



# MEETING NOTICE

<b>MEETING:</b>	<b>METROPOLITAN CABLE COMMISSION</b>
<b>DATE:</b>	<b>Thursday, July 5th, 2018</b>
<b>TIME:</b>	<b>11:30 AM – 12:15 PM</b>
<b>LOCATION:</b>	<b>Lane Council of Governments Buford Room</b> <b>5<sup>th</sup> Floor Buford Room; 859 Willamette (<i>directions on back</i>)</b>
<b>CONTACT PERSON:</b>	<b>Anne Davies 541-682-4040</b>

## A G E N D A

1. **WELCOME & INTRODUCTIONS**
2. **CALL TO ORDER**
3. **ADJUSTMENTS TO THE AGENDA/ANNOUNCEMENTS**
4. **COMMENTS FROM THE AUDIENCE** (*Anyone wishing to comment is asked to sign up on the public comment sheet provided at the meeting. A limit of 3 minutes per person is requested.*)
5. **METROPOLITAN CABLE COMMISSION**
  - a. Cable TV PEG Grant program—Expenditures on Capital Equipment (30 mins)  
Staff Contact & Presenter: Anne Davies, LCOG  
*Action Requested:* Approval of Cable Franchise Authority Staff Recommendations for 2018 Grant Cycle

### **UPCOMING MEETINGS (*note change in Springfield location*):**

August 2	City of Springfield Justice Center, 2nd floor Meeting Room
September 6	Eugene Library Bascom Tykeson Room
October 4	City of Springfield Justice Center, 2nd floor Meeting Room
November 1	Eugene Library Bascom Tykeson Room
December 6	City of Springfield Justice Center, 2nd floor Meeting Room

**-OVER-**

Location is wheelchair accessible (WCA). American Sign Language (ASL) interpretation is available with 48 hours notice.

LCOG Main Office: 859 Willamette Street, Suite 500, Eugene, Oregon 97401-2910

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**Lane Council of Governments:** LCOG is located at 859 Willamette Street on the 5<sup>th</sup> Floor  
**Bus:** Take the bus to the Eugene Station, from there walk north to Willamette and Broadway.  
**Bicycles:** There are bicycle racks by the front entrance.  
**Parking:** Street parking is available on Willamette and on the Park blocks



**PLEASE NOTE:**



LCOG is now posting meetings on its website at <http://www.lcog.org/346/Metropolitan-Policy-Committee>. These postings will include the agenda, minutes and attachments. If you no longer want to receive your meeting announcement in paper format, please contact David Phillips, 541-682-6295 or [dphillips@lcog.org](mailto:dphillips@lcog.org).



This meeting will be broadcast live, and rebroadcast on Metro Television, Comcast cable channel 21, at 1:30 PM on Mondays, 7:00 PM on Tuesdays, and 11:00 AM on Sundays for the rest of the month. A webcast will also be archived for future viewing on the LCOG website. Get details through links at <http://www.lcog.org/346/Metropolitan-Policy-Committee>.



July 5, 2018

To: Metropolitan Cable Television Commission  
From: Anne Davies, Lane Council of Governments  
Subject: 2018 PEG Grant Distributions

**Action Recommended:** Approval of Staff Recommendations for 2018 Grant Cycle

### **Background**

Under the current cable franchise agreement that Eugene, Springfield and Lane County have with Comcast, Comcast provides an annual payment of \$50,000 for distribution to PEG (Public, Educational, Government) broadcast channels. (There is a separate \$50,000 contributed for Metro TV Government Channel capital expenditures.) The MPC, serving as the Metropolitan Cable Television Commission, uses that money to make awards of funds for capital improvements to the PEG channels. In 2013, the MPC decided to postpone further distributions in order to build up a reserve to cover projected costs of installing a signal collection system (cameras and routers and fiber) in the new Eugene City Hall. Since that time, the reserve has accumulated the necessary amount to cover the estimated costs (\$150,000) for City Hall.

Staff sent out a general solicitation notifying potential grant recipients (PEG broadcast channels) that approximately \$50,000 in funding is available for distribution. Staff received two applications. Representatives of the jurisdictions and Metro TV technical staff met to review the applications—one from Eugene/Springfield Fire Training Channel (see Attachment 2) and one from Community Television (Channel 29). See Attachment 3.

Some of the upgrades being sought relate to the impending transition to High Definition (HD). Most of the channels still use Standard Definition (SD) equipment, which is rapidly becoming outdated.

Both of the applicants have requested and received funds before. Past awards and the 2018 requested amounts are as follows:

PEG Grants					
	2011	2012	2014	2017	2018
City of Eugene	\$17,800	\$ 14,679			
City of Springfield		\$62,900			
Community TV	\$20,000	\$ 7,421	\$ 11,430	\$6,285	\$16,816
ES Fire Training	\$28,631		\$8,600	\$8,820	\$15,400
Lane Community College			\$29,400	\$10,700	
<b>Total</b>	<b>\$66,431</b>	<b>\$ 85,000</b>	<b>\$ 49,430</b>	<b>\$25,805</b>	<b>\$32,216</b>

Upon receipt of the grant funding applications, Staff initially requested that Metro TV technical staff (Neil Moyer) analyze the practicality and coherence of the applications. With input from Metro TV technical staff, representatives from the jurisdictions reviewed the applications and made the following determinations:

Eugene/Springfield Fire-- The internal-staff-only fire training channel operation creates and secures videos for broadcast on the scrambled public safety channel. These productions range cross the whole spectrum of public safety needs, and include matters for Police and 9-1-1 emergency dispatch. The program is seeking an entirely new camera package that will replace a camera that the station has been using for years. The new package will improve quality and allow more on-location work, which will lead to more diverse programming. The program also seeks upgrades to post-production equipment and various other studio equipment upgrades.

The Fire Training application requested funding in three categories—funding for a camera upgrade package (\$10,250), post-production upgrades (\$3,600), and studio equipment upgrades (\$1,500). Fire prioritized the camera upgrade package, with the post-production upgrades deemed the next priority, and studio equipment upgrades as the least important.

CTV29— Community TV is an all-volunteer organization that provides an avenue for locally produced programming. Community Television’s (\$16,816) request includes various big-ticket items to upgrade its software only record and playback capabilities. The requested equipment will help Community Television continue and improve its HD capabilities.

Together, the recommendations total around \$32,000. Any funds not used will be rolled over to the next year.

### **Summary of Recommendation**

The Staff recommendation for distribution of the available PEG funds is:

Fire Training	\$ 15,400
CTV	\$ 16,816

A detailed list of the items approved is attached to this memo as Attachment 1.

### **Next Steps**

If the MPC agrees with Staff's recommendation, a motion such as "I move to approve the Staff Recommendations for distribution of the 2014 PEG grants," would be appropriate.

If the MPC wishes to alter the amount of any award, a motion making those changes would be appropriate.

If the MPC approves an award, the next steps will be to purchase the equipment. Neil Moyer has established a string of qualified vendors, so sometimes he can get better prices than found in the applications. In any event, LCOG will purchase the equipment and turn it over to the applicants.

### **Attachments**

1. Staff recommended awards
2. Fire training application
3. Community TV application

Attachment 1

2018 Franchise Staff Grant Recommendations

The Staff recommends the following distribution of the available PEG funds:

Eugene/Springfield Fire

Camera	\$4748
Lens	\$3398
Tripod	\$799
Bag	\$129
Monopod	\$249
Rain slicker	\$149
Mic Kit	\$399
Lens filter	\$80
Lens case	\$27
Extra battery	\$265
Editing PC	\$2099
USB mixer	\$99
Broadcast monitor	\$825
Expansion ports	\$69
Mic reflection filter	\$169
Equipment racks	\$265
Desktop Monitor stands	\$34
Rack hardware	\$4
	<hr/>
	\$15,400

Community TV (CTV29)

Software only playback solution	\$3150
Capture and Play HD video via SDI ports	\$ 995
5-Bay USB 3.0 RAID enclosure	\$ 249
2 HD Cameras	\$2590
2 zoom lenses	\$1198
Lens adapter	\$ 699
Talkback Converter	\$2495
4 Record and playback devices	\$2780
2 Mini Rack Shelf	\$170
10 SD Cards	\$1890
4 500 or 512 GB SSDs	\$600
	<hr/>
	\$16,816

TOTAL AMOUNT OF GRANTS--\$32,216

## **Application Request for PEG Equipment Funds (2018)**

The cable franchise agreement that Lane County, Springfield and Eugene have with Comcast provides for an annual payment from Comcast for PEG-related capital costs. Pursuant to past policy decisions by the Lane County Cable Commission (referred to herein as the Metropolitan Planning Commission or MPC), half of that amount goes directly to Metro TV and half of it is allocated to fund a grant program to distribute funds to jurisdictions in need of capital improvements for Public Access, Education or Government (PEG) programming.

In recent years, the grant program has not distributed any grant funds in order to provide reserves for PEG needs for the anticipated construction of a new City Hall for the City of Eugene. It has been determined that the reserve funds are currently sufficient to satisfy the anticipated City Hall needs. Accordingly, some funds are available this year to be distributed under the PEG grant program. As an agency that has, or could have, a connection agreement to place material on one or more Public Access, Education, or Government (PEG) cable television channels, you are eligible to compete for capital equipment funding.

There is approximately \$50,000 available, but the MPC may choose not to award all of the funds. Applications must be received by Anne Davies by close of business on April 4, 2018. Materials may be submitted either 1) by e-mail to [adavies@lcoog.org](mailto:adavies@lcoog.org) or 2) mailed to Anne Davies, LCOG, 825 Willamette St., Suite 500, Eugene, OR 97401. You may contact Ms. Davies with any questions via e-mail or phone at 541-682-4040.

**Funds must be used for the purchase of capital equipment.** A capital equipment purchase is defined as a non-reoccurring expenditure for the purpose of acquiring and installing equipment (durable goods) with a potential useful life of at least two years. Funds may not be used for operational or maintenance costs.

Please provide the following information:

1. Applicant Organization:  
**Eugene Springfield Fire**
2. Applicant Contact Information:  
**Manuel Velazquez – Video Technician**  
**541-682-7136**  
**Manuel.g.velazquez@ci.eugene.or.us**
3. The capital equipment you propose to purchase must be intended for and used to generate signals to be broadcast on one or more of the Comcast PEG channels, to expand the availability of the signals, or for related operational purposes. However, the use of the signals need not be restricted to the PEG channels. Does your organization have access to the Public or the Educational Channels on the Comcast system in Lane County?

**Yes, our organization has access to a private scrambled channel (Comcast CH 998) that is broadcasted to all 16 fire stations in the area.**

4. What is the total amount of your request? (*Round to the nearest \$100*)  
**\$15,400**
5. Describe the capital equipment your organization would like to purchase, include the following information for each type of equipment requested:

- *Description of equipment*

**Camera Upgrade Package**

- Sony FS5 Body: \$4748
- Sony 18-110mm Lens: \$3398
- Manfrotto Tripod: \$799
- Porta Brace Bag: \$129
- Steadicam/Monopod: \$249
- Rain Slicker: \$149
- Shotgun Mic Kit: \$399
- UV Filter for lens: \$80
- Lens case: \$27
- Extra battery: \$265



- *Preferred date of purchase for each item*  
**May 2018**
- *Funding requested (round to the nearest \$100)*  
**\$10,250.00**
- *Describe how your equipment need benefits the PEG channel viewer:*
  - *Improve the quality of reliability of signals*
  - *Improve opportunities for programming on PEG channels*
  - *Expand the diversity of programming on PEG channels*

**This entire camera package replaces the prosumer camera that has been our “A” cam for years. Not only will it improve quality and workflow but it will serve as a “one man band” field video kit. This will allow us to shoot more on location which will lead to more diverse programs for the channel.**

- *Is the equipment critical to the initial or continued input of signals to the PEG system? Briefly describe.*  
**Yes. As mentioned before this camera will become our main camera that will take on almost all of our filming needs.**

- *Description of equipment*  
**Post Production Upgrades**
  - Editing PC: \$2099
  - USB Mixer: \$99
  - Sony Broadcast Monitor: \$825
  - USB Expansion Ports: \$69
  - Reflection filter for Mic: \$169
  - Equipment Racks: \$265
  - Desktop Monitor Stands: \$34
  - Hardware for Racks: \$4

- *Preferred date of purchase for each item*  
**May 2018**
- *Funding requested (round to the nearest \$100)*  
**\$3600.00**

- Describe how your equipment need benefits the PEG channel viewer:
  - Improve the quality of reliability of signals
  - Improve opportunities for programming on PEG channels
  - Expand the diversity of programming on PEG channels

**This system replaces our current editing computer with a unit that can handle higher resolution videos as well as animations. With the popularity of 4k video on the rise, our current machine cannot keep up with the demands that high res video and animations puts on it. Our current system has stalled projects in the past because it was not able to handle heavy work. This system will handle anything we throw at it and is expandable as well. It includes some audio peripherals to help with VO recording- something we do quite often for training. It also includes a monitor that will correctly display broadcast safe colors for the channel.**

- *Is the equipment critical to the initial or continued input of signals to the PEG system? Briefly describe.*  
**Yes. Every piece of media we produce goes through this machine- photos, video, podcasts, trainings, voiceovers, etc. It is our main workhorse.**

- *Description of equipment*  
**Studio Equipment Upgrades**

- 2-person Wireless Headsets: \$335
- Flag kit for lights: \$279
- Diffusion Gels for lights: \$74
- Light Dimmer Board: \$176
- C-stand: \$109
- HDMI to SDI adapter: \$55
- Varizoom Rocker control for Cam: \$76
- HDMI Splitter: \$42
- 35' HDMI Cable: \$34
- 32" LED TV: \$149
- Rolling TV stand: \$108
- Sandbags: 4 @ \$21 each

- *Preferred date of purchase for each item*  
**May 2018**
- *Funding requested (round to the nearest \$100)*  
**\$1500.00**

- Describe how your equipment need benefits the PEG channel viewer:
  - Improve the quality of reliability of signals
  - Improve opportunities for programming on PEG channels
  - Expand the diversity of programming on PEG channels

**This Package includes equipment that would make the studio more efficient and functional. At the moment we have no way of communicating with a camera operator during live shows. We also don't have a functioning dimmer for our lighting grid which makes some setups difficult. This package will also include a monitor on a stand that will help with training videos. We often have a need for some kind of visual aide during studio shoots. This would solve that and also setup us up to have a direct signal from the TV to the switcher. All of these items will allow us to shoot more programs in the studio.**

- *Is the equipment critical to the initial or continued input of signals to the PEG system? Briefly describe.*

**Yes. All of our live programs go through the studio. It's where we broadcast and film a variety of different projects. (Trainings, PSAs, Live shows, Interviews, etc)**

6. If your application includes a request for more than one type of equipment, please assign a priority to each request (#1 being the highest priority) to assist MPC members in partial awards should total requests exceed the funding available.

**1- Camera Package**

**2- Post Production Upgrades**

**3- Studio Equipment Upgrades**

7. Subject to use for PEG purposes by the applicant, the capital equipment must be available for other PEG users to the extent practical. Would this be an issue for your organization? If yes – please briefly describe why.

**No. If any other PEG users would like to use the equipment they can do so. The only limitation is that most of it will be permanently be installed at 2<sup>nd</sup> & Chambers, so they would have to travel there for access.**

8. If approved by the MPC, how will the equipment be preserved and protected, and what methods will your organization use to insure that the use of the equipment will be responsible, safe, and legal?

**If approved the equipment will live at the TV studio located at 2<sup>nd</sup> & Chambers. The studio is locked all day and can only be accessed by designated users who have key cards (not everyone's prox card opens it). Furthermore the entire building is locked and can only be accessed by key card. The use of the equipment will be supervised by myself- Manuel Velazquez. I am in charge of all operations in the TV studio and its equipment.**

9. If approved by the MPC, what is the shelf life of the equipment and how does the organization intend to plan for the funding of future equipment replacement? *(Applications demonstrating a capacity to fund replacement internally will score higher.)*

**I estimate that the equipment requested should have a shelf-life of about 5 – 10 years. Major shifts in video broadcasting technologies could affect shelf-life projections. Future replacement of this equipment would be funded through the department. Future purchases due to technology shifts will be made through grants or other funding.**

10. Describe the impact to your organization if funds are not allocated for your request through this process.

**While last year we focused on upgrading equipment that was out of date, this year we want to focus on equipment that will refine our workflows and result in better quality programs. Our main camera is a bit outdated and technologies in that field have advanced tremendously since it was purchased. A new upgrade will allow us to set a new quality standard for all of our programs. Our main editing computer suffers from this issue as well- there are just much better options and technologies available today than there was when it was purchased. Our current system slows down workflow and makes some projects difficult because of it's limitations. The studio also is in need of some critical equipment upgrades. At the moment there are pieces of equipment that are either non-existent or not functional, that make live programs difficult sometimes.**

11. Applications that can show that the proposed capital expenditure will provide a benefit to a larger number of viewers will be scored higher than other applications that benefit a smaller number of viewers. Briefly describe the viewer benefit of the proposed capital expenditure. (*The method of demonstrating broader benefit is up to the applicant, but objective demonstrations will be scored higher than subjective demonstrations.*)

**If our organization were awarded with these funds the results would greatly benefit our viewers. Over the past year we have seen an increase in demand for live shows, podcasts, and various other programs for our channel. This new equipment will make sure that we are prepared to meet all our department's needs for years to come. The camera and computer upgrades will not only significantly upgrade the quality of productions, but will also open up more opportunities for more diverse programming. With our department's social media presence growing, upgrades to our equipment will mean that we can keep up with the times. Outreach and education are important right now, and our department wants to utilize video now more than ever for these purposes. The funds would ultimately streamline many workflows here in the field/studio which in turn will yield a better product for the viewers.**

**April 20, 2018**

**PEG Channel Capital Equipment Funding, FY187, Lane County, Oregon**

**1) Applicant Organization**

The Coalition To Rebuild Community Television  
dba Community Television of Lane County (CTV)

**2) Applicant Contact Information**

Larry Dobberstein, President  
Community Television of Lane County  
1430 Willamette St. #321, Eugene, OR 97401  
(541) 790-6616  
info@ctv29.org

Tom Cleveland  
CTV29 Board of Advisors  
Community Television of Lane County  
1430 Willamette St. #321, Eugene, OR 97401  
(541) 729-4855  
info@ctv29.org (or) ctv29@thinkvideo.com

**3) Access To PEG Channel**

CTV29 provides 24/365 television programming on PEG Public Access Channel 29 on Comcast Cable under a contract with LCOG.

**4) Total Amount of Grant Request (rounded to nearest \$100)**

\$16,800

**5) Capital Equipment Requested**

CTV needs capital funding to upgrade our facilities to fulfill our mandate to serve the community with professional quality tools to create locally produced programming on Comcast Public Access Channel 29. CTV shares its studio with Sheldon High School. Currently, there are no high school video classes. However, Sheldon desires to add these classes back when the district makes funding available for a teacher. CTV is all volunteer. Scheduling, programming the broadcast head-end, training users, installing and maintaining equipment and opening the studio for the public to deliver programs and check out equipment are all done by volunteers.

Using 2009, 2011, 2012, 2014 and 2017 grant funds, CTV created an all-digital signal path from camera to Comcast fiber-link. Broadcast is currently Standard Definition (SD). Anticipating transition to High Definition (HD), CTV obtained a Blackmagic Design (BMD) ATEM 2 Production Studio 4K HD switcher in 2014 and three BMD Studio 4K HD cameras in 2017. These have been installed and used, though most producers continue with the TriCaster SD

switcher to avoid the learning curve to master the far more capable BMD switcher. With the planned 2018 transition to an HD broadcast signal, CTV will need to finish upgrading its studio and play-out systems. CTV's current Leightonix broadcast head-end is limited to SD.

This grant application requests the items summarized below. Cost for shipping or for sales tax, if applicable, is not included. Other items (e.g. cables, headsets, etc.) will be needed to complete installation. CTV will use its operating funds to purchase these materials. We would hope to work with the grant administrator to minimize the purchase cost given price fluctuations or newer technology not available at the time of this writing. Vendor sales information will be provided at the time the items are purchased. Thanks to a member donation, CTV's engineer, Joe Tyndall, spent three days at the NAB Conference examining potential purchases.

Item	Use	Cost
<b>Broadcast HeadEnd/Playback</b>		
ToolsOnAir Just:Play Software	Software only playback solution (runs on Mac)	3150
BMD UltraStudio 4K	Capture and Play HD video via SDI ports	995
Oyen Digital Mobius 3R5-EB3-M	5-Bay USB 3.0 RAID enclosure	249
<b>Quality HD Prosumer Cameras for Checkout</b>		
(2) BMD Pocket Camera 4K	4:2:2, 10-bit, HD camera (\$1295 each)	2590
(2) Olympus Zoom Lens	Micro 4/3 - 14-150mm f/4-5.6 II (\$599 each)	1198
Metabones MFT to EF adapter	Adapts full frame Canon EF lenses to PCC4K	699
<b>Items to upgrade the studio</b>		
BMD talkback Converter	To implement talkback for camera operators	2495
(4) BMD Hyperdeck Studio Mini	Record and playback devices (\$695 each)	2780
(2) BMD Mini Rack Shelf	Holds 3 BMD HSM in 17" rack (\$85 each)	170
<b>SD card storage for BMD PCC and Hyperdecks</b>		
(10) Lexar LSD256CRBNA1000	256GB 1000x UHS-II SD Card (\$189 each)	1890
(4) 500 or 512 GB SSDs	Recording and file transfer (approx \$150 each)	600
	<b>Total</b>	<b>16,816</b>

#### **ToolsOnAir Just:Play Software for HD video file and live payout**

**\$3150**

At NAB, Joe Tyndall visited 53 vendors of payout (headend) solutions. Most of these offered big system solutions far more costly than our budget allows. Other companies (like Leightonix and Tightrope) had dedicated hardware boxes in the \$8,000 to \$20,000 range. There were four software only solutions with one that runs on a Mac. With the exception of the Leightonix Windows XP computer, CTV is entirely a Mac house. The ToolsOnAir product performed well in the NAB demo running on a core i7 Mac Mini (6,2), which CTV already owns. Our need is for scheduling and playback of existing files with an occasional live program switched in. While most systems offer graphic creation features, given that CTV is all volunteer, it is unlikely that anyone would have the time to learn and then produce sophisticated graphic overlays. Thus, this functionality is unneeded. ToolsOnAir (no bells and whistles) is the favored solution.

**Black Magic Design UltraStudio 4K** **\$995**

To provide an SDI video input (for a live feed) and an SDI output (for broadcast), a thunderbolt port device is required for mating to the Mac Mini. This unit was used for the demo at NAB.

**Oyen Digital Mobius 5-Bay USB 3.0 RAID Enclosure 3R5-EB3-M** **\$249**

The Mac Mini has one thunderbolt port (to be used for the UltraStudio 4K). It also has only one ethernet port. An NAS (Network Addressed Storage) box on the local network would see all of CTV's network traffic. Thus, a USB-3 RAID 5 box allows for large, fast, interference-free, file storage. CTV's current library is MPEG2 files. The ToolsOnAir system will process .h264 (MPEG4) files and will rescale standard definition files to high definition automatically while the file is played. MPEG4 would be 1/3 the size with the same perceived level of compression artifacts. When transitioning to the new headend, we will bulk convert our files from MPEG2 to MPEG4. CTV already has enough two terabyte hard drives to populate this storage box.

**Two - Black Magic Design Pocket Cinema Camera 4K (\$1295 each)** **\$2590**

After looking at Canon, JVC, Panasonic and Sony prosumer cameras, only one model shoots 4:2:2, 10-bit, 1920x1080, progressive HD video (the Sony PXW-Z280 for \$6500). At one third the cost, including a zoom lens, the BMD Pocket Cinema Camera 4K, which captures 4:2:2, 10-bit HD is a bargain. Joe was able to thoroughly evaluate this camera at NAB. One of CTV's members owns the earlier 2K version and the camera performs nicely.

**Two - Olympus M.Zuiko ED 14-150mm f/4-5.6 II Lens (\$599 each)** **\$1198**

The BMD PCC comes with an active Micro Four Thirds lens mount (and no lens) and provides automatic exposure and focus. Two CTV members have this lens. We tried it on the BMD Studio Cameras. It performs well except for the one f-stop of light loss when zooming to wide angle. While a problem in the studio environment, one can live with this for field work.

**Metabones MFT to EF adapter to use Canon EF lenses with BMD PCC4K** **\$699**

This adapter provides optics and electronics to gain an f-stop (or more given the sensor size crop factor) and to pass through control signals to operate the iris for full frame Canon EF lenses. The .71 version will work. It is possible the .64 version will also work with the PCC4K camera. By the time the purchase is made, Metabones will have been able to verify performance with the .64 adapter. These adapters were designed specifically for the Micro Four Thirds BMD Cinema and Pocket Cinema cameras. CTV has a few Canon lenses and is looking to acquire more.

**Black Magic Design Talkback Converter 4K** **\$2495**

This box embeds talkback audio packets onto the SDI signal to and from the cameras to allow the person switching the program to speak with the camera operators to direct them as to how to move and frame. A couple years back, CTV had a talkback system in the studio. When this died, it was not replaced pending completion of the upgrade to the studio. Producers in the studio have complained about the loss of this function. This item was requested but not funded during the 2017 grant cycle.



**Four - Black Magic Design Hyperdeck Studio Mini (\$695 each) \$2780**

The Hyperdeck boxes record and playback HD video. Currently, a second computer is used to play video to the BMD ATEM 2 switcher and to record the program. The Hyperdecks eliminate the need for the second computer (with keyboard, mouse and monitor) as the record and playback file storage is local to the Hyperdeck and the Hyperdecks are controlled directly by the ATEM switching application, exactly as for the DDR players and recorder currently available in the TriCaster switcher. The Hyperdeck and ATEM combination will also playback files with an alpha channel, providing transparent layering for animated content or green-screened video.

**Two - Black Magic Design Mini Rack Shelf (\$85 each) \$170**

These racks hold three BMD Hyperdeck Studio Minis side by side for mounting in a 17" rack.

**Ten - Lexar LSD256CRBNA1000 256GB 1000x UHS-II SD Card (\$189 each) \$1890**

The BMD PCC records either to SD cards or to an external solid state drive via USB-3. The Hyperdecks record and play from SD cards. The above cards have been tested as recording at 82 MB/sec and reading at 156 MB/sec. It is the record speed that is more important. Both faster and larger cards are desirable, but the cost is much higher. These cards will allow recording or playback of a good quality 1080p30 signal for 3.8 hours (18.4 MB/sec). They will allow recording of the same (compression) quality signal at 2160p30 resolution for 58 minutes (73.6 MB/sec) or the playback of a 1080p30 signal with alpha channel transparency (41.3 MB/Sec) for 103 minutes. As the cost of SD cards continues to drop, CTV will acquire larger and faster cards. These are adequate for the time being.

**Four - 500 or 512 GB Solid State drives (\$150 each) \$600**

CTV has and will acquire more USB-3 docks. These SSDs allow far faster transfer of files as compared to existing USB-2 docks and are unlikely to be damaged when dropped. We have lost a few hard drives as users have dropped them.

**6) Equipment Priorities**

While desirable to obtain all of the equipment listed above, the following is the order of priority.

1) The three playout/headend items \$4394

If CTV is to switch to HD broadcast this fall as planned, a high definition playout system must be in place. This is substantially lower cost as compared to a dedicated box solution.

2) Completion of the HD studio switcher (including 4 SD cards) \$6201

3) One of the BMD Pocket Cinema Cameras (with lens and SD card) \$2083

4) The second BMD Pocket Cinema Cameras (with lens and SD card) \$2083

5) The remaining 4 SD cards, Metabones adapter and 4 SSDs \$2055

### **7) Equipment Availability To Other PEG Users**

CTV would be happy to share equipment with other PEG groups. We encourage such access as it might increase the amount and variety of locally produced programming offered on CTV.

### **8) Preservation and Protection of Capital Equipment**

CTV is required by our contract and by common sense to maintain insurance on all our equipment, including capital equipment, and has done so since the start of operations in 1999.

Due to budget cuts, Sheldon High has canceled its video classes. They hope to bring this back in the future. CTV is not now receiving the Eugene 4J School District grant of \$3,400 annually for maintenance of shared-use equipment in the Studio. Even without this, CTV has maintained and improved the studio and anticipates being able to continue this into foreseeable future.

Joe Tyndall, a CTV board member, producer and electrical engineer, has kept CTV on air for 12 years and oversaw the transition to a digital signal path. Technical expertise needed to utilize the above items is available within the CTV volunteer community. Broadcast, studio and training operations are all organized, performed, and monitored by our volunteer staff and board of directors. We believe our existing equipment use practices have been responsible, safe and legal. We expect the same to be true for equipment made available to us under this grant request.

### **9) Shelf Life and Replacement of the Equipment**

We expect the equipment requested in this application will last at least five years (and likely much longer). Funding for future replacement (and upgrades) of the equipment will come from a combination fundraising efforts, donations from local businesses and individuals, the quarterly contract payments made to CTV by the City of Eugene and applications for PEG Capital Equipment Funding in future fiscal years.

### **10) If Funds Are Not Allocated**

If the funding requested in this application were not allocated, we would be limited in our ability to serve the requests from new and existing producers for both studio and field equipment. Although CTV does receive donations, it is unlikely we would be able to raise funds sufficient to purchase the capital equipment in this request.

### **11) Viewer Benefit**

It is our understanding that Comcast Cable connects to 67,000 homes in the Eugene-Springfield area. Comcast has been good at getting CTV's schedule into their program guide because locally produced content is a selling point for them. Many of CTV's shows have loyal followings.

**Thank you for considering our application.**

Tom Cleveland, for the All-Volunteer CTV29 Board & Staff  
CTV29 Past President and current Board of Advisors  
Community Television of Lane County