11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab I

Title Page

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

State of Nevada Purchasing Division

515 E. Musser Street
Suite 300
Carson City, NV 89701

Part IA – Technical Proposal	
RFP Title:	Body Worn Cameras
RFP:	3273
Vendor Name:	COBAN Technologies, Inc.
Address:	11375 West Sam Houston Parkway South Suite 800 Houston, Texas 77031
Opening Date:	9/28/16
Opening Time:	2:00 PM

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Date: September 23, 2016

State of Nevada Purchasing Division
Attn: Ronda Miller
515 E. Musser Street
Suite 300
Carson City, NV 89701

RE: RFP 3273, Body Worn Cameras

COBAN Technologies, Inc. greatly appreciates the opportunity to respond to the State of Nevada Purchasing Division RFP regarding an integrated body worn video and digital video recorder solution.

COBAN has more than 14 years of experience providing video evidence capturing and management solutions specifically intended for the law enforcement industry. Our involvement has offered unique insight into the constantly evolving challenges that agencies face. From equipment to software to support services, COBAN understands the need for a modular, scalable solution that is tailored to fit each department's current and future requirements.

For the Nevada Highway Patrol, COBAN respectfully presents the COBAN FOCUS (BWC) and EDGE Hi-Def (DVR) solutions for review. We believe that COBAN can offer an unparalleled digital evidence ecosystem that integrates with your existing infrastructure. The FOCUS (BWC) and EDGE Hi-Def (DVR) provide features that conform to the department's requirements in an intuitive to operate, reliable, and customizable package.

COBAN also understands that having a solid and robust video management solution is critical for evidence handling. Data captured by the ECHO is managed by COBAN's Digital Video Management System, where features such as access rights, reports, and video retention are all centrally managed. COBAN is able to provide an end-to-end solution that is powerful, secure, and streamlined.

Included in this document is an executive summary and product solutions overview for your review. We truly appreciate this opportunity to build a relationship with the State of Nevada. Should you have any questions, please call me at 281-925-0488 Extension #160.

Regards,

Cindy Chang
COBAN Technologies, Inc.
11375 West Sam Houston Parkway South # 800
Houston, Texas 77031
Tel: 281-925-0488 Extension 160
Fax: 281-925-0535
Email: Cindy.Chang@cobantech.com

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Tab II

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Houston, Texas 77031

Tab III

Vendor Information Sheet

VENDOR INFORMATION SHEET FOR RFP 3273

Vendor Must:

A) Provide all requested information in the space provided next to each numbered question. The information provided in Sections V1 through V6 will be used for development of the contract;

B) Type or print responses; and

C) Include this Vendor Information Sheet in Tab III of the Technical Proposal.

V1	Company Name	COBAN Technologies, Inc.

V2	Street Address	11375 West Sam Houston Parkway South #800

V3	City, State, ZIP	Houston, Texas 77031

V4	Telephone Number		
	Area Code: 281	Number: 925-0488	Extension:

V5	Facsimile Number		
	Area Code: 281	Number: 925-0535	Extension:

V6	Toll Free Number		
	Area Code: 281	Number: 925-0488	Extension:

V7	***Contact Person for Questions / Contract Negotiations, including address if different than above***
	Name: Cindy Chang
	Title: National Sales Support Manager
	Address: Same As Above
	Email Address: Cindy.Chang@cobantech.com

V8	Telephone Number for Contact Person		
	Area Code: 281	Number: 925-0488	Extension: 160

V9	Facsimile Number for Contact Person		
	Area Code: 281	Number: 925-0535	Extension:

V10	***Name of Individual Authorized to Bind the Organization***	
	Name: Cindy Chang	Title: National Sales Support Manager

V11	Signature ***(Individual must be legally authorized to bind the vendor per NRS 333.337)***	
	Signature:	Date: 09-23-2016

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Houston, Texas 77031

Tab IV

State Documents

State of Nevada
Department of Administration
Purchasing Division
515 E. Musser Street, Suite 300
Carson City, NV 89701

Brian Sandoval
Governor

Jeffrey Haag
Administrator

SUBJECT:	Amendment 1 to Request for Proposal 3273
RFP TITLE:	Body Worn Cameras
DATE OF AMENDMENT:	September 14, 2016
DATE OF RFP RELEASE:	August 24, 2016
OPENING DATE:	September 28, 2016
OPENING TIME:	2:00 PM
CONTACT:	Ronda Miller, Procurement Staff Member

The following shall be a part of RFP ***3273.*** If a vendor has already returned a proposal and any of the information provided below changes that proposal, please submit the changes along with this amendment. You need not re-submit an entire proposal prior to the opening date and time.

---

1. What is the initial contract term for the project? Are there renewal options available?

   Per section 1.1.6 the initial term of contract will be 2 years, with an option of a 2 year extension.

2. How much budget was allotted for the project?

   $1,260,106 per Senate Bill 111.

3. Has the Department determined a funding source for this effort? If so, please indicate which source will be used.

   Yes, State Highway Fund.

4. Please provide the names of the vendors who provided information for RFI #NHP15-01.

   - **Digital Ally**
   - **L3 Mobile-Vision**
   - **Millenium**
   - **Panasonic**
   - **Point Blank**
   - **Presidio**
   - **Pro-Vision**
   - **Taser**
   - **Utility**
   - **VieVu**
   - **WatchGuard**

5. Section 1.1.6 states "This contract is anticipated to begin December 13, 2016 for a term of two (2) years, with the option of extension for an additional two (2) years." However, within the warranty section 3.5.1.5 it is requested as an option for an additional 4 years beyond first 12 months for maintenance and warranty. Can you please clarify the preferred contract and warranty options?

   The project is anticipated to be completed by 6/30/2017. Ongoing costs, including extended hardware warranties and software maintenance necessary to cover the equipment through a two (2) year period from the date the contract is approved, should be itemized and included in RFP cost responses. If the hardware useful life is three (3) years, costs to cover the equipment for three (3) years (1st 12 months + 2 additional years) should be included but separately identified.

6. Attachment K video system specification 3.12.2 states, "Color LED monitor with audio." Can the MDT (computer in the vehicle) function as the display for the in-car video system?

   DPS/HPD's long term goal is to utilize the MDC to fully control the In-Car Video system in efforts to reduce the amount of equipment in the patrol car. Currently out of the 465 potential users, we have 185 MDC's deployed and an additional 160 scheduled for early 2017. Until we are fully deployed with MDC's, a "Color monitor with audio" must be an available option.

7. Attachment K, 3.12.2 - Can the GPS coordinates be provided by an external router or other device? If NHP has GPS in their vehicles currently, would it be acceptable to get a GPS signal from an existing device rather than adding a separate GPS device and antenna?

   Yes. Currently, DPS/HDP utilizes two modems both made by Feeney Wireless. The first is a Cira X2 GX440 which is in the process of being phased out and the second is a Skyus-X modem. It would be acceptable and preferable to get a GPS signal from our existing devices to minimize the amount of antenna's, as long as all equipment can be shown to be compatible. Partnerships may have to be developed between parties before the sharing of equipment and testing can be accomplished. Vendors would have to work this all out.

8. Attachment K, 3.12.4 states "The DVR shall be capable of recording two video inputs from a powerful zoom, forward-facing camera, and a wide-angle rear-facing camera." Would NHP be willing to accept an HD forward-facing non-zoom camera that provides high enough resolution for video to be enlarged and enhanced after the fact? Traditional in-car video systems that utilize SD cameras require zoom capability to clearly identify objects at distances greater than that of a typical traffic stop, but HD video greatly improves this capability.

   Yes, DPS/HPD would be willing to accept this term.

9. Attachment K, 3.12.4 states "The DVR shall require a security feature (key, admin software rights) to prevent unauthorized users from accessing the on-screen menus to adjust video settings and perform file management functions." Would NHP be willing to accept a system that provided an administratively controlled central configuration management utility as part of the Digital Evidence Management System, which pushes configuration changes wirelessly over cellular or Wi-Fi to the in-car camera system rather than a system that required changes to be made at each DVR?

   Yes, DPS/HPD would be willing to accept this term.

10. Attachment K, 3.12.6 refers to an LCD Monitor. Can the MDT (computer in the vehicle) function as the display for the in-car video system?

DPS/HPD's long term goal is to utilize the MDC to fully control the In-Car Video system in efforts to reduce the amount of equipment in the patrol car. Currently out of the 465 potential users, we have 185 MDC's deployed and an additional 160 scheduled for early 2017. Until we are fully deployed with MDC's, a "Color monitor with audio" must be an available option.

11. Attachment K, 3.12.10 refers to a Video Management System in an on-premise server environment. Would NHP consider a central agency-wide cloud based Digital Evidence Management System that provides additional functionality and security such as the ability to digitally share evidence with an audit trail, the ability to manage any type of digital evidence, perform redaction of video and audio, geographic redundance for all data, as well as other features?

Yes. As per section 3.8.10, DPS/HPD is open to a server based, cloud based or a hybrid solution. 3.12.10 refers to the requirements to be met if a server based solution is proposed.

12. RFP Reference page 10, paragraph 3.2.1.4 - What is meant by a schematic rendering? Can the State provide clarification on what they are expecting to receive in response to this requirement?

Vendors to provide a system diagram, a visual model of the proposed system.

13. RFP Reference page 12, paragraph 3.5.1.5 - Most body worn cameras have a useful life of three years or less. Should vendors include the cost of a camera refresh in the price of the four year extended warranty?

The costs for the body camera hardware refresh / replacement should be itemized separately and supported by a replacement cost schedule under ongoing costs. Since these costs would fall outside of initial project expected to be completed by 6/30/2017, as well as the initial two (2) year contract, vendors should provide a hardware replacement schedule for camera and other hardware replacement required under ongoing costs consistent with their useful life. The State prefers that these costs be separately itemized from the four (4) year extended warranty.

14. RFP Reference page 13, paragraph 3.5.2.9 - Does this statement include hardware warranties and software maintenance, or is it only referring to software maintenance?

It is the intent of the State of pay for warranty and software maintenance in the period the service is incurred, however providing BWC hardware warranties consistent with the lifecycle of the proposed equipment is acceptable. Ongoing costs, for extended hardware warranties through the first two years or the contract should be included in RFP cost responses. If the hardware life is three (3) years, include the hardware warranty costs to cover the equipment for three (3) years (1st 12 months included + 2 additional years) in your response. As part of your response, provide expected the lifecycle for all video system components.

15. RFP Reference page 19, paragraph 3.11.3.6 - Can the State provide examples of automatic triggers, or desired functionality that would be acceptable to meet this specification?

DPS/HDP is interested in any standalone triggers that would activate the BWC without the assistance of the In-Car Video system. Examples include triggers based off a device in the vehicle or BWC that would activate the BWC with the light bar being turned on, the shotgun lock being released, a pre-designated speed being reached or an accelerometer to indicate a crash or foot pursuit just to name a few. Integration is a long term goal which won't be achieved right away, so we are open to any concept that helps reduce the human error aspect to activating the BWC, especially in high stress situations where the officer may forget or not have time to activate their BWC.

16. Can the State please identify how many shifts are operated per Precinct/Location on a 24-hour schedule? For example: 3x10hour shifts, 2x12hour shifts, etc.

Las Vegas and Reno are the only regional offices that operate 24 hours. The Elko regional office and 25 sub-stations operate on days and swing with a majority of the state being on 4x10 hour shifts. Refer to table 3.8.A and 3.8.B on pages 16, 17 and 18 of the RFP for further details of manpower.

17. During an "average" day, how many officers with cameras would be out on each individual shift?

Statewide, we estimate on average dayshift will have 105 offers per day, swing shift 105 officers per day and grave yard 27 officers per day. Refer to table 3.8.A and 3.8.B on pages 16, 17 and 18 of the RFP for additional details.

18. Can the State provide a list of Precincts/Locations?

Northern Command West:

Reno Regional Office
357 Hammill Lane
Reno, Nevada 89511

Carson City Sub-station
911 East Musser St.
Carson City, NV 89701

Fallon Sub-station
975 W. Williams Street
Fallon, NV 89406

Fernley Sub-station
770 W. Main Street
Fernley, NV 89408

Hawthorne Sub-station
1085 Highway 95, Suite C
Hawthorne, NV 89415

Incline Village/Tahoe Sub-station
625 Mount Rose Hwy
Incline Village, NV 89451-9111

Tonopah Sub-station
1137 S. Main St. Suite A4
Tonopah, NV 89049

Yerington Sub-station
215 West Bridge Street, #9
Yerington, NV 89447

Northern Command East

Elko Regional Office
3920 East Idaho Street
Elko, NV 89801

Austin Sub-station
184 Main St.
Austin, NV 89310

Battle Mountain Sub-station
101 Carson Road, Suite #6
Battle Mountain, NV 89820

Ely Sub-station
1200 Avenue "E"
Ely, NV 89315

Eureka Sub-station
790 South Monroe Street
Eureka, NV 89316

Jackpot Sub-station
1120 Snyder Way
Jackpot, NV 89825

Lovelock Sub-station
1155 Lovelock Ave
Lovelock, NV 89419

Wells Sub-station
1510 Lake Ave.
Wells, NV 89835

Wendover Sub-station
1111 Gene L Jones Way
West Wendover, NV 89803

Winnemucca Sub-station
3505 Construction Way
Winnemucca, NV 89445

Southern Command

Las Vegas Regional office
4615 West Sunset Road
Las Vegas, Nevada 89118

Alamo Sub-station
100 S. 1st W. Street
Alamo, NV 89801

Beatty Sub-station
211 Montgomery Street
Beatty, NV 89003

Moapa Sub-station
1501 State Highway 168
Moapa, NV 89025

Indian Springs Sub-station
851 McFarland
Indian Springs, NV 89018

Jean Sub-station
22680 Las Vegas South
Jean, NV 89019

Laughlin Sub-station
3650 South Pointe Circle, Suite 104B
Laughlin, NV 89029

Pahrump Sub-station
2250 East Postal Drive #6
Pahrump, Nevada 89048

Pioche Sub-station
1 Main Street
Pioche, NV 89043

19. Is it the intent of the State to have one central docking/download location or will the State be using multiple locations? Can the State provide the list of the location(s)?

Due to our geographical nature, we would require multiple locations as we have 3 regional offices and twenty-five substations throughout the state. Refer to question 18 for locations.

20. Can the State provide what the distance is from the server room to the download location(s)?

This information is challenging to provide as we have multiple locations, 3 regional offices and twenty-five substations throughout the state. With our current In-Car video system, we have 5 servers set up across the state. Reno, Carson City, Elko, Las Vegas and Winnemucca. Refer to question 18 for locations. All other substations have "Dummy" computers set up where video is uploaded to an external hard drive, which is later relayed to one of the main servers.

21. Can the State describe what the bandwidth and speed availability is between the download locations and main location they would like to store data?

This is dependent on the location where the video is uploaded. As described in section 3.8.1, a majority of our sub-stations are in rural communities and many locations have only 1.5 mbps of maximum available bandwidth. Other Urban locations have up to 600-800 Mbps of available bandwidth.

22. How many hours of video does the State expect to be collected during an average shift?

DPS/HPD anticipates each officer will collect approximately 2 hours of video per shift, per device with approximately 237 officers working each day, statewide.

23. How long does the State intend to retain the video collected?

Videos classified as "Non-Events" are retained for 30 days and all others are retained for 5 years, per our State retention schedule.

24. How does the State intend to store the video?

If DPS/HPD goes with a cloud based solution, it will be stored in the cloud for short and long term storage. If server based, all videos other than "Non-Events" will be archived to DVD or Blue Ray after 90 days.

25. Does the State require a backup solution?

Yes.

26. How long does the State intend to retain the video?

Videos classified as "Non-Events" are retained for 30 days and all others are retained for 5 years, per our State retention schedule.

ALL ELSE REMAINS THE SAME FOR RFP 3273.

Vendor must sign and return this amendment with proposal submitted.

Vendor Name: COBAN Technologies, Inc.

Authorized Signature: _____

Title: National Sales Support Manager Date: 09-23-16

This document must be submitted in the "State Documents" section/tab of vendors' technical proposal.

ATTACHMENT A – CONFIDENTIALITY AND CERTIFICATION OF INDEMNIFICATION

Submitted proposals, which are marked "confidential" in their entirety, or those in which a significant portion of the submitted proposal is marked "confidential" **will not** be accepted by the State of Nevada. Pursuant to NRS 333.333, only specific parts of the proposal may be labeled a "trade secret" as defined in NRS 600A.030(5). All proposals are confidential until the contract is awarded; at which time, both successful and unsuccessful vendors' technical and cost proposals become public information.

In accordance with the Submittal Instructions of this RFP, vendors are requested to submit confidential information in separate binders marked "**Part I B Confidential Technical**" and "**Part III Confidential Financial**".

The State will not be responsible for any information contained within the proposal. Should vendors not comply with the labeling and packing requirements, proposals will be released as submitted. In the event a governing board acts as the final authority, there may be public discussion regarding the submitted proposals that will be in an open meeting format, the proposals will remain confidential.

By signing below, I understand it is my responsibility as the vendor to act in protection of the labeled information and agree to defend and indemnify the State of Nevada for honoring such designation. I duly realize failure to so act will constitute a complete waiver and all submitted information will become public information; additionally, failure to label any information that is released by the State shall constitute a complete waiver of any and all claims for damages caused by the release of the information.

This proposal contains Confidential Information, Trade Secrets and/or Proprietary information as defined in ***Section 2 "ACRONYMS/DEFINITIONS."***

Please initial the appropriate response in the boxes below and provide the justification for confidential status.

Part IB – Confidential Technical Information			
YES	X	NO	
Justification for Confidential Status			
Laboratory testing methods for COBAN manufactured equipment is proprietary information.			

A Public Records CD or Flash Drive has been included for the Technical and Cost Proposal			
YES	X	NO (See note below)	
Note: By marking "NO" for Public Record CD or Flash Drive included, you are authorizing the State to use the "Master CD or Flash Drive" for Public Records requests.			

Part III – Confidential Financial Information			
YES	X	NO	
Justification for Confidential Status			
COBAN Technologies is a privately held corporation. Financial information is not publicly available.			

COBAN Technologies, Inc.

Company Name

Signature

Cindy Chang

Print Name

09-23-2016

Date

This document must be submitted in Tab IV of vendor's technical proposal

ATTACHMENT C – VENDOR CERTIFICATIONS

Vendor agrees and will comply with the following:

(1) Any and all prices that may be charged under the terms of the contract do not and will not violate any existing federal, State or municipal laws or regulations concerning discrimination and/or price fixing. The vendor agrees to indemnify, exonerate and hold the State harmless from liability for any such violation now and throughout the term of the contract.

(2) All proposed capabilities can be demonstrated by the vendor.

(3) The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, vendor or potential vendor.

(4) All proposal terms, including prices, will remain in effect for a minimum of 180 days after the proposal due date. In the case of the awarded vendor, all proposal terms, including prices, will remain in effect throughout the contract negotiation process.

(5) No attempt has been made at any time to induce any firm or person to refrain from proposing or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal. All proposals must be made in good faith and without collusion.

(6) All conditions and provisions of this RFP are deemed to be accepted by the vendor and incorporated by reference in the proposal, except such conditions and provisions that the vendor expressly excludes in the proposal. Any exclusion must be in writing and included in the proposal at the time of submission.

(7) Each vendor must disclose any existing or potential conflict of interest relative to the performance of the contractual services resulting from this RFP. Any such relationship that might be perceived or represented as a conflict should be disclosed. By submitting a proposal in response to this RFP, vendors affirm that they have not given, nor intend to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant or any employee or representative of same, in connection with this procurement. Any attempt to intentionally or unintentionally conceal or obfuscate a conflict of interest will automatically result in the disqualification of a vendor's proposal. An award will not be made where a conflict of interest exists. The State will determine whether a conflict of interest exists and whether it may reflect negatively on the State's selection of a vendor. The State reserves the right to disqualify any vendor on the grounds of actual or apparent conflict of interest.

(8) All employees assigned to the project are authorized to work in this country.

(9) The company has a written equal opportunity policy that does not discriminate in employment practices with regard to race, color, national origin, physical condition, creed, religion, age, sex, marital status, sexual orientation, developmental disability or handicap.

(10) The company has a written policy regarding compliance for maintaining a drug-free workplace.

(11) Vendor understands and acknowledges that the representations within their proposal are material and important, and will be relied on by the State in evaluation of the proposal. Any vendor misrepresentations shall be treated as fraudulent concealment from the State of the true facts relating to the proposal.

(12) Vendor must certify that any and all subcontractors comply with Sections 7, 8, 9, and 10, above.

(13) The proposal must be signed by the individual(s) legally authorized to bind the vendor per NRS 333.337.

COBAN Technologies, Inc.

Vendor Company Name

Vendor Signature

Cindy Chang

Print Name

09-23-2016

Date

This document must be submitted in Tab IV of vendor's technical proposal

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab V

Attachment B – Technical Proposal Certification of Compliance with Terms and Conditions of RFP

ATTACHMENT B – TECHNICAL PROPOSAL CERTIFICATION OF COMPLIANCE WITH TERMS AND CONDITIONS OF RFP

I have read, understand and agree to comply with ***all*** the terms and conditions specified in this Request for Proposal.

YES X I agree to comply with the terms and conditions specified in this RFP.

NO _____ I do not agree to comply with the terms and conditions specified in this RFP.

If the exception and/or assumption require a change in the terms in any section of the RFP, the contract, or any incorporated documents, vendors ***must*** provide the specific language that is being proposed in the tables below. If vendors do not specify in detail any exceptions and/or assumptions at time of proposal submission, the State will not consider any additional exceptions and/or assumptions during negotiations.

COBAN Technologies, Inc.
Company Name

Signature

Cindy Chang
Print Name

09-23-2016
Date

Vendors MUST use the following format. Attach additional sheets if necessary.

EXCEPTION SUMMARY FORM

EXCEPTION #	RFP SECTION NUMBER	RFP PAGE NUMBER	EXCEPTION (Complete detail regarding exceptions must be identified)
1	3.11.7.17	28	This feature is not currently available, but will be in a future Q1 2017 software release.
2	3.12.11.2	43	COBAN does not currently provide an In-Car Video system for motorcycles. However, our FOCUS Body Worn Camera can serve as the recording device for motorcycle units.
3	3.12.12.4	44	The High Definition camera for the EDGE Hi-Def involves two cables in order to minimize input noise and interference. These two cables connect at a single point to the camera body. In regards to quick release connectors, for safety and reliability reasons, connections are secured using thumbscrews.

ASSUMPTION SUMMARY FORM

ASSUMPTION #	RFP SECTION NUMBER	RFP PAGE NUMBER	ASSUMPTION (Complete detail regarding assumptions must be identified)
1	3.11.3.6	22	In order to calculate the transfer times, an assumption was made regarding the network throughput speed. Because each station for Nevada State Patrol has different connectivity, this assumption was made to provide a succinct response.
2	3.11.5.1	22	COBAN is assuming that this specification was placed under the wrong category. It is highly unusual for the Agency to request a scientific lab testing results for Video Management Software. COBAN has provided lab testing results for hardware.
3	3.12.10.9	42	The description is based on the assumption that there will be 3 vehicles uploading at any one time per Access Point. The physical layout of each station and shift turnover will have to be surveyed in order to give an exact transfer speed calculation.

This document must be submitted in Tab V of vendor's technical proposal

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab VI

Section 3 – Scope of Work

ATTACHMENT L BODY WORN SPECIFICATIONS

Vendors must respond check either yes or no to each section below: Where section asks to provide details or response, vendors must respond to the corresponding RFP section not in this document.

	Comply	
3.11.2 BWC Hardware Requirements	Yes	No
Cameras worn by officers shall be lightweight, preferably six ounces or less in total combined weight.	✓	
Cameras shall have minimal wiring, not exceed two wires or cables and shall be designed to disengage to prevent the wearer from becoming entangled.	✓	
Cameras shall have recording capability of at least ten continuous (10) hours (the State would prefer twelve (12) hours of continuous recording capability).	✓	
Cameras must have a minimum stand-by battery life of ten (10) hours without recharging or additional batteries, with pre-record on.	✓	
BWC Shall be user friendly that can be activated easily during times of stressful events.	✓	
BWC should have automatic triggers, as a standalone system.	✓	
Rechargeable battery must be able to reach full charge, from no power, in no more than six (6) hours.	✓	
Cameras must have a minimum of thirty-two (32) GB internal/integrated memory and storage media not be removable.	✓	
Rechargeable battery must be able to withstand at least three hundred (300) charging cycles, maintaining the 10 hour record time.	✓	
BWC lens must have a field of view from 95 to 145 degrees.	✓	
The recording speed shall be no less than 30 frames per second (fps).	✓	
Camera shall record video images in full color with a minimum resolution of 640 pixels x 480 pixels. Adjustable resolution is preferable.	✓	
Video compression shall be H.263 or higher.	✓	
Cameras shall have multiple mounting options to accommodate varying uniformed officers, plain-clothed officers, and tactical field situations. Examples include, but are not limited to, lapel, shoulder, eyeglasses, cap, helmet, holster, button shirt, zipper shirt, utility belt, snow suit etc. Mounts shall not require modification to current in-service uniforms.	✓	
Camera should allow for on scene (in the field) viewing? If so, describe the ability to playback or view video.	✓	
Camera shall provide feedback to user when activated, either via a visual indicator or audible tone.	✓	
Camera shall have the ability to be set to stealth mode while in the field.	✓	
Camera must have an indicator that shows current operating mode.	✓	
If the camera offers night vision enhancement, the State shall have the ability to enable or disable it.	✓	
The System should provide automatic indexing functionality of video files and be capable of interfacing with existing computer-aided dispatch (CAD) vendor, Spillman technologies.	✓	

	Comply	
3.11.2 BWC Hardware Requirements	Yes	No
Cameras shall automatically embed a time/date stamp in the recorded video.	✓	
Cameras shall prevent users from deleting recorded files without authorization.	✓	
Camera should have a method for adding desired metadata to video in the field prior to upload.	✓	
Officers should have the ability to playback or view video in the field on mobile cameras and/or MDC's (Panasonic FZ-G1 Tablet) wirelessly (i.e. Bluetooth).	✓	
Camera shall have a pre-event record feature (BWC should capture at least thirty (30) seconds of video prior to officer initiating the recording). Adjustable times are preferable.	✓	
Camera will export in a standard, open format, such that it can be replayed in freely available software without processing or conversion. Proprietary data formats shall not be accepted.	✓	
The Vendor must offer a multi-dock station capable of uploading digital evidence from multiple cameras simultaneously and have the capability to upload video via Wi-Fi and/or cellular LTE connectivity. If via cellular, product should be compatible with Fenny Wireless Skyus X modem.	✓	
The multi-dock station must charge the camera batteries, securely transfer files without loss of quality or metadata, and delete the files from the camera once transferred to the evidence management system.	✓	
The multi-dock station should not require a department computer to operate, connect or interface with the Internet (e.g. the multi-dock station should be a standalone device that connects to the cloud storage solution or server via an Ethernet connection).	✓	
The camera should not cause electromagnetic interference with nearby airwave radios (and other electronic equipment and radio communication systems).	✓	
Loss of power to the camera must not cause data to be lost/corrupted.	✓	
Cameras will be ruggedized. Cameras shall be able to survive a six-foot drop test. Cameras shall be able to operate at minimum temperature of -12 degrees Fahrenheit and a maximum temperature of 130 degrees Fahrenheit.	✓	
Vendor will state camera's Ingress Protection (IP) rating. The State prefers an IP rating of IP67.	✓	
Describe what features devices have in place to prevent accidental activations of camera by the user (without the need for accessories or alteration of equipment by user).	✓	
Vendor shall define the required time for automated indexing (specific time frame after upload of video evidence) and any expected error rate percentage upon indexing, if applicable.	✓	
The Vendor must state the transfer rate of video from the multi-dock station to the cloud in sixty or thirty-minute increments. Vendors shall break down transfer rates by video quality (i.e. Hi Def).	✓	
Describe device wireless activation features (e.g. device is automatically activated with the activation of patrol vehicle's light bar), if applicable.	✓	

	Comply	
3.11.4 VIDEO MANAGEMENT SYSTEM (VMS)	Yes	No
VMS shall either be an externally hosted cloud-based data storage solution with the capability of organizing/managing video/digital evidence, server based or consist of a hybrid solution and be accessible via the internet to multiple users simultaneously. The State prefers the Cloud or Hybrid solution.	✓	
VMS shall allow for remote access with complete functionality (review, enter metadata	✓	

	Comply	
3.11.4 VIDEO MANAGEMENT SYSTEM (VMS)	Yes	No
and send video) with NHP mobile devices and/or computers.		
VMS shall provide an automatic audit trail for when files and videos are accessed.	✓	
VMS shall allow officers to enter additional metadata to recorded files, such as notes or comments.	✓	
Solution must support all major digital file types (avi, jpeg, mpeg, etc.).	✓	
VMS shall provide remote viewing of the stored video based on the permissions granted by the System Administrator.	✓	
VMS shall allow users to search video files by name, date of recording, date of upload, case number (CAD-generated), device number, as well as categorize and add notes to each file within the solution.	✓	
VMS must allow System Administrators the ability to grant access of specific files to specified persons for a specific period of time.	✓	
VMS shall have the ability to share files internally and externally via secure links over the Internet.	✓	
When videos are exported to a portable media device , all metadata shall transfer over without compromising its authenticity.	✓	
VMS shall grant System Administrators the ability to set variable retention rules per DPS/HPD preferences.	✓	
VMS shall have the ability to set time tables for automatic deletions of files.	✓	
VMS should have the ability to recover deleted evidence within a minimum of seven (7) days of deletion. The State would prefer a recovery period of 30 days.	✓	
The VMS will maintain a log/audit trail illustrating users who have viewed and copied video to an external source (e.g. DVD/ long term storage).	✓	
VMS must have the ability to preserve the raw file without editing.	✓	
VMS must securely store all videos and recordings in a way that only State-authorized users and users authorized by DPS/HPD can view.	✓	
VMS must provide redundant, security back-up of all data.	✓	
VMS should offer redaction capabilities.	✓	
VMS must be compatible with at least Windows 7 Professional Operating System or more recent versions) and Internet Explorer Version 11 web browser or more recent version(s).	✓	
Provide the minimum required memory (RAM), if applicable.	✓	
Provide the minimum required processor speed, if applicable.	✓	
Provide the minimum network speed to upload videos, if cloud based.	✓	
Upload times to the VMS will be defined in per hour or thirty-minute increments of video files.	✓	
Any required or expected ‘buffering’ times before video files are accessible in cloud storage (for view or adding metadata) will be clearly defined.	✓	
Describe System compatibility with mobile devices (iPhones and Android).	✓	
Vendor shall indicate the number of searchable fields in storage system and any ‘wild card’ searches that can be done to locate stored data.	✓	
Preferences:		
Users should have the ability to send email messages from hosted solution interface to end users.	✓	

	Comply	
3.11.4 VIDEO MANAGEMENT SYSTEM (VMS)	Yes	No
VMS should send System Administrators administrative notifications when evidence files are about to be deleted.	✓	
VMS should send System Administrators administrative notifications when users need their credentials reset due to failed log on attempts.	✓	
VMS should offer auto-redaction capabilities, to include high-movement and low light video; preferred to minimize the amount of time to redact 30 fps for the entire length of video.	✓	
VMS should have the ability to capture data, report on video statistics and provide custom reports.	✓	

	Comply	
3.11.5 VIDEO STORAGE	Yes	No
If cloud based, the storage facility must be located within the continental United States.	✓	
Does your storage solution have the ability to upload video from multiple camera units simultaneously?	✓	
Storage solution should have the ability to view multiple linked videos simultaneously.	✓	
Solution should have two tier storage capacity for active video and long term storage needs as defined by the State.	✓	
Does proposed solution offer storage options for 'unlimited storage' of body camera video evidence?	✓	
Does your system provide a method to upload videos, via an access point? Please describe your process.	✓	
Is your system compatible with an EnGenius ENS500EXT access point?	✓	
Does solution have the ability to maintain and export audit trail along with video?	✓	
Define maximum storage capacity, if any.	✓	
Describe the capability of proposed solution to provide the State with the ability to export/download and migrate original recordings with all metadata to other storage media or, local storage inclusive of all metadata and chain of custody information.	✓	
Describe archival, hot and cold cloud storage solutions.	✓	
Describe archival solutions for server storage, if applicable.	✓	
Discuss different cost savings as defined by various storage solutions (active vs. long-term storage of files).	✓	
Describe capability to respond to requests to pull video from 'cold cloud storage', including time required to download video from storage.	✓	
Describe your solution to upload video in the rural areas that only have a maximum broadband speed of 1.5 Mbps	✓	

	Comply	
3.11.6 SYSTEM SECURITY	Yes	No
The VMS shall meet the minimal security requirements for the Criminal Justice Information Services (CJIS) Policy. In particular, the VMS shall comply with Policy Areas 2 through 13 in Section 5 of the CJIS Policy. The CJIS Policy can be viewed by accessing the following link: https://www.fbi.gov/about-us/cjis/cjis-security-policy-resource-center	✓	
Will access to Criminal Justice Information (CJI) within a cloud environment fall within the category of remote access? (5.5.6 Remote Access)	✓	

	Comply	
3.11.6 SYSTEM SECURITY	Yes	No
Will advanced authentication (AA) be required for access to CJI within a cloud environment (5.6.2.2 Advanced Authentication, 5.5.2.2.1 Advanced Authentication Policy and Rationale)	✓	
Does your cloud service provider's datacenter(s) used in the transmission or storage of CJI meet all the requirements of a physically secure location? (5.9.1 Physical Secure Location)	✓	
Are the encryption requirements being met? (5.10.1.2 Encryption)	✓	
Who will be providing the encryption as required in the CJIS Security Policy? (Client or cloud service provider)	✓	
Is the data encrypted while at rest and in transit?	✓	
What are the cloud service provider's incident response procedures? (5.3 Policy Area 3: Incident Response)	✓	
Will the cloud subscriber be notified of any incident?	✓	
If CJI is compromised, what are the notification and response procedures?	✓	
Is the cloud service provider a private Vendor/vendor?		
If so, they are subject to the same screening and agreement requirements as any other private Vendors hired to handle CJI. (5.1.1.5 Private Vendor User Agreements and CJIS Security Addendum; 5.12.1.2 Personnel Screening for Vendors and Vendors)	✓	
Will the cloud service provider allow the CSA and FBI to conduct compliance and security audits? (5.11.1 Audits by the FBI CJIS Division; 5.11.2 Audits by the CSA)	✓	
The State may verify that Vendor is in compliance with CJIS by requesting a compliance audit of Vendor's technology deployment through the CJIS Systems Agency to the Federal Bureau of Investigation (FBI). The FBI CJIS Division shall perform the requested audit to verify compliance. 140-2.	✓	
System shall provide full conformance to Federal Information Processing Standards (FIPS) Publication	✓	
VMS shall provide user authentication with a unique username and password.	✓	
VMS will allow for authorized users to be established based on various roles and permissions by the System Administrator.	✓	
VMS will offer optional IP access restriction and security challenge questions upon access from an unknown or previously used location.		✓
Any access to stored video shall be maintained in an automatic log or audit trail showing users that have viewed, shared or copied video to an external source (e.g. CD/DVD, local storage, etc.), and the audit trail should be capable of being exported	✓	
Log activities performed by specific user ID, IP address and time/date stamp all activities.	✓	
System Administrators shall have the ability to administratively manage accounts and assign rights and permissions to system users.	✓	
VMS shall provide ability to set an unsuccessful access attempt limit and suspend IDs after reaching the unsuccessful access threshold.	✓	
VMS shall provide ability to send alerts to System Administrators for unauthorized access attempts.	✓	
VMS shall enable automatic logoff of ID after a defined period of session inactivity, and perform subsequent re-log-on password authentication.	✓	
VMS shall provide ability to configure password parameters such as password lengths,	✓	

	Comply	
3.11.6 SYSTEM SECURITY	Yes	No
user access to expiration settings and other behaviors, enabling alphanumeric characters, etc.		
VMS shall provide ability to lock out user or group ID.	✓	
Vendor will provide a detailed explanation of data security standards, to include but not limited to: defining the physical environment, location of all host servers; protections against natural and man-made disasters; encryption; transfer; storage; redundancy and recovery of files.	✓	
Describe security standards for hardware (cameras) in place to prevent data from being accessed in the event a camera is lost or stolen.	✓	
Vendor will describe any previous loss of data occurring from criminal actions, as well as other issues that impact data integrity, such as unauthorized data access by contract personnel.	✓	
Provide a non-technical means for field personnel to remotely view stored video without altering original file (other than applying metadata to file).	✓	
Describe ability of system to enforce password expiration.	✓	
Describe ability of system to limit concurrent sessions.	✓	
Describe ability of system to log changes to administrative functions.	✓	

	Comply	
3.11.7 INFORMATION SECURITY	Yes	No
Vendor shall encrypt transmission of confidential data when transferred through publicly accessible networks such as the Internet.	✓	
Vendor shall ensure all transmission of information data files are transferred through a Secure Socket Layer (SSL), which creates a 128 bit encrypted connection which is password protected. All data files that are on Vendor's servers are encrypted once they have completed the upload and pre-process procedures.	✓	
All input data transmitted across public networks (all networks other than the State's) shall be encrypted during transit and decrypted electronically during processing to produce non-confidential output data. The decrypted data shall not be accessible by Vendor's employees unless otherwise limited on a "need to know" basis as determined by the Nevada Highway Patrol's designee.	✓	
The System shall have a host-based firewall technology preventing inappropriate/ unauthorized access. Vendor shall provide the following:	✓	
All intrusion detection system monitoring for unauthorized access attempts.	✓	
Must run anti-virus software.	✓	
Monitor daily logs for potential intrusions, file integrity.	✓	
Only allow access by uniquely assigned and auditable IDs.	✓	
All data transfers and administrative access must be in an encrypted format.	✓	

	Comply	
3.11.8 In-CAR VIDEO INTEGRATION	Yes	No
BWC must have the ability to record audio for the In-car video system.	✓	
BWC must have the ability to activate recording off the In-Car video systems automatic triggers.	✓	

IN-CAR VIDEO COMPLY CHECK LIST

The In-Car Video portion of this RFP is contingent upon funding anticipated to be approximately one (1) year from contract award. Vendors proposing In-Car Video must be compatible with proposed Body Worn Cameras.

Vendors must respond check either yes or no to each section below: Where section asks to provide details or response, vendors must respond to the corresponding RFP section not in this document.

	Comply	
3.12 STANDARD SPECIFICATIONS	**Yes**	**No**
All mobile video systems and related audio equipment must conform to the applicable minimum standards as set by the following: Electronic Industries Association (EIA); Federal Communications Commission (FCC) rules/ regulations; Institute of Electrical and Electronic Engineers (IEEE); International Electro-technical Commission (IEC); International Organization for Standardization (ISO); National Fire Protection International (NFPA); National Highway Transportation Safety Administration (NHTSA); Society of Automotive Engineers (SAE); Underwriters Laboratories Inc. (UL); and	✓	
Vendors must provide documentation that validates that their systems adhere to the minimum specifications in the International Association of Chief of Police (IACP) Specifications for In-Car Video (dated 11/21/2008), and that the technology used is generally accepted in the relevant field.	✓	

	Comply	
3.12.2 VIDEO SYSTEM SPECIFICATIONS	**Yes**	**No**
The minimum acceptable components consist of the following parts: o Front camera o Back seat camera o Color LED monitor with audio o Body worn camera must act as a wireless transmitter for audio with in-car & home charger. o Covert secondary hard-wired microphone o Digital Video Recorder- DVR o Integrated GPS receiver and antenna; o Collision sensor o Controller center o Means to transfer media data from In-car to storage solution o Video viewer capability o Hardware/software necessary to submit videos as evidence o All mounts and cables for power, interfaces, cameras, and antennas o Documentation, o Warranty and maintenance, o Training o Shipping and handling	✓	
3.12.3 DIGITAL VIDEO RECORDER (DVR)		
The digital video recorder (DVR) offered shall be in full commercial production. Prototypes will not be considered.	✓	
Programming of the in-car recording system shall be restricted to authorized personnel only.	✓	
All controls and indicators shall have adjustable backlighting.	✓	
The officer shall have the option of recording primary, rear-facing, or both cameras simultaneously.	✓	
A collision sensor covering 360 degrees, to trigger recordings, without requiring connection to the vehicles airbag system, shall be included. If a collision is detected, the video recorder (including pre-event memory) shall be automatically activated so the collision and video leading up to the collision is recorded.	✓	
The in-car digital video system shall be provided with all necessary cables and hardware (e.g. fuse holders, mounting brackets) required for installation.	✓	
Each digital video recording system shall be supplied with a comprehensive installation/ programming/ operations manual. The manual shall specify all brackets, hardware and mounting locations for installing camera systems.	✓	

	Comply	
3.12.4 DIGITAL VIDEO RECORDER (DVR)	**Yes**	**No**
The DVR shall mount in standard equipment consoles between the seats, or overhead.	✓	
No permanent modifications shall be required to install the DVR system.	✓	
The DVR system shall be capable of being installed as to not hinder the operation of the police unit.	✓	
The DVR shall be capable of recording two video inputs from a powerful zoom, forward-facing camera, and a wide-angle rear-facing camera.	✓	
The DVR shall provide a choice of at least one of the following upload options. ○ **Wireless Ethernet**- provided 802.11n base station includes encryption, supports multiple simultaneous uploads and is upwardly scalable. The system should be capable of comfortably uploading from multiple vehicles in the regional command centers (depicted in the scope of work section of this RFP) simultaneously. In addition, a backup upload system must be provided, should the wireless transfer system fail. ○ **Removable Hard Disc Drive (HDD)** with provided hard drive docking stations that support plug and play hard drive insertion. ○ **Removable Compact Flash Device**-Device with provided docking stations that support plug-and-play flash card insertion. ○ **Cellular** - Upload media via LTE connectivity that is compatible with the Feeney Wireless Skyus-X modem.	✓	
The DVR shall have the ability to record up to 8 hours of video before reaching the capacity of the storage media at maximum resolution. For the recording media available, specify the recording and playback times, resolution, and MB per second.	✓	
Video resolution, frame rates, and quality on the DVR shall be preset but can be changed by an administrator. These settings shall be independently configurable for recording modes of both video cameras. Please specify levels for: video resolution video frame rate video quality	✓	
The DVR shall require a security feature (key, admin software rights) to prevent unauthorized users from accessing the on-screen menus to adjust video settings and perform file management functions.	✓	

The DVR shall include a GPS receiver to provide vehicle position, course and speed information. The GPS receiver shall also be used to set the internal DVR clock to the proper time and date so that all vehicles display and record proper time.	✓	
The DVR shall include indicators visible outside of the vehicle to confirm that the system is recording and that the wireless audio transmitter is activated. This indicator does not need to be visible to occupants inside the vehicle.	✓	
The DVR shall be capable of initiating a recording by both automatic and manual means. The DVR shall begin recording automatically when any of the following are activated:. ▪ Vehicle's emergency/pursuit lights; ▪ Siren, and ▪ The systems integrated crash sensor. (This activation shall include capturing the "look back" buffer memory to video-record the collision, should it be in view of the active camera	✓	
The audio input associated with the forward-facing camera shall record audio using the internal microphone inside the vehicle. When the wireless audio transmitter/BWC is activated, the audio input shall be automatically switched to the wireless audio transmitter's microphone. The system shall automatically revert to the internal microphone when the wireless audio transmitter/BWC is deactivated.	✓	
The DVR shall include a programmable pre-event recording mode allowing it to capture images a minimum of 30 seconds prior to the activation of the RECORD mode. Please specify pre-event recording capability of proposed DVR.	✓	
The DVR shall be capable of capturing date/time, user identification information, emergency light indication, siren indication, speed indication (w/ radar interface), braking indication, and whether the microphone is activated. The information shall not be overlaid on the recorded video, and should be stored as secured metadata.	✓	
The DVR shall allow video to be played back in the vehicle. When the DVR PLAY button is pressed a list of all prior recordings shall appear on the display screen provided.	✓	
The DVR shall record video in a format that allows playback on multiple devices.	✓	
The DVR shall provide a means to ensure the integrity of the recorded video has not been compromised. The video must be able to be authenticated at any time, including when it is played back outside of the police vehicle	✓	
The DVR shall provide a means to ensure the integrity of the recorded video has not been compromised. The video must be able to be authenticated at any time, including when it is played back outside of the police vehicle.	✓	
The Control Center/DVR firmware shall allow in-system programming for future updates. Please describe how updates are made.	✓	
The DVR or related display (Mobile Data Computer, tablet etc.) shall have backlit controls for record; stop; play/pause; forward/reverse, fast forward/ reverse; trace, and lighted indicators for power on; record; and play.	✓	

The power control switch shall allow the DVR to automatically power on after the vehicle's ignition is switched on	✓	
The DVR shall automatically power down after the vehicle's ignition is turned off provided the DVR is not in "Record" and is not in the process of downloading files or other type of file save.	✓	
The DVR should provide a means to tag an incident at the time it is recorded with a priority designation. Once a recording is stopped, the DVR should automatically prompt the officer to select from the pre-defined drop-down list(s).	✓	
The DVR shall be capable of operating within the range of interior temperatures found within a law enforcement vehicle in Nevada without the need for supplemental heating or cooling. Specify your DVR's operating range and acceptability for the extreme temperature range in Nevada	✓	

	Comply	
3.12.4 **COMPACT CCD COLOR CAMERA**	**Yes**	**No**
The low-light CCD color camera shall use a Sony EXview® HAD CCD or equivalent image sensor to provide high quality nighttime images while minimizing blooming and glaring from bright sources of light. Proof of "equal" shall be the responsibility of the bidder and shall be submitted with the bid if not using the Sony EX VIEW chipset.	✓	
The forward-facing camera shall be a solid state imaging system that is not subject to burn in, or interference by magnetic fields.	✓	
The forward-facing camera shall operate within the range of temperatures from 0 to 120 degrees Fahrenheit or between -17.8 and 48.9 degrees Celsius	✓	
The camera shall be compact so as not to obstruct the driver's forward or peripheral view thru the windshield, or provide any obstruction of factory installed airbags or mirrors.	✓	
The camera shall be a single unit, including power lens, mounted on the windshield or roof of the vehicle and operate on 12 VDC power source.	✓	
The camera shall provide a minimum field of view of 24 feet width at distance of 35 feet (40 degrees).	✓	
The camera shall have manual and automatic focus capabilities, which are user selectable.	✓	
The front camera should have a minimum 120X zoom (10x optical zoom with 12x digital zoom). Please specify _____ mode.	✓	
The minimum LUX rating of the forward facing camera shall be rated at less than 1 LUX at full shutter speeds and 0.05 LUX in night view mode.	✓	
The camera shall automatically adjust for varying light levels from day to night. The camera and lens will be equipped with auto focus, automatic exposure, and automatic white balance.	✓	
The camera shall have a minimum color resolution of 450 horizontal lines	✓	
All cameras shall default to auto focus. An override system should be configurable to prevent operation while the vehicle is in motion.	✓	

	Comply	
3.12.4 **COMPACT CCD COLOR CAMERA**	**Yes**	**No**
The camera shall offer a signal-to-noise ratio of at least 46db.	✓	
The camera shall have backlight compensation setting.	✓	
The camera shall be compact. List the size and weight of the proposed CCD camera.	✓	
The camera shall mount with a heavy-duty controlled pivot mount that does not obstruct the driver's field of view. Camera shall be able to be rotated 360 degrees and can pan and tilt to +/- 90 degrees. Adjustment shall require no tools.	✓	
An optional rear view camera shall be available.	✓	

	Comply	
3.12.5 **BACK SEAT CAMERA SPECIFICATIONS**	**Yes**	**No**
The back-seat camera shall utilize a micro compact with wide angle 1/3" Super HAD image device (or equivalent) with approximately 420 lines of resolution. Proof of "equal" shall be the responsibility of the bidder and shall be submitted with the bid. This must be included in the system at no charge.	✓	
The rear-facing camera shall be capable of being mounted covertly in the cab.	✓	
The rear facing camera shall be capable of recording the entire rear seat area of the police vehicle.	✓	
The rear-facing camera shall have a minimum lux rating of .03. Please specify the rating	✓	
The rear-facing camera shall utilize infrared illumination to capture video in no-light conditions.	✓	

	Comply	
3.12.6 **COMPACT COLOR LCD MONITOR**	**Yes**	**No**
The monitor shall be a full color high quality LCD, active matrix (TFT) screen that measures at least 3.0" measured diagonally.	✓	
The monitor shall be capable of displaying a live picture from the camera when powered, even if recording is not in progress.	✓	
The monitor shall operate between 32 and 120 degrees Fahrenheit.	✓	
The monitor shall include a system speaker, with volume control, to provide monitoring of live audio or playback from all system microphones.	✓	
The monitor shall have controls/indicators that mimic the DVR and include record; stop; play/pause; forward/reverse; brightness; volume; and power. The monitor should also include a button for disabling the monitor when the system in standby, and accessing a menu for programming.	✓	
The monitor should have the capability to display: date/time, user identification information, emergency light indication, siren indication, latitude and longitude, speed (w/ radar interface), braking indicator and microphone activation indicator. The information shall not be overlaid on the recorded video; rather, it should be stored as external secure meta-data (or equivalent) in the video file.	✓	

	Comply	
3.12.6 **COMPACT COLOR LCD MONITOR**	**Yes**	**No**
The monitor should support a full-screen video mode (without the auxiliary data) using a single key press on the control center	✓	
The monitor shall operate independently from the recording device. For covert operation it should possible to operate the DVR in RECORD mode with the monitor turned off.	✓	
The monitor shall be provided with an adjustable mounting bracket that will allow it to be mounted in a variety of locations within the law enforcement vehicle.	✓	
The monitor shall have the capability to display the approximate amount of storage remaining on the media in an HH:MM format. An audible beep or other form of tone shall warn operator prior to or when there is 10%, or less, time remaining on the media.	✓	

	Comply	
3.12.7 **MICROPHONES**	**Yes**	**No**
The system shall come equipped with a digital wireless microphone that is incorporated into the BWC and an in-car microphone. The in-car microphone shall be mountable anywhere within the vehicle.	✓	
Audio from the interior microphone and the wireless microphone/BWC shall record on separate audio channels.	✓	
The wireless microphone/BWC shall be self-contained and include a re-chargeable battery; mountable charger/docking station; internal microphone; internal antenna. Transmitters that rely on the microphone cable for an antenna, or which utilize an external antenna shall not be permitted.	✓	
The wireless microphone/BWC system shall be FCC type accepted.	✓	
The wireless microphone/BWC shall have a minimum effective operating range 1,000 feet under line-of-sight conditions.	✓	
The wireless microphone/BWC must have a minimum stand-by battery life of ten (10) hours without recharging or additional batteries, with pre-record on.	✓	
The wireless microphone/BWC should be capable of automatically activating the DVR system; additionally, the wireless audio transmitter/BWC shall be capable of being activated by the DVR system when a recording is started.	✓	

	Comply	
3.12.8 **CONTROL CENTER SPECIFICATIONS**	**Yes**	**No**
The control center shall be compact in design and mounted overhead, or in the equipment console between the seats. .	✓	
The control center shall not obstruct the driver's forward or peripheral view or provide any obstruction of factory installed airbags or mirrors.	✓	
The control center shall not require any permanent modifications to the police vehicle.	✓	
The control center shall accommodate the mounting of the front and rear-facing cameras, the monitor and keypad.	✓	

	Comply	
3.12.9 **VIDEO VIEWING SOFTWARE/HARDWARE**	**Yes**	**No**
A video viewer/software shall be provided to allow recorded video files to be played on any computer and display date/time, user identification, emergency light indication, siren indication, latitude and longitude, speed (w/ radar interface), braking indication and the microphone activation indicator. This information shall not be overlaid on the recorded video; it shall be displayed outside the video frame.	✓	
Support for this software shall include version updates provided free of charge for the lifetime of the system.	✓	
Vendors shall provide all hardware (media readers/drives) and software necessary duplicate, share and present digital video in a court acceptable format. Please describe transfer steps needed to convert captured video to court acceptable evidence without the need for a server based infrastructure.	✓	
The video management software should be capable of converting a video from the proprietary format to the standard DVD Video format, and authoring a DVD capable of being played in a standard DVD player.	✓	

	Comply	
3.12.10 **SERVER BASED VIDEO MANAGEMENT SYSTEM (VMS) Backend (Optional)** Vendors may propose systems with a server based digital evidence management, but are not obligated to do so. If a server based Video Management Software System (VMS) component is proposed the following specifications apply.	**Yes**	**No**
The server based VMS should include server infrastructure in our Northern, Southern, and Central regional command offices and assume manual downloading of all rural substations into the regional command centers to which they report (see Table 1.2.A).	✓	
The server based VMS shall be a turn-key component and fully installed, serviced, warranted, and maintained by the vendor.	✓	
The server based VMS should include RAID-5 video storage servers or equivalent for all regional offices to capture video information, workstation(s) for managing and viewing stored video, equipment racks to mount equipment, and uninterruptible power supplies (UPS).	✓	
The server based VMS should provide a configurable DVD archive unit that can automatically archive video copies based on set parameters, and copy video files to a DVD-Video or equivalent court acceptable format.	✓	
Pricing for the server based VMS shall be provided on the Pricing Schedule in the vendor's response. Pricing must be included for all proposed hardware (workstations, servers, archiving hardware, video back up systems, access points), wiring, software, installation, configuration, and training.	✓	
If a server based video management back office component is proposed, a schematic of the back end infrastructure shall be included with responses to the RFP.	✓	
The server based VMS file storage shall be equipped with sufficient storage to	✓	

	Comply	
3.12.10 **SERVER BASED VIDEO MANAGEMENT SYSTEM (VMS) Backend (Optional)** Vendors may propose systems with a server based digital evidence management, but are not obligated to do so. If a server based Video Management Software System (VMS) component is proposed the following specifications apply.	**Yes**	**No**
comfortably manage video that would be generated from cars depicted in the scope of work in this RFP. Please list and itemize the size of proposed storage for each regional command center identified.		
If wireless downloading capability is proposed for vehicles assigned to each regional office, provide download times for video captured based on the video compression and resolution capabilities of proposed cameras, the proposed number of access points, and the proposed servers/wiring infrastructure.	✓	
The server based VMS shall include a database that contains a record for each recorded video file. The database shall store sufficient information to support the search capabilities and provide chain-of-evidence documentation.	✓	
The server based VMS shall be capable of searching stored video files by: department ID, time, date, officer ID, vehicle ID, camera, recording mode, and status (online or archived).	✓	
The server based VMS shall be capable of providing custom fields that may be used to store department-defined information (e.g. suspect's name, license plate number, etc.)	✓	
The server based VMS should allow videos to be categorized using department-defined drop-down lists. This classification shall be used for searching and to define how long each category of video is to be kept before it is automatically deleted.	✓	
The server based VMS shall provide a means to ensure the integrity of the recorded video. Video integrity must be checked when the video is uploaded, anytime it is played back or archived, and shall be verifiable on demand.	✓	
The server based VMS shall provide the capability to duplicate, share and present digital video in a court acceptable format. Describe the transfer steps, if any, needed provide video to the courts as acceptable evidence. Describe the way and format the proposed system archives recorded video files, and how these files will be stored and backed up for safeguarding.	✓	
When a video file is copied or archived to digital media, the Video Management Software shall store a unique archive ID and maintain a virtual directory to recall the archived video file(s).	✓	
The Video Management Software shall be capable of converting a video from the proprietary format to the standard DVD Video format, and authoring a DVD capable of being played in a standard DVD player.	✓	
The support for this software shall include version updates and be provided free of charge to the agency for the lifetime of the system.	✓	

	Comply	
3.12.11 **CONTROL CENTER SPECIFICATIONS**	**Yes**	**No**
An optional radar interface shall integrate directly with the Agency Bee III radar	✓	

	Comply	
3.12.11 **CONTROL CENTER SPECIFICATIONS**	**Yes**	**No**
equipment. Collected information shall include speed of the target, the "locked" target speed, and the patrol vehicle.		
The State is interested in a system that can be configured for motorcycle use. All of the specifications described for the DVR and wireless microphone shall be applicable. Is a motorcycle option available for your solution? If so, does the configuration utilize a weatherproofed monitor and camera? Please explain.		✓

	Comply	
3.12.12 **OFFICER SAFETY**	**Yes**	**No**
All equipment shall be capable of installation in the following vehicles while still meeting the other requirements stated herein: Chevrolet Tahoe, Dodge Charger, Ford Interceptor Utility/Sedan and Ford F150 Pick-up.	✓	
Describe dimensions and vehicle mounting options for your camera, recorder, wireless microphone, transmitter/ receiver and any other required equipment.	✓	
Equipment must not be installed in such as manner as to interfere with a passenger in the front passenger seat.	✓	
No part of the system shall interfere in any way with the driver's field of view. The camera shall be a single unit, including power lens, mounted on the windshield or roof of the vehicle and operate on 12 VDC power source All connections to the camera, for power and video, shall be made by a single cable that attaches using a quick release connector.		✓
The in-car system shall be protected from damage due to input of voltage, reverse polarity, and electrical transients that may be encountered.	✓	
No item installed in the interior of the passenger compartment shall increase the risk of injury to occupants during events related to a vehicle crash.	✓	
Any items installed in the interior of the vehicle shall meet the requirements stated in Federal Motor Vehicle Safety Standard 201 [October 1, 2002] Occupant Protection in Interior Impact as referenced in the In-Car Video Camera Systems Performance Specifications - Digital Video Systems provided by the International Association of Chiefs of Police. (11/21/2008).	✓	
All controls and components should be located and designed to minimize driver distraction. The control pad should be designed and organized to minimize officer workload. The record button should be readily identifiable by size, color, location and/or other design features. The record button should be easily accessible by officers wearing gloves.	✓	
System components shall be capable of being illuminated for ready identification during periods of darkness. The illumination level shall be capable of being controlled over a range from bright to dark.	✓	
All wiring shall meet industry standards applicable to the wire application including Underwriters Laboratory (UL) as well as the Society of Automotive Engineers (SAE).	✓	
Manufacturers shall provide information in their installer's guide or owner's manual that specifies the proper wiring, fuses, connectors, connection points with the vehicle electrical system and grounding points.	✓	

	Comply	
3.12.12 **OFFICER SAFETY**	**Yes**	**No**
No parts that can come into contact with human skin shall be allowed to reach a temperature capable of causing a burn injury, Reference UL 60950 "Safety of Information Technology Equipment" as amended December 1, 2000	✓	
Any system component carried on the officer's person shall meet all Underwriters Laboratory Standards for shock/electrocution and burn prevention. All batteries used in such devices shall meet Underwriters Laboratory Standards for safety.	✓	
The In Car Video System shall operate on a power source that is filtered, regulated, and short-circuit protected. The voltage supplied to the In Car Video System components shall meet the manufacturer's specifications and shall not vary with fluctuations of the vehicle's electrical system of between 9 and 18 volts.	✓	

	Comply	
3.12.13 **RELIABILITY**	**Yes**	**No**
The video systems shall maintain consistent audio/visual recording quality. The in-car recording system shall not be affected by transmissions from the police communication or interference from the following sources: high-powered television stations; other radio frequency interference (e.g. UHF, VHF & HF); automobile alternator, ignition, electrical systems; automobile heaters / air conditioner fan motors; or other patrol vehicle electrical systems.	✓	
All equipment shall have a lifecycle of at least 3 years under law enforcement agency usage, or have replacement coverage under warranty and maintenance. Please provide expected lifecycle for all video system components.	✓	
When in operation, the mobile video system must not generate electromagnetic or radiation that interferes with communications or other electronic equipment found within a police vehicle	✓	
Loss of power to the system shall not cause loss of any recorded data or result in the unit requiring reprogramming, reloading of software or operating system software.	✓	
The video system shall be able to return to a "ready to record" mode after sudden loss of power without requiring user intervention.	✓	
The system's timekeeping device and the vehicle's identifier shall be protected by a system battery backup to prevent loss of information in the event the vehicle battery is disconnected for up to a minimum of fourteen (14) days.	✓	
Date and time within video system shall be self-adjusting for daylight savings time and leap years.	✓	
The video system shall have self-charging backup battery that continues recording upon loss of power, and should gracefully shutdown prior to available power being exhausted. The battery backup that shall power the system for at least 2 minutes following loss of the vehicle's battery power.	✓	

	Comply	
3.12.14 **TRAINING/DOCUMENTATION**	**Yes**	**No**
The vendor shall offer and provide, at no additional cost, training to all end users	✓	

	Comply	
3.12.14 **TRAINING/DOCUMENTATION**	**Yes**	**No**
on the use of the video system and video viewing software		
The vendor shall offer and provide, at no additional cost, training to electronic technicians at their Reno, Elko, and Las Vegas shop locations. This training will ensure proper operation, repair, and maintenance of the manufacturer's video system.	✓	
A system administrator class covering all aspects of the system shall be given at all the DPS/HPD Regional Command sites (Reno, Elko, and Las Vegas) upon award.	✓	
Trainers must be experienced instructors who are thoroughly familiar with all technical aspects of the system.	✓	
Provide a course syllabus for training classes to be provided with your RFP response.	✓	
Vendor shall include documentation for procedures on regular maintenance of video system components.	✓	
Vendor shall provide complete service manuals and service bulletins on all electronic components.		
Vendor shall provide documentation of system that includes identification of all vehicle equipment and the physical configuration; all configurable system parameters; written installation instructions, user manuals; and system administrator manuals instructions covering the change of all configuration settings.	✓	

3.11 SCOPE OF WORK BODY WORN CAMERA (BWC)

3.11.1 The State of Nevada is seeking a qualified vendor that can provide at a minimum, the following:

3.11.1.1 A Video Management System (VMS) that is either an externally hosted cloud-based data storage solution with the capability of organizing/managing video/digital evidence, server based or consist of a hybrid solution and be accessible via the internet to multiple users simultaneously. The State prefers the Cloud or Hybrid solution. The system must meet the State's geographical needs as described in this RFP.

3.11.1.2 Up to 489 high quality Body Worn Cameras necessary to outfit 465 sworn (Lieutenants and below) with 5% spares.

3.11.1.3 The VMS shall have the ability to convert video to a portable media device i.e.: (DVD, external hard drive) without compromising its authenticity to include all metadata and chain of custody requirements.

3.11.1.4 Full service vendor support including installation, maintenance/ support, warranty, training, documentation, and project management throughout the contract period.

3.11.1.5 All-inclusive pricing for all hardware (body worn cameras, workstations, servers, archiving hardware, video back-up systems, access points, automatic triggering devices, connectivity (Ethernet wiring), and software (system, database, and video management) installation, configuration, and training).

3.11.1.6 Proposed systems that consist of server based video evidence management must be turn-key and provide warranties and full service maintenance and support on all hardware, wiring infrastructure, and software for a period of five (5) years.

3.11.2 Body Worn Cameras

Specifications are provided by area including BWC Hardware Requirements, Evidence Managements System, Video Storage, System Security, Information Security, In-car Video Integration, Training and warranty.

3.11.3 BWC Hardware Requirements

3.11.3.1 Cameras worn by officers shall be lightweight, preferably six ounces or less in total combined weight.

3.11.3.2 Cameras shall have minimal wiring, not exceed two wires or cables and shall be designed to disengage to prevent the wearer from becoming entangled.

3.11.3.3 Cameras shall have recording capability of at least ten continuous (10) hours (the State would prefer twelve (12) hours of continuous recording capability).

3.11.3.4 Cameras must have a minimum stand-by battery life of ten (10) hours without recharging or additional batteries, with pre-record on.

3.11.3.5 BWC Shall be user friendly that can be activated easily during times of stressful events.

3.11.3.6 BWC should have automatic triggers, as a standalone system.

3.11.3.7 Rechargeable battery must be able to reach full charge, from no power, in no more than six (6) hours.

3.11.3.8 Cameras must have a minimum of thirty-two (32) GB internal/integrated memory and storage media not be removable.

3.11.3.9 Rechargeable battery must be able to withstand at least three hundred (300) charging cycles, maintaining the 10 hour record time.

3.11.3.10 BWC lens must have a field of view from 95 to 145 degrees.

3.11.3.11 The recording speed shall be no less than 30 frames per second (fps).

3.11.3.12 Camera shall record video images in full color with a minimum resolution of 640 pixels x 480 pixels. Adjustable resolution is preferable.

3.11.3.13 Video compression shall be H.263 or higher.

3.11.3.14 Cameras shall have multiple mounting options to accommodate varying uniformed officers, plain-clothed officers, and tactical field situations. Examples include, but are not limited to, lapel, shoulder, eyeglasses, cap, helmet, holster, button shirt, zipper shirt, utility belt, snow suit etc. Mounts shall not require modification to current in-service uniforms.

3.11.3.15 Camera should allow for on scene (in the field) viewing? If so, describe the ability to playback or view video.
RESPONSE: The FOCUS can integrate with either the COBAN EDGE Hi-Def In-Car Video System or agency Mobile Data Terminal (laptop) to playback video and enter additional data in the field.

3.11.3.16 Camera shall provide feedback to user when activated, either via a visual indicator or audible tone.

3.11.3.17 Camera shall have the ability to be set to stealth mode while in the field.

3.11.3.18 Camera must have an indicator that shows current operating mode.

3.11.3.19 If the camera offers night vision enhancement, the State shall have the ability to enable or disable it.

3.11.3.20 The System should provide automatic indexing functionality of video files and be capable of interfacing with existing computer-aided dispatch (CAD) vendor.

3.11.3.21 Cameras shall automatically embed a time/date stamp in the recorded video.

3.11.3.22 Cameras shall prevent users from deleting recorded files without authorization.

3.11.3.23 Camera should have a method for adding desired metadata to video in the field prior to upload.

3.11.3.24 Officers should have the ability to playback or view video in the field on mobile cameras and/or MDC's (Panasonic FZ-G1 Tablet) wirelessly (i.e. Bluetooth).

3.11.3.25 Camera shall have a pre-event record feature (BWC should capture at least thirty (30) seconds of video prior to officer initiating the recording). Adjustable times are preferable.

3.11.3.26 Camera will export in a standard, open format, such that it can be replayed in freely available software without processing or conversion. Proprietary data formats shall not be accepted.

3.11.3.27 The vendor must offer a multi-dock station capable of uploading digital evidence from multiple cameras simultaneously and have the capability to upload video via Wi-Fi and/or cellular LTE connectivity. If via cellular, product should be compatible with Fenny Wireless Skyus X modem.

3.11.3.28 The multi-dock station must charge the camera batteries, securely transfer files without loss of quality or metadata, and delete the files from the camera once transferred to the evidence management system.

3.11.3.29 The multi-dock station should not require a department computer to operate, connect or interface with the Internet (e.g. the multi-dock

station should be a standalone device that connects to the cloud storage solution or server via an Ethernet connection).

3.11.3.30 The camera should not cause electromagnetic interference with nearby airwave radios (and other electronic equipment and radio communication systems).

3.11.3.31 Loss of power to the camera must not cause data to be lost/corrupted.

3.11.3.32 Cameras will be ruggedized. Cameras shall be able to survive a six-foot drop test. Cameras shall be able to operate at minimum temperature of -12 degrees Fahrenheit and a maximum temperature of 130 degrees Fahrenheit.

3.11.3.33 Vendor will state camera's Ingress Protection (IP) rating. The State prefers an IP rating of IP67.
RESPONSE: The FOCUS is rated IP67.

3.11.3.34 Describe what features devices have in place to prevent accidental activations of camera by the user (without the need for accessories or alteration of equipment by user).
RESPONSE: The recording button of the FOCUS can be configured by the system administrator to activate only on a double-press or long press (3 seconds) to prevent accidental activations.

3.11.3.35 Vendor shall define the required time for automated indexing (specific time frame after upload of video evidence) and any expected error rate percentage upon indexing, if applicable.
RESPONSE: Indexing is completed on the unit itself, prior to upload, and videos are available for viewing immediately after transfer is completed.

3.11.3.36 The vendor must state the transfer rate of video from the multi-dock station to the cloud in sixty or thirty-minute increments. Vendors shall break down transfer rates by video quality (i.e. Hi Def).
RESPONSE: Assuming a video that is 2 hours in length and a 50 Mbps uplink to the Cloud,
640 x 480 – Less than 30 minutes (approximately 11 minutes).
720p – Less than 30 minutes (approximately 13 minutes).
1080p – Less than 30 minutes (approximately 15 minutes).
These times include the speed of transferring data off the FOCUS unit at approximately 24.6 GB/hr.

3.11.3.37 Describe device wireless activation features (e.g. device is automatically activated with the activation of patrol vehicle's light bar), if applicable.
RESPONSE: When deployed with the in-car smart dock, the FOCUS can be wirelessly activated by any trigger operating off

a 12-volt source. Light bar triggering is standard, while other possibilities like gun lock, door ajar, speed trigger, etc. are available.

3.11.4 Maintenance & Repairs (Hardware)

3.11.4.1 Vendor shall propose and provide a detailed description of the maintenance services that are available once the one-year warranty has expired.
RESPONSE: COBAN's Law Enforcement all-inclusive coverage plan comprises of monthly Hybrid Cloud storage per unit, extended warranty coverage for the duration of the plan, and a technology upgrade for Body Cameras and all associated accessories at the end of the second (2nd) and fourth (4th) contract years.

3.11.4.2 Vendor shall provide on-site repair services as required.

3.11.5 Video Management System

3.11.5.1 Vendors must be able to provide documentation establishing that their technology has undergone rigorous field testing by an independent and relevant scientific body. This documentation must be provided with the vendor's proposal response.
RESPONSE: Environmental durability testing documentation is provided in COBAN's Confidential proposal response.

3.11.5.2 Vendors shall be willing to provide an expert witness to testify in a court of law, to support court cases utilizing video from their BWC System, at a reasonable fee. Vendors must specify hourly rate for expert witness testimony within ***Attachment H ~ Cost***.

3.11.5.3 VMS shall either be an externally hosted cloud-based data storage solution with the capability of organizing/managing video/digital evidence, server based or consist of a hybrid solution and be accessible via the internet to multiple users simultaneously. The State prefers the Cloud or Hybrid solution.

3.11.5.4 VMS shall allow for remote access with complete functionality (review, enter metadata and send video) with NHP mobile devices and/or computers.

3.11.5.5 VMS shall provide an automatic audit trail for when files and videos are accessed.

3.11.5.6 VMS shall allow officers to enter additional metadata to recorded files, such as notes or comments.

3.11.5.7 Solution must support all major digital file types (avi, jpeg, mpeg, etc.).

3.11.5.8 VMS shall provide remote viewing of the stored video based on the permissions granted by the System Administrator.

3.11.5.9 VMS shall allow users to search video files by name, date of recording, date of upload, case number (CAD-generated), device number, as well as categorize and add notes to each file within the solution.

3.11.5.10 VMS must allow System Administrators the ability to grant access of specific files to specified persons for a specific period of time.

3.11.5.11 VMS shall have the ability to share files internally and externally via secure links over the Internet.

3.11.5.12 When videos are exported to a portable media device, all metadata shall transfer over without compromising its authenticity.

3.11.5.13 VMS shall grant System Administrators the ability to set variable retention rules per DPS/HPD preferences.

3.11.5.14 VMS shall have the ability to set time tables for automatic deletions of files.

3.11.5.15 VMS should have the ability to recover deleted evidence within a minimum of seven (7) days of deletion. The State would prefer a recovery period of 30 days.

3.11.5.16 The VMS will maintain a log/audit trail illustrating users who have viewed and copied video to an external source (e.g. DVD/ long term storage).

3.11.5.17 VMS must have the ability to preserve the raw file without editing.

3.11.5.18 VMS must securely store all videos and recordings in a way that only State-authorized users and users authorized by DPS/HPD can view.

3.11.5.19 VMS must provide redundant, security back-up of all data.

3.11.5.20 VMS should offer redaction capabilities.

3.11.5.21 VMS must be compatible with at least Windows 7 Professional Operating System or more recent versions) and Internet Explorer Version 11 web browser or more recent version(s).

3.11.5.22 Provide the minimum required memory (RAM), if applicable.
RESPONSE: The minimum required RAM is 4 GB.

3.11.5.23 Provide the minimum required processor speed, if applicable.
RESPONSE: The minimum processor speed is 3.0 GHz.

3.11.5.24 Provide the minimum network speed to upload videos, if cloud based.
RESPONSE: It is highly recommended to have at least a 50 mbps uplink to the cloud.

3.11.5.25 Upload times to the VMS will be defined in per hour or thirty-minute increments of video files.
RESPONSE: The transfer speed from the FOCUS to the VMS is 24.6 GB per hour.

3.11.5.26 Any required or expected 'buffering' times before video files are accessible in cloud storage (for view or adding metadata) will be clearly defined.
RESPONSE: Video files are immediately viewable after transfer of the video is completed. There are no require or expected buffering time.

3.11.5.27 Describe System compatibility with mobile devices (iPhones and Android).
RESPONSE: Future mobile compatibility over Bluetooth/WiFi connection to Android devices will be available via a firmware update.

3.11.5.28 Vendor shall indicate the number of searchable fields in storage system and any 'wild card' searches that can be done to locate stored data.
RESPONSE: The number of searchable fields is not restricted. Any data parameter can be used during COBAN's customizable search feature for the management system. A typical video search implementation includes 25 search criteria, with 14 free text fields that can support partial matches (wildcards).

3.11.5.29 Users should have the ability to send email messages from hosted solution interface to end users.

3.11.5.30 VMS should send System Administrators administrative notifications when evidence files are about to be deleted.

3.11.5.31 VMS should send System Administrators administrative notifications when users need their credentials reset due to failed log on attempts.

3.11.5.32 VMS should offer auto-redaction capabilities, to include high-movement and low light video; preferred to minimize the amount of time to redact 30 fps for the entire length of video.

3.11.5.33 VMS should have the ability to capture data, report on video statistics and provide custom reports.

3.11.6 Video Storage

If cloud based, the storage facility must be located within the continental United States.

3.11.6.1 Does your storage solution have the ability to upload video from multiple camera units simultaneously?

3.11.6.2 Storage solution should have the ability to view multiple linked videos simultaneously.

3.11.6.3 Solution should have two tier storage capacity for active video and long term storage needs as defined by the State.

3.11.6.4 Does proposed solution offer storage options for 'unlimited storage' of body camera video evidence?

3.11.6.5 Does your system provide a method to upload videos, via an access point? Please describe your process.
RESPONSE: While the Focus Body Camera supports Wi-Fi, it is currently used for communications and not upload. When paired with a vehicle device, like the EDGE Hi-Def In-Car Video System, videos can be uploaded wirelessly together with the in-car system.

3.11.6.6 Is your system compatible with an EnGenius ENS500EXT access point?

3.11.6.7 Does solution have the ability to maintain and export audit trail along with video?

3.11.6.8 Define maximum storage capacity, if any.
RESPONSE: There is no maximum storage capacity. Please refer to the Command Terms and Conditions document for more information regarding Hybrid storage solution terms.

3.11.6.9 Describe the capability of proposed solution to provide the State with the ability to export/download and migrate original recordings with all metadata to other storage media or, local storage inclusive of all metadata and chain of custody information.
RESPONSE: Export/download and migration of original recordings to other storage servers/locations always includes metadata and chain of custody information. The metadata and chain of custody is transferred before the actual video file.

3.11.6.10 Describe archival, hot and cold cloud storage solutions.
RESPONSE: For cloud storage, videos are stored in Cool Storage (minor delay when accessed – in seconds when compared to hot storage). For the Courier service (cloud based

sharing), videos are stored in hot storage. COBAN does not offer cold storage at this time.

3.11.6.11 Describe archival solutions for server storage, if applicable.
RESPONSE: Video can be archived to local NAS storage or cloud storage.

3.11.6.12 Discuss different cost savings as defined by various storage solutions (active vs. long-term storage of files).
RESPONSE: COBAN does not charge separate tiers for active or "cold" storage. The Hybrid storage solution proposed by COBAN provides the agency with the ability to store high priority videos on the gateway device, decreasing the time associated with reviewing or accessing videos and lessening the required network bandwidth. A copy of video can be transferred to the Cloud for long-term storage purposes. While there are no separate costs for active vs. long-term storage, the Hybrid solution allows the agency to prioritize videos and maximize efficiency and manpower.

3.11.6.13 Describe capability to respond to requests to pull video from 'cold cloud storage', including time required to download video from storage.
RESPONSE: All videos uploaded are immediately accessible, with no "cold storage" penalty.

3.11.6.14 Describe your solution to upload video in the rural areas that only have a maximum broadband speed of 1.5 Mbps
RESPONSE: Utilizing COBAN's hybrid solution, the agency can elect to only upload certain video categories to the Cloud for long term storage, while keeping non-evidentiary files on premise. Also, COBAN's hybrid technology can optimize file sizes prior to Cloud upload, reducing video sizes as much as 85%.

3.11.7 System Security

3.11.7.1 The VMS shall meet the minimal security requirements for the Criminal Justice Information Services (CJIS) Policy. In particular, the VMS shall comply with Policy Areas 2 through 13 in Section 5 of the CJIS Policy. The CJIS Policy can be viewed by accessing the following link: https://www.fbi.gov/about-us/cjis/cjis-security-policy-resource-center

A. Will access to Criminal Justice Information (CJI) within a cloud environment fall within the category of remote access? (Section 5.5.6 Remote Access found in the above link)

3.11.7.2 Will advanced authentication (AA) be required for access to CJI within a cloud environment (Section 5.6.2.2 Advanced

Authentication, 5.5.2.2.1 Advanced Authentication Policy and Rationale found in the link under 3.11.7.1)

3.11.7.3 Does your cloud service provider's datacenter(s) used in the transmission or storage of CJI meet all the requirements of a physically secure location? (Section5.9.1 Physical Secure Location found in the link under 3.11.7.1)

3.11.7.4 Are the encryption requirements being met? (Section 5.10.1.2 Encryption found in the link under 3.11.7.1)

3.11.7.5 Who will be providing the encryption as required in the CJIS Security Policy? (Client or cloud service provider)
RESPONSE: COBAN utilizes Microsoft Azure Government for Cloud services.

3.11.7.6 Is the data encrypted while at rest and in transit?

3.11.7.7 What are the cloud service provider's incident response procedures? (Section 5.3 Policy Area 3: Incident Response found in the link under 3.11.7.1)
RESPONSE: Please refer to Microsoft Incident Response Information found here:
https://azure.microsoft.com/en-us/blog/microsoft-incident-response-and-shared-responsibility-for-cloud-computing/

3.11.7.8 Will the cloud subscriber be notified of any incident?

3.11.7.9 If CJI is compromised, what are the notification and response procedures?
RESPONSE: COBAN will inform agencies we work with if/when CJI is compromised and update correction progress on a daily basis until the situation is resolved. All communications will be done via email so there is a record of reference.

3.11.7.10 Is the cloud service provider a private contractor/vendor?

3.11.7.11 If so, they are subject to the same screening and agreement requirements as any other private contractors hired to handle CJI. (Section 5.1.1.5 Private Contractor User Agreements and CJIS Security Addendum; 5.12.1.2 Personnel Screening for Contractors and Vendors found in the link under 3.11.7.1)

3.11.7.12 Will the cloud service provider allow the CSA and FBI to conduct compliance and security audits? (Section 5.11.1 Audits by the FBI CJIS Division; 5.11.2 Audits by the CSA found in the link under 3.11.7.1)

3.11.7.13 The State may verify that Contractor is in compliance with CJIS by requesting a compliance audit of Contractor's technology

deployment through the CJIS Systems Agency to the Federal Bureau of Investigation (FBI). The FBI CJIS Division shall perform the requested audit to verify compliance. 140-2.

3.11.7.14 System shall provide full conformance to Federal Information Processing Standards (FIPS) Publication.

3.11.7.15 VMS shall provide user authentication with a unique username and password.

3.11.7.16 VMS will allow for authorized users to be established based on various roles and permissions by the System Administrator.

3.11.7.17 VMS will offer optional IP access restriction and security challenge questions upon access from an unknown or previously used location.

3.11.7.18 Any access to stored video shall be maintained in an automatic log or audit trail showing users that have viewed, shared or copied video to an external source (e.g. CD/DVD, local storage, etc.), and the audit trail should be capable of being exported.

3.11.7.19 Log activities performed by specific user ID, IP address and time/date stamp all activities.

3.11.7.20 System Administrators shall have the ability to administratively manage accounts and assign rights and permissions to system users.

3.11.7.21 VMS shall provide ability to set an unsuccessful access attempt limit and suspend IDs after reaching the unsuccessful access threshold.

3.11.7.22 VMS shall provide ability to send alerts to System Administrators for unauthorized access attempts.

3.11.7.23 VMS shall enable automatic logoff of ID after a defined period of session inactivity, and perform subsequent re-log-on password authentication.

3.11.7.24 VMS shall provide ability to configure password parameters such as password lengths, user access to expiration settings and other behaviors, enabling alphanumeric characters, etc.

3.11.7.25 VMS shall provide ability to lock out user or group ID.

3.11.7.26 Vendor will provide a detailed explanation of data security standards, to include but not limited to: defining the physical environment, location of all host servers; protections against natural and man-made disasters; encryption; transfer; storage; redundancy and recovery of files.

RESPONSE: COBAN uses Microsoft Azure Government as a cloud storage platform. It offers the industry's largest

compliance portfolio, provides physical and network isolation within the continental United States, and is operated by screened U.S. personnel. It is specifically designed to meet the higher level security and compliance needs for sensitive and dedicated U.S. Public Sector workloads found in regulations such as the United States Federal Risk and Authorization Management Program (FedRAMP), Department of Defense Enterprise Cloud Service Broker (ECSB), Criminal Justice Information Services (CJIS) Security Policy, and Health Insurance Portability and Accountability Act (HIPAA).

For more details, please refer to: https://azure.microsoft.com/en-us/documentation/articles/azure-government-overview/

3.11.7.27 Describe security standards for hardware (cameras) in place to prevent data from being accessed in the event a camera is lost or stolen.
RESPONSE: The FOCUS accomplishes secure access through a proprietary mounting mechanism and driver, which makes the FOCUS incompatible with any computers that do not have COBAN's software and a valid access credential. As opposed to only encrypting data, the FOCUS securely protects data by completely locking access to the storage on the device from all unauthorized devices and users, including preventing destructive behavior and formatting.

3.11.7.28 Vendor will describe any previous loss of data occurring from criminal actions, as well as other issues that impact data integrity, such as unauthorized data access by contract personnel.
RESPONSE: None.

3.11.7.29 Provide a non-technical means for field personnel to remotely view stored video without altering original file (other than applying metadata to file).

3.11.7.30 Describe ability of system to enforce password expiration.
RESPONSE: The local system administrator defines password expiration rules in terms of number of days. Each time a user logs onto the system, the VMS will check the expiration rule and request the user to change his or her password if it has expired.

3.11.7.31 Describe ability of system to limit concurrent sessions.
RESPONSE: Each time a user logs on, the system checks for active session under the same user ID and the IP address used. If there is a session under a different IP address that was active less than 1 minute ago, access to the new logon attempt will be denied.

3.11.7.32 Describe ability of system to log changes to administrative functions.
RESPONSE: All changes to administrative functions are logged in the system's audit trail.

3.11.8 Information Security

3.11.8.1 Vendor shall encrypt transmission of confidential data when transferred through publicly accessible networks such as the Internet.

3.11.8.2 Vendor shall ensure all transmission of information data files are transferred through a Secure Socket Layer (SSL), which creates a 128 bit encrypted connection which is password protected. All data files that are on Vendor's servers are encrypted once they have completed the upload and pre-process procedures.

3.11.8.3 All input data transmitted across public networks (all networks other than the State's) shall be encrypted during transit and decrypted electronically during processing to produce non-confidential output data. The decrypted data shall not be accessible by vendor's employees unless otherwise limited on a "need to know" basis as determined by the Nevada Highway Patrol's designee.

3.11.8.4 The System shall have a host-based firewall technology preventing inappropriate/ unauthorized access. Vendor shall provide the following:

A. All intrusion detection system monitoring for unauthorized access attempts.

B. Must run anti-virus software.

C. Monitor daily logs for potential intrusions, file integrity.

D. Only allow access by uniquely assigned and auditable IDs.

E. All data transfers and administrative access must be in an encrypted format.

3.11.9 In-Car Video Integration

3.11.9.1 BWC must have the ability to record audio for the In-car video system.

3.11.9.2 BWC must have the ability to activate recording off the In-Car video systems automatic triggers.

3.12 IN-CAR VIDEO

The In-Car Video portion of this RFP is contingent upon funding anticipated to be approximately one (1) year from contract award. Vendors proposing In-Car Video must be compatible with proposed Body Worn Cameras.

3.12.1 Standard Specifications

3.12.1.1 All mobile video systems and related audio equipment must conform to the applicable minimum standards as set by the following: Electronic Industries Association (EIA);

3.12.1.2 Federal Communications Commission (FCC) rules/ regulations;

3.12.1.3 Institute of Electrical and Electronic Engineers (IEEE);

3.12.1.4 International Electro-technical Commission (IEC);

3.12.1.5 International Organization for Standardization (ISO);

3.12.1.6 National Fire Protection International (NFPA);

3.12.1.7 National Highway Transportation Safety Administration (NHTSA);

3.12.1.8 Society of Automotive Engineers (SAE);

3.12.1.9 Underwriters Laboratories Inc. (UL); and

3.12.1.10 Vendors must provide documentation that validates that their systems adhere to the minimum specifications in the International Association of Chief of Police (IACP) Specifications for In-Car Video (dated 11/21/2008), and that the technology used is generally accepted in the relevant field.
RESPONSE: COBAN will provide the applicable documentation if so requested by Nevada Highway Patrol.

3.12.2 Video System Specifications

3.12.2.1 The minimum acceptable components consist of the following parts:

A. Front camera;

B. Back seat camera;

C. Color LED monitor with audio;

D. Body worn camera must act as a wireless transmitter for audio with in-car & home charger;

E. Covert secondary hard-wired microphone;

F. Digital Video Recorder- DVR;

G. Integrated GPS receiver and antenna;

H. Collision sensor;

I. Controller center;

J. Means to transfer media data from In-car to storage solution;

K. Video viewer capability;

L. Hardware/software necessary to submit videos as evidence;

M. All mounts and cables for power, interfaces, cameras, and antennas;

N. Documentation;

O. Warranty and maintenance;

P. Training; and

Q. Shipping and handling.

3.12.2.2 The digital video recorder (DVR) offered shall be in full commercial production. Prototypes will not be considered.

3.12.2.3 Programming of the in-car recording system shall be restricted to authorized personnel only.

3.12.2.4 All controls and indicators shall have adjustable backlighting.

3.12.2.5 The officer shall have the option of recording primary, rear-facing, or both cameras simultaneously.

3.12.2.6 A collision sensor covering 360 degrees, to trigger recordings, without requiring connection to the vehicles airbag system, shall be included. If a collision is detected, the video recorder (including pre-event memory) shall be automatically activated so the collision and video leading up to the collision is recorded.

3.12.2.7 The in-car digital video system shall be provided with all necessary cables and hardware (e.g. fuse holders, mounting brackets) required for installation.

3.12.2.8 Each digital video recording system shall be supplied with a comprehensive installation/ programming/ operations manual. The manual shall specify all brackets, hardware and mounting locations for installing camera systems.

3.12.3 Digital Video Recorder (DVR)

3.12.3.1 The DVR shall mount in standard equipment consoles between the seats, or overhead.

3.12.3.2 No permanent modifications shall be required to install the DVR system.

3.12.3.3 The DVR system shall be capable of being installed as to not hinder the operation of the police unit.

3.12.3.4 The DVR shall be capable of recording two video inputs from a powerful zoom, forward-facing camera, and a wide-angle rear-facing camera.

3.12.3.5 The DVR shall provide a choice of at least one of the following upload options.

A. Wireless Ethernet- provided 802.11n base station includes encryption, supports multiple simultaneous uploads and is upwardly scalable. The system should be capable of comfortably uploading from multiple vehicles in the regional command centers (depicted in the scope of work section of this RFP) simultaneously. In addition, a backup upload system must be provided, should the wireless transfer system fail.

B. Removable Hard Disc Drive (HDD) with provided hard drive docking stations that support plug and play hard drive insertion.

C. Removable Compact Flash Device-Device with provided docking stations that support plug-and-play flash card insertion.

D. Cellular - Upload media via LTE connectivity that is compatible with the Feeney Wireless Skyus-X modem.

E. If necessary, itemize and include the cost of media needed to allow officers the ability to rotate media between their vehicles and evidence technicians.

3.12.3.6 The DVR shall have the ability to record up to 8 hours of video before reaching the capacity of the storage media at maximum resolution. For the recording media available, specify the recording and playback times, resolution, and MB per second.
RESPONSE:
SD standard 640 x 480 1.3 GB/hr. or 0.37 MB/s.

SD high	**640 x 480**	**2.0 GB/hr. or 0.57 MB/s.**	
HD standard	**720p**	**2.4 GB/hr. or 0.68 MB/s.**	**26.67 Hr.**
HD high	**720p**	**3.6 GB/hr. or 1.02 MB/s.**	**17.78 Hr.**

3.12.3.7 Video resolution, frame rates, and quality on the DVR shall be preset but can be changed by an administrator. These settings shall be independently configurable for recording modes of both video cameras. Please specify levels for:

A. video resolution
RESPONSE: Video resolution can be configured to either 720P or 640 x 480.

B. video frame rate
RESPONSE: Video frame rate cannot be configured, and is always at industry standard 30 frames per second.

C. video quality
RESPONSE: Video quality (bit rate) can be configured to either standard or high settings.

3.12.3.8 The DVR shall require a security feature (key, admin software rights) to prevent unauthorized users from accessing the on-screen menus to adjust video settings and perform file management functions.

3.12.3.9 The DVR shall include a GPS receiver to provide vehicle position, course and speed information. The GPS receiver shall also be used to set the internal DVR clock to the proper time and date so that all vehicles display and record proper time.

3.12.3.10 The DVR shall include indicators visible outside of the vehicle to confirm that the system is recording and that the wireless audio transmitter is activated. This indicator does not need to be visible to occupants inside the vehicle.

3.12.3.11 The DVR shall be capable of initiating a recording by both automatic and manual means. The DVR shall begin recording automatically when any of the following are activated:

A. Vehicle's emergency/pursuit lights;

B. Siren, and

C. The systems integrated crash sensor. (This activation shall include capturing the "look back" buffer memory to video-record the collision, should it be in view of the active camera.

3.12.3.12 The audio input associated with the forward-facing camera shall record audio using the internal microphone inside the vehicle. When the wireless audio transmitter/BWC is activated, the audio

input shall be automatically switched to the wireless audio transmitter's microphone. The system shall automatically revert to the internal microphone when the wireless audio transmitter/BWC is deactivated.

3.12.3.13 The DVR shall include a programmable pre-event recording mode allowing it to capture images a minimum of 30 seconds prior to the activation of the RECORD mode. Specify pre-event recording capability of proposed DVR.
RESPONSE: The pre-event recording time for the EDGE Hi-Def can be specifically configured to conform to department policies and is not restricted.

3.12.3.14 The DVR shall be capable of capturing date/time, user identification information, emergency light indication, siren indication, speed indication (w/ radar interface), braking indication, and whether the microphone is activated. The information shall not be overlaid on the recorded video, and should be stored as secured metadata.

3.12.3.15 The DVR shall allow video to be played back in the vehicle. When the DVR PLAY button is pressed a list of all prior recordings shall appear on the display screen provided.

3.12.3.16 The DVR shall record video in a format that allows playback on multiple devices.

3.12.3.17 The DVR shall provide a means to ensure the integrity of the recorded video has not been compromised. The video must be able to be authenticated at any time, including when it is played back outside of the police vehicle.

3.12.3.18 The DVR shall provide a means to ensure the integrity of the recorded video has not been compromised. The video must be able to be authenticated at any time, including when it is played back outside of the police vehicle.

3.12.3.19 The Control Center/DVR firmware shall allow in-system programming for future updates. Please describe how updates are made.
RESPONSE: Software and configuration updates are automatically pushed to the EDGE Hi-Def at the end of a wireless transfer session (upload video and data) or when a mobile hard drive is checked out.

3.12.3.20 The DVR or related display (Mobile Data Computer, tablet etc.) shall have backlit controls for record; stop; play/pause; forward/reverse, fast forward/ reverse; trace, and lighted indicators for power on; record; and play.

3.12.3.21 The power control switch shall allow the DVR to automatically power on after the vehicle's ignition is switched on.

3.12.3.22 The DVR shall automatically power down after the vehicle's ignition is turned off provided the DVR is not in "Record" and is not in the process of downloading files or other type of file save.

3.12.3.23 The DVR should provide a means to tag an incident at the time it is recorded with a priority designation. Once a recording is stopped, the DVR should automatically prompt the officer to select from the pre-defined drop-down list(s).

3.12.3.24 The DVR shall be capable of operating within the range of interior temperatures found within a law enforcement vehicle in Nevada without the need for supplemental heating or cooling. Specify your DVR's operating range and acceptability for the extreme temperature range in Nevada
RESPONSE: The EDGE Hi-Def has an operating temperature range of -20 to +165 degrees Fahrenheit.

3.12.4 Compact CCD Color Camera

3.12.4.1 The low-light CCD color camera shall use a Sony EXview® HAD CCD or equivalent image sensor to provide high quality nighttime images while minimizing blooming and glaring from bright sources of light. Proof of "equal" shall be the responsibility of the bidder and shall be submitted with the bid if not using the Sony EX VIEW chipset.

3.12.4.2 The forward-facing camera shall be a solid state imaging system that is not subject to burn in, or interference by magnetic fields.

3.12.4.3 The forward-facing camera shall operate within the range of temperatures from 0 to 120 degrees Fahrenheit or between -17.8 and 48.9 degrees Celsius.

3.12.4.4 The camera shall be compact so as not to obstruct the driver's forward or peripheral view thru the windshield, or provide any obstruction of factory installed airbags or mirrors.

3.12.4.5 The camera shall be a single unit, including power lens, mounted on the windshield or roof of the vehicle and operate on 12 VDC power source.

3.12.4.6 The camera shall provide a minimum field of view of 24 feet width at distance of 35 feet (40 degrees).

3.12.4.7 The camera shall have manual and automatic focus capabilities, which are user selectable.

3.12.4.8 The front camera should have a minimum 120X zoom (10x optical zoom with 12x digital zoom). Specify mode.
RESPONSE: The front camera for the EDGE Hi-Def is capable of 28x optical zoom and 12x digital zoom for a total of 336X zoom.

3.12.4.9 The minimum LUX rating of the forward facing camera shall be rated at less than 1 LUX at full shutter speeds and 0.05 LUX in night view mode.

3.12.4.10 The camera shall automatically adjust for varying light levels from day to night. The camera and lens will be equipped with auto focus, automatic exposure, and automatic white balance.

3.12.4.11 The camera shall have a minimum color resolution of 450 horizontal lines.

3.12.4.12 All cameras shall default to auto focus. An override system should be configurable to prevent operation while the vehicle is in motion.

3.12.4.13 The camera shall offer a signal-to-noise ratio of at least 46db.

3.12.4.14 The camera shall have backlight compensation setting.

3.12.4.15 The camera shall be compact. List the size and weight of the proposed CCD camera.
RESPONSE: The camera has dimensions of 2.7" x 2.4" x 4.9" (height x width x length). It weighs 32 ounces.

3.12.4.16 The camera shall mount with a heavy-duty controlled pivot mount that does not obstruct the driver's field of view. Camera shall be able to be rotated 360 degrees and can pan and tilt to +/- 90 degrees. Adjustment shall require no tools.

3.12.4.17 An optional rear view camera shall be available.

3.12.5 Back Seat Cameras

3.12.5.1 The back-seat camera shall utilize a micro compact with wide angle 1/3" Super HAD image device (or equivalent) with approximately 420 lines of resolution. Proof of "equal" shall be the responsibility of the bidder and shall be submitted with the bid. This must be included in the system at no charge.

3.12.5.2 The rear-facing camera shall be capable of being mounted covertly in the cab.

3.12.5.3 The rear facing camera shall be capable of recording the entire rear seat area of the police vehicle.

3.12.5.4 The rear-facing camera shall have a minimum lux rating of .03. Specify the rating.
RESPONSE: The rear-facing, wide-angle IR camera has a rating of 0 lux. It utilizes non-visible, automatic IR LEDs.

3.12.5.5 The rear-facing camera shall utilize infrared illumination to capture video in no-light conditions.

3.12.6 Compact Color LCD Monitor

3.12.6.1 The monitor shall be a full color high quality LCD, active matrix (TFT) screen that measures at least 3.0" measured diagonally.

3.12.6.2 The monitor shall be capable of displaying a live picture from the camera when powered, even if recording is not in progress.

3.12.6.3 The monitor shall operate between 32 and 120 degrees Fahrenheit.

3.12.6.4 The monitor shall include a system speaker, with volume control, to provide monitoring of live audio or playback from all system microphones.

3.12.6.5 The monitor shall have controls/indicators that mimic the DVR and include record; stop; play/pause; forward/reverse; brightness; volume; and power. The monitor should also include a button for disabling the monitor when the system in standby, and accessing a menu for programming.

3.12.6.6 The monitor should have the capability to display: date/time, user identification information, emergency light indication, siren indication, latitude and longitude, speed (w/ radar interface), braking indicator and microphone activation indicator. The information shall not be overlaid on the recorded video; rather, it should be stored as external secure meta-data (or equivalent) in the video file.

3.12.6.7 The monitor should support a full-screen video mode (without the auxiliary data) using a single key press on the control center.

3.12.6.8 The monitor shall operate independently from the recording device. For covert operation it should possible to operate the DVR in RECORD mode with the monitor turned off.

3.12.6.9 The monitor shall be provided with an adjustable mounting bracket that will allow it to be mounted in a variety of locations within the law enforcement vehicle.

3.12.6.10 The monitor shall have the capability to display the approximate amount of storage remaining on the media in an HH:MM format. An audible beep or other form of tone shall warn operator prior to or when there is 10%, or less, time remaining on the media.

3.12.7 Microphones

3.12.7.1 The system shall come equipped with a digital wireless microphone that is incorporated into the BWC and an in-car microphone. The in-car microphone shall be mountable anywhere within the vehicle.

3.12.7.2 Audio from the interior microphone and the wireless microphone/BWC shall record on separate audio channels.

3.12.7.3 The wireless microphone/BWC shall be self-contained and include a re-chargeable battery; mountable charger/docking station; internal microphone; internal antenna. Transmitters that rely on the microphone cable for an antenna, or which utilize an external antenna shall not be permitted.

3.12.7.4 The wireless microphone/BWC system shall be FCC type accepted.

3.12.7.5 The wireless microphone/BWC shall have a minimum effective operating range 1,000 feet under line-of-sight conditions.

3.12.7.6 The wireless microphone/BWC must have a minimum stand-by battery life of ten (10) hours without recharging or additional batteries, with pre-record on.

3.12.7.7 The wireless microphone/BWC should be capable of automatically activating the DVR system; additionally, the wireless audio transmitter/BWC shall be capable of being activated by the DVR system when a recording is started.

3.12.8 Control Center

3.12.8.1 The control center shall be compact in design and mounted overhead, or in the equipment console between the seats.

3.12.8.2 The control center shall not obstruct the driver's forward or peripheral view or provide any obstruction of factory installed airbags or mirrors.

3.12.8.3 The control center shall not require any permanent modifications to the police vehicle.

3.12.8.4 The control center shall accommodate the mounting of the front and rear-facing cameras, the monitor and keypad.

3.12.9 Video Viewing Software/Hardware

3.12.9.1 A video viewer/software shall be provided to allow recorded video files to be played on any computer and display date/time, user identification, emergency light indication, siren indication, latitude and longitude, speed (w/ radar interface), braking indication and the microphone activation indicator. This information shall not be overlaid on the recorded video; it shall be displayed outside the video frame.

3.12.9.2 Support for this software shall include version updates provided free of charge for the lifetime of the system.

3.12.9.3 Vendors shall provide all hardware (media readers/drives) and software necessary duplicate, share and present digital video in a court acceptable format. Please describe transfer steps needed to convert captured video to court acceptable evidence without the need for a server based infrastructure.
RESPONSE: Videos will be shared with a third party (DA, court, defense attorney, etc.) by emailing a link to the specific recipient. The recipient can either playback or download the video, based off of sharing privileges selected by the agency, onto his or her computer or other device for review.

3.12.9.4 The video management software should be capable of converting a video from the proprietary format to the standard DVD Video format, and authoring a DVD capable of being played in a standard DVD player.

3.12.10 Server Based Video Management System (VMS)

3.12.10.1 VMS shall either be an externally hosted cloud-based data storage solution with the capability of organizing/managing video/digital evidence, server based or consist of a hybrid solution and be accessible via the internet to multiple users simultaneously. The State prefers Cloud or a Hybrid solution.

3.12.10.2 The VMS should include infrastructure in our Northern, Southern, and Central regional command offices to assure downloading of all rural substations into the regional command centers to which they report (see Table 3.8.A).

3.12.10.3 The VMS shall be a turn-key component and fully installed, serviced, warranted, and maintained by the vendor.

3.12.10.4 The VMS should include video storage servers or equivalent for all regional offices to capture video information, workstation(s) for managing and viewing stored video, equipment racks to mount equipment, and uninterruptible power supplies (UPS).

3.12.10.5 The VMS should provide a configurable archive unit that can automatically archive video copies based on set parameters, and copy video files to a DVD-Video or equivalent court acceptable format.

3.12.10.6 Pricing for the VMS shall be provided on the In-Car Video Cost in the vendor's response. Pricing must be included for all proposed hardware (workstations, servers, archiving hardware, video backup systems, access points), wiring, software, installation, configuration, and training. If proposing a cloud or Hybrid solution, provide this pricing in the ICV cost schedule.

3.12.10.7 If a server based video management back office component is proposed, a schematic of the back end infrastructure shall be included with responses to the RFP.
RESPONSE: A schematic of the back end infrastructure is included with COBAN's response.

3.12.10.8 The VMS file storage shall be equipped with sufficient storage to comfortably manage video that would be generated from cars depicted in the scope of work in this RFP. List and itemize the size of proposed storage for each regional command center identified.

3.12.10.9 If wireless downloading capability is proposed for vehicles assigned to each regional office, provide download times for video captured based on the video compression and resolution capabilities of proposed cameras, the proposed number of access points, and the proposed servers/wiring infrastructure or cloud solutions.
RESPONSE: For the Hybrid solution, and a 3-to-1 Car-to-AP ratio:
EDGE Hi-Def 720p standard 15-20 min. per hour of video.
EDGE Hi-Def 640 x 480 standard 8-12 min. per hour of video.

3.12.10.10 The VMS shall include a database that contains a record for each recorded video file. The database shall store sufficient information to support the search capabilities and provide chain-of-evidence documentation.

3.12.10.11 The VMS shall be capable of searching stored video files by: department ID, time, date, officer ID, vehicle ID, camera, recording mode, and status (online or archived).

3.12.10.12 The VMS shall be capable of providing custom fields that may be used to store department-defined information (e.g. suspect's name, license plate number, etc.).

3.12.10.13 The VMS should allow videos to be categorized using department-defined drop-down lists. This classification shall be used for searching and to define how long each category of video is to be kept before it is automatically deleted.

3.12.10.14 The VMS shall provide a means to ensure the integrity of the recorded video. Video integrity must be checked when the video is uploaded, anytime it is played back or archived, and shall be verifiable on demand.

3.12.10.15 The VMS shall provide the capability to duplicate, share and present digital video in a court acceptable format. Describe the transfer steps, if any, needed provide video to the courts as acceptable evidence. Describe the way and format the proposed system archives recorded video files, and how these files will be stored and backed up for safeguarding.
RESPONSE: In addition to the method described in line 3.12.9.3 (utilizing cloud as a platform to share videos), when a local server is used, video can be sent to an automatic DVD burner robot for duplication. Labels will be printed on the DVD during burning, and can be mailed to the requesters.
For long-term storage, videos can be archived to a low-cost NAS, stored in the Cloud, or employ an automatic DVD burner robot for physical archival.

3.12.10.16 When a video file is copied or archived to digital media, the Video Management Software shall store a unique archive ID and maintain a virtual directory to recall the archived video file(s).

3.12.10.17 The Video Management Software shall be capable of converting a video from the proprietary format to the standard DVD Video format, and authoring a DVD capable of being played in a standard DVD player.

3.12.10.18 The support for this software shall include version updates and be provided free of charge to the agency for the lifetime of the system.

3.12.11 Control Center Specifications

3.12.11.1 An optional radar interface shall integrate directly with the Agency Bee III radar equipment. Collected information shall include speed of the target, the “locked” target speed, and the patrol vehicle.

3.12.11.2 The State is interested in a system that can be configured for motorcycle use. All of the specifications described for the DVR and wireless microphone shall be applicable. Is a motorcycle option available for your solution? If so, does the configuration utilize a weatherproofed monitor and camera? Please explain.

RESPONSE: EDGE Hi-Def is not available in a motorcycle configuration. Motorcycle officers can utilize a Body Camera as their recording device.

3.12.12 Officer Safety

3.12.12.1 All equipment shall be capable of installation in the following vehicles while still meeting the other requirements stated herein: Chevrolet Tahoe, Dodge Charger, Ford Interceptor Utility/Sedan and Ford F150 Pick-up.

3.12.12.2 Describe dimensions and vehicle mounting options for your camera, recorder, wireless microphone, transmitter/ receiver and any other required equipment.

RESPONSE: Dimensions are given in inches by Height x Width x Length.

CPU	**3.1" x 7.0" x 8.3"**	**Truck, Partition**
Monitor	**5.3" x 1.9" x 6"**	**Headliner, Pedestal**
Front Camera	**2.7" x 2.4" x 4.9"**	**Front Windshield**
Rear Camera	**1.5" x 2.7" x 2.16"**	**Partition**
Smart Dock	**3.4" x 3.4" x 2.5"**	**Console**
UPS Battery	**2.6" x 2.0" x 4.4"**	**Trunk, Partition**

3.12.12.3 Equipment must not be installed in such as manner as to interfere with a passenger in the front passenger seat.

3.12.12.4 No part of the system shall interfere in any way with the driver's field of view. The camera shall be a single unit, including power lens, mounted on the windshield or roof of the vehicle and operate on 12 VDC power source All connections to the camera, for power and video, shall be made by a single cable that attaches using a quick release connector.

3.12.12.5 The in-car system shall be protected from damage due to input of voltage, reverse polarity, and electrical transients that may be encountered.

3.12.12.6 No item installed in the interior of the passenger compartment shall increase the risk of injury to occupants during events related to a vehicle crash.

3.12.12.7 Any items installed in the interior of the vehicle shall meet the requirements stated in Federal Motor Vehicle Safety Standard 201 [October 1, 2002] Occupant Protection in Interior Impact as referenced in the In-Car Video Camera Systems Performance

Specifications - Digital Video Systems provided by the International Association of Chiefs of Police. (11/21/2008).

3.12.12.8 All controls and components should be located and designed to minimize driver distraction. The control pad should be designed and organized to minimize officer workload. The record button should be readily identifiable by size, color, location and/or other design features. The record button should be easily accessible by officers wearing gloves.

3.12.12.9 System components shall be capable of being illuminated for ready identification during periods of darkness. The illumination level shall be capable of being controlled over a range from bright to dark.

3.12.12.10 All wiring shall meet industry standards applicable to the wire application including Underwriters Laboratory (UL) as well as the Society of Automotive Engineers (SAE).

3.12.12.11 Manufacturers shall provide information in their installer's guide or owner's manual that specifies the proper wiring, fuses, connectors, connection points with the vehicle electrical system and grounding points.

3.12.12.12 No parts that can come into contact with human skin shall be allowed to reach a temperature capable of causing a burn injury, Reference UL 60950 "Safety of Information Technology Equipment" as amended December 1, 2000.

3.12.12.13 Any system component carried on the officer's person shall meet all Underwriters Laboratory Standards for shock/electrocution and burn prevention. All batteries used in such devices shall meet Underwriters Laboratory Standards for safety.

3.12.12.14 The In-Car Video System shall operate on a power source that is filtered, regulated, and short-circuit protected. The voltage supplied to the In-Car Video System components shall meet the manufacturer's specifications and shall not vary with fluctuations of the vehicle's electrical system of between 9 and 18 volts.

3.12.13 Reliability

3.12.13.1 The video systems shall maintain consistent audio/visual recording quality. The in-car recording system shall not be affected by transmissions from the police communication or interference from the following sources: high-powered television stations; other radio frequency interference (e.g. UHF, VHF & HF); automobile alternator, ignition, electrical systems; automobile heaters / air conditioner fan motors; or other patrol vehicle electrical systems.

3.12.13.2 All equipment shall have a lifecycle of at least 3 years under law enforcement agency usage, or have replacement coverage under warranty and maintenance. Please provide expected lifecycle for all video system components.
RESPONSE: The expected lifecycle for equipment is 5 years and warranties can be provided for that timeframe.

3.12.13.3 When in operation, the mobile video system must not generate electromagnetic or radiation that interferes with communications or other electronic equipment found within a police vehicle.

3.12.13.4 Loss of power to the system shall not cause loss of any recorded data or result in the unit requiring reprogramming, reloading of software or operating system software.

3.12.13.5 The video system shall be able to return to a "ready to record" mode after sudden loss of power without requiring user intervention.

3.12.13.6 The system's timekeeping device and the vehicle's identifier shall be protected by a system battery backup to prevent loss of information in the event the vehicle battery is disconnected for up to a minimum of fourteen (14) days.

3.12.13.7 Date and time within video system shall be self-adjusting for daylight savings time and leap years.

3.12.13.8 The video system shall have self-charging backup battery that continues recording upon loss of power, and should gracefully shutdown prior to available power being exhausted. The battery backup should power the system for at least 2 minutes following loss of the vehicle's battery power.

3.12.14 Training/Documentation

3.12.14.1 The vendor shall offer and provide, at no additional cost, training to all end users on the use of the video system and video viewing software.

3.12.14.2 The vendor shall offer and provide, at no additional cost, training to electronic technicians at their Reno, Elko, and Las Vegas shop locations. This training will ensure proper operation, repair, and maintenance of the manufacturer's video system.

3.12.14.3 A system administrator class covering all aspects of the system shall be given at all the DPS/HPD Regional Command sites (Reno, Elko, and Las Vegas) upon award.

3.12.14.4 Trainers must be experienced instructors who are thoroughly familiar with all technical aspects of the system.

3.12.14.5 Provide a course syllabus for training classes to be provided with your RFP response.

3.12.14.6 Vendor shall include documentation for procedures on regular maintenance of video system components.

3.12.14.7 Vendor shall provide complete service manuals and service bulletins on all electronic components.

3.12.14.8 Vendor shall provide documentation of system that includes identification of all vehicle equipment and the physical configuration; all configurable system parameters; written installation instructions, user manuals; and system administrator manuals instructions covering the change of all configuration settings.

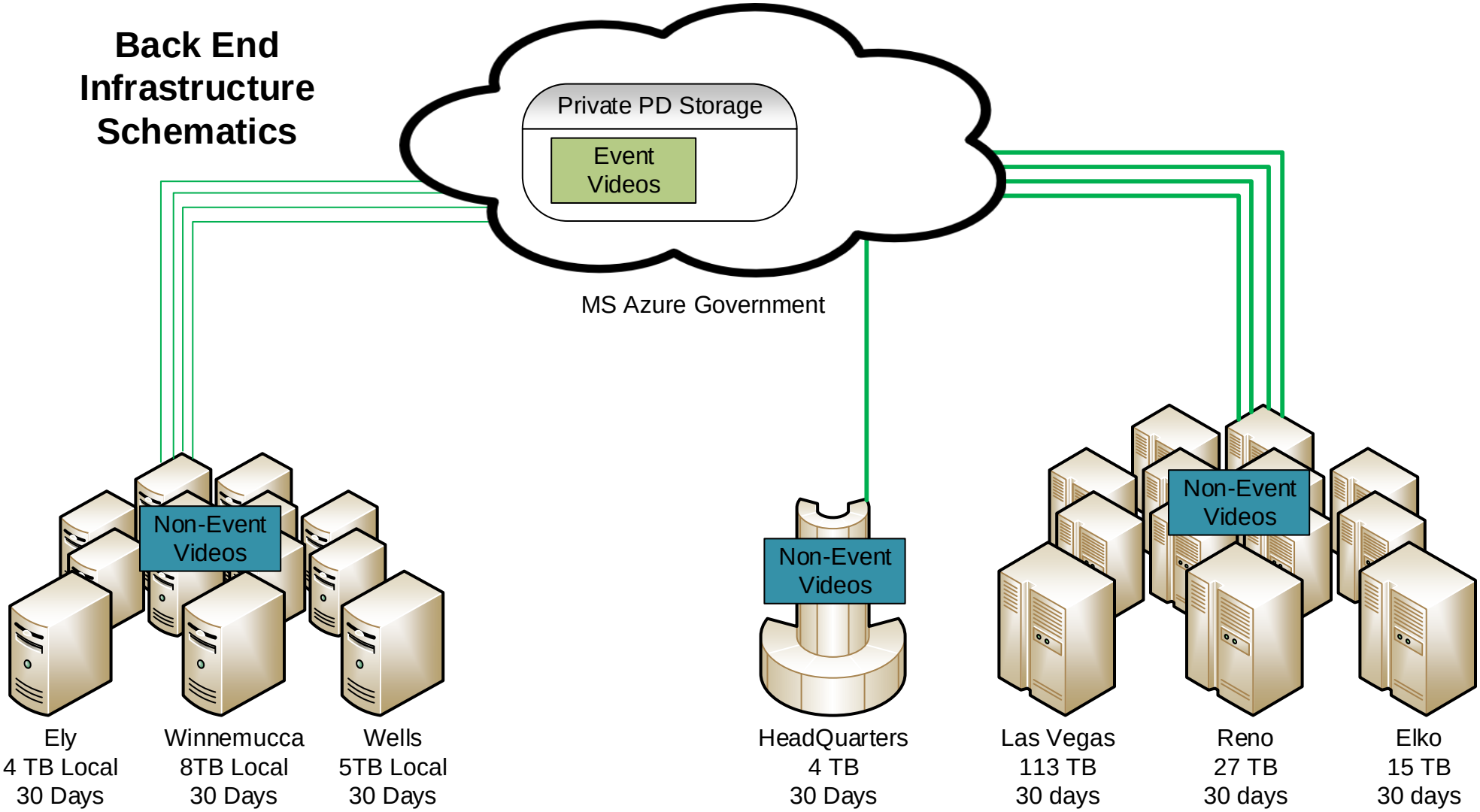
3.12.15 Installation

3.12.15.1 Describe your approach for installing camera systems if this service is requested by the State. The State reserves the right to do such installations either through its fleet shops, or through an accessory installation contract.
RESPONSE: COBAN has field service technicians and field application engineers on staff that will go on site to both do initial install and train fleet shops at the request of Nevada Highway Patrol.

3.12.15.2 Provide an installation price per camera unit for each regional office.

3.12.15.3 Specify the companies that will provide installation of camera systems in our Reno, Elko and Las Vegas regional offices if requested by the State.
RESPONSE: COBAN Technologies will provide installation.

Back End Infrastructure Schematics

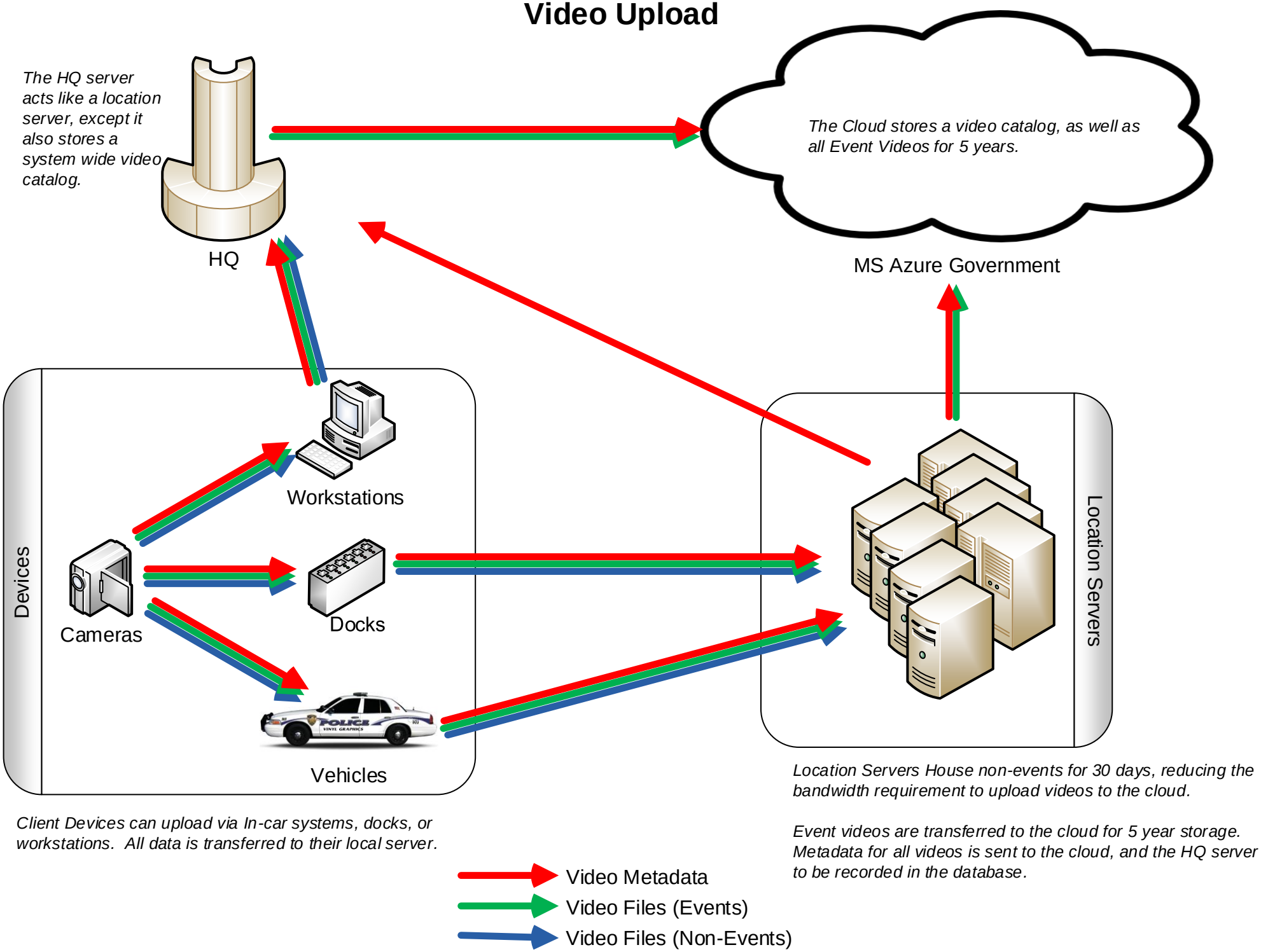


Based on the in the information provided in Section 3.8. Rural areas with ~1.5 Mbps connectivity store Non-Event videos locally for 30 days, and do not push these videos to the cloud. Events are pushed to the cloud and retained for 5 years. This allows for a reduction in required bandwidth due to non-events not requiring cloud upload.

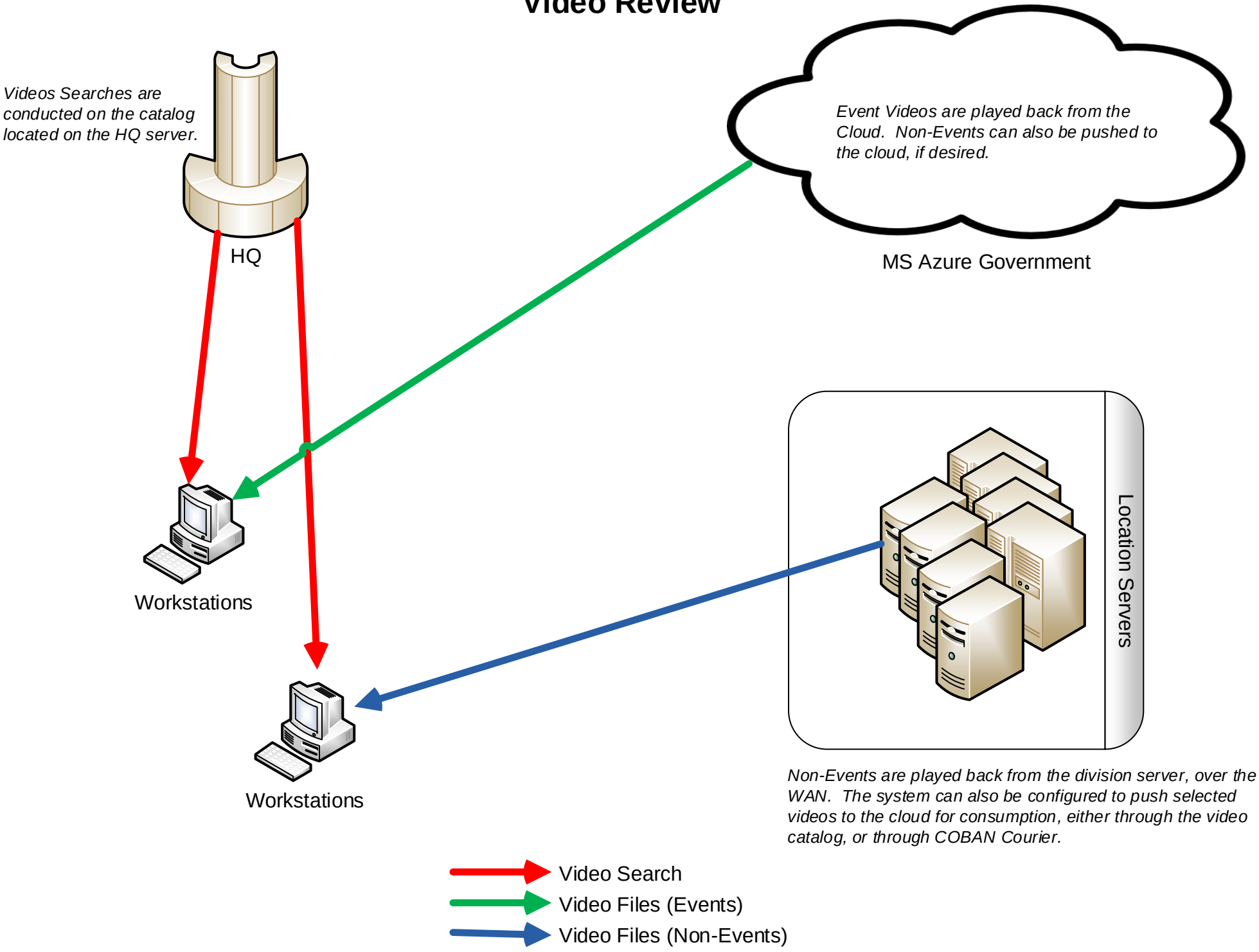
Based upon shift and recording estimates, the 3 largest rural stations are Ely, Winnemucca, and Wells, which have approximate capacities above. The Remaining stations will utilize servers 4TB or smaller.

The remaining stations can also utilize local storage to store non-Events. In addition to reducing the bandwidth requirement, like at rural stations, local storage also allows for rapid access and upload in the first 30 days. Additionally, if bandwidth allows, the first 30 days can be kept in both local and cloud storage.

Video Upload



Video Review



COBAN Technologies User Training

Officer/Deputy Training – Day to Day Video Management and Equipment Use

Course Syllabus

Course Purpose:

This course is designed to train the Officer and Admin staff on day to day "User" use of the COBAN solution during a deployment and/or for officer refresh training. This course provides functional use of the COBAN backend software and COBAN Equipment (In-Car Video, Body Camera, and Interview Room) utilized/purchased by the department. This course is intended for trainers of the department to gain the knowledge necessary to properly train all officers on system functionality.

Course Description:

This course encompasses the software and hardware solutions day to day use for COBAN's video equipment (In-Car Video, Body Camera, and Interview Room). Through real world examples and short presentations, this course will bring forth the components and specifications and also answer some of the questions or concerns that officers have regarding implementation or use, as well allow the user to begin using the equipment and software upon completion. While gaining an understanding of the functional specifications, you will gain an understanding of how these specifications can be used to utilize the COBAN solution.

Course Dates and Times:

This course is recommended to be completed before Officer/Deputy use of the backend and video equipment. Admin are encouraged to attend for Officer/Deputy policy questions.
Course Duration: Typically 3-4 Hours (Dependent on Class Size)
Course Dates: TBD

Course Objectives:

- Allow the user the ability to fully utilize the COBAN Video Management Software and Equipment from a user's perspective
- Allow the user to Search, Playback and Export from the COBAN search page
- Demonstrate Modifying Event Type Selection and other metadata from the backend software and directly from the equipment

Course Policies:

Course should be taken in a quiet, distraction free area.

Technical Requirements/ Support:

Projector/Classroom is required to complete on-site at Department specified location. If no projector is available, please inform COBAN Project Managers during scheduling and one will be provided.
Minimum of 1 Vehicle Installation Completed if utilizing training for In-Car Video to perform real life training in the vehicle upon completion of classroom training. 2 Vehicles are recommended if class size exceeds 8 trainers.

Course Material:

Detailed User Guide Provided Upon Completion

"Cheat Sheet" - One Page Front and Back System Use Pamphlet) provided upon completion to assist trainers in quickly getting users trained and have the ability to reference a one page sheet for assistance

Course Outline:

Introduction

This course is a mix of classroom and field training based on solutions provided to the PD.

Section 1: COBAN Video Management Solutions (Backend)

Digital Video Management Use and functions

Learning Objectives:

- Define functions and features available to the user
- Ability for the user to Search, Update Metadata and Export their videos
- Ability for the user Import, Search, and Export Digital Property Manager (DPM) case files
- Ability for the user to search for snapshots
- Become familiar with all features available in Search Page such as:
  - Partial Export
  - Audit Trail Search and Export
  - Multi-Video Playback
  - Case Package Export
  - Video Logs
  - Data Entry
  - Search Criteria/Options
  - Create a Snapshot and Save it
  - Running Video Integrity Check
- Ability to Export to Cloud Courier (If applicable), Local DVD Burner, AutoDVD, File Folder (USB) and difference between Data and DVD format options when exporting to DVD.

- Ability to utilize Map Based Video Search and Map Based Vehicle Trace (If Applicable)
- Video Uploading
- Equipment Checkout

Section 2: Body Camer (If Applicable)

Provides information on Body Camera Functions, Use, Upload, and Assignment

Learning Objectives:

- Demonstrate how the Body Camera will function based on the template assigned to the Body Camera
- Demonstrate how to assign a camera to the user
- Demonstrate what functions the buttons on the Body Camera perform
- Demonstrate Body Camera clip and placement options
- Demonstrate Body Camera Accessories (Clip On Camera)
- Demonstrate how to upload the Body Camera utilizing the AutoUpload Program from a Workstation
- Demonstrate how to Upload the Body Camera using Manual Upload
- Demonstrate how to upload, tag, playback from COBAN in-car system (If applicable)

Section 2: In-Car Video (If Applicable)

Provides information on In-Car Video Functions, Use, Upload, and Assignment

Learning Objectives:

- Demonstrate how the in-car video will function based on the template assigned to the in-car video system
- Demonstrate how to upload and checkout the drive from the cradle (Manual upload)
- Demonstrate how to login
- Demonstrate how to make a recording on front, rear or both cameras utilizing available triggers such as light bar, wireless, microphone, screen, and any other additional triggers configured.
- Demonstrate Recorded Video event based tagging and data entry upon stopping the video and after the video has been stopped
- Demonstrate Video Playback and Data Screen
- Demonstrate In-Car Video Navigation
- Demonstrate In-Car Video advanced functions such as failsave retrieval
- Demonstrate Wireless Auto-Upload Feature
- Demonstrate In-car video wireless upload procedures
- Demonstrate In-Car video shutdown procedures

Final Assessment

A walkthrough of an incident with each trainer will be performed to ensure full utilization and comprehension of the system from the creation on the equipment to the exporting of video from the video management system.

COBAN Technologies Admin Training

Officer/Deputy Training – Day to Day Video Management and Equipment Use

Course Syllabus

Course Purpose:

This course is designed to train the Admin and IT staff on system configuration settings, templates, user setup and use of the COBAN solution from an Admin level. This course provides functional use of the COBAN backend software and COBAN Equipment (In-Car Video, Body Camera, and Interview Room) utilized/purchased by the department. This course is intended for Admin and IT of the department to gain the knowledge necessary to properly configure and maintain the COBAN solution.

Course Description:

This course encompasses the software and hardware solutions Admin and IT functions for COBAN's video equipment (In-Car Video, Body Camera, and Interview Room). Through real world examples and short presentations, this course will bring forth the components and specifications and also answer some of the questions or concerns that admin and IT have regarding implementation or use, as well allow the user to begin using the equipment and software upon completion. While gaining an understanding of the functional specifications, you will gain an understanding of how these specifications can be used to utilize the COBAN solution.

Course Dates and Times:

This course is recommended to be completed before User training and before Officer/Deputy use of the backend and video equipment. Admin and IT are encourage to attend
Course Duration: Typically 3-4 Hours (Dependent on Class Size)
Course Dates: TBD

Course Objectives:

- Allow the Admin the ability to fully utilize the COBAN Video Management Software and Equipment from a Admin's perspective
- Allow the Admin to Search, Playback and Export from the COBAN search page
- Demonstrate Setting up Modifying Event Type Retention and other metadata from the backend software and directly from the equipment
- Demonstrate Storage Configuration Options and Setup Procedures
- Demonstrate Admin functions such as user and group setup, equipment template setup, user templates and other functions necessary.
- Demonstrate logging ability of the system

- Demonstrate Failsave capabilities of the system

Course Policies:

Course should be taken in a quiet, distraction free area.

Technical Requirements/ Support:

Projector/Classroom is required to complete on-site at Department specified location. If no projector is available, please inform COBAN Project Managers during scheduling and one will be provided.

Course Material:

Detailed Admin Guide Provided Upon Completion.

Completed Deployment Matrix recommended before Admin training is recommended.

Course Outline:

Introduction

This course is a classroom environment and will encompass setup and configuration of the Digital video management system and equipment purchased.

Section 1: COBAN Video Management Solutions (Backend)

Digital Video Management Setup and Configuration

Learning Objectives:

- Define functions and features available to the Admin
- User and User Group Setup
- User templates and User Rights
- Vehicle/Equipment Setup
- Vehicle/Equipment Template Setup
- Event Type Setup, Retention, Export, and Archive Settings
- Primary and Secondary storage configuration
- Server Service Logs and File Locations
- Server IP and Wireless Upload IP configurations and how to change in the event of an IP change becomes necessary in the future
- Ability to install the workstation software required for the equipment provided and the video management software
- Ability for the Admin to Search, Update Metadata and Export their videos

- Ability for the Admin to Import, Search, and Export Digital Property Manager (DPM) case files
- Ability for the Admin to search for snapshots
- Become familiar with all features available in Search Page such as:
  - Partial Export
  - Audit Trail Search and Export
  - Multi-Video Playback
  - Case Package Export
  - Video Logs
  - Data Entry
  - Search Criteria/Options
  - Create a Snapshot and Save it
  - Running Video Integrity Check
- Ability to Export to Cloud Courier (If applicable), Local DVD Burner, AutoDVD, File Folder (USB) and difference between Data and DVD format options when exporting to DVD.
- Ability to utilize Map Based Video Search and Map Based Vehicle Trace (If Applicable)
- Video Uploading
- Equipment Checkout

Section 2: Body Camera (If Applicable)

Provides information on Body Camera Functions, Use, Upload, and Assignment for Admin

Learning Objectives:

- Demonstrate how the Body Camera will function based on the template assigned to the Body Camera
- Demonstrate how to assign a camera to the user
- Demonstrate what functions the buttons on the Body Camera perform
- Demonstrate Body Camera clip and placement options
- Demonstrate Body Camera Accessories (Clip On Camera)
- Demonstrate how to upload the Body Camera utilizing the AutoUpload Program from a Workstation
- Demonstrate how to Upload the Body Camera using Manual Upload
- Demonstrate how to upload, tag, playback from COBAN in-car system (If applicable)
- Demonstrate Body Camera troubleshooting procedures
- Body Camera Logging and Video transfer

Section 2: In-Car Video (If Applicable)

Provides information on In-Car Video Functions, Use, Upload, and Assignment

Learning Objectives:

- In-Car Video Maintenance
- Demonstrate In-Car Video troubleshooting tools
- Demonstrate Admin level failsave retrieval

- In-Car Video Wireless Setup
- Demonstrate how the in-car video will function based on the template assigned to the in-car video system
- Demonstrate how to upload and checkout the drive from the cradle (Manual upload)
- Demonstrate how to login
- Demonstrate how to make a recording on front, rear or both cameras utilizing available triggers such as light bar, wireless, microphone, screen, and any other additional triggers configured.
- Demonstrate Recorded Video event based tagging and data entry upon stopping the video and after the video has been stopped
- Demonstrate Video Playback and Data Screen
- Demonstrate In-Car Video Navigation
- Demonstrate In-Car Video advanced functions such as failsave retrieval
- Demonstrate Wireless Auto-Upload Feature
- Demonstrate In-car video wireless upload procedures
- Demonstrate In-Car video shutdown procedures

Final Assessment

A walkthrough of user and equipment setup and procedures will be performed to ensure familiarity with the system.

A walkthrough of video search and export will be performed to ensure familiarity with the system.

A walkthrough of Event Type and retention setup will be performed to ensure familiarity with the system.

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab VII

Section 4 – Company Background and References

4. COMPANY BACKGROUND AND REFERENCES

4.1 VENDOR INFORMATION

4.1.1 Vendors must provide a company profile in the table format below.

Question	Response
Company name:	COBAN Technologies, Inc.
Ownership (sole proprietor, partnership, etc.):	Corporation
State of incorporation:	Texas
Date of incorporation:	February 8, 2002
# of years in business:	14
List of top officers:	Doug Dickerson – President and CEO Allan Chen – Executive VP of Technology Jeff Lee – CFO and VP of Administration Mark Griffin – VP of Sales and Marketing Eric Lee – VP of Operations
Location of company headquarters:	Houston, Texas
Location(s) of the company offices:	Houston, Texas
Location(s) of the office that will provide the services described in this RFP:	Houston, Texas
Number of employees locally with the expertise to support the requirements identified in this RFP:	2
Number of employees nationally with the expertise to support the requirements in this RFP:	41
Location(s) from which employees will be assigned for this project:	Houston, Texas Sacramento, California

4.1.2 **Please be advised**, pursuant to NRS 80.010, a corporation organized pursuant to the laws of another state must register with the State of Nevada, Secretary of State's Office as a foreign corporation before a contract can be executed between the State of Nevada and the awarded vendor, unless specifically exempted by NRS 80.015.

4.1.3 The selected vendor, prior to doing business in the State of Nevada, must be appropriately licensed by the State of Nevada, Secretary of State's Office pursuant to NRS76. Information regarding the Nevada Business License can be located at http://nvsos.gov.

Question	Response
Nevada Business License Number:	Currently Exempt
Legal Entity Name:	COBAN Technologies, Inc.

Is "Legal Entity Name" the same name as vendor is doing business as?

Yes	X	No	

If "No", provide explanation.

4.1.4 Vendors are cautioned that some services may contain licensing requirement(s). Vendors shall be proactive in verification of these requirements prior to proposal submittal. Proposals that do not contain the requisite licensure may be deemed non-responsive.

4.1.5 Has the vendor ever been engaged under contract by any State of Nevada agency?

Yes		No	X

If "Yes", complete the following table for each State agency for whom the work was performed. Table can be duplicated for each contract being identified.

Question	Response
Name of State agency:	N/A
State agency contact name:	
Dates when services were performed:	
Type of duties performed:	
Total dollar value of the contract:	

4.1.6 Are you now or have you been within the last two (2) years an employee of the State of Nevada, or any of its agencies, departments, or divisions?

Yes		No	X

If "Yes", please explain when the employee is planning to render services, while on annual leave, compensatory time, or on their own time?

If you employ (a) any person who is a current employee of an agency of the State of Nevada, or (b) any person who has been an employee of an agency of the State of Nevada within the past two (2) years, and if such person will be performing or producing the services which you will be contracted to provide under this contract, you must disclose the identity of each such person in your response to this RFP, and specify the services that each person will be expected to perform.

4.1.7 Disclosure of any significant prior or ongoing contract failures, contract breaches, civil or criminal litigation in which the vendor has been alleged to be liable or held liable in a matter involving a contract with the State of Nevada or any other

governmental entity. Any pending claim or litigation occurring within the past six (6) years which may adversely affect the vendor's ability to perform or fulfill its obligations if a contract is awarded as a result of this RFP must also be disclosed.

Does any of the above apply to your company?

Yes		No	X

If "Yes", please provide the following information. Table can be duplicated for each issue being identified.

Question	Response	
Date of alleged contract failure or breach:	N/A	
Parties involved:		
Description of the contract failure, contract breach, or litigation, including the products or services involved:		
Amount in controversy:		
Resolution or current status of the dispute:		
If the matter has resulted in a court case:	Court	Case Number
Status of the litigation:		

4.1.8 Vendors must review the insurance requirements specified in ***Attachment E, Insurance Schedule for RFP 3273.*** Does your organization currently have or will your organization be able to provide the insurance requirements as specified in ***Attachment E.***

Yes	X	No	

Any exceptions and/or assumptions to the insurance requirements ***must*** be identified on ***Attachment B, Technical Proposal Certification of Compliance with Terms and Conditions of RFP.*** Exceptions and/or assumptions will be taken into consideration as part of the evaluation process; however, vendors must be specific. If vendors do not specify any exceptions and/or assumptions at time of proposal submission, the State will not consider any additional exceptions and/or assumptions during negotiations.

Upon contract award, the successful vendor ***must*** provide the Certificate of Insurance identifying the coverages as specified in ***Attachment E, Insurance Schedule for RFP 3273.***

4.1.9 Company background/history and why vendor is qualified to provide the services described in this RFP. Limit response to no more than five (5) pages.

4.1.10 Length of time vendor has been providing services described in this RFP to the public and/or private sector. Please provide a brief description.
RESPONSE: COBAN has been providing video evidence capture and management solutions to law enforcement and first responder industries for over 14 years. Our services and products have always been solely dedicated to these agencies.

4.1.11 Financial information and documentation to be included in Part III, Confidential Financial Information of vendor's response in accordance with Section 9.5, Part III – Confidential Financial Information.

4.1.11.1 Dun and Bradstreet Number

4.1.11.2 Federal Tax Identification Number

4.1.11.3 The last two (2) years and current year interim:

A. Profit and Loss Statement
B. Balance Statement

4.2 SUBCONTRACTOR INFORMATION

4.2.1 Does this proposal include the use of subcontractors?

Yes		No	X

If "Yes", vendor must:

4.2.1.1 Identify specific subcontractors and the specific requirements of this RFP for which each proposed subcontractor will perform services.

4.2.1.2 If any tasks are to be completed by subcontractor(s), vendors must:

A. Describe the relevant contractual arrangements;

B. Describe how the work of any subcontractor(s) will be supervised, channels of communication will be maintained and compliance with contract terms assured; and

C. Describe your previous experience with subcontractor(s).

4.2.1.3 Vendors must describe the methodology, processes and tools utilized for:

A. Selecting and qualifying appropriate subcontractors for the project/contract;

B. Ensuring subcontractor compliance with the overall performance objectives for the project;

C. Ensuring that subcontractor deliverables meet the quality objectives of the project/contract; and

D. Providing proof of payment to any subcontractor(s) used for this project/contract, if requested by the State. Proposal should include a plan by which, at the State's request, the State will be notified of such payments.

4.2.1.4 Provide the same information for any proposed subcontractors as requested in ***Section 4.1, Vendor Information***.

4.2.1.5 Business references as specified in ***Section 4.3, Business References*** must be provided for any proposed subcontractors.

4.2.1.6 Vendor shall not allow any subcontractor to commence work until all insurance required of the subcontractor is provided to the vendor.

4.2.1.7 Vendor must notify the using agency of the intended use of any subcontractors not identified within their original proposal and provide the information originally requested in the RFP in ***Section 4.2, Subcontractor Information***. The vendor must receive agency approval prior to subcontractor commencing work.

4.3 BUSINESS REFERENCES

4.3.1 Vendor must provide at least three (3) law enforcement agencies within the last two (2) years as references, for which it is verifiable that the vendor has deployed at least 100 active BWS's that have been in service for at least six (6) months for each of those references.

4.3.2 Vendors must provide the following information for ***every*** business reference provided by the vendor and/or subcontractor:

The "Company Name" must be the name of the proposing vendor or the vendor's proposed subcontractor.

Reference #:	Ocala Police Department (Florida)		
Company Name:	COBAN Technologies, Inc.		
Identify role company will have for this RFP project (Check appropriate role below):			
X	***VENDOR***		***SUBCONTRACTOR***
Project Name:	Body Worn Cameras		
Primary Contact Information			
Name:	Mark Griffin		
Street Address:	11375 West Sam Houston Parkway South		
City, State, Zip:	Houston, Texas 77031		
Phone, including area code:	281-925-0488 ext. 112		
Facsimile, including area code:	281-925-0535		
Email address:	Mark.Griffin@cobantech.com		
Alternate Contact Information			
Name:	Cindy Chang		
Street Address:	11375 West Sam Houston Parkway South		
City, State, Zip:	Houston, Texas 77031		
Phone, including area code:	281-925-0488 ext. 160		
Facsimile, including area code:	281-925-0535		
Email address:	Cindy.Chang@cobantech.com		
Project Information			
Brief description of the project/contract and description of services performed, including technical environment (i.e., software applications, data communications, etc.) if applicable:	Ocala PD was an existing customer for COBAN in-car video systems. In 2014, we provided them 135 body cameras that integrated with the back office video management software. They are currently in the process of upgrading and replacing the existing body worn camera units.		
Original Project/Contract Start	09/19/2014		

Date:	
Original Project/Contract End Date:	09/30/2014
Original Project/Contract Value:	$130,775.00
Final Project/Contract Date:	09/30/2014
Was project/contract completed in time originally allotted, and if not, why not?	Yes
Was project/contract completed within or under the original budget/ cost proposal, and if not, why not?	Yes

Reference #:	Missouri City Police Department (Texas)		
Company Name:	COBAN Technologies, Inc.		
Identify role company will have for this RFP project (Check appropriate role below):			
X	***VENDOR***		***SUBCONTRACTOR***
Project Name:	Body Worn Cameras		
Primary Contact Information			
Name:	Mark Griffin		
Street Address:	11375 West Sam Houston Parkway South		
City, State, Zip:	Houston, Texas 77031		
Phone, including area code:	281-925-0488 ext. 112		
Facsimile, including area code:	281-925-0535		
Email address:	Mark.Griffin@cobantech.com		
Alternate Contact Information			
Name:	Cindy Chang		
Street Address:	11375 West Sam Houston Parkway South		
City, State, Zip:	Houston, Texas 77031		
Phone, including area code:	281-925-0488 ext. 160		
Facsimile, including area code:	281-925-0535		
Email address:	Cindy.Chang@cobantech.com		
Project Information			
Brief description of the project/contract and description of services performed, including technical environment (i.e., software applications, data communications, etc.) if applicable:	Missouri City Police Department is a local and longtime customer of COBAN for In-Car video systems. The project involved a review of their storage and infrastructure capabilities, re-training of the users on the new equipment and back office procedures, and updating the		

	back office software.
Original Project/Contract Start Date:	12/17/2015
Original Project/Contract End Date:	12/30/2015
Original Project/Contract Value:	$61,461.00
Final Project/Contract Date:	12/30/2015
Was project/contract completed in time originally allotted, and if not, why not?	Yes
Was project/contract completed within or under the original budget/ cost proposal, and if not, why not?	Yes

Reference #:	Columbia Police Department (South Carolina)		
Company Name:	COBAN Technologies, Inc.		
Identify role company will have for this RFP project (Check appropriate role below):			
X	***VENDOR***		***SUBCONTRACTOR***
Project Name:	Body Worn Cameras		
Primary Contact Information			
Name:		Mark Griffin	
Street Address:		11375 West Sam Houston Parkway South	
City, State, Zip:		Houston, Texas 77031	
Phone, including area code:		281-925-0488 ext. 112	
Facsimile, including area code:		281-925-0535	
Email address:		Mark.Griffin@cobantech.com	
Alternate Contact Information			
Name:		Cindy Chang	
Street Address:		11375 West Sam Houston Parkway South	
City, State, Zip:		Houston, Texas 77031	
Phone, including area code:		281-925-0488 ext. 160	
Facsimile, including area code:		281-925-0535	
Email address:		Cindy.Chang@cobantech.com	
Project Information			
Brief description of the project/contract and description of services performed, including technical environment (i.e., software applications, data		Originally, Columbia Police Department purchased In-Car video systems from COBAN. After Columbia PD decided to implement Body Worn Cameras, they chose COBAN to be able to have a	

communications, etc.) if applicable:	centrally managed back office system. The project involved a review of their storage and infrastructure capabilities, re-training of the users on the new equipment and back office procedures, and updating their back office software.
Original Project/Contract Start Date:	12/03/2015
Original Project/Contract End Date:	12/18/2015
Original Project/Contract Value:	$169,565.40
Final Project/Contract Date:	12/18/2015
Was project/contract completed in time originally allotted, and if not, why not?	Yes
Was project/contract completed within or under the original budget/ cost proposal, and if not, why not?	Yes

4.3.3 Vendors must also submit ***Attachment F, Reference Questionnaire*** to the business references that are identified in ***Section 4.3.2***.

4.3.4 The company identified as the business references must submit the Reference Questionnaire directly to the Purchasing Division.

4.3.5 It is the vendor's responsibility to ensure that completed forms are received by the Purchasing Division on or before the deadline as specified in ***Section 8, RFP Timeline*** for inclusion in the evaluation process. Reference Questionnaires not received, or not complete, may adversely affect the vendor's score in the evaluation process.

4.3.6 The State reserves the right to contact and verify any and all references listed regarding the quality and degree of satisfaction for such performance.

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab VIII

Attachment G – Proposed Staff Resumes

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***Cindy Chang***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***National Sales Support / Program Manager***		
# of Years in Classification:	***15***	**# of Years with Firm:**	***15***

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

As national sales support and program manager, Cindy Chang is responsible for ensuring all projects have the appropriate resources and support to be executed in a responsive, efficient manner. Cindy oversees the management of physical assets, participates in staff development, and growth strategies. She is also responsible for the continued development and compliance of purchasing and procurement procedures.

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

Washington State Police / 2005 – Current / Program Manager
- Multi-Phases and multi-districts implementation
- Over 800 Coban In Car Systems deployed statewide
- End Of Life Product Transitioning
- Contract renewed in 2016 for additional 5 year

Chicago Police Department / 2006 – Current / Program Manager
- Multi-Phases and multi-districts implementation
- Over 900 Coban In Car Systems deployed citywide
- Wifi upload and download implementations
- End Of Life Product Transitioning
- Contract renewed in 2014 for additional 5 year

Los Angeles Police Department / 2008 - Current / Program Manager
- Multi-Phases and multi-districts implementation
- Over 1300 Coban In Car Systems deployed citywide
- Wifi upload and download implementations
- Disaster Recovery implementations
- Contract renewed in 2016 for additional 5 year

Delaware State Police / 2011 – Current / Program Manager
- Multi-Phases and multi-districts implementation
- Over 800 Coban In Car Systems deployed statewide
- Wifi upload and download implementations
- Disaster Recovery implementations
- Contract renewed in 2016 for additional 5 year

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Bachelor of Business Administration: Accounting **1996**
University of Houston – Houston, TX

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

Project Management Certificate: **2006**
Project Management Institute

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Washington State Patrol - ITD
Scott Jarmon (Assistant Division Administrator)
403 Cleveland Ave SE Suite C
Tumwater, WA 98501-3311
Office: 360-596-4902
Scott.Jarmon@wsp.wa.gov

Chicago Police Department (Chicago, IL)
Lance Becvar (Sergeant)
3050 S. Sacramento Ave
OEMC Communication Repairs
Chicago, IL 60623
Office: 312-747-9171
lance.becvar@chicagopolice.org

Los Angeles Police Department (California)
Daniel Gomez (Officer In Charge - Tactical Technology Sec.)
100 West 1st. Street, Room 842
Los Angeles, CA 90012
Office: 213-486-7015
Daniel.Gomez@lapd.lacity.org

Delaware State Police – Information Technology
Michael McDonald (Director of Information Technology)
1441 North Dupont Way
Dover, DE 19901
Office: 302-672-5444
Michael.McDonald@state.de.us

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***David Kirsch***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***Director of Product Management***		
# of Years in Classification:	***14***	**# of Years with Firm:**	***<1***

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

David has been involved in information systems and communications for over 30 years and active for the past 14 years as a product management professional. In product management he is focused on technical hardware/software products from product need identification through analysis, definition, pricing, marketing to direct and channel sales. In addition David has consulting and consulting practice management experience leading to high value results and faster program completion and delivery to customers.

His focus at Coban is the enhancement of the definition through product delivery processes in order to ensure customers receive products of higher value, quality and utility in a timely, reliable manner.

Prior to joining Coban, he most recently developed a use of predictive analytics to provide business growth insights for the investment community. Through late 2015, David held product management positions of increasing responsibility at Cisco Systems, Inc. He originally joined Cisco in 1999 as a consulting engineer in the Office of the CTO working on network management. He subsequently has been involved in Cisco's Metro Optical/ Metro Ethernet, Application Control Engine and overall Data Center Network Management including responsibility for product management of the Cisco Prime Data Center Network Manager product line and research on the use of predictive analytics. Prior to joining Cisco, David was a co-founder of Quintessent Communications, developer of OSS electronic data exchange between Service Providers as well as Practice Manager for network management consulting at Sun Microsystems (SunNetworks). David has been involved in data networking over 30 years since installing LANs in 1981, working on both reseller and VAR teams, as well as network consulting, training and writer for industry trade journals (LAN Magazine, ComputerWorld, and PC Magazine). He jokes that his background in operations includes "building NOCs" and "sleeping on the cot on third shift" though these days his mind is fully in product definition, development and delivery.

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

Coban Technologies, 2016-Present, Houston, Director of Product Management
Product management including that for In Car Video, Body Worn Camera, Interrogation Room Video and Video Evidence Management, Retention and Delivery.

Cisco Systems, 1999-2015, San Jose, Manager, Product Management

Product Management for complex, real-time, mission critical systems with focus on the simplification, reliability and ease of use of their operations & administration. This included systems supporting global enterprises, federal/state/local governments as well as institutions which required the highest reliability and quality suited to purpose while ensuring lowest overhead for operations. These same areas of focus are translating into his work on Coban's product lines.

Quintessent Communications, 1996-1999, Director Standards and Industry Forums
Significant cross organization and internal coordination to ensure successful product definition, use and deployment.

SunNetworks / Sun Microsystems, 1993-1996, Practice Manager
Lead and managed the delivery of small team of consultants on over 30 projects spanning network operations and design for telecommunications service providers, enterprises, military and civilian government.

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Case Western Reserve University, Cleveland, Ohio – Studies in Information Decision Systems (non-degree) 1985

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

Stanford Certified Program Manager (SCMP), 2007 - Stanford Center for Professional Studies, Palo Alto, CA

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Previous Manager – Known professionally over 5 years
Richard Darnielle
VP Marketing, F5 Networks, Inc.
r.darnielle@F5.com
408.273.4800 Office

Previous Manager – Known professionally over 5 years
Guy Daley
Partner, InnoVacient, LLC
gudaley@gmail.com
408.722.1048 Mobile

Engineering Lead on multiple shared products – Peer - Known professionally over 5 years
Sachin Vishwarupe
Senior Engineering Manager
Cisco Systems, Inc.
vsachin@cisco.com
408.853.5857 Office

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***Jerry Chang***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***Product Manager***		
# of Years in Classification:	***2***	**# of Years with Firm:**	***12***

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

2004 – 2007 Technical Support (COBAN Technologies, Inc.)
Primary Responsibilities:
Customer Support and Troubleshooting
Remote Deployment and Administration of Video Systems/Servers

2007 – 2010 Field Engineer (COBAN Technologies, Inc.)
Primary Responsibilities:
On site Configuration and Deployment of Video Systems/Servers
Conducting and developing Training for end-users and Admins
Level 3 troubleshooting of Servers, Storage Systems, and Networks

2010 – 2014 Solution Engineer (COBAN Technologies, Inc.)
Primary Responsibilities:
Design, deployment, and maintenance of Enterprise customers
Trade studies, documentation, and systems consultation.

2014 - 2016 Product Manager (COBAN Technologies, Inc.)
Primary Responsibilities:
Drive customer needs and requirements into future products
Guide Software and Hardware enhancements and fixes with Engineering

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

New Mexico State Police – 2008 to present

Role: Field Engineer
400 units, spanning 3 generations of COBAN systems
Virtual server environment
Geographically separated multi-site and multi-server deployment

Washington State Police – 2005 to present

Role: Field Engineer
700 units, spanning 2 generations of COBAN systems
Geographically separated multi-site deployment with low bandwidth

Delaware State Police – 2011 to present

Role: Solution Engineer
450 units, spanning 2 generations of COBAN systems
Geographically separated multi-site and multi-server deployment
Separate Disaster Recovery Site, housing replicate videos and database

Los Angeles Police Department – 2008 to present

Role: Solution Engineer
1000 units, spanning 2 generations of COBAN systems
Separate Disaster Recovery Site, housing replicate videos and database
Integration with Active Directory, Novell, and other systems

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

University of Texas – Austin (Austin, TX) – 2002 to 2003
- 4 Semesters towards BS of Electrical Engineering

University of Phoenix (Houston, TX) – 2011-2012
- 2 additional semesters towards BS of Information Technology

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

Microsoft
1998 – MCP
2012 – MCTS
2012 – MCSA (Windows Server)
2012 – MCITP (Windows Server Enterprise Administrator)

Cisco
2012 – CCNA
2012 – CCNP (Routing and Switching)

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Jason Liguori
Sgt II – Project manager
Los Angeles Police Department
jason.liguori@lapd.lacity.org
(P) 213-996-1330

Lee Richards
Sgt – Video Unit
Kansas City Police Department
Lee.Richards@kcpd.org
(P) 816-234-5589

Russell Brown
Lt. – Information Technology
Bellaire, TX Police Department
rbrown@bellairepolice.com
(P) 713-662-8132

Lance Becvar
Sgt – Video administrator
Chicago police Department
lance.becvar@chicagopolice.org
(P) 312-747-9171

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***Steve Bowen***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***Customer Service Manager***		
# of Years in Classification:	***1.5***	**# of Years with Firm:**	***9***

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Experienced Information Technology Consultant, Field Service Engineer and Services Manager. Excellent communication skills with a strong technical background in network engineering, user training and documentation. Strong points in major operating hardware and software, project deployments, technology reviews, network support/maintenance, and problem solving.

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

COBAN Technologies – Customer Service Manager **April 2015 - Present**

Manage Technical Support department and Field Service personnel including but not limited to:

- Developing and achieving Technical Support and Field Service objectives and goals to support the organizational vision.
- Develop, deliver, and manage call and email based Standard Operating Procedures and best practices to guide customer support.
- Establish and manage Technical Support metrics to significantly and consistently improve service performance.
- Managing a team of Technical Support and Field Service personnel while leading the development of the vision and strategy of technical support and services.
- Assisting in developing an annual business plan to incorporate best call center practices to meet customer and company needs including 24/7 response options.
- Ensuring service and performance standards are achieved or exceeded.
- Executing tactical plans and initiatives that exceed customer expectations via phone, email and/or web—resulting in increased customer satisfaction.
- Executing additional projects such as, hiring, training practices and team building exercises.
- Establishing and managing communication channels within and among departments—being the liaison to provide customer feedback to the Senior Management Team.

COBAN Technologies – Midwest Regional Field Systems Engineer **Oct. 2007 – April 2015**

Primary Contract – Chicago PD

- Responsible for design, configuration, and maintenance of COBAN's enterprise solution for Chicago PD.

- Installed, configured and tested Servers and DVMS (Digital Video Management System) Enterprise Solution Software in 25 Districts, Headquarters, training facilities, and fleet/maintenance shops utilizing store and forward video management.
- Configured and tested Motorola wireless access points utilizing WLAN controller setup for District level in-car vehicle video and metadata uploading.
- Maintenance and Troubleshooting with assistance from Chicago PD network team on Cisco Wireless and vehicle connections utilizing Eap-Fast security.
- Maintenance and Troubleshooting for over 1000 in-car video systems for Chicago PD.
- Training Officers, Admin Staff, and

Deployed numerous COBAN in car video solution deployments throughout the Midwest and throughout the nation which required setup and configuration of servers, wireless, in-car video setup, agency specific configurations and training. Departments deployed including but not limited to:

Chicago PD, Green Bay PD WI, Des Moines PD IA, Joliet PD IL, Coles County Sheriff IL, Kane County Sheriff IL, Albany PD NY, Sheboygan PD WI, Jefferson County Sheriff WI, Carol Stream PD IL, Kalamazoo PD MI, Dolton PD IL, Cherry Valley PD IL, Gurnee PD IL, Huntley PD IL, Town of Beloit WI, Monroe County Sheriff MI, Monroe County Sheriff IN, Cleveland Metroparks Rangers OH, Willoughby Hills PD OH, Oregon PD OH, Trotwood PD OH, Avon PD OH, Ocala PD FL, Rice County Sheriff MN, Three Rivers PD MN, Cumberland Twp PD PA,

Intelligent Solutions, Inc. ***Sept. 2002 – Oct.2007***
Senior IT Consultant/Project Manager, Technology Consulting Firm

- Responsible for the design and implementation of networking solutions for industries including Medical, Financial, Legal, Manufacturing, Governmental Municipalities and not-for-profit corporations.
- Implementations for large and small networks, conducting technology reviews and implementing policies and procedures (i.e disaster recovery, security).
- Network solutions provider and implementer for the Village of Carol Stream, Carol Stream Police Department and Carol Stream Fire Protection District.
- In conjunction with the President and CIO, developed business goals and strategies to create a stronger, more cohesive corporation.

State Bank of Countryside, Countryside IL ***Sept. 2001 - Sept. 2002***
Network Administration/Support, Financial Institution

Administered and upgraded a five location frame-relay network with 150+ users. The network environment was a mixed Novell and Microsoft NT 4.0 and was migrated to a full Microsoft 2000 environment. Successfully migrated 11 Novell production servers to Microsoft 2000 on time and on budget. Developed and maintained an internal website accessible to all branch locations which improved productivity, communication, and reduced costs. Successfully trained employees in all branch locations on the use of the intranet. Reviewed and recommended hardware and software for network management and office solutions. Played a key role in the document imaging committee created to recommend a viable check and document imaging solution. Involved in a security audit in which improved security measures were produced.

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Lewis University *Bachelor of Science, 2003*
Romeoville, IL

Majors
Management Information Systems – Completed 2003
Business Administration – Completed 2003

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

Microsoft Certified Professional – 1/06

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Jonathan H. Lewin – Preferred Contact is Email
Deputy Chief
Bureau of Support Services
Chicago Police Department
3510 S Michigan Av
Chicago, IL 60653
Jonathan.Lewin@chicagopolice.org

Lance Becvar
Sergeant
Mobile Tech Unit
Chicago Police Department
3510 S Michigan Av
Chicago, IL 60653
Lance.Becvar@chicagopolice.org
Cell: 312-446-3305

Richard Fugett
Former President/CEO
Intelligent Solutions, Inc.
9930 W. 190th St. • Ste. L
Mokena, IL 60448
RFugett@intelligentsolutions.net
Cell: 312-907-8063

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***Jeffrey Meng***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***Field Service Technician***		
# of Years in Classification:	**5**	**# of Years with Firm:**	**5**

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

I have been with Coban Technologies for 5 years as a Field Service Technician and have completed all my projects successfully without any problems or issues. My job duties not only require comprehensive technical knowledge, but I must also communicate well with the agencies I work with.

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

Los Angeles Police Department Phase 2
Los Angeles, California
6 Months
Field Service Technician
Successfully completed Phase 2 of LAPDs In car video project. Assisted with testing, networking and installation while managing a third party contractor.

Seattle Police Department
Seattle, Washington
1 Month
Field Service Technician
Completed upgrades and troubleshooting for Seattle PD.

Los Angeles Police Department Phase 3
Los Angeles, California
6 Months
Field Service Technician
Successfully completed Phase 3 of LAPDs In car video project. Assisted with testing, networking and installation while managing a third party contractor.

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

University of Houston
Houston, TX

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

Microsoft Office Certified

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Lt. Craig Griffis
Taylor County Sheriff's Office
450 Pecan St
Abilene, TX 79602
(325) 674-1334
griffisc@taylorcountytexas.org

Lt. Kelly Wright
Stafford Police Department
2702 South Main St.
Stafford, TX 77477
(281) 261-3990
kwright@staffordtx.gov

Dennis Argueta
Los Angeles Police Department
100 W. First Street Rm: 639
Los Angeles, CA 90012
(213) 996-1330
38266@lapd.lacity.org

PROPOSED STAFF RESUME FOR RFP 3273

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	***COBAN Technologies, Inc.***

Check the appropriate box as to whether the proposed individual is prime contractor staff or subcontractor staff.

Contractor:	***X***	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.

Name:	***James Lee***	**Key Personnel: (Yes/No)**	***X***
Individual's Title:	***Field Service Technician***		
# of Years in Classification:	***3 yr 2 mon***	**# of Years with Firm:**	***3 yr 2 mon***

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

I have been employed at Coban for 3 years as an installer. I am heavily involved in the Los Angeles Police Department and have been one of the main installers for two phases which include multi vehicle platforms of 600+ units.

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the contract/project and details of contract/project.

6 months	LAPD Phase 2	Los Angeles, CA	Installer
6 months	LAPD Phase 3	Los Angeles, CA	Installer

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

William P. Clements High School	Sugar Land, TX	GED	May 2004
Universal Technical Institute	Houston, TX	Automotive Technician	Aug 2009

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

N/A

REFERENCES

A minimum of three (3) references are required, including name, title, organization, phone number, fax number and email address.

Dr. Bernard C. Yu, M.D.	Ophthalmologist	713-988-8889	Bernardcyu@gmail.com
Officer Jin Oh	Police Officer III	714-249-8488	39565@lapd.online
Lieutenant Craig Griffs	Police Officer	325-668-5984	griffsc@taylorcountytexas.org

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Tab IX

Other Informational Material

11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

EXECUTIVE SUMMARY

The following summary introduces COBAN Technologies and how the solution we have proposed will meet the Nevada Highway Patrol's RFP criteria.

COBAN, was founded in 2002 with the explicit intention of providing comprehensive digital video capture solutions for law enforcement use. Headquartered in Houston, Texas, COBAN has grown to provide over 400 agencies across the United States with a viable, cost-effective means of capturing and maintaining digital media evidence. We serve large agencies such as L.A.P.D., Delaware State Police, and Kansas City PD as well as several local agencies in the state of Nevada. COBAN pledges to continue our commitment to service and providing scalable solutions for an ever-changing industry.

COBAN Objectives:

To work with the Nevada Highway Patrol and provide an effective solution to the requests brought forth by this RFP:

- A Body Worn Camera Solution that encompasses the four elements of a turnkey solution: Capture, Transfer, Storage and Management of evidence.
- A Body Worn Camera Solution that integrates with an In-Car Camera System and/or Mobile Data Terminal to create a complete and functional operation environment.
- A scalable solution that can adapt with the agency's needs.
- Provide a solution that is compatible with the current infrastructure and the possibility of future requirements.
- Maximizing operational efficiency by reducing the amount of time involved with the administration and management of videos, systems, and users involved.
- Addressing the geographical and communication challenges faced by a state-wide agency.

COBAN is aware of the difficulties facing today's law enforcement agencies. In an environment where obligations increase while resources are limited, it is a hard task to balance what is possible with what is necessary. Two major obstacles faced are:

- Budgets
- Infrastructure

Budgets: Funding is, and will always be, the greatest hurdle that agencies face. COBAN will work with the Nevada Highway Patrol in recommending the proper equipment and services that satisfy the project requirements while allowing the flexibility to address changes. We endeavor to always provide the greatest cost-to-performance solutions.

Infrastructure: Although the Nevada Highway Patrol has an existing IT infrastructure, COBAN would like to extend an open offer to review the multiple network upload and storage options that

are available. We have worked with many agencies, including LAPD, New Mexico State Police, and Chicago Police Department, to create a customized network infrastructure that fit each of their requirements. In no way is this essential to our proposal; if the current infrastructure in place is sufficient to support this project, the FOCUS BWC is compatible. COBAN is aware that substations in remote areas will face issues with network throughput, so the solution we have proposed allows Nevada Highway Patrol to take advantage of remote storage benefits at all locations while not requiring a major infrastructure upgrade.

Integrated with COBAN Digital Video Management System: COBAN Digital Video Management System (DVMS) is the video evidence management solution for the COBAN FOCUS and EDGE Hi-Def. Users have the ability to centrally upload and manage all device settings or video retention and export policies under a single application. As part of DVMS, access rights and policies can be easily assigned to individuals and groups, certifying that only the proper operators have domain admittance. In addition, COBAN DVMS is capable of automating many procedures, like generating shift logs, aggregating metadata, and transferring videos to long term storage. While the front end is obviously important, a turnkey solution does not really exist without the ability to easily manage the users, devices, and videos from the back end. Please see included Solutions Overview for more information regarding COBAN Digital Video Management System.

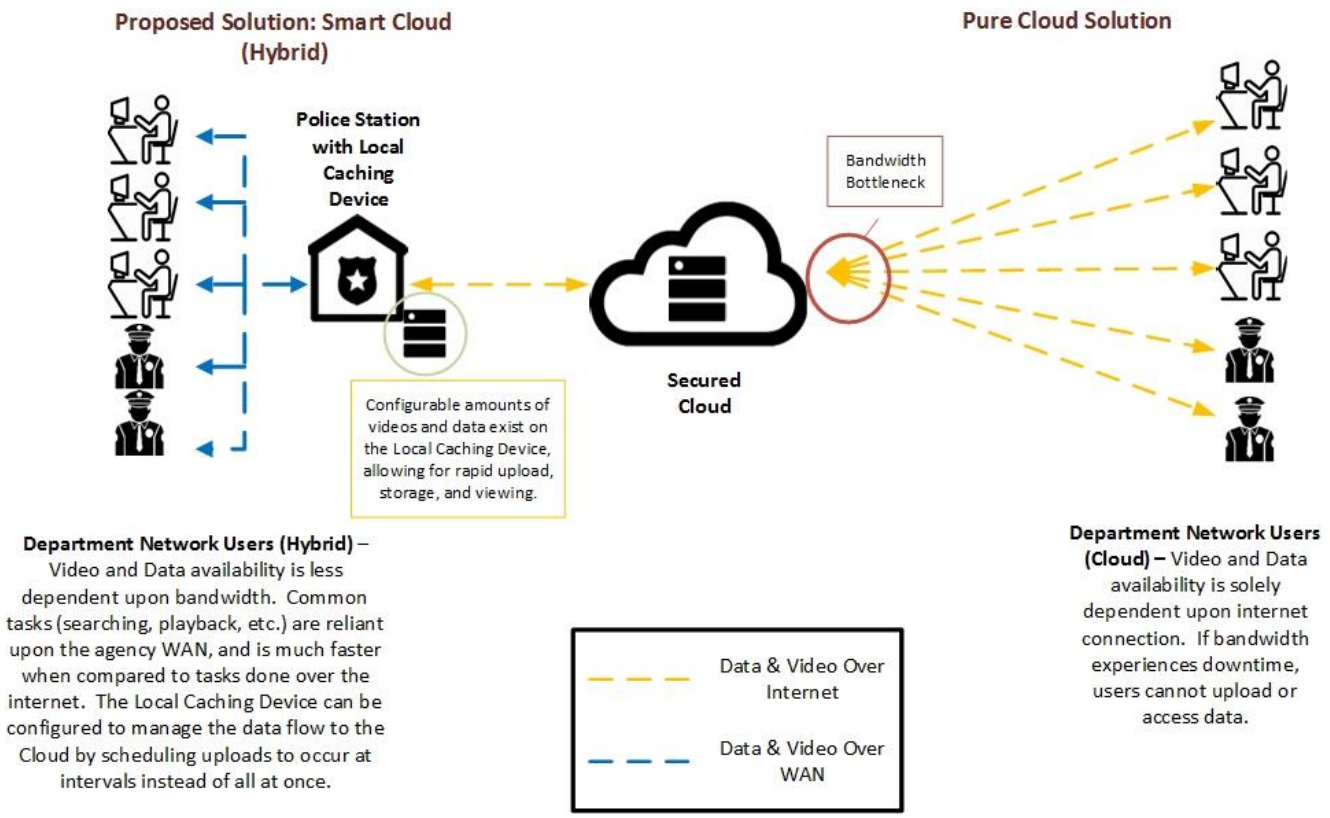
Multiple, Scalable Storage Options: The solutions provided by COBAN support Local, Cloud, or Smart Cloud (Hybrid) storage. Because we are aware that storage is not "one-size fits all," COBAN provides departments the flexibility of selecting a solution that will meet the project requirements while still allowing for the possibility of future growth. For the Nevada Highway Patrol, COBAN is proposing either a Smart Cloud (Hybrid) storage solution.

A few benefits of Smart Cloud based storage are:

- Mitigates the need for dedicated IT personnel.
- Allows for faster retrieval and access to certain videos by storing locally while pushing others to the cloud for retention.
- Is not as bandwidth intensive as a pure Cloud solution. Less network impact than pure Cloud.
- Easier to conform to existing infrastructure capabilities.
- For agencies that may have existing storage solutions, the transition to a Smart Cloud solution is greatly streamlined and does not require a single, mass migration.

The following diagram outlines some of the advantages of the Smart Cloud solution when compared to Cloud storage.

Smart Cloud Advantages Diagram



Please refer to the Solution Overview document for more information regarding COBAN's proposed solution.

Proposed Environment: The FOCUS body worn camera is a rugged, easy to operate unit where functions can be customized to fit within Nevada Highway Patrol's operating procedures. The FOCUS features user controls that are simple and reliable, allowing the user to concentrate on the situation at hand. When implemented with the EDGE Hi-Def, operations are streamlined and symbiotic. Also, data entry can be performed in the field or at the station, in accordance to Nevada Highway Patrol operating procedures. The process of transferring recorded data at the end of a shift is as simple as the officer placing the FOCUS into a smart upload/charging dock.

From the back end, COBAN's Smart Cloud Solution will automate the process and ensure 100% of the data reaches the Cloud Storage quickly and efficiently. To improve upload performance, the Smart Cloud Solution includes a COBAN Video Gateway. The Gateway allows for periods of high activity, like shift changes, to be quickly uploaded from the cameras by staging videos on a rapid storage while it waits to transfer to the cloud. This prevents data backlogs due to internet connections, which often cause cameras to require hours of upload time, and rendering videos un-viewable from the cloud, often until the next day. The Video Gateway ensures video can be quickly uploaded and viewable via department workstations in minutes instead of hours. Within this

environment, videos are not only available much faster, but also can be searched and reviewed by any users with valid permissions regardless of physical location.

Retention period, categorization, and backup will all be automated after the initial configuration by the Nevada Highway Patrol system admin. Also, system status and diagnostics can be run at any time to ensure the health of the system is maintained.

Data Security: Security is always a concern when dealing with sensitive and confidential material. All operations, from file access to exporting, are logged to provide a comprehensive audit trail. COBAN also supports authorization based on user role, simplifying access control across defined groups of users. The solution provided by COBAN will work in conjunction with Nevada Highway Patrol IT personnel to create a secure environment for sensitive data.

Technology Replacement Plan: The Body Worn Camera market is rapidly evolving. Even when compared to a year ago, the technology has progressed quicker than most have anticipated. As such, the solution provided by COBAN incorporates a biennial upgrade plan that ensures Nevada Highway Patrol is equipped with the most current technology available. All Body Worn Cameras and related equipment will be replaced with the most current model from COBAN at the beginning of the third (3rd) and fifth (5th) year of a contract. Please refer to the Detailed Pricing Quote document for more information.

COBAN is a "first-party," end-to-end solutions company. As such, we can provide a complete and efficient project deployment plan. The modularity and scalability of our services enables COBAN to meet many of the challenges associated with deployments. The Nevada Highway Patrol can implement a COBAN solution in stages or batches based on funding availability and other factors. We approach each project as a distinct, multi-phase process; tasks of this size require foresight and suitable preparation. We will work closely with the Nevada Highway Patrol to acquire a real understanding of your situation and the major milestones of the project. From the largest to smallest of agencies, COBAN has provided a personalized and valuable solution for each agency we work with.

FOCUS Body Worn Camera

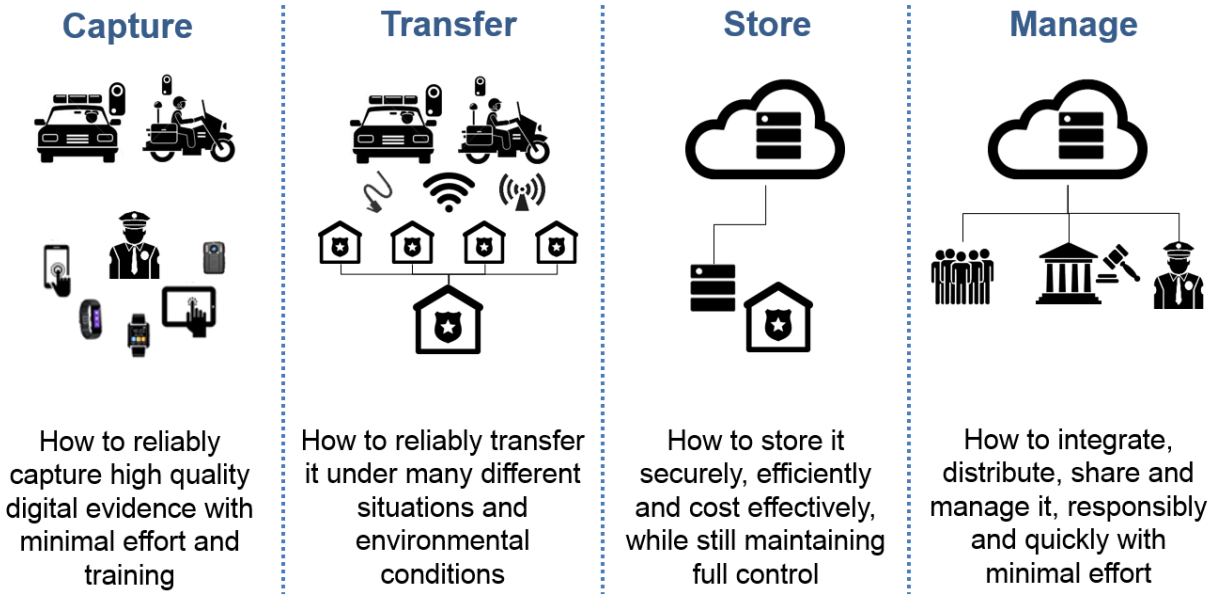
11375 West Sam Houston Parkway South # 800
Houston, Texas 77031

Introduction

The COBAN FOCUS, in conjunction with the COBAN Digital Video Management System (DVMS), provides a powerful and varied function set intended for use by law enforcement and public safety industries. The FOCUS is modular in design, both in terms of configuration and scale. The following information explains the major functions of our solution and how they will meet your requirements.

COBAN Solutions Overview

There are four phases to BWC digital video projects that form the life cycle of video evidence. This document will describe the flexibility, security, and scalability of COBAN's solutions in regards to these aspects:



Video Capture

COBAN's video capture solutions offer utility that can be scaled and configured to fit the needs of any law enforcement agency. The focus of this overview will be the COBAN FOCUS and its related components.

COBAN Body Worn Camera

COBAN's FOCUS is designed as a high performance body worn video recorder with the understanding that technology requires both usability and capability. The FOCUS possesses features that are intuitive for the user and is centrally managed from the back office COBAN Digital Video Management System.

Simple Yet Powerful Operation

The FOCUS has an intuitive layout that is devised for ease-of-use while still maintaining powerful functionality. Located on the top of the unit is an LCD status screen that relays information to the user with clear symbols representing battery life, Bluetooth connection status, and remaining storage space.

Recording can be activated either wirelessly with in-vehicle triggers or by using the large button located on the front of the unit. Visual, aural, and/or haptic indicators indicate if the FOCUS is currently recording.

Other buttons located on the FOCUS include power, Bluetooth connect, LCD backlight, and programmable function. It is not dependent upon a cellphone or Mobile Data Terminal laptop for full functionality. Rather, the FOCUS is a self-contained unit that is can be enhanced when incorporated into an operational environment.

Adjustable Video Resolution

The local system administrator can configure video resolution and bit rates for the FOCUS. Depending upon the department's policy, the DVMS administrator can set the FOCUS to record anywhere from standard definition to true 1080p high definition. The agency can balance between what is deemed acceptable video quality and data storage considerations.

Image Quality

The recording quality of the FOCUS is optimized for high image quality in different environmental conditions. Even during movement or vibration, the image does not heavily pixelate or lose clarity. The FOCUS features a fixed lens optimized for focus and stability from six inches to infinity, auto-white balance, and brightness control.

Unparalleled Battery Life

The integrated, non-removable battery for the FOCUS is capable of recording for 13 continuous hours at HD resolution and more than 24 hours of standby. This remains true throughout the lifetime of the battery, whereas the recording duration for other body cameras dramatically depreciates over time. Also, body worn cameras that require or encourage in-field battery replacement lose environmental resistance as the units are opened up.

Covert Function

The FOCUS also has a user activated covert mode that disables all visual, aural, or haptic operation indicators. The local system administrator can centrally configure which indicators are disabled during covert mode (for example, only haptic feedback is left enabled), ensuring standardized settings and operation for groups or even across users.

Deep Integration with the COBAN EDGE Hi-Def

The FOCUS can operate as the wireless microphone for COBAN In-Car Video systems, decreasing the amount of equipment users need to carry on his or her person. In addition, there is no interference or range limit to the FOCUS when acting as the microphone for the in-car video system. Whether the user is two miles away, behind a concrete structure, or surrounded by numerous other electronic devices, the audio captured by the FOCUS is clear and uninterrupted.

The FOCUS can also connect to the EDGE Hi-Def In-Car Camera system via a single bay docking station. Videos and data from the FOCUS can then be transferred to the EDGE Hi-Def for purposes of data entry, video review, or simultaneous upload with the In-Car video. If the videos from both the Body Worn Camera and In-Car Camera system are uploaded together, they can be automatically linked together as a single case event when reviewed and managed from the back office.

Data Collection

Data helps to identify, contextualize, and organize captured video.

Metadata like time and location are automatically logged on the FOCUS and linked to a respective video. Event data such as type of offense, offender's information, case numbers, and more can be entered using the In-Car Camera System, Mobile Data Terminal (laptop), or COBAN DVMS software.

This data can be used to attain a more complete understanding of the incident in question, and sort the uploaded videos for easier organization down the line.

These are just a few of the functions available for all FOCUS deployments. Many BWCs can offer some basic level of compliance, especially when it comes to capturing video, but the COBAN FOCUS is set apart due to dependability and flexibility that allows it to adapt to any situation.

Video Transfer

COBAN's video transfer solutions are designed to ensure efficient turnkey application. The transfer process, as the link between front-end and back-end, is essential in determining the flow and efficacy of a solution.

If FOCUS is the department's only COBAN product, transferring data is as simple as docking the unit into an upload/charging bay. The files will automatically begin transferring from the unit at a rate for 24.6 GB per hour. As an example, four hours of 720p video will be able upload in less than ten minutes if using local storage. Single and eight port upload/charging bays are available to accommodate the department's necessities. All this is accomplished automatically while the FOCUS is charging in a bay, so there is no need to allocate additional time or manpower to the process. If a bay is not available, the FOCUS can be connected to the computer by secure USB.

If the FOCUS is integrated with a COBAN EDGE Hi-Def system, the user can transfer recorded data directly to the in-car unit. The videos and data from both BWC and in-car sources can then be uploaded together, either through wireless upload or direct transfer via the physical data infrastructure.

If the department uses Mobile laptops, the FOCUS can also be connected through USB or the single upload/charging bay in the car. Once connected to the MDT, the user can review recordings, tag, and enter metadata that will be transferred with the videos once it is uploaded at the station.

Video Storage

COBAN offers several types of video storage to accommodate the specific needs of a department, no matter how small or large. In instances where a storage network is already in place, COBAN can work with the agency to ensure compatibility and sustainability. Types of storage we offer include Local Primary Storage, Extended Storage, Cloud storage, and Hybrid solution. The following information details each of these different forms.

Local Primary Storage

Local Primary Storage is when videos are hosted on a nearby server with internal storage or an attached disk array. The videos are available for viewing to whoever possesses the access rights. Local Primary Storage is used when the videos in question have been recently uploaded or will be accessed frequently. Local Primary Storage provides the fastest transfer rates of all the storage options and immediate access to all data located on the server or disk array. At this stage, the department can still maintain complete control over security and ownership of their data.

COBAN can recommend a disk storage system that fits within the department's projected requirements and budget, while maintaining flexibility for future growth. Points to consider when

making this recommendation include the amount of video generated on a daily basis and the length of time that videos need to be quickly retrieved on line.

Typically, Local Primary Storage incurs higher initial costs when compared to Cloud or remote storage. However, there are no further usage or access fees after the initial deployment. So for departments with heavy network usage, over longer periods of time, local storage will be the more cost effective choice.

Local Extended Storage

Local Extended Storage is used to retain videos and data for longer durations than Local Primary Storage. This can be anywhere from a few months to years past the departments online requirement. Videos that are not accessed often or marked as critical will be moved from Primary over to Extended Storage for retention purposes. Local Extended Storage may take the form of a secondary server, Network-Attached Storage, Direct-Attached Storage, Storage Area Network, or even DVDs. COBAN's solution provides the flexibility to initiate the required network infrastructure (a server) or expand the department's existing long-term data storage.

COBAN's Auto DVD Solution is an extended storage option that does not require additional IT personnel to operate. It provides a local, on-site solution that incorporates well with any preexisting infrastructure. With Auto DVD Solution, any video matching preconfigured event types are automatically sent to the DVD robot for export. After a DVD is written, it can be retained locally or given to the proper official for courtroom purposes. Anywhere from one to five copies per video can be exported depending upon the department's standard operating procedure. The Auto DVD Solution is designed to eliminate the man hours spent exporting and creating DVDs manually.

Cloud Storage

Cloud Storage is a remote based solution. It involves uploading all captured video and data directly to a remote server where it will be hosted by another party. There is no designation between online and archived data, and if access is required, a video will need to be downloaded from the Cloud server. The appeal of Cloud Storage is that it lessens the need for IT personnel and investment in storage hardware, since there is no need for intermediary local servers. The Cloud is a viable solution for departments that possess robust network bandwidth.

COBAN utilizes industry-leading Microsoft Azure Government for Cloud storage services. Microsoft Azure Government is CJIS capable, FedRAMP compliant, and DISA certified to ensure the security of data. Cloud services do not require separate licenses or access administration and data management are still done within Digital Video Management system.

While the initial cost of Cloud is much lower than that of local storage, subscription fees and increasing data volume eventually lead to higher than anticipated expenditures. Also, since the Cloud is so heavily dependent on bandwidth, not all agencies will be equipped to realistically implement this type of storage system. It is not a universal solution and COBAN will cooperate with the department to make sure there is a clear understanding of the potential benefits provided by the Cloud.

Hybrid Storage Solution

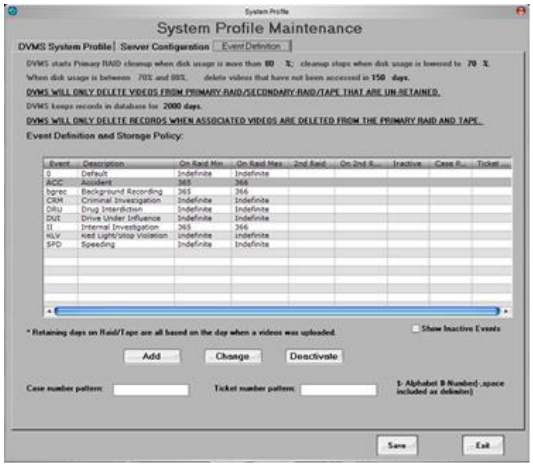
The Hybrid Storage Solution is a partial combination of the concepts behind Local and Cloud storage systems. Rather than immediately pushing all data to the Cloud, videos are initially uploaded to a gateway device. Certain or all types of videos, in accordance to department policy, can be kept locally for easier and more immediate retrieval. The videos are then scheduled for automatic upload to the cloud for retention purposes. The time frame for pushing videos to the Cloud can be configured by the local system administrator. For example, if network bandwidth is a concern and the cloud is used solely for long term storage purposes, videos can be uploaded at off-peak hours.

The strength of the hybrid solution is that it can conform to the existing infrastructure to ensure impact on the network is minimized. It is not necessary to acquire multiple servers at one location or augment internet access capabilities. Along these lines, the Hybrid solution decreases the strain on bandwidth when compared to a Cloud solution, as uploads can be arranged to occur at off-peak times instead of all at once, and a copy of high priority event type videos can be kept on the gateway device to avoid having to re-download the file for access. Also, internet connection or Cloud storage downtime does not completely disable the back end process. Data and videos can still be transferred to the local gateway device even without connection to the Cloud and uploaded when services resume. The Hybrid solution may not be compatible with a department's needs because it still requires some local infrastructure and IT personnel, while the fees associated with Cloud storage are still applicable, albeit at a lower tier. But for certain departments, dependent upon size and usage, a Hybrid solution has the potential to fit storage requirements while minimizing the necessary investment in new infrastructure.

The storage solution provided by COBAN will always comply with each individual agency's capabilities and requirements. Our aim is to provide a functional and complete solution that will not conflict with the department's budget or capabilities.

Video Management

COBAN's Digital Video Management System is a back office, policy-based automation software that allows administrators to focus on overall system performance instead of day-to-day operational tasks.



Video Retention

The systems administrator determines how each category of video is handled; retention period for each video is connected to its type. Once the retention period has passed and no deliberate action has been taken, videos are purged from the system automatically. This guarantees policy compliance while minimizing the amount of time spent micromanaging files.

Automated System Management

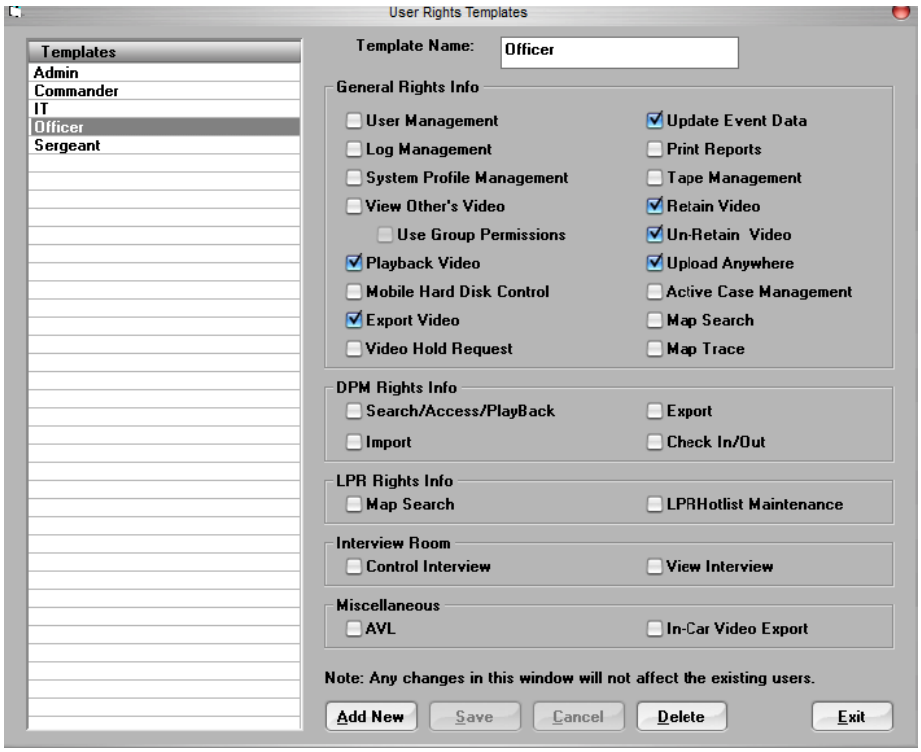
After the administrator defines the necessary criteria, DVMS will take over the everyday video management jobs. Diagnostic reports will be generated, showing the results of daily tasks and overall storage status. System exceptions are also emailed to alert the system administrator for immediate review.

Complete Chain of Custody

All activities associated with each uploaded video are logged to the system's audit trail. This includes the date and time a video was uploaded, archived, played back, exported, or purged from the system. A complete history of each video is available to the system administrator for analysis.

System Security

Activity permissions such as video access, report printing, and general data management functions can be set up by the administrator. Only users with proper clearance are able to perform actions associated with a video in question, and all activities are logged into the aforementioned audit trail.



Centralized Management System

DVMS is capable of managing videos and data from both COBAN Body Worn Cameras and In-Car Video systems. Organization and management of videos involves the same interface and procedures regardless of the source. In addition, associated videos can be grouped together into a case file for easier organization.

Streamlined Storage Management

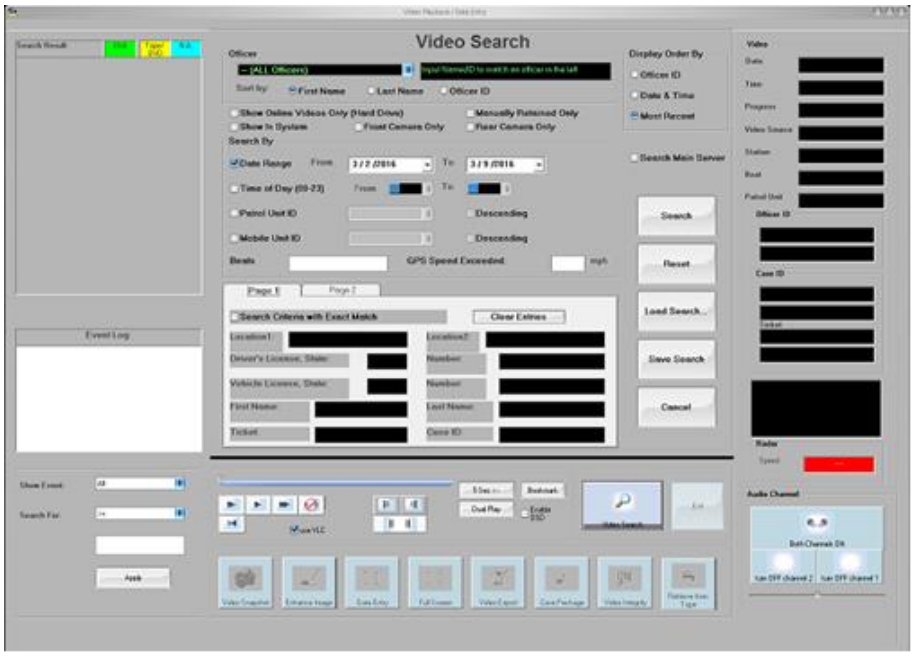
Whether the department uses Local, Cloud, or Hybrid storage, DVMS provides a standard management system that does not require changes to user interface or external software. Storage server policy, once established by the local system administrator, is automated while still allowing specific videos and data to be handled on an individual basis.

CAD/RMS Integration

The COBAN solution allows an agency the option to integrate their existing or future CAD/RMS system in order to share metadata on videos and cases, in addition to streamlining user and ID management. This saves time and simplifies the video management process by reducing the number of systems that users will have to work with.

Powerful Search Capability

Videos can be searched using all event data associated with the BWC units, including offender's ID, patrol unit, event type, time range, and more. The multiple criteria selection allows the user to find specific videos or perform general inquiries. The following graphic shows an example of the interface and options of the DVMS search function.



COBAN Courier

The COBAN Courier service allows the department to export videos or Digital Property Management case files without the need for physical DVDs. When the department uploads or identifies the requested video in the Cloud, a link will be sent via email to the intended recipient so he or she may access or download it. The ability to access or download can be configured by the department according to what the intended use is and the party they are sending it to. The link is time-sensitive and the duration can be configured as necessary. Although Courier service is Cloud based, it does not require a COBAN Cloud subscription to be available for use.

Digital Property Manager (DPM)

DPM is value added software that is included within DVMS. It imports, aggregates, and manages externally sourced digital evidence like videos, audio, or documents based on case number.

Users can add external files into the system or link to in-car and interview room videos to form a case package. The system maintains all versions of each individual file in addition to an audit trail to track activity. There is also an export function that allows the user to send all the digital evidence to a DVD, with a searchable index for easy reference.

Distributable Video Playback Tool

When videos are transferred to DVD or other portable media, DVMS can include an installation program for playback viewing. The program will install a video playback tool on any Windows XP, Vista, 7, or 10 based computers. All the event data present will be displayed along with the video, giving a more complete depiction of what is happening on-screen. Although Windows Media Player or VLC Player are capable of showing the videos, the program provided by COBAN provides an interface identical to the DVMS software.

Data Replication

Data redundancy is important for every agency in order to guarantee necessary videos and data will not be lost due to server or storage failure. COBAN provides departments the flexibility to decide how they copy videos and data to a secondary source. Local storage, DVDs, Cloud, or even a hybrid solution are all compatible with the COBAN system. Agencies also have the choice to replicate just videos, event based data, or all data according to their policies.

COBAN Enterprise Solution is specifically designed for multiple precinct agencies and provides several functions.

1. All data under department domain, including officers, vehicles, and event definitions, can be centrally maintained. A main server acts as a single data maintenance point, and updated data will be pushed to all sub-stations on a daily basis, allowing for consistent data content across all sites.

2. Event data is accumulated at the main server, which then enables query and playback of videos amongst the sub-stations across the network.

3. After program updates for both in-car and backend software are loaded onto the main server, sub-stations will receive the updates automatically.

All of the aforementioned functions do not need to be enabled. Departments can choose which features are most suited for department policy. As an example, if network bandwidth is a concern, videos can be stored at the sub-stations while event data is pushed to the main server. In this instance, even though COBAN is providing distributed storage architecture, an approved user can access any video on the network for the purposes of viewing or exporting. The Enterprise Solution furthers the flexibility, interconnectivity, and network capabilities inherent in COBAN's end-to-end system.

A few of the key specifications of the FOCUS Body Worn Camera are:

Dimensions:	3.38" (H) x 2.68" (W) x 1.0" (D)
Weight:	4.5 ounces
Video Resolution:	1080P/720P/D1 configurable
Low Light Ability:	Approximately 0.3 lux (0 lux if using available IR Clip-on camera attachment)
Pre-Event Recording:	Yes, configurable
Angle of View (Main):	116-Degrees
Battery Life:	13 hours record time @ 720P / 24 hours standby
Internal Storage:	32GB SSD
Buttons:	Record, Programmable Multifunction, Power, Wireless Sync, and LCD backlight
GPS:	Yes
Connections:	POGO, USB 2.0
IP Rating:	IP67
Camera Positioning:	Modular Clip and Clip-on Camera option
Uploading:	8-Bay smart Upload/Charging Dock Single-Bay Upload/Charging Dock (office/vehicle) USB Cable
Warranty:	1 year (2nd and 3rd year extended available)