

Working Proposal

2018 Chamber Upgrade Information

Notes, Scope, Equipment, Projection of Cost

Team Members

Dr. Cheryl L. Brown, Director- Project Leader and Designer

Steve Cassada, Project Manager

Louie Marino, Co Project Manager

Paula Shoup, Co Project Manager- Scribe

Carol Owens, Project Operations Consultant

Jessica Matthews- Project Operations Consultant

Michael Young, External Departmental ITD Project Manager

Kevin Johnson. External Departmental ITD Project Manager

Mark Tarrance, External Departmental ITD Project Manager

Chambers Upgrade Checklist

Document Camera

- Allows for display of comment cards over Tight Projector/Tight Receiver
- Cost: \$500
- NOTE: Need presentable solution by April 4th Rules Committee meeting

Video Router (source to specific outputs)

- Cost: \$3,000

84" Commercial Grade Monitors with Lifts

- Current plasma screens are 12 years old and 300 lbs each
- Current lifts regularly jam
- 7 total
 - 2 facing dais
 - 1 large upfront
 - 4 facing audience
- Benefit: Fully functioning lifts and lightweight commercial grade monitors (good for 10+ years)
- Cost: \$12,000/each = \$84,000 total

Ultra HD or 4K Cameras x 5

- Replace original 4
- Additional camera for sign language and allow for 2 people on same camera
- State of the art – lasts 10-12 years
- \$5000/each = \$25,000 total

TriCaster 8000 (8 hard inputs)

- Current TriCaster 460 (allows for 4 hard inputs)
- Newtek (maker)
- Encore (seller and maintenance)
- Cost: \$32,000

Crestron Update

- Software for camera control (turn system on, pan, tilt, and zoom)
- Benefit: volume control, overlays
- Cost: \$7000

HD Capture Cards

- Real time video (no delay to CM with document camera and live cameras)

Infrastructure Cabling

- Remove copper cables
- Replace with fiber cable network connection
- Fiber/termination splitter

- Cost: Local company install with warranty – estimate pending
- Benefit: Will remove time delay

Upgrade Broadcast Equipment

- Upgrade signal to Comcast, Uverse, AT&T, internet
- Will allow for crystal clear signal

Wireless Microphones

- 2 sets of 8
- 1 set for Lynwood and 1 set for Chambers
- \$2000 each/ \$32,000 total

Internal TV Channel (closed system)

- Chambers, Lynwood, possibly Conference Room A

Miscellaneous

Evaluate Electrical Circuits

Drawing Diagrams and Labeling (for troubleshooting)

Highend Projector and Upgraded Screen

- Lynwood Roberts Room

Desktop Computers

- Replace desktop computers on dais
- \$750 each x 26/\$19,500 total

Flat Screen 42" Smart TVs

- Council Member Offices

Wireless Polycom Telephone

- Cost: \$400

Repurpose Old Equipment

TriCaster 460

- Move to Video Studio
- Virtual sets
- Studio recorder and streaming
- TriCasters in Studio and Chambers can communicate to one another

Old Cameras

- Move to:
 - Don Davis Room
 - Committee Room B
 - Lynwood Roberts (would need switcher)
 - Conference Room A (may need pan & tilt controller & switcher)
- Goal would be to make cameras usable for everyone to minimize need for IT staff assistance
- Cost: \$7,000 each for encoder to allow for streaming

Old Plasma TVs

- Mount in following rooms:
 - Lynwood Roberts
 - Replace old TV in Green Room
 - Add additional TV in Green Room

Meeting Notes: 3/23/17 Chambers Upgrade Project Team

Attendance: Cheryl L Brown, Mike Young, Kevin Johnson, Mark Tarrance, Tom Polk, Mike Marino, Louie Marino, Steve Cassada, Paula Shoup

- Discussed history of the original upgrade installed around 1997. Monitors and lifts are 12 years old. Original vendor was CCS. Took 5 weeks, needed to cancel 1st Council meeting in January. Lifts took 12 weeks to install, TVs 6 weeks.
- New project, requesting quotes from Emtec.
 - o Replace auton lift boxes
 - o Move old lifts to other conference rooms
 - o 98" monitor in front of chambers, rest would be 84"
 - o HDMI to fiber converters
 - o Move current electrical room to another room. Turn old electrical room into storage closet to house cables
 - o Fiber cables are cheaper and faster, but converters for fiber cost 30% more
 - o Remove coax cables
 - o Clean out AV system/leave IRC system components
 - o Need to create fiber layout
 - o Need to know all inputs (DVDs, doc cameras, cameras, converters, microphones, points of control, other rooms)
 - o Need to know how desire system to perform, current setup may not be necessary based on preference.
 - o Design discussion for TriCaster (=combiner). Video router 1st (could bypass TriCaster altogether). Or TriCaster to monitors.
 - o 4K cameras may not be best, as nothing may be able to display 4K (internet, Comcast, etc). Extra cost may not be worth it. Current cameras 480 SDI.
 - o Closed captioning decoder
 - o Schedule refresh of Chamber PCs with ITD. If not, PC w/ HDMI output = \$750/each. There has not been funding for refresh for 2 years, so refresh schedule has shifted.
 - o Part of the purchase will be in this year's budget, the rest will be next year.
 - o Total cost could be between \$350-500k (due to fiber cables, 4k system and its components)
 - o Cost of annual maintenance would be 20% of total cost of system, with first few years being less.
 - o Piggyback off RFPs. Side note: Flagler County piggybacked at \$300,000 (did not need to go to bid).
 - o Next meeting scheduled for Monday, March 27th with Cheryl Brown to review analysis.

Meeting Notes: 3/28/17 Chambers Upgrade Project Team

Attendance: Cheryl Brown, Mike Young, Kevin Johnson, Mark Tarrance, Louie Marino, Steve Cassada, Stephanie Barnett, Paula Shoup

- M. Young opined the T. Polk initial Emtec quote of \$500k is too high
 - o He ran through an overview of what he and K. Johnson came up with. Their estimate comes in at \$295k for the base with 20% padding for infrastructure costs for a total of \$354k.
 - o The biggest unknown in producing a quote will be infrastructure costs
 - o M. Young, K. Johnson, and M. Tarrance are scheduled to meet with Emtec on Friday March 31st to provide an input total and address the quote question.
 - o Inputs: 5 cameras, DVD player, document camera, laptop, existing computer, 3 repurposed cameras for Don Davis, Comm. Room B, Conference Room A.
 - Inputs = 12 base, 16 to allow for additional inputs (ex: Conference Room B).
- Maintenance
 - o Current maintenance contract is with CCS, monthly charge paid directly to Haivision
 - o If can't go through Emtec, Haivision could be a standalone contract
- AV Closet
 - o New rack enclosed in AV Closet
 - o No one needs to use the room (could be badge only access)
 - o Use of AV Closet could facilitate the installation of some infrastructure before Dec. 2017
 - o Allows to run additional infrastructure to lifts
- Media Control Room
 - o Make backroom into media room (can wall off switcher)
 - o Captioning – plug into closed captioning encoder
 - o Duplicate controls for fail safe
 - o Similar set-up to 911 Center (example)
- Production Room
 - o Move TriCaster 460 to this room
 - o Add another fiber cable to connect
 - o Record video newsletters, pre & post production, ability to live stream
- Other Meeting Rooms
 - o Install old cameras with pan and tilt base
 - o \$15,000 for touchscreen monitors and joysticks
 - o Mekidos for streaming and recording
- TriCaster 8000
 - o Quoted at \$33,000
- Crestron
 - o Chambers, Lynwood, Don Davis, Production Room
 - o No video data flows through Crestron, only allows for hardware control
 - o Need renewed quote for Crestron upgrade (last quote \$8,000 6 months ago)
 - o Upgrade needed primarily for volume control

- Deliverables
 - o Vision – All problems the upgrade will solve
 - o Bells & Whistles – Picture in picture, captioning, overlays, public comment display, scroll agenda with short title, HD quality, real time streaming (assign to each piece of equipment for purchase)
 - o Need – Parts of system that are at risk of failure
- PCs
 - o There has not been a budget to refresh PCs in 3 years. Check with Marilyn and Laura to see when City Council is scheduled for a refresh.
 - o Would need to increase fleet count and licenses in order to have PCs in other committee rooms (ex: Comm. Room B – 8, Don Davis room - 1)
- TVs in CM Offices
 - o Switch from CRT to 42" smart flat screens
 - o Closed circuit (overlays our signal on Comcast internal channel 266)
 - o Schedule time for team to look at CM Anderson's flat screens
 - o May need to lay fiber from AV closet to Mezzanine to closet on 4th floor
- Broadcasting
 - o Currently broadcast through old v-brick encoder
 - o Need additional 5 signals for other meeting rooms (switch from channel/channel view – any room/any noticed meeting)
 - o Check if DCPS has laid fiber cable yet (HD)
 - o Run content 24-7 with programming running on kiosk (check Clay County)
 - o Uverse requires constant checking to confirm content is streaming. ITD needs to restart publishing point every Council day. We don't have access and would like same broadcasting capability as Comcast.
 - o Need to know what broadcasting companies need in order for CC to stream in HD with no issues
 - o Need high resolution to see text
 - Comcast is 720p (want 1080p)
 - Switch to HD signal
 - Current boxes are digital – must replace with HD
 - \$250/each and fiber (1080p)
 - o Need to have ability to give high definition signal to Comcast
 - Not sending HD
 - TVs can't receive HD
 - o What are the cost per Comcast to upgrade converter box (DTS) (Kevin will check with Chris)
 - o Check with Library about their Uverse streaming

TO DO:

- Quote for Crestron upgrade
- Check with DCPS (fiber and Uverse)
- Check with Marilyn and Laura re: PC refresh schedule
- Visit 911 Center
- Compile definitions for all components & applications
- Have ITD look at CM Anderson's flat screen setup

- Cheryl will get w/Kristi re: clean way to do Haivision standalone contract
- Inquire with Lisa King re: procurement/vendor discussion

Next Meeting: 3/31/17 ITD will meet with Emtec to go over inputs and quote. Follow-up meeting to be scheduled with full team afterwards.

City Council Staff Services**City Council A/V Upgrade: [Priority # of #]**

I. Business Need Description (include bulleted issues)

- The City Council Chambers require larger display monitors in order to accommodate growing council meeting audiences.
- Council Chamber monitor lifts will need to be replaced to accommodate the larger displays.
- Council Chamber cameras are outdated standard definition and will need to be replaced to display HD.
- The A/V equipment and displays in the Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A are outdated and need to be replaced.

II. Proposed Solution

- Purchase larger monitors and lifts for City Council Chambers.
- Purchase new HD cameras for the City Council Chambers.
- Utilize existing Council Chamber monitors, lifts, cameras, and other A/V gear to upgrade outdated or non-existing equipment in the Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A.
- Purchase new supporting A/V equipment for the City Council Chambers, Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A.
- Have a contractor run new fiber infrastructure for the City Council Chambers, Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A.
- Have a contractor assist with the A/V design/build for the City Council Chambers, Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A.

III. Benefits of Proposed Solution (Process Efficiencies, Cost Savings, Increased Revenue, etc.)

- Improved visibility for City Council meetings by providing larger monitors for the public audience and city council members.
- Improved image quality for broadcast council meetings by utilizing new HD cameras.
- Utilize existing cameras and monitors in the Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A.
- The ability to record/broadcast meetings from all rooms to all rooms and predefined Comcast Channels.

IV. City Priority Alignment (Check All that Apply)

- ☐ Public Safety
- ☐ Regulatory Compliance
- ☐ Revenue Generating
- ☒ External Customer Service Improvements
- ☒ Internal Customer Service Improvements

V. Funding and Budgetary Estimates

- Index Code for Budget:
- Have budgetary estimates been gathered? If so, please supply along with request.



Technology Request Form



Point of contact name and phone number for questions: _____

Signatures:

Business Sponsor: _____ **Date:** _____

Division Chief: _____ **Date:** _____

Department Director: _____ **Date:** _____

Type	Description	Unit Price	Qty	Extended Price	Link
Video Router	Crestron DM-MD32X32	\$ 45,000.00	1	\$ 45,000.00	Estimate
4k Cameras	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera	\$ 4,950.00	5	\$ 24,750.00	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera
4k TV	Philips Signage Solutions U-Line Display - 84" LCD 4k Ultra HD	\$ 5,560.50	6	\$ 33,363.00	Philips 84" 4k HD Monitor
4K TV	Philips Signage Solutions U-Line Display - 98" LCD 4k Ultra HD	\$ 13,343.04	1	\$ 13,343.04	Philips 98" 4k HD Monitor
Monitor Lift	Auton DFD-200-M	\$7,722.00	6	\$ 46,332.00	Emailed Price Quote
Monitor Lift	Auton DFD-250-M	\$ 8,247.00	1	\$ 8,247.00	Emailed Price Quote
Controller	Crestron Controller Upgrade	\$ 5,000.00	1	\$ 8,000.00	Estimate
Converters	Gefen 4K Ultra HD HDMI/Serial/IR Extender over One Fiber	\$ 1,799.10	20	\$ 35,982.00	Gefen 4K Ultra HD Converter
Video Production	Tricaster TC1 Max Bundle	\$ 39,999.95	1	\$ 39,999.95	Tricaster
Control Desk	SmartTrac V2 Desk	\$ 1,800.00	1	\$ 1,800.00	SmartTrac V2
Shipping	Shipping for Auton Lifts	x	1	\$ 3,000.00	

Type	Description	Unit Price	Qty	Extended Price	Link
Infrastructure	New Fiber Runs	x	x	\$ 52,000.00	Emailed Price Quote
Build Out	Estimate based on 25% of total cost	x	x	\$ 63,754.25	RFP

\$ 375,571.24 **Total**

\$ 317,992.24 **Total if we Purchase Auton Lifts in FY17**

Type	Description	Unit Price	Qty	Extended Price	Link
Video Router	Crestron DM-MD32X32	\$ 45,000.00	1	\$ 45,000.00	Estimate
4k Cameras	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera	\$ 4,950.00	5	\$ 24,750.00	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera
4k TV	Philips Signage Solutions U-Line Display - 84" LCD 4k Ultra HD	\$ 5,560.50	6	\$ 33,363.00	Philips 84" 4k HD Monitor
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Converters	Gefen 4K Ultra HD HDMI/Serial/IR Extender over One Fiber	\$ 1,799.10	20	\$ 35,982.00	Gefen 4K Ultra HD Converter
New PCs	New CC Chamber PCs	\$ 895.00	24	\$ 21,480.00	Emtec Install under contract
Video Productio	Tricaster TC1 Max Bundle	\$ 39,999.95	1	\$ 39,999.95	Tricaster
Control Desk	SmartTrac V2 Desk	\$ 1,800.00	1	\$ 1,800.00	SmartTrac V2
Shipping	Shipping for Auton Lifts	x	1	\$ 3,000.00	

Type	Description	Unit Price	Qty	Extended Price	Link
Infrastructure	New Fiber Runs	x	x	\$ 52,000.00	Emailed Price Quote
Build Out	Estimate based on 25% of total cost	x	x	\$ 64,204.25	RFP
				\$ 397,501.24	Total
				\$ 339,922.24	Total if we Purchase Auton Lifts in FY17

Type	Description	Unit Price	Qty	Extended Price	Link
Video Router	Crestron DM-MD32X32	\$ 45,000.00	1	\$ 45,000.00	Estimate
4k Cameras	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera	\$ 4,950.00	5	\$ 24,750.00	Vaddio ROBOSHOT20-UHD Ultra HD (4K) PTZ Camera
4k TV	Philips Signage Solutions U-Line Display - 84" LCD 4k Ultra HD	\$ 5,560.50	6	\$ 33,363.00	Philips 84" 4k HD Monitor
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Monitor Lift	Auton DFD-200-M	\$7,722.00	6	\$ 46,332.00	Emailed Price Quote
Monitor Lift	Auton DFD-250-M	\$ 8,247.00	1	\$ 8,247.00	Emailed Price Quote
Controller	Crestron Controller Upgrade	\$ 5,000.00	1	\$ 8,000.00	Estimate
Converters	Gefen 4K Ultra HD HDMI/Serial/IR Extender over One Fiber	\$ 1,799.10	20	\$ 35,982.00	Gefen 4K Ultra HD Converter
New PCs	New CC Chamber PCs	\$ 895.00	24	\$ 21,480.00	Emtec install under contract
Controllers	Mini Crestron Units (5 rooms)	\$ 1,000.00	5	\$ 5,000.00	
Video Router	Crestron 4x4 Routers (5 rooms)	\$ 1,000.00	5	\$ 5,000.00	
Video Productio	Tricaster TC1 Max Bundle	\$ 39,999.95	1	\$ 39,999.95	Tricaster
Control Desk	SmartTrac V2 Desk	\$ 1,800.00	1	\$ 1,800.00	SmartTrac V2
Shipping	Shipping for Auton Lifts	x	1	\$ 3,000.00	

Type	Description	Unit Price	Qty	Extended Price	Link
Infrastructure	New Fiber Runs	x	x	\$ 52,000.00	Emailed Price Quote
Infrastructure	Fiber for 5 meeting rooms	\$ 3,805.00	5	\$ 19,025.00	
Build Out	Estimate based on 25% of total cost	x	x	\$ 66,704.25	RFP

\$ 429,026.24 **Total**

\$ 371,447.24 **Total if we Purchase Auton Lifts in FY17**