In-Car & Body Worn Camera Project

Vermont State Police

2019

Phase I (2015 – 2017)

- VSP internal committee established to research funding & product options. Body Worn Camera options.

- Implemented in-car camera replacement for 216 cruisers with the Watchguard 4RE system.

- 5 additional cameras for emergency replacement.

Phase I (2015 – 2017, cont.)

- $1.2 million of one-time funding from VT.

- $500,000 federal funding from NHTSA.

- Worked with outside consultant to develop project management and timeline.

- Addition of an in-car camera for the Tactical Services Unit's response vehicle.

- 25 body-worn cameras for Tactical Services Unit members to be used during tactical operations.

- Phase I implementation completed by June 2018.

Phase I (Lessons Learned)

- Manual entry and physical storage of the video is time consuming and physically demanding.

- **We have twice experienced video storage failures that required complete system back-ups. Each back-up took several days to complete.**

- There are continued on-going costs not associated with the warranty (lost & damaged microphones, storage towers.)

Phase II: Introduction:

The project team has made the following determinations:

1. Cloud-based mobile video storage will greatly reduce the amount of time currently dedicated to this endeavor by Troopers and administrative staff.

2. Upgrading individual barracks' wireless infrastructure is a costly and multi-agency undertaking.

3. Using cellular data for wireless upload is the more economical option, despite cellular coverage being a concern in many areas of the state.

Wireless Upload: (Same process and cost regardless of cloud option chosen)

- Each cruiser will have the ability to upload the electronic data to the cloud-based storage via cellular signal.

- Requires one-time purchase of Cradlepoint hardware for each cruiser.

- Verizon and AT&T (FirstNet) have both confirmed they will not throttle VSP's data if the mobile video is uploaded. VSP currently has an unlimited data plan.
  - *Throttling is the intentional slowing or speeding of an cellular service. It is a reactive measure employed in communication networks to regulate network traffic and minimize bandwidth congestion.*

Cloud-Based Storage Options:

The project team identified the following as the most feasible cloud-based storage options:

1. Watchguard Evidencelibrary.com hosted cloud solution

2. Hybrid Watchguard/Hyland Sharebase solution

Option #1 – Watchguard Hosted

WatchGuard / Evidence Library Cloud

VSP Cruiser w/ WatchGuard Dash Cam & Antenna — Cradle Point — Cell Tower — **WATCH GUARD** — Document Repository — S.A. — S.A. Makes Copy for Courts

Option #2 – Hybrid of Watchguard / Hyland Sharebase

CAR CELLULAR WATCHGUARD / SHAREBASE

VSP Cruiser w/ WatchGuard Dash Cam & Antenna — Cradle Point — Cell Tower — **WATCH GUARD** — ShareBase (CJIIS Compliant) — S.A. — S.A. Makes Copy for Courts

Option #1 (Watchguard Hosted): Pro's & Con's

<u>Pro's:</u>

- A "plug & play" solution designed to work seamlessly with existing Watchguard in-car hardware with proven results.

<u>Con's:</u>

- Proprietary solution, which silos mobile video data in one location.
- While a subscription allows for unlimited storage during the entirety of the retention period, video that will need to be stored permanently or more than an estimated 10 years will need to be stored somewhere outside of Evidencelibrary.com (Watchguard's storage system).
- More expensive annually and over a 5-year period.
- Have to pay Watchguard to convert existing video data.

Option #2 (Watchguard / Hyland Sharebase): Pro's

Pro's:

- Sharebase solution would allow unlimited and long-term storage solution (over 10 years).

- Sharebase solution can store other video/data such as barracks' video recordings, and digital pictures from uniform troopers and BCI detectives.

- Don't have to convert existing ELX video data.

- Video can be stored in one location and other state agencies (State's Attorney/Courts) can stream it from that location.

- Customizable and can integrate with many other applications for future growth.

- The State of Vermont has a pending contract with Hyland to utilize their products as an enterprise platform solution (the more agencies that use it, the lower the cost for VSP).

- Watchguard/Hyland lifecycle cost is approximately $558,950.00 cheaper than the Watchguard hosted solution.

- Makes switching video hardware vendors easier in the future.

Option #2 (Watchguard / Hyland Sharebase): Con's

Con's:

- Although other entities have used Sharebase to store and share video, **this method is not as established** and requires multiple moving parts to make functional. No exact template to set up this system and workflow.

- Still need to pay for a Watchguard subscription and have Watchguard back-end running on a server to process video and enable its movement it to another location as usable video.

- According to Watchguard – lose their propriety embedded security processes that allow them to track modification or alterations of video. Hyland allows for tracking changes and viewing statistics as part of the audit portion of their software.

- Cost is dependent upon the number of other Vermont agencies signed up to use the system. Other charges possible by Watchguard to work with Hyland.

Other Issues

- A collaborative effort between DPS and VSARA to finalize a specific **retention** schedule applicable to law enforcement video footage remains on-going.

- Public Records Requests –
  - Costs
  - Administrative time
  - Redaction time