REQUEST FOR PROPOSAL

UPGRADE FOR VTC SYSTEMS

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Proposal Deadline:
5:00 p.m. on Monday, July 1, 2013

TABLE OF CONTENTS

1. INTRODUCTION

The San Joaquin Valley Unified Air Pollution Control District (District) has operated a video teleconferencing (VTC) system since October 1996, with VTC rooms in each of the three District offices in Bakersfield, Fresno, and Modesto, California. The system's communication hub is located at the Fresno site. Through the course of the system's history, there have been several technology refreshes and upgrades to various components. The current system was upgraded in 2008 and consists of analog equipment. It is the District's intention to upgrade the analog system components (both those identified within this RFP as well as any identified through potential RFP responses), for the dual purpose of taking advantage of newer technology (digital system components), and to upgrade components considered to be legacy or no longer maintainable.

The District uses its VTC system to increase meeting efficiency, avoid air pollution associated with driving long distances to attend meetings, help increase public participation in the air quality management process, and as a technology example for other organizations. It is safe to say the District's VTC system is an integral tool in helping the District fulfill its mission to improve the health and quality of life for all Valley residents through efficient, effective, and entrepreneurial air quality-management strategies.

This Request for Proposal (RFP) is for a vendor to integrate system-wide upgrades to the District's VTC audio, video, and control equipment.

The system integrator's work must be coordinated to minimize downtime for the VTC system. The integrator's responsibilities, in summary, will include the following:

- Performing total project management for the VTC project.

- Designing and engineering the changes to the VTC system.

- Preparing space plan specifications as needed for VTC facility preparation work. Ensuring that this work is completed in accordance with original space plan specifications. Any modifications to the facilities are the vendor's responsibility.

- Purchasing, fabricating, and installing the VTC equipment.

- Providing complete documentation for installed systems.

- Providing operational training for the systems.

2. BACKGROUND

The District was formed in 1991 to assume all responsibilities for air pollution control in the San Joaquin Valley (Valley). This includes developing plans, adopting and enforcing rules, and issuing permits to reduce and limit pollutant emissions. Valley air quality is classified as "severe non-attainment" for failing to meet both federal and state health-based standards. Population growth, climate, and geography combine to make air pollution a serious problem. Reducing motor vehicle emissions is a key emphasis. The area served by the District – the counties of Fresno, Kern, Kings, Madera, Merced, Stanislaus, San Joaquin, and Tulare – is nearly 300 miles long. Administrative headquarters are at the Central Region Office in Fresno. Approximately 220 staff members are located in Fresno, 60 in Bakersfield, and 40 in Modesto. The District's Governing Board has 15 members: one supervisor from each of the eight counties, five City Council members selected by the cities within the District, and two public members appointed by the Governor.

3. KEY VTC SYSTEM MEETINGS

Governing Board Meetings
The Governing Board holds monthly public meetings to set policy and take formal action for the District, such as adopting plans and rules and approving agreements and financial matters. In attendance are Board members, District staff, representatives of industry, agriculture, and other private and governmental organizations, the news media, and members of the public. Participants from each of the abovementioned groups may show up at any of the District's regional offices to participate in the meeting. Interaction is between Board members, selected staff, and participants at any of the meeting locations. Members of the audience can participate in these meetings in an interactive mode from a podium position when recognized by the Board Chairperson.

At times there will be the need to add one or more parties via telephone so that they can listen and speak to the VTC participants. There are times when Spanish translation service is required, at which time one District staff will perform the translation of the meeting. We also offer assisted listening service for those that are hearing impaired. This meeting requires no degradation of audio/video playback to all locations during presentation content from connected mobile devices, DVDs, and documents. Audio and video recording of the proceedings may be made from each of the three locations. The District also has integrated phone and restroom audio feeds for all locations which are manually controlled by District staff. The meeting also makes use of an existing service created by District staff for the Board members to request permission to speak.

The Board room supports up to 175 participants. The Central Region Office has a smaller VTC Room where staff can view and hear the proceedings, in the situation where the Governing Board Room is not sufficient to hold the entire audience. This meeting is also streamed to the Internet so that people unable to attend in person can monitor the proceedings. A future feature might be to track Board member votes; however, that feature is not part of the current RFP. This is the District's most important

and public meeting, and it is critical that there are no interruptions, degradations, or other system-related issues of any kind.

Plan and Rule Development Workshops
Plan and rule development is a very active process for the District. Staff prepares and distributes a draft of a proposed rule, then holds public workshops where the draft is discussed with those who will potentially be affected by the rule. Previously, staff teams had to travel to present duplicate workshops, and discussion input was limited to one location at a time. Using the VTC system, staff is able to hold a single workshop in Fresno and include audiences in Modesto and Bakersfield in real time. This allows active dialogue between the staff presenters and audience members in a fully interactive mode at all three locations simultaneously, saving time and expense in the plan and rule development process. All features available for the Governing Board Meeting should be available for Plan and Rule Development Workshop meetings.

Hearing Board Meetings
The District's Hearing Boards convene monthly to dispense orders granting or denying temporary relief from the provisions of a District rule, regulation, or permit condition. The District holds three separate Hearing Boards via VTC, with the Board members and applicants attending in their corresponding region, and necessary District staff attending from their normal office location. All features available for the Governing Board Meeting should be available for Hearing Board meetings.

Staff Meetings and Training
The VTC system allows large and small staff meetings and conferences District-wide without travel. Fully interactive meetings of various sizes will be held in all four of the VTC Rooms as needed. Separate meetings may be held simultaneously in all four VTC Rooms. Types of meetings include:
- A presentation (e.g., live, from another location, or via recording) originating in Fresno to audiences in Fresno, Modesto, and Bakersfield, followed by an interactive question-and-answer session.
- An interactive discussion with between one to ten participants at each location.
- Fully interactive meetings with entire staff participation at each location.

At times there will be the need to add one or more parties via telephone so that they can listen and speak to the on-site participants. Audio and video recording of the proceedings may be made from each of the three locations. All features available for the Governing Board Meeting should be available for staff meetings and training. Other functions include audio/visual presentations, and inclusion of an off-net VTC site.

Citizens Advisory Committee Meetings

The District receives input from a Citizens Advisory Committee (CAC), comprised of representatives from interest groups such as business, public, agricultural, and environmental from each of the eight counties within the District. These monthly meetings are held in the Fresno Governing Board Room with committee members attending in Modesto and Bakersfield, as they are able. All features available for the Governing Board Meeting should be available for Citizens Advisory Committee meetings.

Note: Sometimes there are meetings that take place outside of District normal business hours. The same functionality needs to be available after hours. One such meeting is the Environmental Justice Advisory Group.

Environmental Justice Advisory Group

Economically disadvantaged population groups can be disproportionally impacted by air pollution issues. To ensure these groups are properly heard, the District created the Environmental Justice Advisory Group (EJAG). The District receives input from Environmental Justice Advocates, comprised of representatives of interest groups from each of the eight counties within the District. These monthly meetings are held in the Fresno Governing Board Room with committee members attending in Modesto and Bakersfield, as they are able. This meeting allows the District to collaboratively work with stakeholders in Environmental Justice areas. All features available for the Governing Board Meeting should be available for Environmental Justice Advisory Group meetings.

Stakeholders' Forums

The District hosts quarterly meetings for its stakeholders to make presentations regarding District activities, receive input from members of the public, and respond to past and present suggestions and inquiries. These meetings are held simultaneously at all three regional offices via VTC, with the main presentations being made from each office on a rotational basis. Audio/visual presentations, originating from any of the locations, will be made intermittently during the meetings. These proceedings will be viewed and heard by audiences in the District's other VTC rooms. Audio and video recording of the proceedings may be made from any of the three locations. All features available for the Governing Board Meeting should be available for Stakeholders' Forum meetings.

Interface with Other Related Organizations

District staff has frequent interaction with staff of other public and private organizations (e.g., the California Air Resources Board in Sacramento, the U.S. Environmental Protection Agency, other air pollution control districts and public agencies throughout California, and businesses nationwide). This interaction frequently required travel. The VTC system allows fully interactive multi-point VTC communication with other organizations that have installed VTC systems (functionality is based on equipment compatibility). All features available for the Governing Board Meeting should be available for interfacing with other related organizations.

4. SYSTEM OVERVIEW

The District presently operates four VTC systems in three regional offices; located in Fresno, Modesto, and Bakersfield, California. These custom room systems are based on a mixture of equipment from LifeSize, Crestron, Extron, and Codian. The base components include LifeSize Room codecs, a Codian 4505 MCU, Codian GW-3241 ISDN Gateway, video equipment from Sony, Extron, Mitsubishi, and Sharp, and audio equipment from Biamp, Extron, and ClockAudio. Various photos are included throughout Section 6: Site Specific Information.

The Fresno VTC systems include two facilities. The Governing Board Room is a large custom board chambers for public meetings before the District's 15-member Governing Board, and other various public meetings and workshops. The room consists of 10 sets of dual monitors for local and remote video; four people cameras for showing various dais, staff table, and podium positions; a camera mounted in the ceiling as a document camera for displaying documents to the monitors; multiple table, podium, and ceiling microphones as well as ceiling speakers for providing adequate audio coverage. There are two laptop interface connection points, which are located on the East and West staff tables. These are used by staff to send laptop display signals (such as presentations and web pages) onto the monitors for viewing by the Governing Board members and other meeting attendees. The control of the laptop interfaces are controlled through the Crestron touch panel. The supporting equipment racks are located within the computer room approximately 130' from the Governing Board Room, with some auxiliary equipment in a cabinet as part of the dais.

The Fresno VTC Room is a custom conference room with more traditional VTC capabilities for staff meetings and smaller public meetings and workshops. This "mirror-image" room consists of front and rear dual-system monitors for local and remote video; front and rear people cameras for showing both sides of the table, the podium, and the audience; a camera mounted in the ceiling as a document camera for displaying documents to the monitors; multiple table and ceiling microphones as well as ceiling speakers for providing adequate audio coverage. There is one laptop interface connection point, which is located on the top of the table. This connection point is used by staff to send laptop display signals (such as presentations and web pages) onto the monitors for viewing by the meeting attendees. The control of the laptop interface is controlled through the Crestron touch panel. The supporting equipment rack is located within the computer room approximately 80' from the VTC Room, with some auxiliary equipment in cabinets within the room.

The Modesto VTC Room is a custom conference room with standard VTC capabilities. This "mirror-image" room consists of front and rear dual- system projection for local and remote video; front and rear people cameras for showing both sides of the table, the podium, and the audience; a camera mounted in the ceiling as a document camera for displaying documents to the monitors; multiple table, podium, and ceiling microphones as well as ceiling speakers for providing adequate audio coverage. There is one laptop interface connection point, which is located on the top of the table. This connection

point is used by staff to send laptop display signals (such as presentations and web pages) onto the screens for viewing by the meeting attendees. The control of the laptop interface is controlled through the Crestron touch panel. The supporting equipment rack is located within the computer room approximately 70' from the VTC Room, with some auxiliary equipment in cabinets within the room.

The Bakersfield VTC Room is a custom conference room with standard VTC capabilities. The room consists of front and rear dual-system projection for local and remote video; front and rear people cameras for showing both sides of the table, the podium, and the audience; a camera mounted in the ceiling as a document camera for displaying documents to the monitors; multiple table, podium, and ceiling microphones as well as ceiling speakers for providing adequate audio coverage. There is one laptop interface connection point, which is located on the top of the table. This connection point is used by staff to send laptop display signals (such as presentations and web pages) onto the screens for viewing by the meeting attendees. The control of the laptop interface is controlled through the Crestron touch panel. The supporting equipment rack is located within the computer room approximately 40' from the VTC Room, with some auxiliary equipment in cabinets within the room.

(**NOTE:** *For all rooms at all sites, the District currently possesses as-built AutoCAD drawings of the facilities and equipment.*)

It is important to note that the District is very satisfied with the current approach to VTC already deployed. This project's primary focus is on updating the VTC equipment to current digital technology. In addition, the current network topology provides nailed-up ISDN connectivity between offices, providing reliable and consistent VTC services to the Governing Board members, as well as District staff and the public. The District is interested in continuing this communication method. IP-based solutions are not seen as sufficient at this time to meet the Governing Board quality demands. However, the District is open to solutions that, while maintaining the ISDN connectivity, would provide future evaluation and testing of IP capability in our demanding environment.

With the long history of VTC usage and exposure to continually emerging technology, the District has made many observations through direct experience and through feedback from the user community. The following list contains items of concern to be addressed through this RFP process:

• Video quality and video capability (codecs, cameras, monitors, and bandwidth): When the system was setup 720p @ 30fps was only available. Current system supports 720p @ 30fps running over an analog infrastructure. There have been audio and video signal degradation issues such as jitter, artifacts, and tiling. This RFP is requesting a high-definition solution such as 720p @ 60fps running over a digital infrastructure, with future plans of moving to new standards such as 4k. The solution must address degradation issues such as jitter, artifacts, tiling etc. It is of significant interest to increase the video quality for playback of local presentations (such as staff training videos created by the District's internal video editing

department) and end-to-end video teleconferencing, as well as more efficient use of the installed monitor screen sizes. Of particular concern are the bandwidth requirements for proposed solutions, given the District's existing use of 1.5mbps on dedicated T-1 circuits between offices.

- Regarding video monitors, the District would prefer possible monitor solutions to replace the projection systems (front and/or rear) in the Modesto and Bakersfield facilities, provided existing screen size is maintained.

- Replacement of out-of-service equipment: The District acknowledges that certain equipment is outdated and no longer able to be adequately supported under a maintenance contract. Prospective vendors are encouraged to evaluate the attached equipment inventory when submitting responses to this RFP, keeping in mind the District's desire to be fully covered under a maintenance contract.

- Retention of existing network equipment: In 2006 the District upgraded to (3) Adtran Atlas 830 Integrated Access Devices as the base network for the VTC system. These devices are supported internally by ITS staff. It is the District's intent to keep the Adtran platform intact, but is open to possible solutions.

- System scheduling: the District currently uses Widearea Systems' VC Wizard scheduling application for controlling the MCU (and for scheduling of VTC and regular meetings). The District is open to consideration of other scheduling software solutions that offer the same functionalities as VC Wizard: centralized scheduling of meeting rooms, both VTC and regular; functional control of MCU and codecs to utilize existing feature sets; distributed viewing of meeting schedule and room availability to the end user community; email notification of the addition, change, or cancellation of meetings. In addition to the above mentioned features the scheduling software solution must integrate with Microsoft Outlook.

- Lighting and glare: controlling light glare in the rooms is of utmost importance. Ceiling lighting design is important to consider when proposing monitor and camera solutions. Our current lighting is great and meets the District's needs.

- Spare equipment and like models: When the original systems were installed, the majority of equipment in all offices was of identical make and model. This provided ease of support (both on site and remotely) and ease of replacement (since one spare could serve any of the systems). It is the District's desire to maintain an effective methodology for operating and supporting like equipment across all systems. *(See Maintenance and Service section of RFP for further detail)*

- Integration of DVD recorders: District personnel have installed DVD recorders in all four systems, providing users the capability of recording meetings directly to a DVD-RW. This same capability or better is required in any proposed upgrade solutions. The District is open to new video recording solutions.

- Webcast: it should be acknowledged that the District streams the Governing Board meetings through its internal streaming server to the Internet, providing all members of the public with the ability to observe meetings in progress. Our streaming process consists of one LifeSize Room codec connected via an S-Video connection to a ViewCast Osprey 530 capture card, which is installed on an HP ProLiant DL360 rack mounted server running Windows 2008 R2, which is connected to the Internet. Windows Media Encoder 9.2 is the software running on the server that is used for encoding the captured content that is then "pushed" to NetroMedia, our streaming service provider, who then streams the meeting to the Internet via their website. The captured content is encoded in multi-bitrate streams consisting of three profiles:
  - 469Kbps - 32kHz stereo, 720x400 @ 30fps – 5 sec buffer, 80% smoothing & 4 sec keyed frame interlock

  - 340Kbps – 32kHz stereo, 512x288 @ 30fps – 5 sec buffer, 70% smoothing & 8 sec keyed frame interlock

  - 43Kbps – 16kHz mono, 256x144 @ 15fps – 5 sec buffer, 40% smoothing & 10 sec keyed frame interlock

This ensures that all members of the public will be able to view the meeting via the Internet at an optimal rate regardless of their network subscriber line speed. This same capability is required of any new or proposed changes to the system.

- Audio feeds: in each location, there are manually selectable audio feeds providing mixed meeting audio to the District's telephone systems and to the nearby public restrooms. This same capability is required of any new or proposed changes to the system.

- Audio access points: The District's Clerk to the Board uses a portable linear PCM recorder to plug into an existing audio outlet, for the purpose of recording meetings in the Governing Board Room. The District is interested in other audio recording methods as an alternative to the clerk's linear PCM recorder system.

5. PROJECT APPROACH

In summary, the steps to be taken in implementing this project are as follows:

a. The District issues this RFP, which provides the system requirements and basic design concepts.

b. Interested system integrators have approximately 30+ days to respond to the RFP with their proposals and proposed costs for the District's design concepts. During these 30+ days, the District will field questions and supply answers as needed to provide additional information and clarification on the District's requirements. In addition, the District will convene a mandatory Bidders Conference for onsite inspection and discussion of existing support capabilities. If they wish, integrators may also propose cost and design concepts they have developed along with the required proposal for the District's design concepts.

c. District staff recommends the selection of one integrator based on best value for the District and negotiates an agreement based on the RFP and submitted proposal. Governing Board approves.

d. Integrator completes installation of system according to the schedule established within the agreement.

Critical dates for this project include:

- May 21, 2013   RFP Released to Vendors
- May 28, 2013   RFP Bidders Conference in Fresno, CA
- July 1, 2013   RFP Due from Vendors
- August 15, 2013   Integration Contract Finalized with Selected Vendor
- September 19, 2013   Governing Board Meeting for Potential Approval
- March 13, 2014   Final Acceptance and Project Closure

The rough timeline and some key milestone dates for this project are listed on the spreadsheet in Appendix A.

The integrator selected will be fully responsible to the District for carrying out all phases of the project. The contract between the District and the integrator will specify all equipment to be provided and all services to be performed for this project, as well as the timeline for completion of the entire project. The contract will specify the total cost for the project and the payment schedule under which the District will pay the integrator. The integrator will be responsible for all payments to equipment suppliers, subcontractors, providers of services, and others as necessary to complete the project.

6. SITE SPECIFIC INFORMATION

Fresno Office: Description

The Fresno office (1990 E. Gettysburg Avenue, Fresno, CA) contains two VTC rooms: a large Governing Board Room with a raised dais, podium, multiple monitors and cameras; and a smaller traditional VTC room with conference table and audience seating. The computer room houses all control, video and audio support equipment in multiple equipment racks. A full existing equipment inventory list is provided in Appendix D.

There is one network rack in support of the overall VTC system (see image below) containing the following equipment.

Hardware	Part number
LifeSize Room Codec (Streaming Codec)	
Codian (MCU) Multipoint Control Unit	4505
Codian ISDN Gateway	3241
Adtran Netvanta Router	4305
Adtran Atlas 830 Access Switch	830
CSUs for T1 and PRI connections	

There are two equipment racks dedicated to the Governing Board Room. One rack (see image below) contains the following video support equipment:

Hardware	Part Number
Extreme Networks switch	X450E 16142
Vaddio Dual Display	PREVIEW HD DUAL 7.0
Crestron PRO2 Processor	PRO2
LifeSize Room Codec	
Kramer Video Switcher	VS-41HD
TVOne Video Scaler	C2-2200
Extron Matrix Switcher	MAV 44 SVA
Extron RGBHV Switcher	SW4 RGBHV
Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA
Extron Scan Converter	VSC 500
(2) Extron Video Scaler	DVS 304
(6) Extron Distribution Amplifier	DA4 RGBHV

The other Governing Board Room rack (see image below) contains the following audio support equipment:

Hardware	Part Number
(5) Biamp Equalizer	D60EQ
(5) Wideband Feedback Canceller	FC101
(2) AudiaFlex Audio Platform	12X12CM
(2) Nexia Processor	NEXIA CS
(2) Extron Distribution Amplifier	DA 6A
In back of Rack:	
Creston Distribution Block	C2N-HBLOCK
Crestron Converter	CN-RJ11

The final rack (see image below) is dedicated to the Fresno VTC Room, and contains the following video and audio support equipment:

Hardware	Part Number
VTEL power supply	
Biamp Amplifier	MPA250
Vaddio Dual Display	999-5510-002
Crestron PRO2 Processor	PRO2
LifeSize Room Codec	
TVOne Video Scaler	C2-2200
Extron Video Switcher	SW2 VGA/RGB
Kramer Video Switcher	VS-41HD
Extron Matrix Switcher	MAV 44 SVA
(2) Extron Decoder	VYC 100N
Extron Scan Converter	VSC 500
Crestron Transmitter	QM-TX
Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA
(2) Extron Video Scaler	DVS 304
(2) Extron Distribution Amplifier	DA4 RGBHV
AudiaFlex Audio Platform	12X12CM
(2) Extron Distribution Amplifier	DA 6A
(2) Nexia Processor	NEXIA CS
In back of Rack:	
Extreme Networks switch	X150 15201
Creston Distribution Block	C2N-HBLOCK

Fresno VTC Room Description

The VTC room is a 760-square-foot conference room with a six-position conference table in front facing a 52-seat audience section. There are 12 ClockAudio C32E-RF Halo microphones covering both sides of the table, allowing for seating on either side. There are 8 ClockAudio C 3SW ceiling microphones providing adequate coverage for the audience. The room has 11 Extron ceiling mounted speakers providing adequate audio coverage for the room.

There are two pairs of 65" Sharp Aquos monitors in the front and rear of the room. There are two Sony EVI-HD1 people cameras to provide video coverage from the front and rear of the room. There is also a fixed ceiling-mounted Wolf Vision EYE-10 document camera. The entire system is controlled with a Crestron TPMC-15-QM control panel, located on the top of the table, with custom-designed layouts (see images below).

Layout of Video Conference Camera Controls

Layout of Video Conference Sources

Layout of DVD Source Controls

Layout of Video Conference Interpreter Dialing Controls
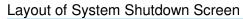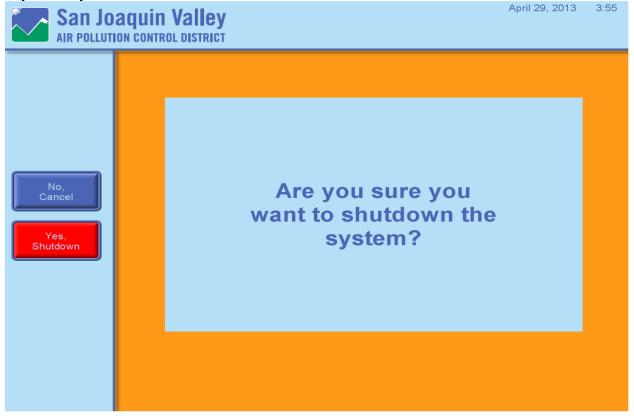
Layout of Video Conference Record Controls

Layout of Audio Conference Dialing Controls

Layout of Presentation Sources

Layout of System Shutdown Screen

This room also utilizes the following equipment and/or features: podium with built in microphone, which is attached to a floor plate under the podium, and attached timer display; analog phone add capability through the Codian 4505 MCU; auxiliary audio jack on top of table for connection of Clerk to the Board's linear PCM recorder system; VGA interface on top of table for connection of mobile devices for the purpose of presenting materials; Alzatex timer control box located on top of table for timing public comments; auxiliary audio/video RCA jacks for external media input located on the East wall; auxiliary XLR News Media jacks located on the North wall; custom directional light grids with modified shades to control glare in monitors and cameras.

There are other ancillary devices located in cabinets in the front of the room under the monitors. The ancillary devices located in the cabinets consist of: Sony BDP S590 Blu-Ray/DVD player integrated into the Crestron control panel; Sony RDR-GX360 DVD recorder for recording near and far video and audio; and two Listen Wireless Amplifiers, model LT-800-072, for use as interpreter and assisted listening features.

On top of the table there is also a 15" Planar monitor used for the District's in house Request-to-Speak System. The monitor is connected to the PC running the Request-to-Speak software via a VGA extender. The Request-to-Speak PC is located in the cabinets at the front of the room along with the devices listed in the paragraph above.

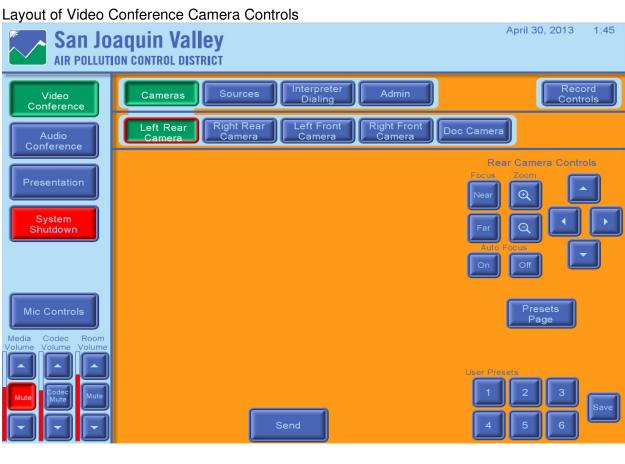**Governing Board Room Description**
The Governing Board room is a 2,121-square-foot chamber. There is custom cabinetry and seating for 13 board positions at a raised dais, with ClockAudio C32E-RF Halo microphones fixed at each position. There are two curved staff seating areas with six positions each with three ClockAudio C32E-RF Halo microphones at each table. A podium with a flex-neck microphone and attached timer display faces the dais. There are two audience-seating areas, with 12 ClockAudio C 3SW ceiling microphones. The room is configured with a zone-matrix microphone-speaker scheme, providing local sound reinforcement within the room. The room has 24 Extron ceiling mounted speakers providing adequate audio coverage for the room.
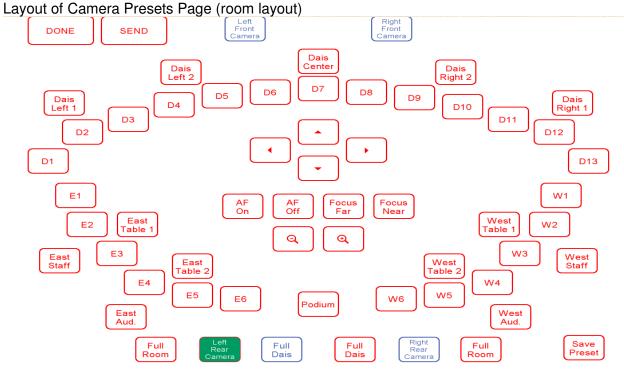
The Board room is a dual purpose room. The dividing point of the room is the podium; podium-to-front and podium-to-rear. During times of staff meetings the front section of the room is used leaving the rear part of the room dark. During times of workshop small meetings, and Q&A sessions the rear section of the room is used while the front section is dark.
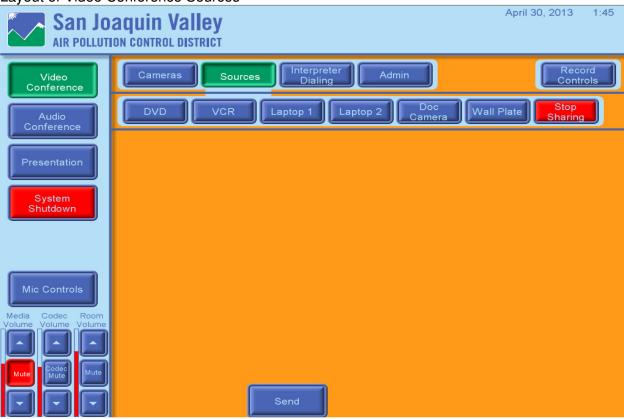
There are six pairs of 65" Sharp Aquos monitors (four pairs are hung on ceiling-mounted brackets facing audience, one pair floor level facing podium, and one pair wall mounted facing dais for the Governing Board members); four pairs of 50"Samsung monitors (two pairs hung on ceiling-mounted brackets and two pair floor level facing dais for the Governing Board members). There are two additional monitors, 15" Planar flat panel (located on the West table) and a 52" LG flat panel (located on the floor directly facing the dais) used for the District's in house Request-to-Speak System. Both monitors are connected to the PC running the Request-to-Speak software via VGA cables. The Request-to-Speak PC is located in a cabinet on the East end of the dais. There are four Sony EVI-HD1 people cameras to provide adequate video coverage of the dais, staff tables, podium, and audience areas. There is also a fixed ceiling-mounted Wolf Vision EYE-10 document camera. The entire system is controlled with a Crestron TPMC-15-QM control panel with custom-designed layouts (see images below).
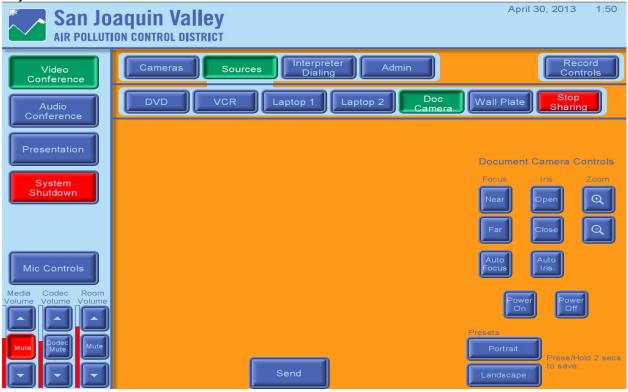
Layout of Video Conference Camera Controls

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

April 30, 2013   1:45

| Cameras | Sources | Interpreter Dialing | Admin | | Record Controls |

Video Conference

Audio Conference

Presentation

System Shutdown

Mic Controls

| Left Rear Camera | Right Rear Camera | Left Front Camera | Right Front Camera | Doc Camera |

Rear Camera Controls

Focus   Zoom

Near   🔍

Far   🔍

Auto Focus

On   Off

▲
◄   ►
▼

Presets Page

User Presets

| 1 | 2 | 3 |
| 4 | 5 | 6 |

Save

Media Volume   Codec Volume   Room Volume

▲   ▲   ▲

Mute   Codec Mute   Mute

▼   ▼   ▼

Send

Layout of Camera Presets Page (room layout)

DONE   SEND   Left Front Camera   Right Front Camera

Dais Center

Dais Left 2   D7   Dais Right 2

D5   D6   D8   D9

Dais Left 1   D4   D10   Dais Right 1

D3   D11

D2   D12

D1   D13

▲
◄   ►
▼

E1   W1

AF On   AF Off   Focus Far   Focus Near

E2   East Table 1   West Table 1   W2

East Staff   E3   🔍   🔍   W3   West Staff

E4   West Table 2   W4

East Table 2

E5   E6   Podium   W6   W5

East Aud.   West Aud.

Full Room   Left Rear Camera   Full Dais   Full Dais   Right Rear Camera   Full Room   Save Preset

Layout of Video Conference Sources

Layout of Video Conference Doc Camera Controls

Layout of Video Conference Interpreter Dialing Controls

Layout of Video Conference Admin Controls

Layout of Video Conference Record Controls
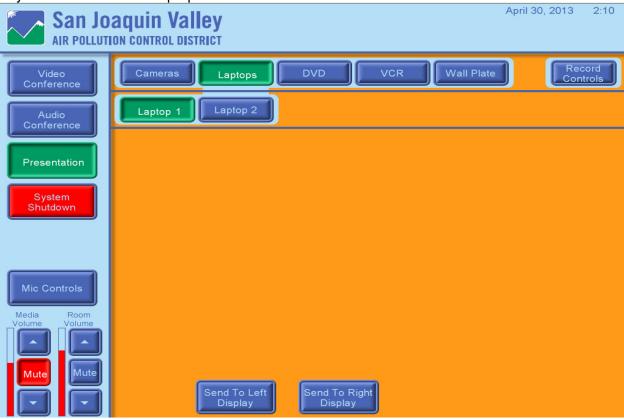

Layout of Video Conference Microphone Controls

Layout of Audio Conference Dialing Controls

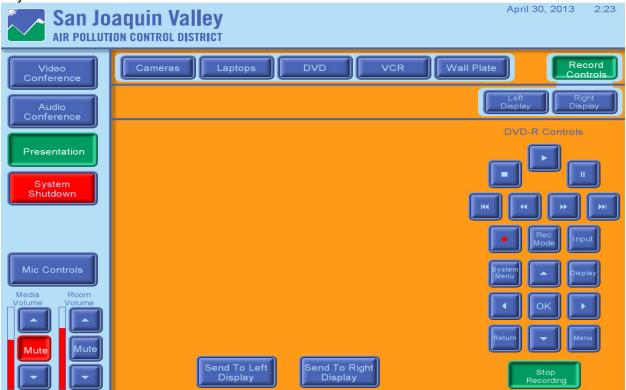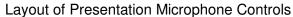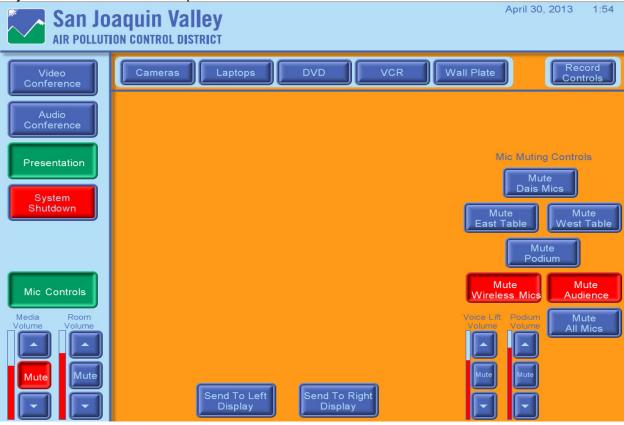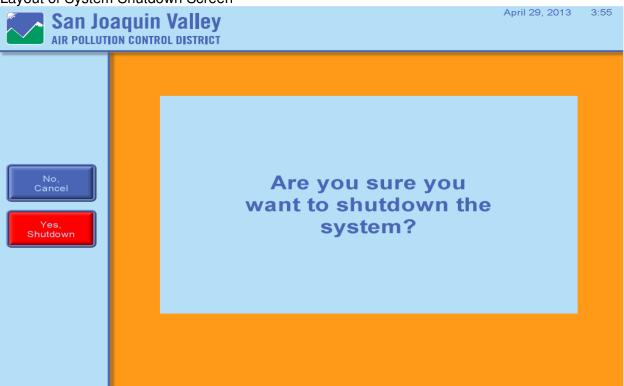Layout of Presentation Sources

Layout of Presentation Laptop Sources

Layout of Presentation Record Controls

Layout of Presentation Microphone Controls

Layout of System Shutdown Screen

The content of the meeting is sent to dual monitors. The right monitor is the active content that gets streamed while the left monitor displays the joined participants. The left monitor contains a PIP on the lower right hand corner. This PIP contains the inactive participant and becomes the active participant based on voice activation (see picture below).

This room also utilizes the following equipment and/or features: analog phone add capability through the Codian 4505 MCU; auxiliary audio/video jacks for external input and auxiliary XLR News Media jacks located on the East wall; one auxiliary VGA and audio interface for mobile device connection and power outlets on the West staff table; one VGA and audio interface for mobile device connection and a separate auxiliary audio jack for connection of Clerk to the Board's linear PCM recorder system located on the East staff table; Alzatex timer control box located on top of the East staff table for timing public comments; custom directional light grids with modified shades to control glare in monitors and cameras.

There are other ancillary devices located in a cabinet on the East end of the dais. The ancillary devices located in the cabinet consist of: Sony BDP S590 Blu-Ray/DVD player integrated into the Crestron control panel; Sony RDR-GX360 DVD recorder for recording near and far video and audio; District's Request-to-Speak PC; and a Crestron QM-TX media transmitter.

There are two break-out rooms attached to the Board room; one on the South-West wall and the other located on the South-East wall. The South-East break-out room is used by staff and Board members for refreshments. The South-West break-out room is used by interpreting staff during times when the service is requested. The room contains two Listen Wireless Amplifiers, model LT-800-072, for use as interpreter and assisted listening features; two 21" ViewSonic monitors for viewing meeting content by interpreting staff; two Shure Wireless Amplifiers SLX4 for use of wireless microphones in the room; auxiliary XLR, RCA, and VGA input/output interface faceplates for integrating the above devices into the VTC system; and an electrical power breaker box.

Fresno Computer Room: Description

The computer room is a 742-square-foot climate-controlled facility with raised flooring, dedicated HVAC, and dedicated power and UPS backup, which houses a large majority of all VTC system components. All four VTC equipment racks for the Fresno VTC and Governing Board rooms are located here.

Modesto Regional Office: Description

The Modesto office (4800 Enterprise Way, Modesto, CA) has a single VTC Room. The computer room houses all control, video, and audio support equipment in a single equipment rack. A full equipment inventory is provided in Appendix D.

The equipment rack (see image below), located in the computer room contains the following video and audio support equipment:

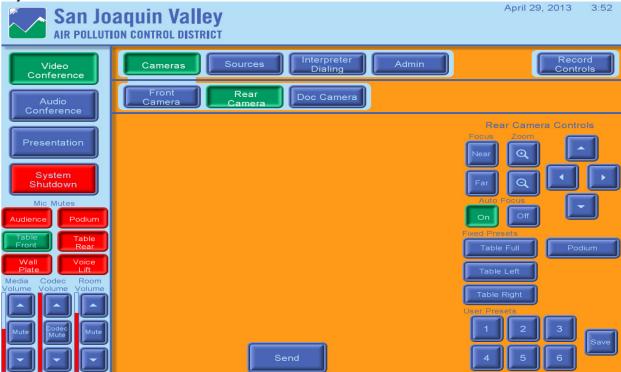| Hardware	Part Number
VTEL power supply	
Biamp Amplifier	MPA250
Adtran Netvanta Router	3430
Vaddio Dual Display	PREVIEW HD DUAL 7.0
LifeSize Room Codec	
Extron Matrix Switcher	MAV 44 SVA
TVOne Video Scaler	C2-2200
(2) Extron Decoder	VYC 100N
Extron Scan Converter	VSC 500
Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA
(2) Extron Video Switcher	SW2 VGA/RGB
(2) Extron Video Scaler	DVS 304
(2) Extron Distribution Amplifier	DA4 RGBHV
Crestron Transmitter	QM-TX
Crestron PRO2 Processor	PRO2
(2) Extron Distribution Amplifier	DA 6A
AudiaFlex Audio Platform	12X12CM
(2) Nexia Processor	NEXIA CS
ADTRAN Atlas 830	
CSU for T1 and PRI connections	
In back of Rack:	
Extreme Networks switch	X150 15201
Creston Distribution Block	C2N-HBLOCK

Modesto VTC Room Description

The VTC room is a 924-square-foot conference room with a six-position conference table in front facing a 61-seat audience section. There are 12 ClockAudio C32E-RF Halo microphones covering both sides of the table, allowing for seating on either side. There are 10 ClockAudio C 3SW ceiling microphones providing adequate coverage for the audience. The room has 11 Extron ceiling mounted speakers providing adequate audio coverage for the room.

There are four Mitsubishi WD2000 overhead projectors (two facing front, two facing rear) projecting images onto two dual-pairs of 92" Supernova projection screens mounted on the front and rear walls of the room. There are two Sony EVI-HD1 people cameras to provide video coverage from the front and rear of the room. There is also a fixed ceiling-mounted Wolf Vision EYE-10 document camera. The entire system is controlled with a Crestron TPMC-15-QM control panel with custom-designed layouts located on the top of the table (see images below).
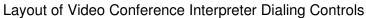
Layout of Video Conference Camera Controls

Layout of Video Conference Sources

Layout of Video Conference DVD Source Controls

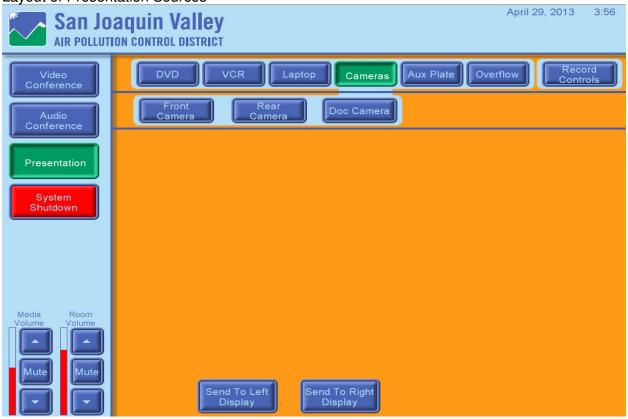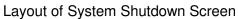Layout of Video Conference Interpreter Dialing Controls
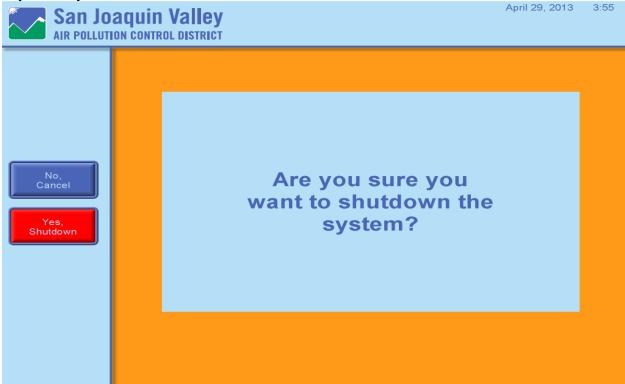
Layout of Video Conference Record Controls

Layout of Audio Conference Dialing Controls

Layout of Presentation Sources

Layout of System Shutdown Screen

This room also utilizes the following equipment and/or features: podium with built in microphone, which is attached to a floor plate under the podium, and attached timer display; analog phone add capability through the Codian 4505 MCU; auxiliary audio jack on top of table for connection of Clerk to the Board's linear PCM recorder system; VGA interface on top of table for connection of mobile devices for the purpose of presenting materials; Alzatex timer control box located on top of table for timing public comments; auxiliary audio/video RCA jacks for external media input located on the East wall; auxiliary XLR News Media jacks located on the North wall; custom directional light grids with modified shades to control glare in monitors and cameras.

There are other ancillary devices located in cabinets in the front of the room under the projection screens. The ancillary devices located in the cabinets consist of: Sony BDP S590 Blu-Ray/DVD player integrated into the Crestron control panel; Sony RDR-GX360 DVD recorder for recording near and far video and audio; and two Listen Wireless Amplifiers, model LT-800-072, for use as interpreter and assisted listening features. On top of the table there is also a 15" Planar monitor used for the District's in house Request-to-Speak System. The monitor is connected to the PC running the Request-to-Speak software via a VGA extender. The Request-to-Speak PC is located in the cabinets at the front of the room along with the devices listed in the paragraph above.

Modesto Computer Room: Description

The computer room is a 400-square-foot climate-controlled facility with raised flooring, dedicated HVAC, and dedicated power and UPS backup, which houses a large majority of all VTC system components. The VTC equipment rack for the Modesto VTC room is located here.

Bakersfield Regional Office: Description

The Bakersfield office (34946 Flyover Court, Bakersfield, CA 93308) has a single VTC room. The computer room houses all control, video, and audio support equipment in a single equipment rack (right). A full equipment inventory is provided in Appendix D.

The equipment rack (see image below), located in the computer room contains the following video and audio support equipment:

Hardware	Part Number
VTEL power supply	
Biamp Amplifier	MPA250
Adtran Netvanta Router	3430
Vaddio Dual Display	PREVIEW HD DUAL 7.0
LifeSize Room Codec	
Extron Matrix Switcher	MAV 44 SVA
TVOne Video Scaler	C2-2200
(2) Extron Decoder	VYC 100N
Extron Scan Converter	VSC 500
Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA
(2) Extron Video Switcher	SW2 VGA/RGB
(2) Extron Video Scaler	DVS 304
(2) Extron Distribution Amplifier	DA4 RGBHV
Crestron Transmitter	QM-TX
Crestron PRO2 Processor	PRO2
(2) Extron Distribution Amplifier	DA 6A
AudiaFlex Audio Platform	12X12CM
(2) Nexia Processor	NEXIA CS
ADTRAN Atlas 830	
CSU for T1 and PRI connections	
In back of Rack:	
Extreme Networks switch	X150 15201
Creston Distribution Block	C2N-HBLOCK

Bakersfield VTC Room Description

The VTC room is a 924-square-foot conference room with a six-position conference table in front facing a 61-seat audience section. There are 12 ClockAudio C32E-RF Halo microphones covering both sides of the table, allowing for seating on either side. There are 10 ClockAudio C 3SW ceiling microphones providing adequate coverage for the audience. The room has 11 Extron ceiling mounted speakers providing adequate audio coverage for the room.
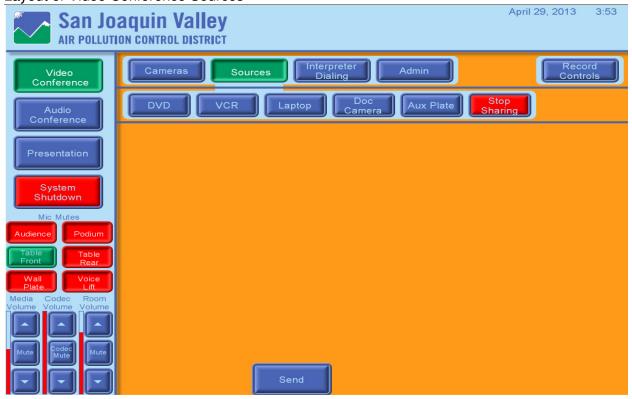

There are four Mitsubishi WD2000 overhead projectors (two facing front, two facing rear) projecting images onto two dual-pairs of 92" Supernova projection screens mounted on the front and rear walls of the room. There are two Sony EVI-HD1 people cameras to provide video coverage from the front and rear of the room. There is also a fixed ceiling-mounted Wolf Vision EYE-10 document camera. The entire system is controlled with a Crestron TPMC-15-QM control panel with custom-designed layouts located on the top of the table (see images below).
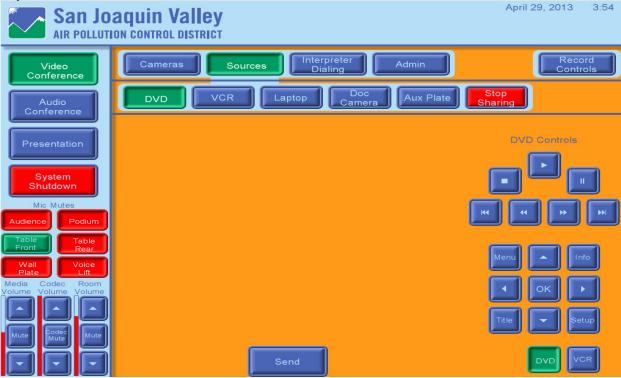
Layout of Video Conference Camera controls

Layout of Video Conference Sources

Layout of Video Conference DVD Source Controls

Layout of Video Conference Interpreter Dialing Controls
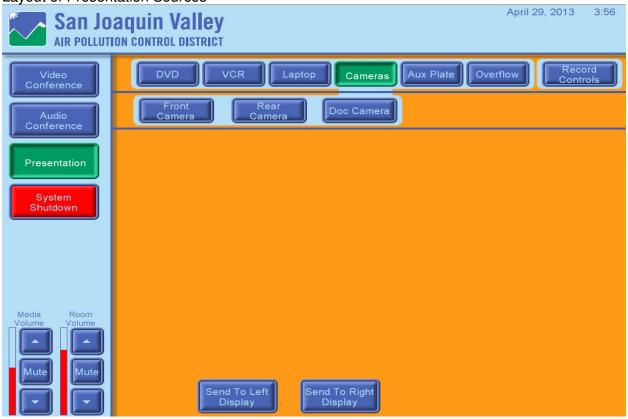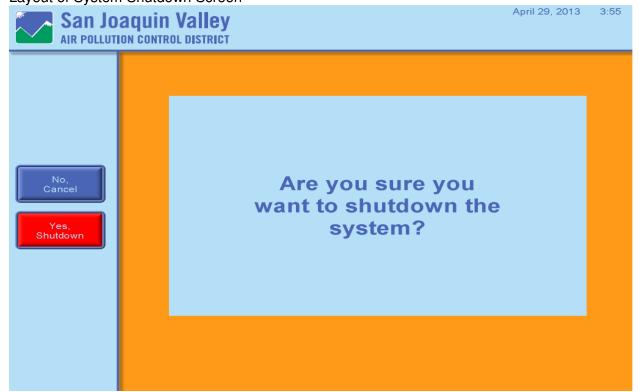
Layout of Video Conference Record Controls

Layout of Audio Conference Dialing Controls

Layout of Presentation Sources

Layout of System Shutdown Screen

This room also utilizes the following equipment and/or features: podium with built in microphone, which is attached to a floor plate under the podium, and attached timer display; analog phone add capability through the Codian 4505 MCU; auxiliary audio jack on top of table for connection of Clerk to the Board's linear PCM recorder system; VGA interface on top of table for connection of mobile devices for the purpose of presenting materials; Alzatex timer control box located on top of table for timing public comments; auxiliary audio/video RCA jacks for external media input located on the North wall; auxiliary XLR News Media jacks located on the West wall; custom directional light grids with modified shades to control glare in monitors and cameras.

There are other ancillary devices located in cabinets in the front of the room under the projection screens. The ancillary devices located in the cabinets consist of: JVC DVD/VCR DR-MV79 player integrated into the Crestron control panel; Sony RDR-GX360 DVD recorder for recording near and far video and audio; and two Listen Wireless Amplifiers, model LT-800-072, for use as interpreter and assisted listening features.
On top of the table there is also a 15" Planar monitor used for the District's in house Request-to-Speak System. The monitor is connected to the PC running the Request-to-Speak software via a VGA extender. The Request-to-Speak PC is located in the cabinets at the front of the room along with the devices listed in the paragraph above.

Bakersfield Computer Room Description
The computer room is a 400-square-foot climate-controlled facility with raised flooring, dedicated HVAC, and dedicated power and UPS backup, which houses a large majority of all VTC system components. The VTC equipment rack for the Bakersfield VTC room is located here.

7. UPGRADE SPECIFICATIONS

Fresno Office: Upgrade Specifications for VTC System

The Fresno VTC Room has multiple categories of recommended upgrades: audio, video, control, cabling, audio, timer, and recording functions. The following list is provided both as suggestions for upgrades as well as the starting point for further discussions and proposals.

Video: Enhance the room system to provide improved video images for participants.
- Upgrade system and equipment from 720p 30fps to a high-definition solution such as 720p @ 60fps running over a digital infrastructure. The District is also interested in seeing proposals with future plans of moving to new standards such as 4k.

- Replace existing analog videoconferencing equipment with digital videoconferencing system. Examples may include LifeSize, Cisco, or equivalent solutions, and should include codec, upgraded cabling as required, and any ancillary amplifying or extending equipment.

- Improved integration of laptop display.

Control System: Upgrade the Crestron control system, chassis, and programming.
- Replace existing Crestron control panel system with new Crestron touch panel control system and reprogram. For example, the Crestron V15-TILT (V15) touch panel system, along with all programming. Other alternatives may be proposed.

Cabling: Upgrade control and signal cabling.
- With the upgrade from analog equipment to digital equipment the cabling infrastructure will require upgrading. Any existing cable will need to be tested for integrity before reuse. Any cable not found to be useable would need to be replaced. Therefore, the recommendation is to replace all cable runs to the control system as needed, and removing all abandoned cabling.

Audio: Better integration of audience microphones.

Timer: The District is open to proposals for improving timer functionality.

Recording functions: The District is open to proposals for improving overall recording functions of meetings. This includes the audio recording performed by the Clerk to the Board, and audio/video recording of meetings.

Fresno Office: Upgrade Specifications for Governing Board VTC System

The Fresno Governing Board VTC Room has multiple categories of recommended upgrades: audio, video, control, cabling, audio, timer, and recording functions. The following list is provided both as suggestions for upgrades as well as the starting point for further discussions and proposals.

Video: Enhance the room system to provide improved video images for participants.
- Upgrade system and equipment from 720p 30fps to a high-definition solution such as 720p @ 60fps running over a digital infrastructure. The District is also interested in seeing proposals with future plans of moving to new standards such as 4k.

- Replace existing analog videoconferencing equipment with digital videoconferencing system. Examples may include LifeSize, Cisco, or equivalent solutions, and should include codec, upgraded cabling as required, and any ancillary amplifying or extending equipment.

- Improved integration of laptop display.

Control System: Upgrade the Crestron control system, chassis, and programming.
- Replace existing Crestron control panel system with new Crestron touch panel control system and reprogram. For example, the Crestron V15-TILT (V15) touch panel system, along with all programming. Other alternatives may be proposed.

Cabling: Upgrade control and signal cabling.
- With the upgrade from analog equipment to digital equipment the cabling infrastructure will require upgrading. Any existing cable will need to be tested for integrity before reuse. Any cable not found to be useable would need to be replaced. Therefore, the recommendation is to replace all cable runs to the control system as needed, and removing all abandoned cabling.

- Table top enclosure for Clerk to the Board audio and power connection.

Audio: Better integration of audience microphones.

Timer: The District is open to proposals for improving timer functionality.

Recording functions: The District is open to proposals for improving overall recording functions of meetings. This includes the audio recording performed by the Clerk to the Board, and audio/video recording of meetings.

Modesto Regional Office: Upgrade Specifications for VTC System

The Modesto VTC Room has multiple categories of recommended upgrades: audio, video, control, cabling, audio, timer, and recording functions. The following list is provided both as suggestions for upgrades as well as the starting point for further discussions and proposals.

Video: Enhance the room system to provide improved video images for participants.
- Upgrade system and equipment from 720p 30fps to a high-definition solution such as 720p @ 60fps running over a digital infrastructure. The District is also interested in seeing proposals with future plans of moving to new standards such as 4k.

- A full review of the room dimensions and viewing distances for recommendations of replacing the projectors and projection screens with comparably sized (91" or 92") flat panel monitors.

- Replace existing analog videoconferencing equipment with digital videoconferencing system. Examples may include LifeSize, Cisco, or equivalent solutions, and should include codec, upgraded cabling as required, and any ancillary amplifying or extending equipment.

- Improved integration of laptop display.

Control System: Upgrade the Crestron control system, chassis, and programming.
- Replace existing Crestron control panel system with new Crestron touch panel control system and reprogram. For example, the Crestron V15-TILT (V15) touch panel system, along with all programming. Other alternatives may be proposed.

Cabling: Upgrade control and signal cabling.
- With the upgrade from analog equipment to digital equipment the cabling infrastructure will require upgrading. Any existing cable will need to be tested for integrity before reuse. Any cable not found to be useable would need to be replaced. Therefore, the recommendation is to replace all cable runs to the control system as needed, and removing all abandoned cabling.

Audio: Better integration of audience microphones.

Timer: The District is open to proposals for improving timer functionality.

Recording functions: The District is open to proposals for improving overall recording functions of meetings. This includes the audio recording performed by the Clerk to the Board, and audio/video recording of meetings.

Bakersfield Regional Office: Upgrade Specifications for VTC System

The Bakersfield VTC Room has multiple categories of recommended upgrades: audio, video, control, cabling, audio, timer, and recording functions. The following list is provided both as suggestions for upgrades as well as the starting point for further discussions and proposals.

Video: Enhance the room system to provide improved video images for participants.
- Upgrade system and equipment from 720p 30fps to a high-definition solution such as 720p @ 60fps running over a digital infrastructure. The District is also interested in seeing proposals with future plans of moving to new standards such as 4k.

- A full review of the room dimensions and viewing distances for recommendations of replacing the projectors and projection screens with comparably sized (91" or 92") flat panel monitors.

- Replace existing analog videoconferencing equipment with digital videoconferencing system. Examples may include LifeSize, Cisco, or equivalent solutions, and should include codec, upgraded cabling as required, and any ancillary amplifying or extending equipment.

- Improved integration of laptop display.

Control System: Upgrade the Crestron control system, chassis, and programming.
- Replace existing Crestron control panel system with new Crestron touch panel control system and reprogram. For example, the Crestron V15-TILT (V15) touch panel system, along with all programming. Other alternatives may be proposed.

<u>Cabling</u>: Upgrade control and signal cabling.
- With the upgrade from analog equipment to digital equipment the cabling infrastructure will require upgrading. Any existing cable will need to be tested for integrity before reuse. Any cable not found to be useable would need to be replaced. Therefore, the recommendation is to replace all cable runs to the control system as needed, and removing all abandoned cabling.

<u>Audio</u>: Better integration of audience microphones.

<u>Timer</u>: The District is open to proposals for improving timer functionality.

<u>Recording functions</u>: The District is open to proposals for improving overall recording functions of meetings. This includes the audio recording performed by the Clerk to the Board, and audio/video recording of meetings.

8. SERVICES TO BE PROVIDED

The integrator will be entirely responsible for the installation and functioning of the new equipment and its proper connectivity with VTC systems. The integrator can make suggestions to the District, as appropriate, regarding any changes that will improve general functionality of the District's VTC systems.

District Responsibilities

The District specific responsibilities include, but are not limited to, the following:

a. Providing the integrator with access to all drawings and floor plans for each VTC system and location.
b. Providing the integrator with access to all Crestron code, as well as remote access.
c. Providing full site access to all locations during regular business hours (Monday through Thursday 7:30am-5:30pm, and alternating Fridays 8:00am-5:00pm), allowing for access outside these hours on an as-needed basis with prior arrangements.
d. Testing each system after integration is complete, and generating a punch list containing any items to be addressed before acceptance.

Integrator Responsibilities

The integrator will be responsible for tasks as necessary to fully implement this project, including, but not limited to, the following:

a. Performing total project management, including overseeing and coordinating with the District and others who are carrying out portions of the project.

b. Ensuring that portions of the project provided by the District are completed in accordance with the systems specifications.

c. Ensuring that all legal requirements relating to the project are met, including obtaining necessary permits and licenses.

d. Developing designs for the VTC Rooms, communications equipment, and the system as a whole that (1) fully meet performance requirements, (2) utilize existing equipment as appropriate, and (3) meet cost constraints. Provide alternative designs as appropriate, describing advantages and disadvantages plus costs for each. Performing all associated design and engineering work.

e. Defining all services, materials, and equipment necessary for the project to fully meet performance requirements.

f. Developing and presenting pricing options for all components of this project.

g. Developing the design for all VTC system-related conduit runs, to provide connectivity for all VTC system communication signals as specified in this RFP.

h. Purchasing all additional items needed by the integrator to complete the project. Shipping or transporting these items to the installation sites.

i. Performing final test and checkout of the new system and its functioning with related voice, video and data equipment.

j. Assisting with and addressing any items on the District-created punch list for each phase of the project.

k. Providing initial training on facility and network operation, including training manuals and materials.

l. Delivering complete paper and electronic facility and network documentation, to include at a minimum: final detailed facility space plan specifications and system engineering specifications, schematics/flow diagrams, telephone numbers, system procedures, etc.

m. Proposing an on-going maintenance and service agreement for the new equipment, to amend and/or replace the District's existing service agreement (*see Maintenance and Service section*).

n. Providing a warranty for the new system. During the warranty period, following installation of the system, all maintenance, repairs, and operating problems are handled at no additional charge.

9. MAINTENANCE AND SERVICE

The District considers on-going maintenance and service extremely important if the success of these VTC systems and interconnecting networks is to be assured. It is understood that most hardware devices now being used in VTC systems require little maintenance; however, it would seem prudent to perform certain periodic maintenance inspections (PMIs) and equipment adjustments as necessary. These PMIs would also include diagnostic checks beyond those typically performed by local District VTC

personnel. Additionally, service response time to correct component, system and/or network failures is of great concern to the District.

For purposes of this RFP, you are requested to describe the maintenance and service alternatives your firm offers; either in-house and/or outsourced, that is suggested for the District's VTC rooms and their interconnecting network. Pricing options should be clearly outlined as well. Please provide annual pricing figures for a 5-year maintenance term as part of your quote.

District's Maintenance and Service Expectations

Regular maintenance of the VTC system is vital for the system to perform as expected for every meeting. The District is proposing a regular maintenance interval to be performed **once a quarter** on all three District VTC sites (Bakersfield, Fresno, and Modesto). The length and scheduled days of the monthly maintenance will be agreed upon ahead of time between vendor and the District. The maintenance window must not fall on the week of a Gov. Board meeting. A detailed test plan must be created.
The basic tasks (to be defined in detail) performed during the monthly maintenance window are as follows:

- Backup system and configurations.
- Test audio balance, video performance, recording, and controls. Adjust as necessary.
- Verify system configurations and settings
- Record lamp hours of projectors (Bakersfield and Modesto)
- Physical check of connections and system hardware.
- Cleaning of system hardware

Backup System and Configuration

This task will ensure the latest system configuration files are readily available in the event of device/system failure.

Test audio balance, video performance, recording, and controls

This task will ensure the system is performing as designed and provide trouble free operation during meetings. Any modifications to the system must be backed up upon completion of this task.

The agreed upon test plan will include:

1) Basic task list
2) Length that the scheduled test plan will take
3) A set schedule per visit

Any change to the test plan and schedule will need to be agreed upon by both parties.

Record lamp hours of projectors (Bakersfield and Modesto)

In the event projector use is continued in the Bakersfield and Modesto VTC rooms, recording the hours of projector lamps is required. These projectors require periodic replacement of the lamps and filters. This task will proactively monitor the lamp life of each projector. The replacement of the lamps and filters (parts and labor), is to be included with the current agreement at no additional cost to the District.

> **Recommended Replacement:** Between 1500 – 2000 hours or immediately upon failure.

Physical check of connections and system hardware

This task ensures the physical aspect of the system (i.e. cabling, hardware etc…) is in proper functioning condition. Example:

- Loose mounts/screws
- Electrical connections coming apart
- Hardware improperly labeled

Cleaning of system hardware
Dust collection on equipment can cause excessive heat, which in turn causes premature hardware failure. The cleanliness of the primary units for the VTC system must be maintained. Some of the primary components of the VTC system includes, but is not limited to, the MCU, codecs, VTC network switches, and room cameras.

Any non-typical dust including but not limited to drywall dust or other "atypical destructive dusts" are not included.

Chart of Devices and expected maintenance

Device	Backup	Test Performance	Verify Configuration	Record Lamp Hours	Physical Check	Clean
MCU	X	X	X		X	X
Codec	X	X	X		X	X
Control Panel	X	X	X		X	X
Cameras		X			X	X
Switches	X	X	X		X	X
Routers	X	X	X		X	X
Projectors		X		X	X	X
Microphones		X			X	X
Audio Mixer	X	X	X		X	X
Audio Switch		X			X	X
Speakers		X			X	X
Display Monitors		X			X	X

In addition to the stated Quarterly maintenance tasks, additional tasks to be performed on a **quarterly** interval are as follows:

All potential hardware & software upgrades covered under the maintenance agreement will be discussed between the vendor and the District prior to any work being completed, so that benefits and risks can be determined. No updates will be performed unless agreed to by both parties.

This includes but is not limited to:

- Hardware firmware (including but not limited to: MCU, codec, recorders, switches and routers).
- Software (Creston, VCWizard, etc…)

Updates and Related Integration

The software and firmware versions of the installed hardware are modified by the manufacturer throughout the supported life of the hardware to correct bugs, enhance current features, and to introduce new features. Manufacturer software and firmware updates will be administered by the maintenance vendor under the agreement. This includes the research required to verify compatibility of said updates with all integrated equipment.

The maintenance vendor will make a best-effort to provide information to the District if any part of the system is discontinued by manufacturer and updates cannot be provided. The provided information must include recommendations by the maintenance vendor to which device/software to upgrade in order to keep the VTC system fully functional.

Evaluation of System configuration

The VTC system requires evaluation of current settings to the specifications of the system at the time of install. Any deviations to the specification will be corrected unless there are documented reasons for the change in specifications.

The VTC system will be reviewed by the maintenance vendor for the purpose of quality assurance and recommendations presented to the District. Recommendations might come in the form of a configuration change that will enhance the District's VTC experience.

TECH SUPPORT

Support Staff

The maintenance vendor will provide industry qualified staff to the District. Calls from the District will be treated as a priority and every effort will be made to address questions and issues in a timely manner.

Response Times

The District operates on a 7:30am to 5:50pm Monday through Thursday schedule with an every other Friday workday of 8:00am to 5:00pm. These times are Pacific Standard times and apply to remote service as well as onsite repairs. Support & repairs must be provided and performed during these hours unless otherwise stated. An additional trip charge may be applicable if a return trip is needed due to room availability issues.

The problem will dictate the time required for a response and successive corrective measure. The levels of problems are as follows:

Critical Problems

Definition: A **Critical Problem** is defined as an incident that renders the District's system(s) unusable until the problem is resolved. There are no acceptable alternatives or workarounds available to restore partial and/or temporary service. Resolution of the problem is considered to be of utmost priority.

Example: A **Critical Problem** would include operational or total failure of the following equipment but is not limited to: Codec unit; MCU and VTC network switches.

Expectations: For **Critical Problems**, an industry qualified technician would be onsite the business day following the reported incident with the appropriate spare and/or replacement parts or equipment based upon availability of the part or equipment which needs replacing. The replacement may be a newer version of equipment as older and discontinued parts may not be available or hard to procure. If it is determined that replacement parts are needed by 3 PM EST, a replacement part will be delivered the next business day when available. If the replacement part or equipment is not available, the maintenance vendor will make the best effort to obtain the part or equipment as quickly as possible. The maintenance vendor will provide an estimate on when this part or equipment will be onsite.

Major Problems

Definition: A **Major Problem** is defined as an incident that prevents normal operation of the District's system(s), but does not preclude the system(s) usability. There are acceptable alternatives or workarounds available to restore partial and/or temporary service until the problem is resolved.

Examples: A **Major Problem** would include partial or total failure of any of the following equipment but is not limited to: Room cameras; podium microphones; audio or video amplifiers; mixers; flat panel monitors; and television monitors

Expectations: For **Major Problems**, an industry qualified technician would be onsite the business day following the reported incident to diagnose the reported problem, identify and order the appropriate spare and/or replacement parts or equipment. The technician would be back onsite no later than the fourth business day along with the ordered parts/equipment, and affect the repair by End of Business that day. The replacement may be a newer version of equipment as older and discontinued parts may not be available or hard to procure. If the replacement part or equipment is not available, the maintenance vendor will make the best effort to obtain the part or equipment as quickly as possible. The maintenance vendor will provide an estimate on when this part or equipment will be onsite.

Minor Problems

Definition: A **Minor Problem** is defined as an incident that hinders normal operation of the District's system(s), and does not preclude the system(s) usability, but is a non-normal condition. There are acceptable alternatives or workarounds available to restore partial and/or temporary service until the problem is resolved. Meetings can continue with little or no interruption. (By default, a Minor Problem is any incident that cannot be classified as Critical or Major.)

Examples: A **Minor Problem** would include partial or total failure of any of the following equipment but is not limited to: table microphones; ceiling microphones; document cameras; speakers.

Expectations: For **Minor Problems**, an industry qualified technician would be onsite no later than the second business day following the reported incident to diagnose the problem, identify and order the appropriate spare and/or replacement parts or equipment. The technician would be back onsite no later than the fifth business day along with the ordered parts/equipment, and affect the repair by End of Business that day. The replacement may be a newer version of equipment as older and discontinued parts may not be available or hard to procure. If the replacement part or equipment is not

available, the maintenance vendor will make the best effort to obtain the part or equipment as quickly as possible. The maintenance vendor will provide an estimate on when this part or equipment will be onsite.

Exceptions

The District acknowledges there are circumstances out of the maintenance vendor's control. The following exceptions are recognized and apply on a case by case situation.

- The vendor will not be held responsible for District-related delays, such as office closures, room and/or system availability, etc., when determining the overall progress of a trouble ticket.
- The vendor will not be held responsible for delivery delays outside of their control, i.e. freight/delivery carriers' delays due to weather, disaster, etc. Scheduling delays are not considered to be an exception.
- For any critical problems, the maintenance vendor will make every possible effort to keep the response times as short and quick as possible.
- For any major problems or minor problems, exceptions <u>may be made</u> if the identified part is no longer available and alternatives need to be identified, provided the vendor performs due diligence in locating similar part(s).

Spare Parts

The maintenance vendor will have access to spare parts to meet the response times based on part availability. These parts may be a newer version of equipment as older and discontinued parts may not be available or hard to procure. These parts include, but are not limited to codecs; power supplies; cameras; microphones; control panels; and video recorders.

The District requires all VTC rooms to operate on a standardized platform. In the event failed equipment cannot be replaced with the same model, then recommendations must be made to the District to replace all units with the proposed replacement model.

In the event a different model/part is used, the maintenance vendor will discuss any potential issues with the District. If adjustments are necessary for compatibility, then any potential charges will be discussed between both parties.

Service Metrics

SLA service metrics are a way for the District to guarantee VTC services are restored in a timely manner.

The service metrics in the chart below display the level of anticipated response/repair times.

CRITICAL PROBLEM

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Open Ticket by 4pm local time	Parts onsite & installed by qualified technician by EOB	MINOR LAPSE		MAJOR LAPSE	

| 0 hours | 24 hours | | | | |

MAJOR PROBLEM

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Open Ticket by 4pm local time	Qualified technician onsite to diagnose issue, and order parts by 4pm		Parts onsite by 10am & installed by qualified technician by EOB	MINOR LAPSE		MAJOR LAPSE	

| 0 hours | 24 hours | 48 hours | 72 hours | | | | |

MINOR PROBLEM

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Open Ticket by 4pm local time		Qualified technician onsite to diagnose issue, and order parts by 4pm		Parts onsite by 10am & installed by qualified technician by EOB	MINOR LAPSE			MAJOR LAPSE	

| 0 hours | 24 hours | 48 hours | 72 hours | 96 hours | | | | | |

The District entered into a Service Agreement with Carousel Industries in July 2012. Presently the District's Agreement expires June 2013. This Agreement covers service, maintenance, and critical spares coverage according to the terms agreed upon by the two parties. The integrator will be responsible for providing an on-going maintenance and service agreement for the new configuration, and will coordinate with the service provider to amend and/or replace the District's existing service agreement.

In responding to this portion of the RFP, the District has a special interest in the following:

- **Source of services.** Are these services provided by company personnel or out-sourced? If out-sourced, to whom?

- **Telephone support.** Is first level telephone support available? Describe.

- **Remote diagnostics.** Can in-depth diagnostic checks be performed remotely? Via what method (i.e. dial vs. IP)?

- **Loopback checks.** Are loopback checks provided at the subsystem level – i.e. video, audio, etc., as well as the component level?

- **Response time.** What on-site response time alternatives are available – including the relative cost of each? Are technicians available locally in Fresno, Modesto and Bakersfield, or from where will they be dispatched?

- **Sparing.** What sparing levels of equipment, if any, are recommended – including related costs?

- **Warranty alternatives.** Describe how manufacturer warranties on given facility components are integrated into the maintenance and service alternatives offered by your firm. Include:

  - Clarification of what constitutes customer abuse, normal wear and tear, and acts of God.

  - A method of returning faulty equipment to vendor(s), and return of repaired items to District VTC sites. Include related costs.

  - Level of training District VTC personnel will need to be accepted as "qualified technical assistants", if this option is included in your warranty program.

  - Length of warranty period and specific coverage to be provided.

- **Troubleshooting.** How do your maintenance and service programs address troubleshooting situations that involve other entities such as the LECs and IXCs, District VTC personnel, component manufacturers, etc.?

- **Renewal options.** Describe renewal or extension options of your maintenance and service offerings - including related costs.

- **Payment options.** What payment options are available? The District typically issues quarterly payments in advance for maintenance contracts.

10. TRAINING

Introductory/Overview

Your response to this RFP should describe your organization's approach to training, its cost, and any alternative training program(s) your firm might suggest the District consider for this project. The District will require a single phase of introductory level training for equipment and facility operation, as it relates to the new systems added to the District's existing VTC network. This training will be conducted within the VTC rooms at the District's Fresno location.

Equipment and Facility Operation

This phase of training should be a brief introduction to the new features of the District's VTC rooms and their interaction with the District's existing network. There should also be training for specific system component capabilities and operational functions. There will be approximately 5-8 persons receiving this training, including selected District administrative and technical staff. A 6-8 hour course is envisioned, including ample time for hands-on experience. Specific course content should include, but not necessarily limited to:

- A facility and network overview.
- Description of new subsystems and key component features.
- System Controller functions.
- Basic guidelines for conducting a successful teleconference using the District VTC system and network.

All training material is to be provided by the integrator.

11. BIDDERS CONFERENCE

In order to clarify any questions about this RFP, as well as allow prospective vendors the opportunity to physically see District facilities, the District will convene a mandatory Bidders Conference on Tuesday, May 28, 2013, at 10:00 am. This conference will be conducted in the District's Fresno office located at 1990 E. Gettysburg Avenue, Fresno, California. Directions to the office can be found on the District's web site www.valleyair.org. The meeting is anticipated to last approximately two hours.

It is mandatory for prospective vendors to attend this conference in order to submit a proposal and receive serious or otherwise consideration. Due to the technical interests to be discussed at this meeting, the District strongly recommends that service personnel at the managerial level also be in attendance.
The tentative agenda for this conference is as follows:

- Introduction of District staff involved with this project.
- Brief review of the RFP.

- Tour of the Fresno computer room, Governing Board Room, and VTC Room.
- Videoconference tour of the Modesto and Bakersfield VTC Rooms.
- Brief question and answer period.

Please advise Brandon Swedblom no later than Friday, May 24, 2013 regarding your intention to attend this conference. Brandon Swedblom's address, and telephone number is on the Title Page of this RFP. An email response with the names and positions of the attendee(s) will be sufficient notification. Brandon Swedblom's email address is brandon.swedblom@valleyair.org

12. PROJECT COMPLETION AND PAYMENT SCHEDULE

The District intends to make payments during phases of the project with the entire project paid for once all punch list items have been resolved. Payments will be released according to a negotiated milestone completion schedule, based on the following staged implementation outline:

- PHASE 1: Network and System Scheduling Upgrade
- PHASE 2: Governing Board System Upgrade
- PHASE 3: Modesto VTC System Upgrade
- PHASE 4: Fresno VTC System Upgrade
- PHASE 5: Bakersfield VTC System Upgrade

13. PROPOSAL DESCRIPTION

Each proposal submitted must include, at a minimum, the following four sections:
1. Company profile
2. Technical proposal
3. Project management
4. Pricing summary

The District's evaluation process will primarily focus on responses as presented in these sections. A title page reflecting your proposal title, your firm's name, address, telephone number, fax number, email address, the name and contact information of your firm's contact person, and date is also requested.

Company Profile
At a minimum, this section should include:
- Specific responses to each item in Section 7 of this RFP. This should include your firm's understanding of the item and how you propose to complete each task.
- At least three references who can provide a recommendation and insight into your firm's performance on implementation of a similar project(s). The District's intent is to visit sites of installed completed projects.

Technical Proposal

At a minimum, this section should provide detailed descriptions of:

- The systems and components being proposed for each room.

- Maintenance and service alternatives being proposed.

- The specific training program(s) your firm will offer, both in accordance with what is being requested in Section 10 and any alternative training program options you might suggest for the District's consideration.

Project Management

At a minimum, this section should include:

- A brief statement of your firm's understanding of the work to be done for this project.

- Descriptions of the relevant experience your firm has in the design, engineering, procurement, integration, and implementation of VTC systems similar to what have been described in this RFP.

- Projected implementation schedule milestones from receipt of contract to final test and acceptance. The integrator will review the District proposed schedule and provide input as necessary.

- Your firm's approach to the facility preparation phase of this project (if required).

- How your firm plans to manage the overall project.

Pricing and Financing Summary

At a minimum, this section must include your estimated cost for that which is being specifically requested in this RFP – including options where indicated. Additionally, any alternative options your firm might wish to propose, as far as the various subsystems, maintenance & service, training, etc., are concerned, are also encouraged.

To assist the District in its evaluation process, this section should be formatted to easily reflect:

- Facility preparation estimates listed separately for the Fresno VTC Room, the Governing Board Room, Modesto VTC Room, and Bakersfield VTC Room.

- Major end item and total system cost breakdown for the Fresno VTC Room, the Governing Board Room, Modesto VTC Room, and Bakersfield VTC Room, preferably in terms of subsystems as defined throughout Section 7.

- Maintenance and Service offerings that address the items listed in Section 9.

- The initial training outlined in Section 10, including any alternative programs your firm might suggest.

- Project management and/or any integrator fee structure.

Pricing proposals should be summarized in a Pricing Detail Sheet that provides line item detail as well as section and grand totals for the project in order to finance this project. An example of the Pricing Detail Sheet is shown in Appendix B.

Prohibited Interest
Each proposal must contain a statement disclosing to the District in writing any financial interest in proposer's business or in this transaction held by any District Board member or any District officer or employee. The District reserves the right to refuse any proposal if the District determines a conflict of interest exists. A conflict of interest may be determined to exist in any instance where a District officer or employee participates in or influences any decision-making process affecting a bid or contract in any way whatsoever.

Because the District receives Federal Grant monies, the District is prohibited from contracting with or making sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred. For all contracts that the District enters into with an entity, for over $25,000, the District **"must"** verify that the entity is not suspended or debarred or otherwise excluded. This verification process is accomplished by checking the *Excluded Parties List System (EPLS)* www.epls.gov.

14. PROPOSAL EVALUATION

The District will consider the following factors in selecting a system integrator for this project:

- Completeness and clarity of the proposal.

- Your firm's overall experience in the field of teleconferencing.

- Project management experiences for this particular type of implementation; and, how your firm proposes to implement this project, assure end-to-end network integrity, and your overall project management approach to this task – including scheduling, integrator team composition, etc.

- Responses from references.

- On-going maintenance and service options offered, including pricing.

- Course content and method of presentation of initial training.

- Your estimated pricing for this project as detailed in the Pricing Summary section of your proposal.

The evaluation process will be directed primarily at those capabilities clearly shown in the written proposal submitted. However, the District may request any or all firms submitting proposals to make oral presentations during the evaluation process and/or to provide additional information.

The District shall be the sole judge of all proposals, particularly, which one best qualifies for acceptance. The District reserves the right to accept other than the lowest-priced proposal and to negotiate with respondents if it appears to be in the best interest of the District to do so. The District reserves the right to reject any and all proposals.

15. PROPOSAL DEADLINE

Three (3) printed copies and an electronic version of your proposal submitted in response to this RFP must be forwarded to:

>   Brandon Swedblom, Network Systems Analyst
>   San Joaquin Valley Air Pollution Control District
>   1990 E. Gettysburg Avenue
>   Fresno, CA 93726
>   brandon.swedblom@valleyair.org

In order to be considered, the proposal must be received no later than 5:00 pm on Thursday, July 1, 2013. Postmarks, fax, and/or emails are NOT acceptable substitutes for formal printed proposal copies.

16. LIST OF APPENDICES

Appendix A: District VTC Project Schedule (Proposed)

Appendix B: Detailed Pricing Summary

Appendix C: District Network Diagram

Appendix D: District VTC Equipment Inventory

Appendix E: District Facility Floor Plans

- Fresno Governing Board Room
- Fresno VTC Room
- Modesto VTC Room
- Bakersfield VTC Room

Appendix A District VTC Upgrade Project Schedule (Proposed)

ID	Task Name	Start	Finish	Duration	2013								2014		
					May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	RFP Released to Vendors	5/21/2013	5/21/2013	1d											
2	RFP Bidders Conference	5/28/2013	5/28/2013	1d											
3	RFP Due from Vendors	7/1/2013	7/1/2013	1d											
4	Integration Contract Finalized with Winning Vendor	8/15/2013	8/15/2013	1d											
5	Governing Board Meeting for Potential Approval	9/19/2013	9/19/2013	1d											
6	Integration Period for All Systems	9/30/2013	3/13/2014	23w 4d											
7	Network and Scheduling Upgrade	9/30/2013	12/30/2013	13w 1d											
8	Governing Board VTC Upgrade	10/1/2013	11/28/2013	8w 3d											
9	Fresno VTC Upgrade	11/4/2013	12/30/2013	8w 1d											
10	Modesto VTC Upgrade	11/22/2013	1/17/2014	8w 1d											
11	Bakersfield VTC Upgrade	1/2/2014	2/27/2014	8w 1d											
12	Project Closure	3/13/2014	3/13/2014	1d											

Appendix B Detailed Pricing Summary

This summary provides a sample of the cost breakdowns to be provided. There should be a summary section for the total project cost, with a separate detail section for each of the four VTC systems in the proposal. Note the different sales tax rates: Fresno 8.225%, Modesto 7.625%, and Bakersfield 7.50%.

Project Pricing Summary

	Fresno VTC System	Governing Board VTC System	Modesto VTC System	Bakersfield VTC System	TOTALS
Equipment					
Labor					
Facilities					
Sales Tax					
Shipping & Handling					
Training					
TOTALS					

Project Detailed Pricing

FRESNO VTC SYSTEM

EQUIPMENT SECTION

Qty	Description	Unit Price	Ext. Price
	A		
	B		
	C		
	…		
	SALES TAX (8.225%)		
	SHIPPING & HANDLING		
	EQUIPMENT SECTION TOTAL		

LABOR SECTION

Qty	Description	Unit Price	Ext. Price
	A		
	B		
	C		
	…		
	LABOR SECTION TOTAL		

FACILITIES SECTION

Qty	Description	Unit Price	Ext. Price
	A		
	B		
	C		
	…		
	FACILITIES SECTION TOTAL		

TRAINING SECTION

Qty	Description	Unit Price	Ext. Price

Appendix C District Network Diagram

San Joaquin Valley Air Pollution Control District Network Interconnectivity

Appendix D District VTC Equipment Inventory

Quantity	Manufacturer	Model	Site	Priority

1	Adtran Atlas 830 – base unit (incl 2 T1/PRI ports)
	   - Adtran Bonding module
	   - Adtran Quad T1/PRI module
		1200780L1
		1200262L1
		1200185L3
			Bakersfield	Low

1	Adtran CSU	T1 ACE	Bakersfield	Low
1	Biamp Amplifier	MPA250	Bakersfield	Low
1	Adtran Netvanta Router	3430	Bakersfield	Low
1	Vaddio Dual Display	PREVIEW HD DUAL	Bakersfield	High
1	LifeSize Room Codec		Bakersfield	High
1	LifeSize SDI Adapter		Bakersfield	High
1	Extron Matrix Switcher	MAV 44 SVA	Bakersfield	High
1	TVOne Video Scaler	C2-2200	Bakersfield	High
2	Extron Decoder	VYC 100N	Bakersfield	High
1	Extron Scan Converter	VSC 500	Bakersfield	High
1	Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA	Bakersfield	High
2	Extron Video Switcher	SW2 VGA/RGB	Bakersfield	High
2	Extron Video Scaler	DVS 304	Bakersfield	High
2	Extron Distribution Amplifier	DA4 RGBHV	Bakersfield	High
1	Crestron Transmitter	QM-TX	Bakersfield	High
1	Crestron PRO2 Processor	PRO2	Bakersfield	Low
2	Extron Distribution Amplifier	DA 6A	Bakersfield	High
1	AudiaFlex Audio Platform	12X12CM	Bakersfield	Low
2	Nexia Processor	NEXIA CS	Bakersfield	Low
1	Extreme Networks switch	X150 15201	Bakersfield	Low
1	Creston Distribution Block	C2N-HBLOCK	Bakersfield	Low
1	Extron Power Amplifier	MPA 181T	Bakersfield	High
4	Mitsubishi Projector	WD2000	Bakersfield	High
2	Sony HD Camera	EVI-HD1	Bakersfield	Low
1	JVC DVD/VCR Player	DR-MV79	Bakersfield	Low
1	Panasonic DVD Recorder	RDR-GX360	Bakersfield	Low
2	Listen Wireless Amplifier	LT-800-072	Bakersfield	Low
1	Shure Microphone	SM58	Bakersfield	Low
4	Supernova Projection Screen	92”	Bakersfield	Low
1	Extron Peaking Amplifier	PA-300	Bakersfield	High
1	Wolf Vision Document Camera	EYE-10	Bakersfield	Low
1	Sennheiser Headphones	HD205	Bakersfield	Low
1	Crestron Control Panel	TPMC-15-QM	Bakersfield	High
1	Alzatex Timer	TMR017	Bakersfield	Low
1	Extron RGB Interface	RGB 160	Bakersfield	High
Quantity	**Manufacturer**	**Model**	**Site**	**Priority**
1	Codian MCU	MCU-4505	Fresno	Low
1	Codian ISDN Gateway	ISDN GW-3241		Low
1	Adtran Atlas 830 – Base Unit AC F/TDM ISDN Quad T1/PRI Module	1200780L1	Fresno	Low
3	Adtran CSU	T1 ACE	Fresno	Low
1	Biamp Amplifier	MPA250	Fresno	Low
1	Adtran Netvanta Router	4305	Fresno	Low
2	Vaddio Dual Display	PREVIEW HD DUAL	Fresno	High
3	LifeSize Room Codec		Fresno	High

Quantity	Manufacturer	Model	Site	Priority
2	LifeSize SDI Adapter		Fresno	High
2	Extron Matrix Switcher	MAV 44 SVA	Fresno	High
2	TVOne Video Scaler	C2-2200	Fresno	High
4	Extron Decoder	VYC 100N	Fresno	High
2	Extron Scan Converter	VSC 500	Fresno	High
2	Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA	Fresno	High
1	Extron Video Switcher	SW2 VGA/RGB	Fresno	High
4	Extron Video Scaler	DVS 304	Fresno	High
8	Extron Distribution Amplifier	DA4 RGBHV	Fresno	High
2	Crestron Transmitter	QM-TX	Fresno	High
2	Crestron PRO2 Processor	PRO2	Fresno	Low
4	Extron Distribution Amplifier	DA 6A	Fresno	High
3	AudiaFlex Audio Platform	12X12CM	Fresno	Low
4	Nexia Processor	NEXIA CS	Fresno	Low
2	Extreme Networks switch	X450E 16142	Fresno	Low
2	Creston Distribution Block	C2N-HBLOCK	Fresno	Low
2	Kramer Video Switcher	VS-41HD	Fresno	High
1	Extron Distribution Amplifier	MDA 3SV	Fresno	High
1	Extron RGBHV Switcher	SW4 RGBHV	Fresno	High
1	Kramer S-Video Distributor	VM-3S	Fresno	High
5	Biamp Equalizer	D60EQ	Fresno	Low
5	Wideband Feedback Cancellar	FC101	Fresno	Low
1	NetGear 10/100M Switch	FS605	Fresno	Low
1	HP Server for VCWizard		Fresno	Low
Quantity	Manufacturer	Model	Site	Priority
1	Alzatex Timer	TMR217	GB Fresno	Low
1	Alzatex Timer	TMR017	GB Fresno	Low
12	Sharp Aquos 65"Flat Panel	LC65D64U	GB Fresno	Low
8	Samsung 50"Flat Panel	PPM50M7HB	GB Fresno	Low
4	Sony HD Camera	EVI-HD1	GB Fresno	Low
	Crestron Transmitter	QM-TX	GB Fresno	High
1	Sony Blu-Ray/DVD player	BDP S590	GB Fresno	Low
2	Panasonic DVD Recorder	RDR-GX360	GB Fresno	Low
2	Shure Wireless Amplifier	SLX4	GB Fresno	Low
2	Shure Wireless Microphone	SLX2	GB Fresno	Low
2	Listen Wireless Amplifier	LT-800-072	GB Fresno	Low
1	Shure Microphone	SM58	GB Fresno	Low
1	Extron Peaking Amplifier	PA-300	GB Fresno	High
1	Wolf Vision Document Camera	EYE-10	GB Fresno	Low
1	Sennheiser Headphones	HD205	GB Fresno	Low
1	Crestron Control Panel	TPMC-15-QM	GB Fresno	High
2	Creston Extender	ST-COM	GB Fresno	High
1	Extron RGB Interface	RGB 160	GB Fresno	High
Quantity	Manufacturer	Model	Site	Priority
1	Adtran Atlas 830 – base unit (incl 2 T1/PRI ports)	1200780L1	Modesto	Low
1	Adtran CSU	T1 ACE	Modesto	Low
1	Biamp Amplifier	MPA250	Modesto	Low
1	Adtran Netvanta Router	3430	Modesto	Low
1	Vaddio Dual Display	PREVIEW HD DUAL	Modesto	High
1	LifeSize Room Codec		Modesto	High
1	LifeSize SDI Adapter		Modesto	High

1	Extron Matrix Switcher	MAV 44 SVA	Modesto	High
1	TVOne Video Scaler	C2-2200	Modesto	High
2	Extron Decoder	VYC 100N	Modesto	High
1	Extron Scan Converter	VSC 500	Modesto	High
1	Extron 16x16 Crosspoint Switcher	ULTRA 1212 HVA	Modesto	High
2	Extron Video Switcher	SW2 VGA/RGB	Modesto	High
2	Extron Video Scaler	DVS 304	Modesto	High
2	Extron Distribution Amplifier	DA4 RGBHV	Modesto	High
1	Crestron Transmitter	QM-TX	Modesto	High
1	Crestron PRO2 Processor	PRO2	Modesto	Low
2	Extron Distribution Amplifier	DA 6A	Modesto	High
1	AudiaFlex Audio Platform	12X12CM	Modesto	Low
2	Nexia Processor	NEXIA CS	Modesto	Low
1	Extreme Networks switch	X150 15201	Modesto	Low
1	Creston Distribution Block	C2N-HBLOCK	Modesto	Low
1	Extron Power Amplifier	MPA 181T	Modesto	High
4	Mitsubishi Projector	WD2000	Modesto	High
2	Sony HD Camera	EVI-HD1	Modesto	Low
1	JVC DVD/VCR Player	DR-MV79	Modesto	Low
1	Panasonic DVD Recorder	RDR-GX360	Modesto	Low
2	Listen Wireless Amplifier	LT-800-072	Modesto	Low
1	Shure Microphone	SM58	Modesto	Low
4	Supernova Projection Screen	92"	Modesto	Low
1	Extron Peaking Amplifier	PA-300	Modesto	High
1	Wolf Vision Document Camera	EYE-10	Modesto	Low
1	Sennheiser Headphones	HD205	Modesto	Low
1	Crestron Control Panel	TPMC-15-QM	Modesto	High
1	Alzatex Timer	TMR017	Modesto	Low
1	Extron RGB Interface	RGB 160	Modesto	High
Quantity	**Manufacturer**	**Model**	**Site**	**Priority**
1	Alzatex Timer	TMR017	VTC Fresno	Low
4	Sharp Aquos 65"Flat Panel	LC65D64U	VTC Fresno	Low
2	Sony HD Camera	EVI-HD1	VTC Fresno	Low
1	Crestron Transmitter	QM-TX	VTC Fresno	High
1	Sony Blu-Ray/DVD player	BDP S590	VTC Fresno	Low
1	Panasonic DVD Recorder	RDR-GX360	VTC Fresno	Low
1	Shure Microphone	SM58	VTC Fresno	Low
2	Listen Wireless Amplifier	LT-800-072	VTC Fresno	Low
1	Extron Peaking Amplifier	PA-300	VTC Fresno	High
1	Wolf Vision Document Camera	EYE-10	VTC Fresno	Low
1	Sennheiser Headphones	HD205	VTC Fresno	Low
1	Crestron Control Panel	TPMC-15-QM	VTC Fresno	High
1	Creston Extender	ST-COM	VTC Fresno	High
1	Extron RGB Interface	RGB 160	VTC Fresno	High
1	Crestron Transmitter	QM-TX	VTC Fresno	High

Appendix E District Facility Floor Plans

Figure 1 Governing Board Room

Figure 2 Fresno VTC Room

Equipment / Monitor Cabinetry

Equipment / Monitor Cabinetry

Figure 3 Modesto VTC Room

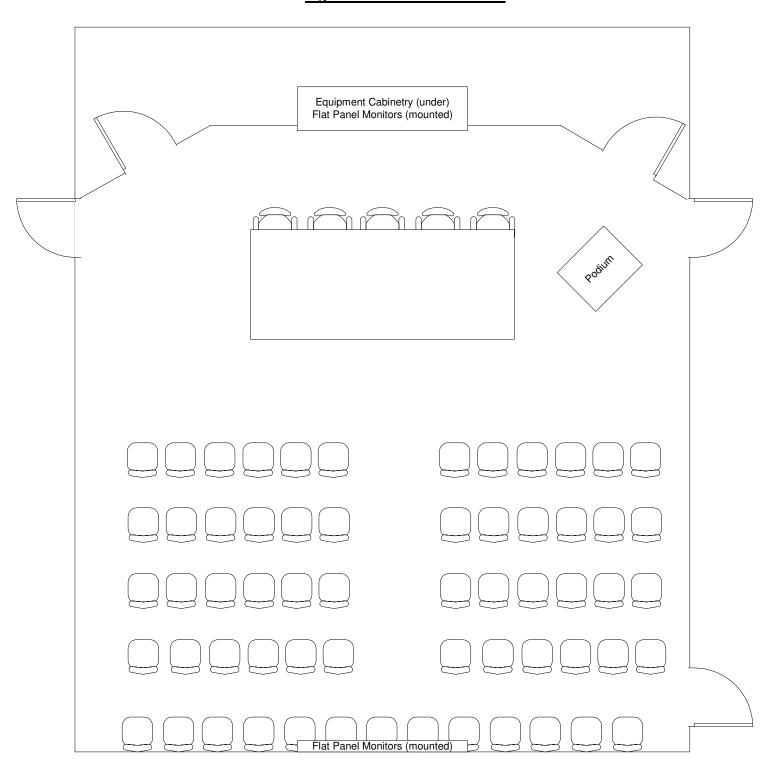
Equipment Cabinetry (under)
Flat Panel Monitors (mounted)

Podium

Flat Panel Monitors (mounted)

Figure 4 Bakersfield VTC Room

Equipment Cabinetry (under)
Flat Panel Monitors and Camera (mounted)

Doc Cam

Podium

Bakersfield VTC Room (Blueprints)

Flat Panel Monitors and camera (mounted)

39'

28'