed, experimental or partially implemented products that did not have reliable track records or were not proven in the marketplace.

The primary vendors, Taser and Coban Technologies (Coban), had existing BWV products, viewing systems, video management software, and storage solutions that could be field-tested by Department personnel. In addition, both vendors had the capability to scale to the size needed for a large police agency. Moreover, the Department could examine both companies' performance records with other law enforcement agencies that were using their systems.

Taser provided a solution with two styles of cameras and a hosted/cloud storage and video management solution. The second solution, from Coban offered a camera manufactured by a third party (VieVu), with on premise storage and video management software similar to the LAPD's existing DICV system.¹

The LAPD conducted an extensive and comprehensive field test of these two solutions over a period of more than six months.

A. Testing and Evaluation of Taser BWV Systems

To begin the field test of the two BWV solutions, the Department requested volunteers from the Central Area Safer Cities Initiative (SCI). SCI officers were selected because of their foot beat assignments, and the frequent public contacts each day.

In January 2014, thirty SCI officers volunteered for the field test and began testing the Taser BWV solution. The volunteers each wore both of the cameras offered by Taser (See figs. 1 and 2) while on duty in the field, docked the cameras in Taser's Electronic Transfer Mechanism (ETM) (docking station) to download the video to Taser's Evidence.com storage solution and charge the camera, and accessed Evidence.com to review video as required by the draft policy that was published for purposes of the field test. At the end of the 90-day field test of the Taser solution, both models of cameras were collected from the SCI officers.



Figure 1: Axon Body



Figure 2: Axon Flex

¹ Coban is currently the primary vendor for the LAPD's in-car video equipment, software and storage solutions.

B. Testing and Evaluation of Coban and VieVu Cameras

In May 2014, the SCI officers began the 90-day field test of the Coban solution. Each officer wore the VieVu camera (See fig. 3), connected the camera to a computer on LAPD's Local Area Network (LAN) to download the video to the Department's on premise storage solution, and accessed the Coban video management software to review video as required by the pilot program policy. At the end of the 90-day field test of the Coban solution, the VieVu cameras were collected from the SCI officers.



Over the course of each of the two 90-day field tests, TTS staff interviewed the SCI officers every 30 days to receive feedback. The surveys were structured to first ask basic questions about the use of the particular solution being tested, and then progressively ask for more detailed feedback from the officers in regard to the solution and the related policy in the second and third survey.

Figure 3: VieVu L3

While the field tests were in progress, the Department (including representatives from the LAPD Employee Relations Group, Information Technology Bureau, Planning and Research Division, and the Office of Operations) held meetings with representatives from the Office of the Inspector General and the Los Angeles Police Protective League (LAPPL) to discuss the progress of the testing. During each of those meetings with the LAPPL, volunteers from the SCI attended to provide direct input to the group regarding the use and policy of BWV.

The input and feedback from those SCI officers was overwhelmingly positive. Officers explained that as they grew accustomed to the BWV device, they saw a variety of benefits of BWV. For example, officers indicated that once a person they had contact with understood the encounter was being recorded, it often de-escalated the situation. Officers also indicated that they appreciated that the video captured during an encounter had helped to clear an officer of false allegations made in a complaint against the officer.

C. Side-By-Side Technical Testing by LAPD

In addition to the field-testing conducted by SCI volunteers, officers from TTS conducted extensive, technical testing of the two solutions. During this effort, if the vendor claimed the system could perform a particular function (e.g., a battery life of 12 hours, a 30-second pre-event buffer, video and audio quality, etc.) that function was tested extensively. Both solutions were also tested side-by-side in similar conditions (e.g., low light conditions, on the move, etc.) to ensure an apples-to-apples comparison was performed.

D. Test Results

The following results and recommendations were determined through the technical testing conducted by TTS and the end-user feedback provided by the field officers who deployed the devices and used the supporting software. In addition, interviews were conducted with the individual vendors.

i. Taser Test Results

Pros of the Taser Solution

- Physical design
- Sealed device
- Ease of Use (camera and supporting computer based interface)
- Video quality (standard definition)
- Video Stability
- 30-second buffer
- Battery Life (exceeded 12 hours)
- Charge time (4 hours)
- Easy download of video from device via ETM
- Firmware, time synchronization, and software on cameras updated automatically via ETM
- Storage managed by Taser
- Scalability
- Mobile device for viewing and adding meta data
- Ease of use for system administrator
- Chain of custody
- System Security (in transit and at rest)
- Electronic sharing capability (based on roles and permissions)
- Web-based interface
- Audit/Reporting Documentation
- Product/software controlled by one vendor
- iOS and Android compatible
- Evidence.com also used to manage the Department's Taser x26 devices
- GPS option
- Programmable audible tone for activation and system status

Cons of the Taser Solution

- Initial individual enrollment process
- Administrative Dashboard usability
- Multiple password security for authentication
- Bluetooth connection issues with iOS devices

Cons specific to the Axon Flex

- Audio – still usable but could be improved since the microphone is mounted to the side of the camera
- Camera connected to the battery pack via cord
- Camera angle inconsistent when moving between mounting options
- Discomfort when utilizing eyeglass mount for prolonged use
- Eyeglass mount not compatible with most prescription eyewear

Cons specific to the Axon Body 1

- Audio – still usable but needs improvement when subject to wind noise
- Need to develop additional mounting options
- Size of device with bracket
- Lack of adjustable camera angle

ii. Coban/VieVu Test Results

Pros of the Coban/VieVu Solution

- Audio quality
- Same back office video management solution as in-car video
- Camera size
- Camera ease of use
- Battery life
- Hard drive size (16 GB)
- Charge time (3 hours)
- Training (compliments existing training developed for in-car video)
- Sealed Device
- Existing infrastructure and network design

Cons of the Coban/VieVu Solution

- Video quality (standard definition)
- Stability
- No pre-event capability
- Lack of adjustable camera angle
- Mounting clip (stability, durability, and screw head causing uniform damage)
- Accidental activations and deactivations
- Could not verify a true 1-to-1 transfer of original video (device to storage)
- Lack of viewing device (physical connection required)
- Video did not always upload
- No mass uploading/charging device (at time of testing)
- Back office end-user experience
- Need an LAPD computer to connect, login, and then download video
- On premise solution requires multiple City employees to maintain servers, switches, network connectivity, tape drives, firmware, software, operating systems, etc.
- Lack of reporting functionality
- Product/software controlled by different vendors

- Lack of GPS option
- No programmable audible tone for activation and system status

E. The LAPD Continued Its Market Analysis Beyond the Field Test

Each year, the International Association of Chiefs of Police (IACP) hosts its annual conference; the largest conference in the United States dedicated solely to law enforcement. The exhibit hall at IACP is host to every major (as well as a variety of smaller) vendor in the law enforcement market. Everything from vehicles to weapons to helicopters to every facet of technology is represented in the exhibit hall.

During the October 2014 IACP conference, just after the 2014 field test concluded, the LAPD TTS visited the vendors in the exhibit hall that offered body worn video cameras. After in-depth discussions with the various BWV vendors, it was clear that most offerings were in their early stages of design and development, and were relying on systems initially designed for other video platforms (i.e., in-car video, security cameras, etc.). In fact, after understanding the scope of the LAPD's efforts in regard to BWV, several of these BWV companies asked if they could send engineers to the LAPD to learn from the experience of the Department's research and testing, and better understand the needs of law enforcement.

F. The LAPD Recommended the Taser Solution to the Police Commission

Based on a comprehensive review and findings described above, the Department recommended the Axon Body solution from Taser to the Police Commissioners. It was clear from the market research, field test, and technical testing that, from a technical standpoint and from the field officer experience, the Axon Body best met the LAPD's operational needs. In addition, the Taser offering was designed and functioned as a single system, rather than requiring individual components (hardware/software) to be deployed together to form a system, and was hosted and maintained by the vendor. This reduced the technology risk to the Department as well as a reduced need for additional City technical staff to support the technology, servers and storage.

In November 2014, the Department recommended the selection of the BWV solution from Taser to the Police Commission. The Board approved the recommendation and requested that the Department proceed with the development of the policy regarding the use of BWV and the requisite meet and confer process with the LAPPL as quickly as possible.

i. The Taser Solution Meets the Security Requirements of the LAPD

Prior to recommending the Taser Solution to the Police Commission, the LAPD conducted a thorough security analysis of Taser's hosted storage/video management solution, Evidence.com, to ensure it would meet the security requirements of the LAPD. Security is of particular importance, as the Department had previously elected not to move its email operations and other technology to a cloud/hosted solution due to security concerns.²

The "gold standard" for security in a law enforcement setting is the FBI Criminal Justice Information Security (CJIS) standards. CJIS guidelines apply to all data that is derived from the FBI and US DOJ criminal history systems. While the BWV solution will not contain data derived from those systems, and, as such, compliance with CJIS is not required, the LAPD typically begins a security review as compared to CJIS requirements. In this instance, it has been determined that Evidence.com meets CJIS requirements.

Further, data stored in Evidence.com is not accessible to employees of Taser and remains the sole property of the LAPD. All maintenance and updates to the system are completed without access to encrypted video files.

In addition to complying with CJIS requirements, the Department's security review also found that Evidence.com security exceeds CJIS mandates. For example, Evidence.com is certified by the International Organization for Standardization in information security management (ISO 27001) and complies with the Cloud Security Alliance Cloud Controls Matrix (CSA CCM). Taser has implemented a robust vulnerability management program that exceeds CJIS requirements, including penetration tests and vulnerability scanning (four to six third-party penetration tests of Evidence.com per year and monthly internal vulnerability scans of Evidence.com infrastructure). Additionally, the encryption applied to the data goes beyond CJIS requirements, and Taser's advanced security monitoring and response go well beyond CJIS "logging" requirements. Taser has also implemented a dedicated Security Operations Center (SOC), and employs extensive risk management and internal audit practices to identify potential gaps, and ensure security requirements are consistently met.

An additional differentiator is that Evidence.com is both CJIS and ISO certified on both the application level and the infrastructure level. Taser has partnered with Microsoft to host Evidence.com on Microsoft's "Gov Cloud," a hosted environment built and maintained specifically for government customers. The Microsoft Gov Cloud is also separately CJIS compliant and ISO 27001 certified. In fact, Microsoft recently signed a CJIS Addendum with the California office of the U.S. Department of Justice. As such, not only is the Evidence.com software solution CJIS compliant, but so is the hosted hardware and third-party data center.

² In 2010-2011, the LAPD determined it could not move to Gmail as an email solution due to Google's inability to meet the US DOJ Criminal Justice Information Security guidelines.

Further, Evidence.com allows the LAPD to store and manage both the body camera's video and the X26P Conducted Electric Weapons in a single controlled system. This allows for greater control of the data and increased efficiency by training and investigative personnel.

II. SUCCESSFUL DEPLOYMENT OF BWV

In December 2014, the Los Angeles Police Foundation purchased 860 Axon Body cameras from Taser and donated them to the LAPD. Over the next several months, the Department engaged in the meet and confer process with the LAPPL; developed Department Notices, user guidelines, and training materials; and completed the infrastructure work at the stations that would receive the 860 cameras.

During this time, the LAPD worked extensively with staff from Taser on all aspects of the deployment, training, the configuration of Evidence.com and establishing file-sharing capabilities with the Office of the District Attorney and the Office of the City Attorney. This encrypted connection through Evidence.com allows detectives to securely transfer videos for filing. This was a significant improvement over the LAPD's existing in-car video system, which requires CD's to be created and delivered in-person to prosecutor offices across the City. During continued market research, the LAPD found no other body worn camera vendor that offered sharing, storage and licensing to prosecutors at no charge.

LAPD staff was given access to Taser developers, engineers and product specialists at all levels to ensure the LAPD's needs were being met. The LAPD personnel responsible for managing the project noted the professionalism and commitment of Taser personnel.

In August 2015, the LAPD began the deployment of the 860 cameras. The cameras were ultimately deployed in Mission, Newton, Central and Hollenbeck Areas.

As of March 11, 2016, the LAPD has collected 45,787 hours of video; an average of 237 hours of video per day. The LAPD has shared 1,448 hours of video with the City Attorney and 1,169 hours of video with the District Attorney for criminal case filings. Video has also been captured in four officer-involved shooting incidents and has significantly aided in those investigations.

Commanding officers who have experienced BWV deployments in their Divisions and officers who are currently utilizing body worn cameras have continued to provide feedback, indicating that the cameras often help to de-escalate tense situations in the field. Further, officers have noted that the use of the mobile device in conjunction with the camera has helped to reduce the amount of time officers must spend in the station at the end of their watch, as they can categorize and tag each video in the field as events occur (i.e., video is categorized by the action taken in the field (e.g., "misdemeanor arrest") and tagged with an incident number from the Computer-Aided Dispatch system).

Evidence.com also enables a secure cloud-based solution to provide access to video evidence to the District Attorney and City Attorney's officer for criminal prosecution and discovery obligations at no additional cost to the agency.

The initial deployment required dedicated personnel and resources from throughout the Department, ITA, GSD, Taser and Sprint.³ The implementation teams identified several “lessons learned” from the initial deployment. For example, the team learned that the time required to complete the infrastructure work for the installation of the docking stations could vary, depending on the age and configuration of a police station. Further, the train-the-trainer program and the officer training presentations were adjusted to address specific areas of the policy that generated a number of questions from officers during the initial deployment. These adjustments provided for greater efficiency and effectiveness as the program moved forward.

III. THE LAPD CONDUCTED ADDITIONAL MARKET ANALYSES IN 2015

A. Development of Minimum Required Specifications

Based on the findings from the 2014 field test and the experience of preparing for the initial deployment of the cameras donated by the Police Foundation, the LAPD developed the following minimum specifications for its BWV system:

- Device must have a pre-event buffer that captures video only (no audio) for a minimum of 30 seconds.
- Device battery life must reach a minimum of 12 hours with no additional charging or external connections based on the following settings:
 - Standard Definition
 - 30 Second Pre-Event Buffer
 - 30 Frames Per Second
 - 3 Hours of Captured Video
- System must include an iOS and android mobile app that allows officers to capture video, photos, audio, and metadata. App must also upload directly to a hosted video management solution
- Ability to upload photos, video and audio from a Mobile Data Computer (MDC)
- Ability for the video management system to manage audio, video, images and digital documents
- Ability to provide data security without a VPN connection
- All data must have AES-256 Encryption in transit and during storage (at rest)
- All video must have data hashing (SHA1) or equivalent on the device to validate one-to-one transfers
- A mechanism to share with the DA, City Attorney, Public Defender or other offices without burning DVDs
- Secure Audit log to track all changes and access to each file for security and chain-of-custody purposes

³ Sprint donated 860 mobile viewing devices to the Police Foundation, as well as 12 months of voice/data.

- Ability to access the system from an internet-connected browser
- Secure login for each user with multi-factor authentication
- Remote viewing of stored video must be available for field personnel via web-based interface
- Must be compatible with Win7, IE8 and IE9 and IE10
- The system shall provide a log showing which users have accessed, viewed and/or copied video to an external source, e.g. CD/DVD, local storage, USB device, or other storage device. The log must also show users that have edited or deleted videos
- The storage solution must allow the System Administrator the ability to control the length of retention of individual case videos
- The System Administrator must be able to set and control user rights, and must be able to determine which users have which rights
- The vendor must have live customer support available
- All updates to software must be available to the City at no additional charge
- The storage solution must have the ability to upload and download digital evidence from multiple users simultaneously
- Digital evidence must not be in a proprietary file format
- System must support the following image formats: JPEG, JPG, GIF, PNG, BMP, TIFF, TIF
- System must support the following video formats: DIVX, TS, 3GP, ASF, AVI, FLV, MOV, MP4, RM, VOB, WMV, F4V, MPEG, MPG
- System must support the following audio format: MP3
- The video must be exported in an industry standard file format: MP4
- Storage must be in compliance with the Federal Information Security Management Act (FISMA)
- Storage must be ISO 27001/27002 certified

B. Supplemental Market Research and Analysis

After the minimum system specifications were developed, TTS conducted an additional market analysis to determine if any other BWV vendor should be considered for deployment, or if the Axon Body would remain the recommended vendor for future deployments. Additionally, during the most recent IACP conference in October 2015, the TTS again visited the BWV vendors in the exhibit hall to understand what progress each vendor had made since the LAPD's 2014 review of the market.

Various additional vendors were evaluated through publicly available data, during previously mentioned trade shows, or through direct agency-to-agency contacts to see if any of the solutions would meet the LAPD's operational and functional needs.

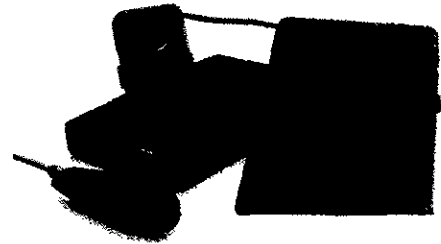
In addition, the LAPD considered if the recording devices/system complied with Rule 1001(2) of the Federal Rules of Evidence, which establishes seven criteria to determine the admissibility of video evidence. Of the seven criteria, there are five that are dependent on the ease of use, quality, reliability, security and integrity of the device, and the software and management system where the recordings are stored. These five criteria are as follows:

1. The recording device was capable of recording the activity;
2. The recording is authentic and correct;
3. No changes, additions, or deletions have been made to the recording;
4. The recording has been preserved in the manner shown to the court;
5. The operator was competent to operate the recording device.

While many new vendors entered the body worn camera market after the Ferguson, Missouri incident in August 2014, the majority of those solutions did not meet the LAPD's operational needs and minimum system specifications. Further, the LAPD cannot afford to be the guinea pig for solutions that have not been proven in the law enforcement field, and, in particular, proven in a large-scale deployment. The following explains how a variety of other products did not meet the needs of the LAPD.

Digital Ally:

- Does not achieve a minimum of 12 hours.
- Device has a small record activation button.
- The "FirstVu HD One" model and the "FirstVu HD" model use a wire connector from the camera to the storage/battery pack.



Panasonic:

- Video format on the device is not an open standard, making it proprietary to Panasonic. This would require specialized software to view both within the LAPD and outside the organization during discovery or court proceedings.
- The device requires an additional battery pack to be connected in a daisy chain fashion to achieve a minimum of 12 hours.



Reveal:

- Does not achieve a minimum of 12 hours with standard battery.
- Does not have a pre-event record feature that would allow for capturing of video prior to officer manually activating the record button.
- The rotating lens would create an inconsistent view angle based on positioning of the lens.



Utility:

- Video format on the device is not an open standard, making it proprietary to Utility. This would require specialized software to view both within the LAPD and outside the organization during discovery or court proceedings.

- Battery life is less than 12 hours.
- Recommended mounting would require the LAPD to replace its uniform shirts, jackets, raingear and traffic safety vests to accommodate placement of the camera/phone.
- To realize all features of the device, the LAPD would need to purchase and install an additional product called the Rocket that would be mounted in every vehicle. Additional costs would be required both for the Rocket device, and for a re-imaging of the LAPD mobile data computers (MDCs). Resources from the LAPD Motor Transport Division and Information Technology Agency Radio Unit would also be required to test and install the Rocket/MDC configuration.
- This solution is new to market (late 2014) and to date has not been deployed on a large-scale.
- The product is not sufficient for the LAPD's "connected officer" program. The Utility device uses the camera on the smartphone to capture video. An officer would need to remove the device from a pouch in their uniform to access mobile applications (e.g., completing an electronic field interview card or accessing criminal history data), disrupting the ability to continue recording the officer's encounter with the member of the public.



WatchGuard:

- Based on an on-premise storage solution. This would require the LAPD to house all necessary servers and storage and hire staff to support the system, and update the operating systems and hardware throughout the life of the system.
- Requires an additional offering called "WatchGuard Cloud-Share" to allow for the sharing of data through web-based service.
- Device has a small record activation button.



Wolfcom:

- Device requires additional battery packs to be connected in a daisy chain fashion to achieve a minimum of 12 hours.
- The video captured does not generate a hash tag (SHA1) on the device. The hashing occurs after upload and video is only protected by an optional password setting.
- The device has a small record activation button.



Given the size of the LAPD (10,000 sworn), and the complexity of policing in a city as expansive as Los Angeles, at the conclusion of the 2015 market analysis, the LAPD determined that Taser still provided the solution that best met LAPD's requirements.

IV. THE BWV PROCUREMENT WAS PURSUANT TO THE CITY CHARTER AND THE MOST COMPETITIVE PRICING WAS OBTAINED BY THE LAPD

A. Kern County Issued a Competitive Request for Bids with Required System Specifications Substantially Similar to Those of the LAPD

Los Angeles City Charter Section 371(e)(8) provides for an exception to the City's competitive bidding requirements where there are:

Contracts for cooperative arrangement with other governmental agencies for the utilization of the purchasing contracts and professional, scientific, expert or technical services contracts of those agencies and any implementing agreements, even though the contracts and implementing agreements were not entered into through a competitive bid process.

The utilization of this process is often referred to as a "piggyback" on another government agency's procurement or contract. Although this process is authorized even where those agreements "were not entered into through a competitive bid process," the LAPD typically prefers to piggyback where the other agency selected a vendor through a competitive bidding process to ensure a thorough evaluation of the available solutions.

When the Fiscal Year (FY) 2015-2016 LA City budget was approved at the end of FY 2014-2015, and \$4.55 M was allocated in the Unappropriated Balance for body worn cameras, the LAPD began researching the universe of contracts and competitive evaluations for body cameras in place or in progress across the country. While numerous agencies across the country had entered into a purchasing contract for body cameras with Taser (e.g., Rialto, CA and San Diego, CA), Kern County, California had issued a competitive Request for Bids with required system specifications that were substantially similar to those of the LAPD. As such, the LAPD decided to monitor the competitive bid process over the summer, while proceeding with the initial deployment of the 860 donated cameras.

In approximately August 2015, Kern County selected Taser as a result of the competitive bid process and in September 2015, Kern County entered into a pricing agreement with Taser. Kern County's selection of Taser, based on system specifications substantially similar to that of the LAPD, solidified the Department's initial finding/recommendation that the Taser solution best met the needs of the LAPD.⁴ As such, the LAPD requested approval from the City Attorney to utilize the Kern County procurement, pursuant to Charter Section 371(e)(8) as described above.

⁴ An increasing number of large agencies nationally and internationally have all reached the same conclusion. Baltimore (2,500 cameras), Cleveland (1000 +), San Antonio (2200), San Diego (1000 +), Chicago (2000 +), Las Vegas (1400), San Francisco (1800). and London Metropolitan (22,000), have selected Taser for their BWV systems.

Other vendors have recently asserted that they might have bid on the Kern County business if they had known there was also potential for LAPD business. It is unclear how this would be possible, given that the majority of other vendors did not meet the requirements set forth by the LAPD and Kern County, and therefore, would not have qualified to submit a bid.

In addition, other vendors have questioned whether utilizing another agency's procurement process is somehow unfair if the other agency is substantially smaller in size than the LAPD. This does not hold true, however, as the utilization of another agency's process is not based on the volume being the same or similar. It is based upon the system specifications being substantially similar. In fact, the larger volume purchase by the LAPD provides a substantial benefit to the City, in that the LAPD is able to negotiate significantly lower pricing based on volume discounts.

B. The LAPD Negotiated More Favorable Pricing than Kern County

While the LAPD could have utilized the pricing specified in the Kern County agreement, the Department instead chose to negotiate more favorable pricing, based on the volume of cameras that would be purchased by the LAPD. Ultimately, the Department was able to negotiate the following discounts from the Kern County prices:

- Cameras: 75% off
- Storage/Licensing/Support: 25% off
- Docking Stations: 100% off

Further, if the LAPD had released its own request for bids/proposals (RFP), it is likely that the solution would have been secured at a higher price than was ultimately negotiated in the proposed contract. In a City RFP, the evaluation criteria typically include: how the proposed solution meets the required specifications, the experience and references of the vendor, and the proposed pricing. After an award is made, pricing reductions are minimal, as the pricing that was utilized as part of the scoring/selection criteria typically stands.

In this instance, Taser would have likely offered the LAPD the same pricing it offered to the Police Foundation for the purchase of the 860 donated cameras, which was significantly greater than the pricing ultimately negotiated by the LAPD.

The following chart depicts the pricing in the Kern County agreement, the pricing offered to the Police Foundation, and the pricing in the proposed LAPD contract.

Equipment	Kern County	Police Foundation	LAPD
Camera	\$399	\$190	\$99
Storage/Licensing/Support	\$99/month	\$85/month	\$74/month
Docking Stations	\$1,485	\$598	\$0 (\$1.5 M savings)
Additional Benefits			140 Terabytes additional storage; Dedicated onsite support throughout camera deployment; Upgrades of the body cameras in year 2 ½ and 5 of the contract; Guaranteed migration of the video data to another data storage solution at no cost; Computer-Aided Dispatch (CAD) integration; 4,400 X26P Conducted Electric Weapons

In addition to the significant pricing discounts, the proposed contract with Taser includes a "Most Favored Nations" clause, which requires that should Taser offer better pricing to another agency, it must offer that same pricing to the LAPD. Furthermore, the proposed contract includes a "Termination for Convenience" clause, which allows the City to cancel the contract for any reason, without cause, upon 30-days written notice.

Accordingly, the Department recommends that the Council approve the 5-year contract with Taser for the BWV system.

SECTION 2 – STAFFING PLAN (BWV and DICV)

The resource requirements discussed herein address the staffing needs created by the deployment and support of both BWV and Digital In-Car Video (DICV) Department wide. Currently, DICV is deployed in Operations South Bureau and Central Bureau, and the Operations West Bureau deployment is nearly complete. The Operations Valley Bureau deployment will begin this summer and be completed by the end of 2016.

I. Benefits of Body Worn Video; Reduced Liability

The benefits of camera programs have been recognized nationally and internationally. In the first two years (2010/2011) of the DICV deployment in LAPD's Operations South Bureau, where video was captured pertaining to a complaint against an officer, 94 percent of the allegations were adjudicated as "unfounded" or "no misconduct." In previous years, only 54 percent of allegations against LAPD officers were adjudicated as "unfounded" or "no misconduct" (See *Annual Complaint Report for 2008* available online at http://assets.lapdonline.org/assets/pdf/2008_ACR_Final.pdf). That 40 percent difference would have typically been adjudicated as "not resolved" (i.e., "he said", "she said"). Thus, 40 percent more complaints were less likely to result in liability to the City as a result of the video.

Over the past few years, a large number of studies have been published (and are on-going), that recognize significant benefits to law enforcement agencies that have deployed cameras, including reductions in liability.

Since 2014, at least six studies of the use of body worn cameras have been completed. In addition, 14 more evaluations are underway, all of which are examining the impact of BWV on use of force and civilian complaints and other police behavior (Lum et al, 2015).

The first, and most referenced study is from the Rialto, CA Police Department (RPD) published in 2014 (Farrar, et al. 2014). The study focused on the impact of 54 field officers wearing body worn cameras over a 12-month period. The officers were randomly assigned by shift to either wear (i.e. treatment) or not wear (i.e. control) the BWV on a weekly basis. Over the course of the study period, 489 treatment shifts and 499 control shifts were observed.

The RPD report identified that for the 54 officers subject to the study:

- Citizen complaints dropped by 88%, from 28 complaints in the year prior to just 3 complaints during implementation.
- Uses of Force declined by 60%, from 61 incidents before implementation to 25 incidents during the implementation period.
- Control shifts saw double the number of use of force incidents than the treatment shifts saw during the same period.

- The cameras did not have an adverse impact on the frequency of police-public contacts. The RPD recorded 40,111 police/public contacts in the year prior to implementation, and 43,285 during the year of implementation.

In February 2015, a study of the Phoenix, AZ Police Department focused on the impact of 56 officers wearing body worn cameras in one precinct (i.e. treatment) and a control group without cameras (Katz et al 2015). Researchers specifically reviewed officer productivity, complaints against officers, and domestic violence cases.

The Phoenix report identified that for the 56 officers subject to the study:

- Arrests increased by approximately 17% among the treatment group, versus 9% in the comparison group.
- Complaints against officers who wore the cameras declined by 23%, compared to a 10.6% increase among comparison officers, and a 45.1% increase among patrol officers in other precincts.
- Officers who wore a camera and received a complaint were significantly less likely to have the complaint sustained than the comparison group and other officers in the department.
- Additionally, the review of the impact of BWV on domestic violence case processing found that cases were significantly more likely to be initiated, result in charges filed, and result in a guilty plea or guilty verdict. The analysis also determined that cases were completed more quickly following the implementation of body worn cameras. Prior to the use of the cameras, domestic violence cases took about 96 days to process. After the cameras were put into use, the process took 78 days.

Four other studies (Mesa, AZ, Orlando, FL, San Diego, CA, and London) showed that BWV reduced the number of use of force incidents and the number of civilian complaints. In addition, the studies show that BWV leads to improvements in evidence collection and report writing (Orlando); that officers wearing cameras were less likely to have complaints sustained against them (Phoenix), and that officers were more polite while using the camera (Rialto).

The following table provides a summary of findings from the six studies that have been completed to date (*see* Table 1).

Table 1. Results of Research Studies Since 2014 by Jurisdiction

Jurisdiction with a Research Report	Impact of BWV on Use of Force	Impact of BWV on Civilian Complaints	Impact of BWV on Investigations	Impact of BWV on Officer Productivity	Other Findings
Mesa, AZ	Significant decrease	Significant decrease	Not studied	No effect on arrests	Officers w/cameras made more traffic stops and issued more tickets
Orlando, FL	Significant decrease	Significant decrease	Not studied	Not studied	Improvements in evidence collection and report writing
Phoenix, AZ	No findings reported	Significant decrease and complaints less likely to be sustained	DV cases resolved faster as a result of the presence of cameras (number of days decreased)	Significant increase in arrests	Officers who received a complaint while wearing a camera were less likely to have the complaint sustained
Rialto, CA	Significant decrease	Significant decrease	Not studied	No adverse effect on police-citizen encounters	Officers more polite when cameras were on
San Diego, CA	Decrease	Decrease	Not studied	Not studied	Use of pepper spray decreased
London, UK	Decrease	Decrease	Not studied	No effect on arrests	No impact on the number or type of stops and searches

Another positive impact on liability is the potential reduction of claims and lawsuits against the City. This outcome is difficult to measure; however, as it is not possible to determine how many claims or lawsuits are not filed as a result of a potential claimant knowing that video exists (i.e., effectively proving a negative). That said, one could extrapolate that some of those instances where a personnel complaint against an officer is adjudicated as unfounded as a result of video evidence, may have ultimately led to a claim or lawsuit against the City, if not for the video. Video evidence will also be available to determine what occurred during a use of force and be helpful in making liability and risk assessments.

II. The Scope/Volume of the LAPD Deployment is Significant

The large size and scope of the Department's BWV and DICV programs will require personnel resources to properly implement, maintain, and use in order to meet the program's important objectives.

The following depicts the scope of the DICV deployment:

- Operations South-Bureau: 300 vehicles (September 2010)
- Operations Central-Bureau: 381 vehicles (May 2015)
- Operations West-Bureau: 366 vehicles (January-May 2016)
- Operations Valley-Bureau: 477 vehicles (complete by December 2016)
- Metropolitan Division: 200 vehicles (2017)

The following are totals as of January 7, 2016 for DICV as currently deployed in South and Central Bureaus:

- Total Number of Videos Created: 1,705,817
- Total Size of Videos: 354 Terabytes
- Total Hours of Video Captured: 335,568
- Average Number of Videos Created Per Month: 46,380
- Average Uploaded Per Day: 1,547

The following are totals as of March 11, 2016 for the body worn cameras deployed in four LAPD Divisions between August and December 2015:

- Total Number of Videos Created: 254,853
- Total Size of Videos: 34 Terabytes
- Uploaded Per Day: 1,314
- Hours Uploaded Per Day: 237
- GB of Video Uploaded Per Day: 178
- Videos Shared with District Attorney's Office: 4,273
- Videos Shared with City Attorney's Office: 5,146

III. At Least 10 Separate Categories of Review Occur at the LAPD

The LAPD has implemented DICV and is proceeding with the deployment of BWV to promote accountability throughout the Department and improve public trust with the community. To achieve these goals, it is not enough to simply capture the video; rather, the video must be reviewed. Video reviews fall into a number of categories, including:

1. Review of video in the preparation of crime and arrest reports by field officers
2. Review of video by detectives in packaging of cases for submission to the City Attorney and District Attorney
3. Inspections for compliance with BWV use policy
4. Investigations of uses of force
5. Investigations of complaints against officers
6. Investigations of vehicle pursuits
7. Investigations of traffic collisions
8. Reviews of all of the above by the Office of the Inspector General
9. Audits of all of the above by Audit Division
10. Support of all of the above by Department subject matter experts

The Department-wide deployment of DICV and BWV deployments present new challenges for the LAPD. Combining both technologies at the scale required to support a 10,000 officer agency will fundamentally change how the organization conducts investigations, includes or excludes individuals associated with a crime, prepares cases for filing, and meets the expectations of the community in terms of accountability and through evidence in criminal proceedings. These efforts must be supported by civilians and officers who can serve as subject matter experts in administrative and criminal investigations, administrative hearings, and in civil and criminal court proceedings to testify regarding the technology, the policy and the operational circumstances captured on video.

A. LAPD Investigations are Detailed and Complex

One traffic stop alone can trigger a number of detailed and complicated investigations across the LAPD, all of which will require the review of related video. The following is an example of how these various video reviews might come into play and intersect:

Two officers on patrol witness a vehicle run a red light. The officers activate the light bar on their vehicle to make the traffic stop and cite the driver of the vehicle (i.e., suspect). Upon activation of the light bar, the DICV system begins recording, and the DICV 60-second pre-event buffer captures the footage of the suspect running the red light. The officers also activate their body worn cameras. The BWV 30-second pre-event buffer may also capture the footage of the suspect running the red light, depending upon the height/build of the officer.

The suspect fails to respond to the officers' direction to pull over, and attempts to evade the officers. A vehicle pursuit ensues. The two officers (i.e., "primary unit")

communicate over the radio that they are in vehicle pursuit of a suspect. This communication triggers the dispatch of a second patrol unit comprised of two officers (i.e., "secondary unit") and a supervisor unit comprised of one sergeant. The two officers in the secondary unit and the sergeant in the supervisor unit activate their DICV cameras and their body cameras.

Ultimately, the pursuit ends in a traffic collision, wherein the suspect runs his car into the curb and a streetlight. The suspect exits his vehicle and points a gun at the officers in pursuit. An officer-involved-shooting (OIS) occurs. One of the officers broadcasts "shots fired" over the radio, prompting the dispatch of additional units, all of which activate DICV and body cameras, per Department policy.

As the pursuit is coming to an end, a third-party driving down the street inadvertently pulls in front of the secondary patrol unit, causing the patrol vehicle to collide with a parked car on the side of the road.

Out of this incident the following investigations occur:

1. Force Investigation Division (FID) conducts three separate investigations with three separate teams.
 - a. Administrative investigation to brief the Chief of Police, to identify any immediate training needs for any of the officers involved, and ultimately, to determine whether the OIS was within Department policy.
 - b. Criminal investigation as to whether any of the officers' actions were criminal in nature.
 - c. Criminal investigation into the crimes committed by the suspect for filing with the City Attorney or District Attorney.
2. Pursuit Review Section conducts an investigation into whether the tactics employed during the vehicle pursuit were within Department policy, and to identify any opportunities for additional officer training.
3. Traffic Investigation Section conducts an investigation as to whether the collision that occurred wherein the secondary unit collided with a parked vehicle was preventable or non-preventable.
4. Use of Force Review Division conducts a review of the FID administrative investigation to determine which involved officers will receive findings for tactics, drawing and exhibiting their firearm, lethal use of force, as well as command and control.
5. Internal Affairs Group conducts a complaint investigation into any "out of policy" findings from the investigations described above to determine any disciplinary action against the involved officer(s).
 - This may also be split into two investigations and be conducted by two separate teams: criminal and administrative.
6. Internal Affairs Group oversees a Board of Rights administrative hearing of any of the officers subject to a complaint investigation who either elect to have a hearing, or are ordered to a hearing by virtue of their recommended penalty by the Chief of Police.

7. The Office of the Inspector General conducts reviews of all of the investigations described above.
8. The Tactical Technology Section supports all of the investigations described above by serving as subject matter experts in the training, deployment and use policy for DICV and BWV. These subject matter experts will also provide testimony in all administrative, civil and criminal proceedings.

The chart on the following page depicts the responsibilities of each Department entity involved in various investigations, audits and inspections.

Department Responsibilities for Investigations, Audits and Inspections

Dept. Entity	Equipment Inspections	Policy Inspections	Audits	Pursuits	Traffic Collisions				
Geographic Division	X	X		X		X		X	X
Geographic Bureau	X	X	X	X		X	X	X	X
Force Investigation Division							X		X
UOF Review Division						X	X		
Internal Affairs Group								X	X
Pursuit Review Section				X					
Traffic Investigation Section					X				
Audit Division		X	X						
Office of the Inspector General	X	X	X	X	X	X	X	X	X
Tactical Technology Section	X	X	X	X	X	X	X	X	X

B. The Workload of LAPD Investigators is Voluminous

The LAPD conducts a substantial number of investigations annually. The following depicts the totals for investigations in 2015 for the LAPD:

- 48 Officer Involved Shootings (OIS)
- 51 Other Categorical Uses of Force (non-OIS)
- 1,825 Non-Categorical Uses of Force
- 593 Traffic Collisions
- 514 Vehicle Pursuits
- 3,446 Personnel Complaints

Non-Categorical use of force investigations occur on a regular basis in every Division, as the types of force included range from a “complained of” injury to overcoming resistance by a suspect during an arrest or detention, to use of a less-lethal control device. While Categorical uses of force do occur less frequently, due to their more serious nature, they are more complicated and require a much deeper investigation.

The investigation and analysis required for the type of incident described in the exemplar above require a substantial investment of time and resources on the part of the Department. For example, a recent pursuit that resulted in an OIS at two separate points in the pursuit, involved nine vehicles and 17 officers. The total incident lasted about one hour and thirty minutes. The involved officers had not yet received body worn cameras, but each of the nine vehicles was equipped with DICV. Across its three simultaneous investigations (administrative, criminal and prosecution of the suspect), FID investigators spent approximately 100 hours reviewing video. If each of the officers had been wearing a body worn camera, the time for video review required by FID alone would have totaled more than twice that.

FID, the Office of the Inspector General, and Internal Affairs Group all place staff on-call during off hours and escalate responses based on the size and complexity of the incident being investigated.

The image on the following page is an example of a timeline analysis of two vehicles involved in a pursuit, derived from the metadata from each of the involved DICV systems. The analysis is completed by subject matter experts and is specific to each of the entities responsible for their portion of the investigation. For instance, FID may be establishing a sequence of events based on the arrival of the vehicles at the scene of the incident.

DICV Patrol Units:

- Identify Involved Units
- At Scene
- Post Event
- Review Video for all units
- Standard Pursuit:

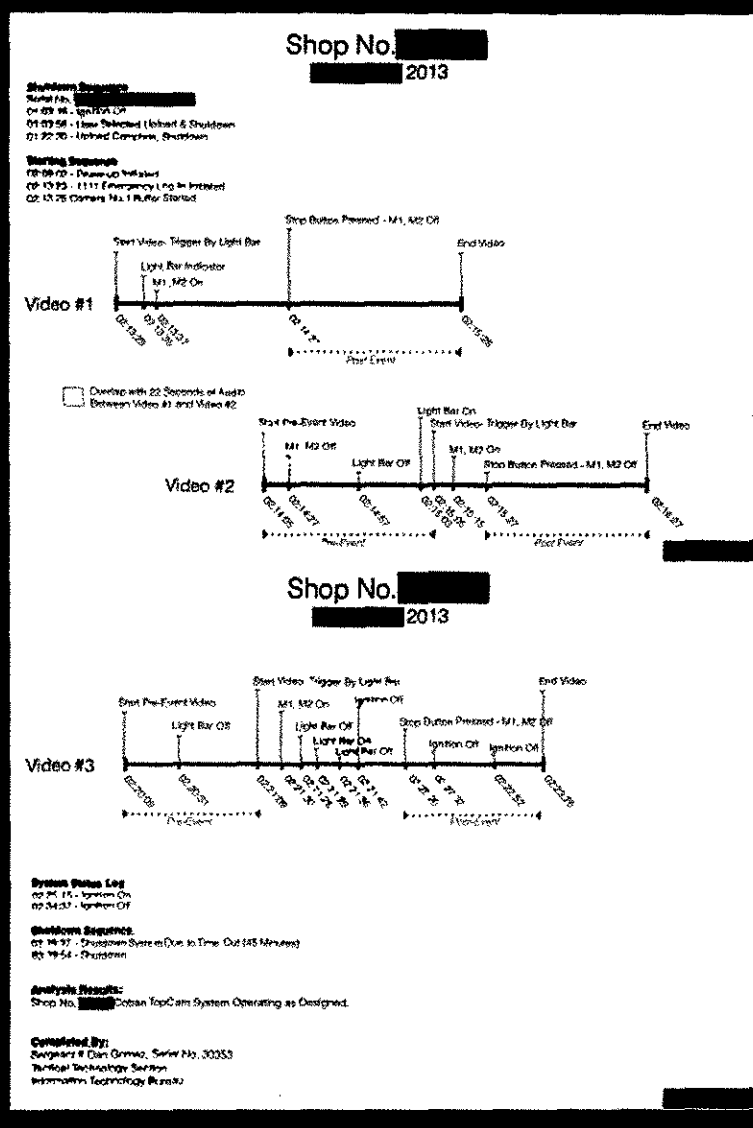
Primary Unit = 3 cameras

Secondary Unit = 3 Cameras

Supervisor Unit = 2 Cameras

Total: 8 Videos & Audio

- Retrieve Metadata logs from Server
- Review material from the appropriate investigative section (FID, OIG, PSB)
- Determine cause & attempt to recreate
- Submit Findings
- Present as Required



IV. Regular Audits and Inspections Must Be Conducted to Ensure Proper Use of the Cameras

The investigative duties described above must be performed primarily by sworn employees with the training, expertise and experience to understand the tactics and actions performed by officers as depicted in each video. There are other types of video inspections and audits, however, that may be performed by civilian auditors or sworn individuals who are either on restricted duty or are retired Reserve officers.

For example, in addition to the detailed investigations into a use of force, pursuit, collision or personnel complaint, regular video inspections of video involving routine traffic and pedestrian stops must be conducted by each LAPD Division to ensure officers are complying with the Department use policy for DICV and BWV. These inspections include a review to verify officers are activating their camera as required, deactivating their camera only after a public contact/incident has concluded, and are not recording activities they are prohibited from recording by policy.

To date, the divisions in Operations South-Bureau have been rotating in existing sworn staff to review an average 8,820 in-car videos per LAPD Deployment Period (28 days) to ensure compliance with the DICV use policy. These numbers do not include any BWV review. Those who serve in this function are also tasked with obtaining copies of videos (DVDs) from downtown Property Division for discovery/court, vehicle equipment inspections, and administrative investigations handled at the Divisional level. Body worn camera footage is being captured at a larger volume per Division and will quickly overwhelm the ability of non-dedicated staff to inspect both DICV and BWV for policy compliance.

V. The LAPD is Utilizing Civilians and Existing Position Authorities Wherever Possible

Civilian staff can be used in collecting and viewing the appropriate data for inspections and audits. For example, the LAPD Internal Audits and Inspections Division and the Office of the Inspector General both utilize civilian employees. Sworn staff, however, is required for the final analysis of the data for compliance with the policy, as the review does not only consider whether the camera is "on" or "off." This type of review also looks at officer tactics, training and conduct. As such, the field experience and tactical training of a sworn employee is required.

That said, the Department uses existing resources to the best of its ability including restricted duty personnel who are temporarily unable to perform the full duties of a police officer in compliance with City and Department Return to Work policies. Further, given

that the LAPD currently possesses vacancies in the ranks of Police Officer II, Police Officer III and Detective II, new position authorities are not being requested for those positions.

New position authorities must be requested at the Sergeant rank, however, as existing vacancies for those positions are currently in patrol divisions, and the LAPD does not wish to take resources from patrol to support BWV or DICV.

As such, while the following chart depicts the number of staff the LAPD expects to assign to them in Fiscal Year 2016-2017, it should not be interpreted as a request for additional funding or position authorities at this time. The Department will work with the CAO through the FY '16-'17 budget process to determine actual budgetary needs.

STAFFING PLAN – FY 16-17

Division	Job Functions	PO II	PO III	SGT. I	SGT. II	DET. II	MAIL	POLICE PER. AUDITOR I	POLICE PER. AUDITOR II	SP. INV. UNIT	POLICE SPECIAL INVEST.	TRAINING	INTELLIGENCE	COMM. PERSONNEL	NON-POLICE PERSONNEL	TOTAL PERSONNEL REQUESTED
Geographic Divisions	Division Coordinators, Level 1 support, regular inspections of policy compliance				21			42				21			42	63
Force Invest. Division	Review of all Categorical Uses of Force (Officer Involved Shootings, In Custody Deaths, etc.)	2	1		1	6				1		10			1	2
Use of Force Review Division	Final review of all uses of force (categorical and non-categorical)		3	1	1	2						7			0	2
Internal Affairs Group	Personnel complaint investigations, investigations of out of policy use of force, Board of Rights hearings				7	4						11			0	7
Pursuit Review Unit	Review of all vehicle pursuits		2									2			0	0
Office of Inspector General	Department oversight								2		1	0			3	3
Audit Division	Department audits							3				0			3	3
Discovery Unit	Review, redact and produce video for Court/Litigation						1			1		0			2	2
Tactical Technology Section	Subject Matter Experts, Level 2 support, onsite support at OIS's, courtroom testimony, assistance in use of force and personnel investigations, reviewing inspection and audit findings	2	3		1							6			0	1
Totals												57			51	108

PO II and PO III - No additional salary or position authorities being requested

Sgt I and Sgt II - Requesting salary and position authorities (existing vacancies are in patrol)

Det II - Requesting salary only. Will use existing vacancies

Civilian positions - Requesting salary and position authorities

VI. Federal Funding for BWV Program

There is significant federal grant funding that the City may lose if the program does not move forward. The City has been awarded \$1 million by the U.S. DOJ Bureau of Justice Assistance for the purchase of body worn cameras. This grant requires a 50% match. The acceptance of this grant is still pending in conjunction with this Council File and the approval of the requested funding and proposed agreement with Taser.

The City, through the Los Angeles Police Foundation, has also been awarded \$2 million by the U.S. DOJ National Institute of Justice for the evaluation of the impact of BWV on the LAPD and the community it serves. The nation is watching this evaluation closely, and awaiting the results from what will be the largest deployment in the U.S. to date.

CONCLUSION

The LAPD and the City of Los Angeles leads the nation in the effort to use BWV to increase accountability for both the officers and the public. The expectation of the community is that video is readily available for almost every interaction and most importantly, that video is available as evidence for prosecutions and incidents where force is used. Delaying this proposed agreement could adversely affect prosecutions and limit the ability of the LAPD to resolve complaints against officers and close the gap in critical investigations.

Taser was selected after a careful and thorough evaluation that complied with the City's procurement process and federal procurement guidelines. The LAPD negotiated significant cost savings with Taser, and the City may terminate the proposed agreement, without cause, upon 30 days written notice.

The LAPD has developed a staffing plan that utilizes civilians for approximately half of the necessary resources. Without the appropriate staff to review video, ensure compliance with Department policy and conduct investigations, the LAPD will be unable to uphold its commitment to implementing the video in a manner that builds trust with the community.