



# City of Seattle

## Seattle Police Department

### REQUEST FOR INFORMATION

#### Submittal Schedule

Table 1: Schedule

Schedule of Events	Date
Release RFI	12/9/14
Submit your Response	1/12/15

*The City reserves the right to modify this schedule at the City's discretion. Notification of changes will be posted on the City website or as otherwise stated.*

#### Project Manager

IT Project Manager: Jolene Luck, [Jolene.luck@seattle.gov](mailto:Jolene.luck@seattle.gov), 206-684-92-97

Table 2: Delivery Address

Email	Fed Ex & Hand Delivery - Physical Address	US Post Office - Mailing Address
IT Project Manager Jolene Luck <a href="mailto:Jolene.Luck@Seattle.gov">Jolene.Luck@Seattle.gov</a>	Seattle Police Department Jolene Luck 610 Fifth Avenue Seattle, Washington, 98124-4986	Seattle Police Department Jolene Luck 610 Fifth Avenue Seattle, Washington, 98124-4986

This Request for Information (herein referred to as (RFI)) is issued to discover marketplace solutions and gather information regarding video collection management from inception to public disclosure, legal discovery, and investigation. This RFI is for planning purposes only and should not be construed as a solicitation nor should it be construed as an obligation on the part of the City to make any purchases. This RFI should not be construed as a means to pre-qualify vendors. This RFI is not a selection process for a technology or consultant contract.

From the information provided by the respondents to the RFI, a determination will be made regarding any actual contracting through a procurement process. Any future contract that may be awarded must comply with City procurement requirements. The Seattle Police Department (herein referred to as SPD) may utilize the results of this RFI in drafting a competitive solicitation through a Request for Proposal (herein referred to as RFP) for the subject services/products/equipment. Its purpose is to provide ideas/solutions which the SPD may use in helping develop an RFP.

The strategy for this RFI is to provide enough preliminary detail (see appendix) about business processes, requirements, and vision contextual diagrams to communicate the overall vision to any responders.

Participation in this RFI is voluntary and SPD will not pay for the preparation of any information submitted by a respondent or for SPD's use of that information.

# 1. Purpose and Background

SPD seeks information regarding marketplace offerings regarding solutions for managing collections of video (video includes audio) from source systems to collections used for Public Disclosure Requests (hereafter referred to as PDR), investigation, and legal discovery purposes. The solution for the management of the video collections is expected to provide an end to end workflow through the various processes that includes redaction functions for both audio and video.

A project has been formed to manage this solicitation named "Video to Public" project (hereafter referred to as VTP) and is expected to complete in 2015.

The VTP project will implement a video collection management program at the Seattle Police Department by establishing policy and implementing processes and systems that are efficient, timely, and cost effective regarding video consumption for public disclosure requests, legal discovery, and investigations with minimal risk to the Police Department.

SPD has elicited and classified preliminary requirements for the purpose of this RFI. At the time of this RFI the requirements are preliminary and the marketplace offerings are not fully understood. The RFI will help inform the project team of the marketplace offerings. SPD realizes that the technology may not be in place today to meet the preliminary requirements and expects to review information based on vendor solutions now and future releases. In addition, SPD realizes that where there may be a future contract through a solicitation process (e.g. RFP), the approach is likely to be a Commercial Off The Shelf (COTS) based implementation with development to the base functionality to meet SPD requirements to the fullest extent possible within cost and time.

SPD currently has approximately 1.5M in car videos (2600-2800 hours) and 358 Terabytes (TB) of storage. There are other sources of video such as Body Cams (in pilot) and security videos that must be considered.

SPD user sizing includes approximately a maximum of 50 investigators, 20 public disclosure staff, 10 video lab staff, and 50 legal staff.

# 2. Instructions

## Registration into City Registration System.

The City suggests that the vendors register. If you have not previously done so, register at: <http://www.seattle.gov/contracting/registration.htm>. The City expects all vendors to register. Women- and minority- owned firms are asked to self-identify. For assistance, call 206-684-0444.

## Questions.

Respondents can freely submit written questions to the Project Manager listed on page 1. The City will document these questions and release a response on the same solicitation website (<http://www.seattle.gov/purchasing/>), according to the schedule on page 1.

## Email Submittal.

The City seeks responses by the date on page 1. The City can accept late responses since this is not a formal competition. However, the City prefers all responses received on the desired date so that the City can meet its schedule for the review of the responses.

1. Please number your pages sequentially.
2. The City does not have page limits.
3. The City prefers and will accept an electronic submittal. The electronic submittal should be e-mailed to the Project Manager (see page 1). Title the e-mail clearly. The City e-mail system will allow documents at least 20 Megabytes in size. Responses that exceed this limit should coordinate with the Project Manager.

### **Cost of Preparing Submittals.**

The City will not be liable for any costs incurred by the Respondent to prepare or submit the Submittals.

### **Proprietary and Confidential Material.**

By submitting a response, the Respondent agrees that the City of Seattle and its member agencies may copy and distribute the response, in whole or in part, for the purpose of facilitating the review of the response. The Respondent consents to such copying by submitting a response and warrants that such copying does not violate the rights of any third party. By submitting one or more responses, the Respondent thereby grants the City of Seattle and its member agencies the right to use the ideas and to adapt or modify the Respondent's ideas, for the purposes of scoping a procurement and implementation effort, which are contained in the response.

### **Requesting Disclosure of Public Records**

The City asks interested parties to withhold public disclosure requests for a period of two months. This will allow the City the opportunity to review the information without interruption.

### **Marking and Disclosing Material.**

Washington's Public Records Act (Release/Disclosure of Public Records)

Under Washington State Law (reference RCW Chapter 42.56, the *Public Records Act*) all materials received or created by the City of Seattle are **public records**. Washington's Public Records Act requires that public records must be promptly disclosed by the City upon request unless a judge rules that RCW or another Washington State statute exempts records from disclosure. Exemptions are narrow and explicit and are in Washington State Law (Reference RCW 42.56 and RCW 19.108).

Respondents should be familiar with the Washington State Public Records Act and limits of record disclosure exemptions. For information, visit the Washington State website at <http://www1.leg.wa.gov/LawsAndAgencyRules>).

If you believe records you submit to the City as part of your response or work product are exempt from disclosure, you may request the City not release such records until the City notifies you about the pending disclosure. To do so, identify the records on the Non Disclosure Request form, located below, and submit this form with your proposal.



NonDisclosure.pdf

The City will not withhold materials from disclosure because you mark them with a document header or footer, page stamp, or a generic statement that a document is non-disclosable, exempt, confidential, proprietary, or protected. Identify no entire page as exempt unless each sentence is within the exemption scope; instead, identify paragraphs or sentences that meet the specific exemption criteria you cite in your submittal. Only the specific records or portions of records properly listed in your submittal will be protected and withheld for notice. All other records will be considered fully disclosable upon request.

If the City receives a public disclosure request for any records you have properly listed, the City will notify you in writing of the request and postpone disclosure, providing sufficient time for you to pursue an injunction and ruling from a judge. While it is not a legal obligation, the City, as a courtesy, allows up to ten business days to file a court injunction to prevent the City from releasing the records (reference RCW 42.56.540). If you fail to obtain a Court order within the ten days, the City may release the documents.

By submitting, the respondent acknowledges the obligation to identify such records within the response and that the City has no obligation or liability to the Respondent if the records are disclosed.

### **Ethics Code.**

Please familiarize yourself with the City Ethics code: [http://www.seattle.gov/ethics/etpub/et\\_home.htm](http://www.seattle.gov/ethics/etpub/et_home.htm). Attached is a pamphlet for Consultants, Customers and Clients. Specific question should be addressed to the staff of the Seattle Ethics and Elections Commission at 206-684-8500 or via email: (Executive Director,



contractor-vendorbrochure[1].pdf

### 3. Response Format.

#### Please submit response as described below.

Please submit an answer document detailing an applicable solution and its use to provide the below capabilities. As you submit the answer document please consider sections 1) **Purpose & Background**, 2) Appendix A: **Contextual Diagram**, 3) Appendix B: **High Level Current State Business Processes**, and 3) Appendix C: **Preliminary Requirements**. In addition, there may not be technology in the marketplace that meets the preliminary requirements 100%, therefore SPD is interested in your answers concerning your solution (implemented and packaged for sale today), your ideas of partnering with other firms, and your firm's roadmap for future release enhancements by time.

#### Provide the following:

1. Cover Page  
Please include the name of the organization submitting the response and signed by authorized official(s). The cover page should also include the name, title, phone number and email address for the person authorized to clarify information in the response.
2. Table of Contents
3. Executive Summary
4. Firm Experience  
Include Public Sector customers, preferably entities of similar size and complexity.
5. Response Detail (Solution Capabilities)
  - a. Provide a general overview for proposed solution and include your context diagram.
  - b. Describe roles (public disclosure requester, legal discovery requester, investigation requester, video lab, and public disclosure) interaction, processes, and user experience with the proposed solution.
    - a. Such as: search, filter, search within search result, grouping, sub grouping, user specific fields, accessibility, viewing of compressed thumbnails, etc..
  - c. Describe the display capabilities with the proposed solution on various devices.
  - d. Describe the sharing capabilities with investigation and legal discovery (Internal sharing and external sharing (e.g. across agencies)).
  - e. Describe workflow capabilities such as status tracking and E-Mail alerts.
  - f. Describe how redaction of video works including auto redaction capabilities.
  - g. Describe how redaction of audio works including auto redaction capabilities.
  - h. Describe how audio to text works including limitations.
  - i. Describe payment processing for public disclosure requests and ideas on how to charge for the 'cost of copying'.
  - j. Describe the retention/archive process capabilities and configuration options.
  - k. Describe how the video sharing may use existing message switches.
  - l. Describe how documents may be attached.
  - m. Describe how map based views (where GPS information is available on records) may be used.
  - n. Describe integration capabilities with existing systems such as CAD/RMS or other video or evidence systems.
  - o. Describe how processes may work for initial loads (volume).
  - p. Describe how processes may work for future scheduled loads/imports.

6. Response Detail (Solution Implementation Approach)
  - a. Describe the methodology to implement a video collection solution (approach).
    - Include both baseline (Commercial Off The Shelf (COTS)) functionality, what is already planned in your upcoming releases, and what requires development
    - Include proposal to incorporate development into baseline product to avoid customization for SPD
  - b. General time line (based on prior experience) for design, planning, configuration, development, testing/readiness of proposed solutions.
  - c. Describe a typical sustainment program for operations, maintenance, and support including a staffing model.
  - d. Describe the basic architecture options such as SaaS/Cloud, on premise, hybrid and third party partnerships.
  - e. Describe general costs (or range of cost) associated to implement such a solution in terms of on premise infrastructure (if applicable), cloud storage/infrastructure, licensing/subscriptions, and support.
  
7. Response Detail (Service/Support, Data Agreements, Security)
  - a. Describe how internal user authentication works.
  - b. Describe how external user registration works.
  - c. Describe typical Service Level Agreements (SLA) for your service, support, data agreements, and security for each listed:
    - Provisions for testing enhancements, timing of enhancements and notifications.
    - Ongoing data storage, accessibility and retention.
    - If you go out of business, how will the City gain access to the data?
    - How will data be retained to meet state retention requirements?
    - How will data be ported to a replacement application should this one go away?
    - What is the data jurisdiction?
    - How can SPD have regular data extracts in agreed format?
    - How does SPD get data back at any termination, including formats?
    - What are the data usage rights (defining how the vendor can and cannot use the data in the solution).
    - Describe data retention, including costs, both within terms of the relationship and beyond.
    - What are typical uptime agreements?
    - What are typical redundancy, failover and disaster recovery agreements and how does it impact pricing?
    - Who will be responsible for each element of the service the application vendor or a third party infrastructure provider?
    - Describe current (or in the process of) security certifications to meet audit standards.
    - Describe typical payment collections on SPD's behalf, such as 1) ability to use our desired hosted payment processing gateway (Kubra) and maintain Payment Card Industry (PCI) compliance with an available Report on Compliance (ROC) for our reliance or 2) bill credit cards using your own Merchant ID.
    - Describe typical support for service desk support, escalations, response times and definitions of severity.
    - Please provide other information here (optional):
  
8. Provide any other Information

## 4. Next Steps.

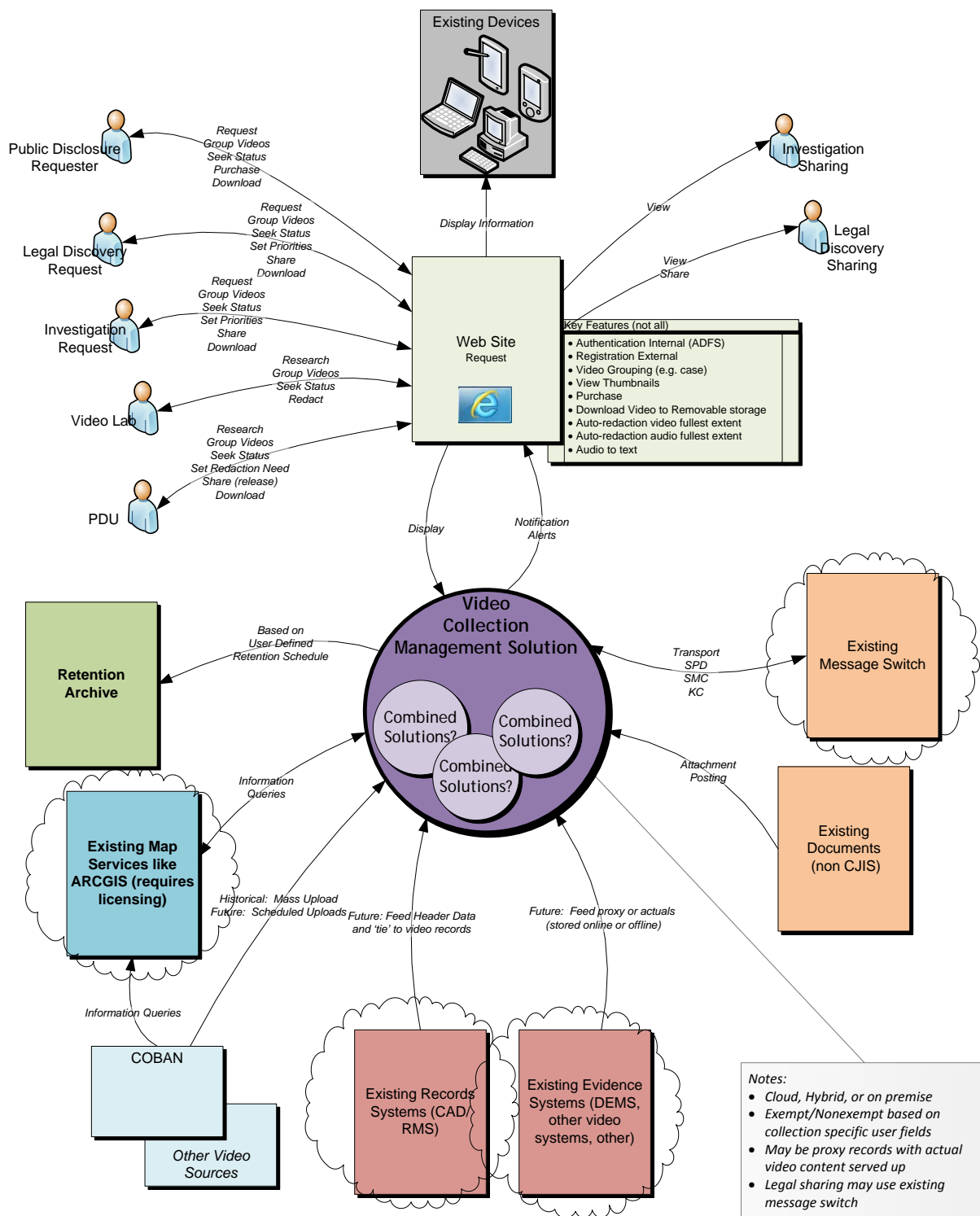
The City project manager and the project team will review all responses. The team may ask respondents to meet with the team, to discuss the technology solution, ideas and further develop the direction.

The City will then make a decision about how to proceed with the project, what direction the City finds to be most appropriate, and whether to pursue a technical solution and implementation contract. Such a contract, if any, would undergo a solicitation process through a Request for Proposal (RFP).

# 5. Appendix

## Appendix A | Contextual Diagram

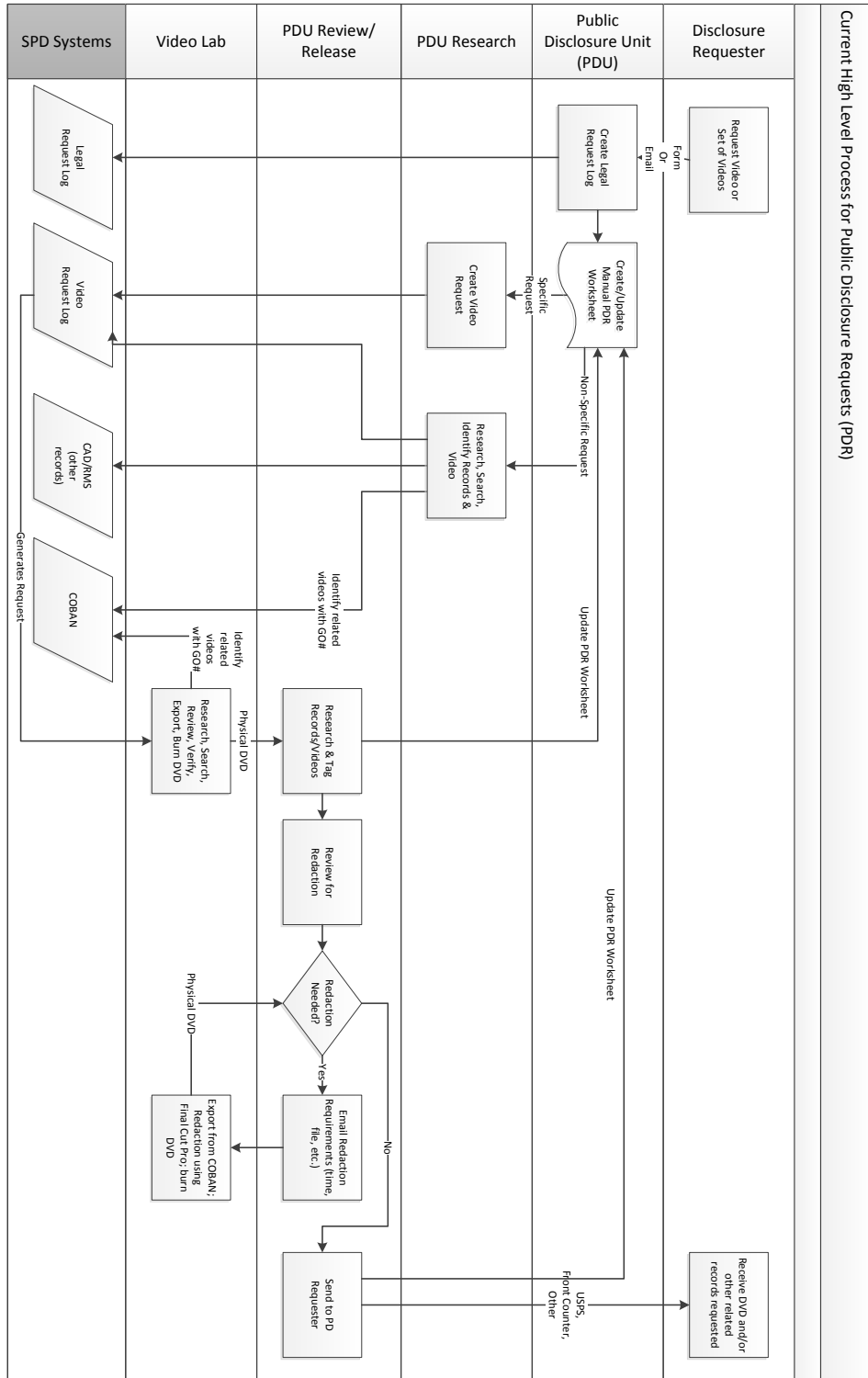
This diagram is not technically accurate on purpose. It is a contextual diagram to communicate overall vision internally and with vendor partners. The contextual diagram reflects the preliminary requirements in Appendix C at a high level and may not cover all the details. The contextual diagram has clouds drawn around entities that may be ultimately out of scope for the initial implementation. This diagram included as a PDF attachment for better viewing.



## Appendix B | High Level Current State Business Processes

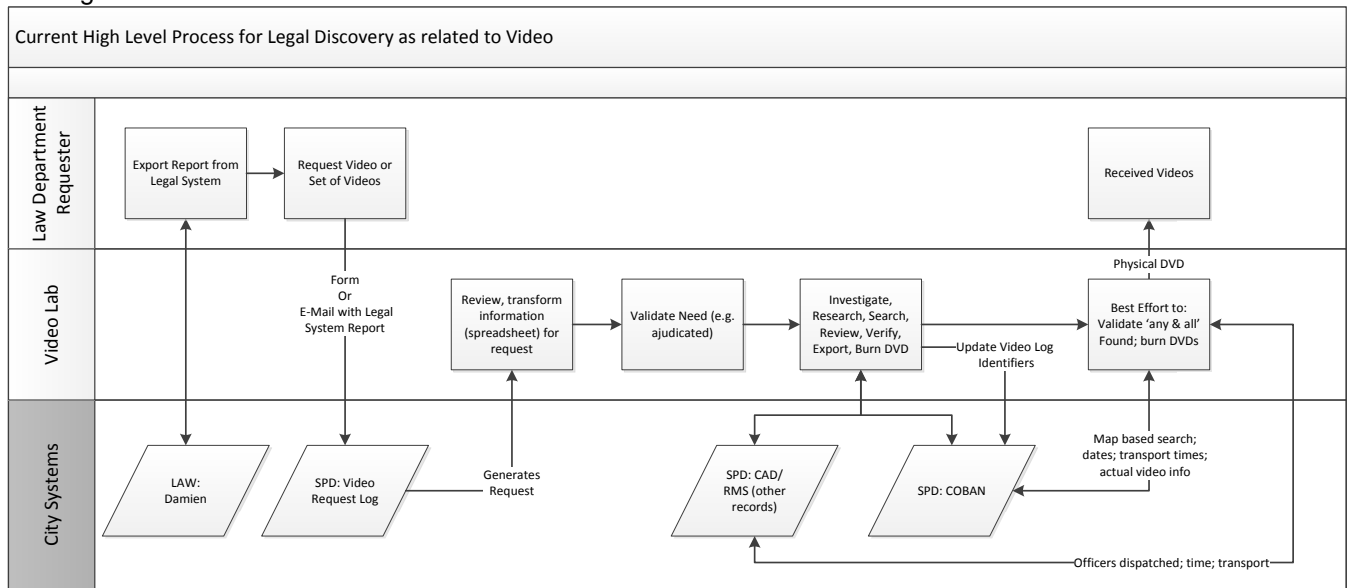
These business process charts are high level and included in the RFI to assist with understanding of the current state of process, people, and systems at a high level.

**Current State High Level Process for Public Disclosure Requests (PDR)** related to video involves 4 functional groups, a paper trail, four+ SPD systems, and physical DVD routing for review and redaction. This diagram included as a PDF attachment for better viewing.

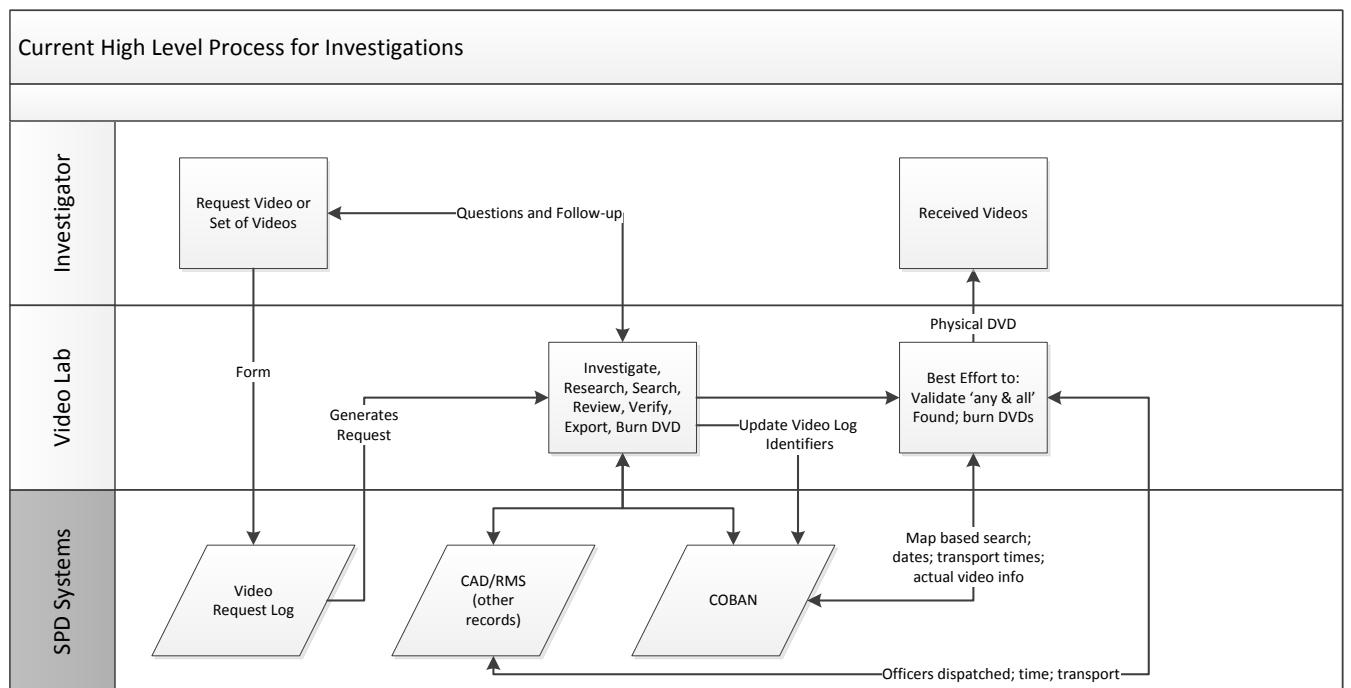




**Current state high level process for legal discovery** requires 2 functional groups, separate spreadsheets for tracking, four+ SPD systems, and one physical DVD. This diagram included as a PDF attachment for better viewing.



**Current state high level process for investigations** requires 2 functional groups, four SPD systems, and one physical DVD. This diagram included as a PDF attachment for better viewing.



## Appendix C | Preliminary Requirements

The preliminary requirements are shared in the RFI to assist responders with understanding the overall need for SPD video collection management. The responders are not responsible to answer the requirements one by one as they will not be scored; however, the responders are expected to address the preliminary requirements in their response format section of this RFI for the proposed solution.

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
1.0	The solution shall provide a process to provide account management for external users through a registration process.	Business	Accounts	1. For external accounts such as public disclosure requesters.		
1.1	The solution shall provide a process to provide account management for internal users through an internal authentication process (single sign-on).	Business	Accounts	1. For City of Seattle internal accounts. 2. Ability to integrate or federate with Microsoft Active Directory for single sign on.		Multiple forests/domains across departments.
2.0	The solution shall provide a process to determine by account and role who has permissions to view/request exempt and non-exempt video.	Business	Accounts	1. Based on security groups (preferably in Active Directory (AD)), the user administrators are able to add or delete accounts from the security groups who have rights to view specific content. 2. Allow the user/requester to sign in and register, providing content required by the Washington Public Records Act ("PRA"), RCW Chapter 42.56.		
3.0	The solution shall provide a process to upload & import millions (as of 11/17/2014 there are approx. 1.5M video records for in car alone) for the initial load and then a scheduled process thereafter.	Business	Administration	1. A data structure and mapping function is needed. 2. The ability to use existing infrastructure is important during the process is important. 3. This may be a proxy record where the actual video remains on premise and is posted based on need (the need may be any/all).		1. Due to the amount of data produced daily, a delivery medium would likely be required (delivery of daily or weekly videos to host). Uploading would be too slow and costly.
4.0	The solution shall provide a process to maintain a status on the video record indicating logs of activities such as redacted, released, release to, released date, Public Disclosure Requests (PDR) number, etc. and so on.	Business	Administration			
5.0	The solution shall provide a process to tie discovered (or found) video to a group (e.g. case) number for investigative work and case management within the solution and provide comments entries for the group.	Business	Analysis			

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
6.0	The solution shall provide a process to translate audio to text from video/audio footage and provide a modifiable report (for redaction) as export.	Business	Audio-Text	1. This feature could be used by the "Use of Force" unit in addition to the PDR, Investigative, and Discovery needs.	Technology exists for audio to text today.	1. Languages other than English. 2. Technology not exact in noisy environments. 3. Where the technology works, is usually in very controlled environments.
7.0	The solution shall provide a process to auto-redact certain words or phrases in an exported audio to text output.	Business	Audio-Text	This feature could be used by the "Use of Force" unit in addition to the Public Disclosure Requests (PDR), and Discovery needs.		Technology may not be available for auto-redaction based on words or phrases.
8.0	The solution shall provide a process to identify using qualifying fields about the videos, which video records are exempt and non-exempt (the qualifying fields are likely entered manually and shall describe the reason why a video may be exempt).	Business	Classification	1. Process to identify which videos records are exempt and non-exempt based on video record information. 2. Need specific user fields to identify videos as exempt/nonexempt (based on exemptions guidelines), set priorities, workflow status, etc.	There are fields available on the video record or derived from lookup to the CAD/RMS records that are indicators whether the video is non-exempt (requires no redaction) or exempt (requires redaction)	COBAN system may not have mutually exclusive fields for identifying the exemptions. COBAN system does not have all the fields necessary to identify exemptions.
9.0	The solution shall provide a process to post video records and content online which shall be used for 1) for discovery (internal), 2) disclosure (external) requests business processes, and 3) investigative processes.	Business	Consumption	a. Exempt posted as a proxy (stand in) b. Non-exempt posted (may be stored within the solution or may be a proxy same as exempt)	The video "posted online" may be a proxy pointing to on premise video stores OR it may be actually posted online for non-exempt video.	
10.0	The solution shall provide a process to allow users (internal/external) to self-serve (with request status) for video consumption for discovery (internal), disclosure (external) requests based on their roles, and investigative processes.	Business	Consumption	a. Search, sort, filter capability on video metadata (information about the video like officer, time, or location) b. Provide compression views (quick views) prior to request, purchase, or download c. Provide a 'drop box' style of posting requested video for 30 days where the requester can download/purchase d. Exempt Videos i. The solution shall not provide a compressed view (quick view) of exempt video ii. The solution shall provide a click-request to initiate disclosure or discovery requests workflows		

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
12.0	The solution shall provide a process to share videos using an E-Mail address for Public Disclosure requesters with an expiration date.	Business	Consumption			
13.0	The solution shall provide a process to burn multiple videos to "removable storage" in batch process, groups, or one at a time without download required.	Business	Consumption	<ol style="list-style-type: none"> <li>1. SPD owns equipment for burning.</li> <li>2. SPD should be able to batch run videos for DVD burn.</li> <li>3. SPD should be able to select individual videos for DVD burn in groupings or singular.</li> </ol>		
14.0	The solution shall provide a process to download redacted videos in bulk (batch processing) or one by one in a format that is easily burned to DVD and that will play in standard players such as VLC.	Business	Consumption			
15.0	The solution shall provide a process to for integration through web services (API) to tie video back to SPD existing systems such as calls (CAD), or reports (RMS), IAPro, or other SPD record systems.	Business	Integration	<ol style="list-style-type: none"> <li>1. CAD/RMS on premise solutions.</li> <li>2. Currently IAPRO holds "Use of Force" records electronically with an ID that is assumed to be usable for a look across CAD and/or RMS and/or COBAN or other video sources.</li> </ol>	<ol style="list-style-type: none"> <li>1. We are uncertain how integration may work at this time and it will depend on the vendor's proposals. We are interested in options.</li> <li>2. There are keys/ids usable for lookup.</li> </ol>	This requirements is touching on out of scope elements and needs to be monitored.
17.0	The solution shall provide a process to share evidence from videos for discovery through the SPD existing message switch.	Business	Integration	This would be the actual chain of evidence approach to share information through the existing message switch that SPD and LAW use for sharing information.		This requirements is touching on out of scope elements and needs to be monitored.
18.0	The solution shall provide a process to charge for disclosure requests (external) and not charge for discovery requests (internal).	Business	Purchase	<ol style="list-style-type: none"> <li>1. The process for purchasing the request is in the ownership of the solution provider.</li> <li>2. When a vendor is collecting payment on our behalf, we either need them 1) to use our desired hosted payment processing gateway and maintain PCI compliance with an available ROC for our reliance or 2) bill credit cards using their own Merchant ID.</li> </ol>	SPD is responsible for PCI requirements only for SPD network traffic information (if any).	

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
19.0	The solution shall provide a process to provide a process to calculate the 'actual cost of copying' the videos for disclosure according to WA State law (RCW 42.56.120). The 'actual cost of copying' in digital terms for video would be a) the cost of staff time to upload video to provide directly to a particular requester or b) where videos have been uploaded to a publicly-accessible site, the cost of providing a copy of video when the requester downloads it.	Business	Purchase	1. Prompts for payment when there is an additional "GB" of data based on system defined quotas and timing per request.		
20.0	The solution shall provide a process to multi-function audio redaction in entirety, multi-function targeted audio redaction, and total audio removal.	Business	Redaction-Audio	1. Ability to remove audio within 2 markers on the audio track and/or change levels of volume and/or distort, and place sound over original audio to mask. 2. A 'visual cue' data field as an on-screen display to notify the user when audio is redacted, such as 'audio redacted'.	There is no true total audio blur. There may be marketplace offerings mid-2015.	
21.0	The solution shall provide a process to multi-function video auto-redaction in entirety, multi-function targeted video redaction, and total blur video redaction.	Business	Redaction-Video	1. Ability to auto-redaction by redaction choice selected (black box, pixilation, or masking, etc.) for all types of objects such as (license plate, human faces, or written/displayed materials or screens). 2. Ability to blur video in its entirety. 3. Ability to redact details include, but not limited to: total automatic blur for the entire video, total automatic blur within 2 markers on the video, clipping for total removal of sections between 2 markers, vector masking frame by frame with multiple choices of objects spanning across choices of squares to circles and blurs to filling black boxes or pixilation.	There is a 'total blur' feature in the marketplace today; however, there is no true auto-redaction. There may be marketplace offerings for partial auto-redactions mid-2015.	The understanding is that the technology is not at this point yet and even if there was auto-redaction based on object types it would only cover approx. 70% and require human review prior to release.
22.0	The solution shall provide a process to easily purge video based on user defined retention timelines.	Business	Retention	1. This should be a parameter based entry for system administration. 2. Should be automatically deleted from off-line and on-line storage based on system retention schedules.		

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
23.0	The solution shall provide a process to maintain a status based workflow for public disclosure requests progress, video/audio redaction progress, who is performing the redaction, and when the redaction is completed.	Business	Workflow	<ol style="list-style-type: none"> <li>1. PDR workflow status available to the requester and the administrators.</li> <li>2. User/requester access to review (audit) requests by: name of requester, date, data volume, and content delivered, etc.</li> <li>3. A workflow style process log indicating to the user/requester the status for the entire lifecycle of the request.</li> </ol>		
24.0	The solution shall provide a process to hold the integrity of the chain of custody for video evidence used in litigation for the lifecycle of the case.	Business	Workflow	<ol style="list-style-type: none"> <li>1. Maintain the integrity of who has shared the video with who from discovery to prosecutor to district attorney, etc..</li> </ol>		
26.0	The solution shall provide a function to display thumbnails of records or proxies in the user interface to enhance user experience.	Functional	User Experience	<ol style="list-style-type: none"> <li>1. This would be a compressed view of the video or something like that.</li> </ol>		
27.0	The solution shall provide a function to provide the users the ability to scrub (scroll through timelines) through proxies.	Functional	User Experience	<ol style="list-style-type: none"> <li>1. Scrub means having the ability to mouse click on a timeline and drag back and forth to seek to a location. This will speed the user experience and will reduce the amount of streamed data and the cost associated with streaming.</li> </ol>		
28.0	The solution shall provide a function to design and maintain public facing searchable website; search features include: officer name, officer number, GPS (location data), "general Offense# (GO)", address, date & time, precinct, and any other user/requester supplied metadata.	Functional	User Experience			
29.0	The solution shall provide a function to "Mark-in, Mark-out" to provide the user the option of selecting areas of interest in a video clip and only downloading specified content.	Functional	Consumption			

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
30.0	The solution shall provide a function to allow the user the option of downloading the proxy immediately, or the original (unaltered ... between in and out marks from proxy) after a customer specified wait period, as dictated by technical limitations of supplier (state limitations to move data from off-line to a download location).	Functional	Consumption			
31.0	The solution shall provide SPD technical administrators the ability to setup and configure the solution without additional vendor support.	Technical	Administration	1. There should be system administrator capabilities so that SPD is not relying on the vendor for minor configuration/setup work.		
32.0	The solution shall provide support of up to 500 concurrent users without degradation of system performance, including response time and data throughput.	Technical	Bandwidth			1. We are concerned that 500 video streams through the City network is more a constraint on us rather than them.
33.0	The solution shall provide ease of use for the user interface with the video records (not necessarily the video content itself) with simplicity, meaningful searches, abilities to filter, abilities to export the records (not necessarily the videos) in multiple formats, no or limited pagination, and accessibility ease.	Technical	Ease of Use			
34.0	The solution shall provide ability to integrate with Active Directory/ADFS for authentication	Technical	Security			
35.0	The solution shall provide assurances for security by adhering to the US Federal Government data security guidelines.	Technical	Security	1. Cloud solutions should be ISO 27001 certified (or in process) and have obtained or pursuing one or more of the following: SSAE16 SOC1, SOC2, or FedRAMP.		
36.0	The solution shall provide proven and demonstrated security from unauthorized access (hacking) by providing penetration testing certification through a 3rd party provider.	Technical	Security			
37.0	The solution shall provide the ability to integrate with Active Directory/ADFS for authentication, security, and the avoidance of proliferation of accounts.	Technical	Security			

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
38.0	The solution shall provide assurance that a redacted video and audio cannot be un-redacted (reversed), resulting in the recovery of redacted content by public disclosure requesters.	Technical	Security			
39.0	The solution shall provide capacity that must support and maintain >500TB of data, (as of 11/17 the storage for video is 359 TB and growing at approximately 16TB per month as we are currently holding all video under requirement).	Technical	Storage			
40.0	The solution shall provide ability to store both offline and online to support the use of online proxies to save in storage costs and serve up offline content as requested files ranging in size from 2MB to 10GB.	Technical	Storage			
41.0	The solution shall provide online storage of proxy data, estimated to be approximately 10% of original clip size in bits.	Technical	Storage			
42.0	The solution shall provide support automated method of uploading content on a customer (SPD) defined frequency (daily, weekly, etc.), (or provide a reasonable method of integrating new data into system at a regular interval).	Technical	Integration			
43.0	The solution shall provide proxies that are automatically created as SPD defined FFmpeg supported formats at time of original file ingest into off-line storage. 'Proxy' is a transcoded version of the video in a different format. The current original forward facing camera is H.264 (MPEG4), 720x480, 3.5mbps. Proxy tests at MPEG1, 360x240, 0.3mbps, replicate the video very well. The proxy data file size is only 8.7% of the original. Older video data is MPEG2 and will also be transcoded into a proxy format.	Technical	Video	1. Ability to integrate FFmpeg commands for SPD specified proxy formats.		
44.0	The solution shall provide maintain synchronization of separate audio and video streams that are contained in each file	Technical	Video			



ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
45.0	The solution shall provide streaming proxy video at rates between 150kbps and 350kbps	Technical	Video			
46.0	The solution shall provide support for web streaming of proxy content (in architecture for: Internet Explorer, Google Chrome, Firefox, Safari).	Technical	Video			
47.0	The solution shall provide assurance that metadata information and tags in original clips are tied to the same metadata and tags in proxy clips.	Technical	Data			
48.0	The solution shall provide be able to work with various frame types within a typical MPEG GOP structure. This would include I, P and B frames. In other words, the solution must support MPEG based video playback and streaming.	Technical	Video	COBAN uses both IFrames and Pframes and the solution must be able to process both frame types.		
49.0	The solution shall provide a process to "When maintaining City data in the provider's environment, the provider shall only use the City's data to provide the service. City data shall not be used for marketing, research, or other purposes not agreed to by the City. City data shall not be disclosed without prior notice to the City."	Business	Privacy			
50.0	The solution shall provide a process to ability to map videos where GPS information is available.	Business	Maps			This requirement is touching on out of scope elements and needs to be monitored.
51.0	The solution shall provide a function to ability for viewing solutions displays on multiple devices (smartphone, tablet, desktop, etc.)	Functional	User Experience			
52.0	The solution shall provide a function to ability to receive alerts based on workflow (multiple workflows such as Public Disclosure Unit (PDU) workflow, requester workflow, etc.)	Functional	User Experience			

ID	Preliminary Requirement	REQ- Type	REQ-Sub Type	REQ- Details (as needed)	Rational / Assumption (as needed)	Known Constraints
53.0	The solution shall provide a function to ability to attach documents to video records	Functional	User Experience			