

Public, Educational and Government Access Channels and Institutional Network

2016-2017 ANNUAL REPORT





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EXECUTIVE SUMMARY

Clackamas County provides high quality cable programming that serves the public interest and is committed to enriching the lives of the residents of the county by communicating information over Public, Educational and Government (PEG) access channels. These channels provide a cable television venue for residents, schools, and County government.

The Oregon Office of Economic Analysis lists Clackamas County as a stable population area. That solid population, coupled with cable issues in broadband, telephony, service for those residents caught in the digital divide, institutional networks (I-Nets), and demand for telecommuting reinforces the important role of PEG television programming.

Total PEG expenditures for Fiscal Year 2016-2017 were \$401,682 for capital equipment and facilities.

WILLAMETTE FALLS MEDIA CENTER (PUBLIC ACCESS CHANNEL)

As part of a community effort, Willamette Falls Media Center (WFMC), a 501 (c)(3) non-profit organization, operates and maintains PEG access channels and production resources on behalf of the communities they serve.

The WFMC facility, which is located in Oregon City, includes video production studios, editing suites, portable equipment for certified producer use, video playback capacity, training space and business offices. The organization facilitates the production of locally-based content by community members, non-profit organizations, churches, government agencies, and educational entities. It also coordinates the cablecast of programming on several designated community access channels.

CLACKAMAS COMMUNITY COLLEGE (EDUCATIONAL ACCESS CHANNEL)

The Clackamas Community Art Department, with oversight by the Clackamas Community College TV (CCCTV) Steering Committee, manages the operation of the college television channel (CCCTV). CCCTV currently broadcasts programming that includes instructional videos, college events, activities, news, live events, and creative work produced by students in the college's Digital Media Communications (DMC) program, including short films and motion capture animations. The channel operation is focused on offering access to its instructional content and also serves as a public information arm of the college.

Clackamas Community College (CCC) has campuses in Oregon City, North Clackamas and Wilsonville, plus extension sites in Canby and Molalla. The college offers associate degrees and certificates, college transfer degrees, career technical education, literacy/basic skills, community education, business training, distance learning and partnerships for four-year degree completion programs. There are more than 39,000 students enrolled in all course offerings. The college district includes all of Clackamas County except Lake Oswego, Sandy, Damascus and Boring school districts.



NORTH CLACKAMAS SCHOOL DISTRICT (EDUCATIONAL ACCESS CHANNEL)

The Sabin-Schellenberg Center works with the North Clackamas School District to educate K-12 students. There are 240 high school students enrolled in the media production programs with additional production teams at several schools. The program draws students from Clackamas, Milwaukie and Rex Putnam high schools.

More than 5,000 hours of programming aired on their educational access channel. This curriculum is affiliated with Oregon Associated Press Broadcasters. The students are members of the Varsity TV organization. Local media professionals assist the program and mentor the students.

OREGON CITY SCHOOL DISTRICT (EDUCATIONAL ACCESS CHANNEL)

The Oregon City School District broadcasts live school board meetings throughout the year. These broadcasts are an important part of the district's overall communication strategy to reach households throughout the school community. The meetings are broadcast live by the WFMC and replayed throughout the following weeks. Several meetings of the school board are recorded and rebroadcast on the WFMC public access channel.

WEST LINN-WILSONVILLE SCHOOL DISTRICT (EDUCATIONAL ACCESS CHANNEL)

West Linn-Wilsonville Schools broadcast into the communities of West Linn and Wilsonville. The channel is used to re-broadcast the most recent school board meetings and to run reader board style announcements about upcoming events. The school district did not utilize PEG funding from Clackamas County for Fiscal Year 2016-2017.

CLACKAMAS COUNTY (GOVERNMENT ACCESS CHANNEL)

The Clackamas County Government Channel (CCGC) serves the public interest by promoting the communities of Clackamas County and making government more accessible and understandable to its residents. The channel offers information about county services, activities, community life, and history of the region as well as live and recorded coverage of public meetings. Productions include coverage of the Clackamas County Board of County Commissioners meetings, summaries of basic government services and how to access them, documentaries, and programs showcasing a variety of community events.

CCGC aired approximately 6,600 hours of programming from July 1, 2016 to June 30, 2017, with a daily program average of approximately 20 hours. This included live broadcasts of the Board of County Commission meetings and Land Use hearings. The remainder of the viewing day was filled with public announcements carried in a reader board format. A total of 140 new programs, promos, public service announcements and station IDs were produced resulting in nine national and international awards for various productions in Fiscal Year 2016-2017.



INSTITUTIONAL NETWORK (I-NET)

Clackamas County Department of Technology Services monitors the County's I-Net system. The network is designed to link all county offices and most emergency responders with the highest level of communication systems. The network was created through a \$7.8 million federal ARRA Grant and \$3.3 million from county contributions. The network brings affordable high-speed service to more than 176 community anchor sights countywide, along a 200 mile fiber network system. This network of fiber optic cables connects schools, colleges, libraries, medical, police and fire stations, and other public agencies.



PUBLIC ACCESS

WILLAMETTE FALLS MEDIA CENTER (WFMC)

Clackamas County contracts with Willamette Falls Media Center (WFMC) to support public access opportunities within Clackamas County. Through a contract service agreement with WFMC, Clackamas County Public and Government Affairs Department provided \$50,000 in PEG funding for facilities and equipment, and \$54,000 from general funds toward operations in Fiscal Year 2016-17. As contracted, the media center and its resources are accessible to all residents living in the unincorporated areas of the county. WFMC also contracts with the cities of Oregon City, Wilsonville, and Milwaukie thereby making the facilities and equipment available to residents of those communities.

WFMC has four professional studio spaces each equipped with cameras that provide full 4K HD acquisition. Studio A, which is approximately 1,200 sq. ft., houses a small audio booth, a green screen, LED and florescent lighting, and is equipped with a Tricaster digital switcher featuring multiple digital virtual sets. Studio B is approximately 450 sq. ft. and is perfect for smaller, intimate settings. This studio is equipped with a Tricaster multi camera switcher, and LED and florescent lighting. The kitchen studio has all of the amenities of a working kitchen including functioning utilities and appliances. In addition, a new podcast suite was built this year to accommodate community interest and requests. The facility provides on-site live event coverage through the use of a fully equipped mobile production van. Producers have constant access to HD field production equipment and post production edit suites. Both PC and Macintosh based editing systems are used. The media center offers basic classes and advanced workshops in all facets of media production and techniques.

This year, WFMC has made exceptional progress toward strengthening our partnerships and relationships within the county, as well as building on our core services and community offerings. We continue to have a positive and ongoing relationship with Clackamas Community College (CCC) as a Cooperative Work Experience site, providing over 117 Cooperative Work Experience hours for students enrolled in the media program. We have a growing number of CCC media students coming into the WFMC studio to utilize the facilities services, such as studio space and the green screen. In addition, the college's media/channel management department and WFMC have begun meeting to discuss how to redevelop the college's channel into a shared education channel that would cablecast programming submitted by schools within the districts countywide, as well as school district board meetings and other education based content.

In collaboration with the City of Wilsonville and supported by Wilsonville High Schools administration, teachers, and students, WFMC production staff has created a basic template for a high school media program. This easy-to-implement afterschool based program introduces students to core media concepts and basic production techniques. It also gives students real world, hands on experience and their programs provide fresh content for their community's channel.



Additionally, WFMC has a new relationship with a Netflix production that is filming in the county this summer. This opportunity gives our staff access to a unique type of training and large production experience. With the extensive media coverage productions of this scale in our community, we are using this opportunity to help further market the services of our media center. As one of the production sites, this mutually beneficial partnership provides a small source of revenue that is directly earmarked for facility and operations support.

The media center continues to remain focused on expanding available services that accommodate community, civic, and educational needs and define new opportunities for community involvement. In support of this goal through a generous PEG donation from Clackamas County, WFMC was able to build a new podcasting suite. This studio space is professionally equipped with a multi-camera switcher, three robotic full 4k HD acquisition cameras, and industry standard microphones. This studio space is also able to broadcast live on the channels, as well as streaming capabilities to other media outlets.

More detailed information about the media center and the services available to the community can be found on the website: www.wfmcstudios.org.

LOCATION

The Willamette Falls Media Center is located at 1101 Jackson Street, Oregon City, Oregon. Hours of operation are: Tuesday through Friday, 10am–7pm and Saturday 12pm–7pm.

PROGRAMMING

During FY 2016-2017, over 42 resident producers in the unincorporated area of the county utilized editing suites, studio space, and field equipment over 863 times, totaling 4,815 hours of community use. These users also provided 269 programs for cablecast, which generated more than 2,300 playback hours of first run, local origin programming on WFMC managed channels.

Community announcements, which are submitted by the greater Clackamas County, are cablecast in a community board format, in-between produced programs.

STAFFING

Willamette Falls Media Center's current staff works on a part-time capacity and consists of an Executive Director, Executive Assistant, Bookkeeper, Engineer, Studio Specialist, Playback Operator, two on-location videographers, and a Website Administrator.

ACCOMPLISHMENTS

- Provided over 1,800 hours of work experience and internship training for schools and public resources in Clackamas County
- We have strengthened our collaboration with Clackamas Community College to mutually support each of our ongoing education programs, equipment, and facility use



- Built new podcast suite

FUTURE PLANS

- Build a classroom space to support on-going classes with community and educational organizations
- With the new podcast suite, our focus will be building stronger community relations and connections
- Developing a program to service the at-risk population by providing basic computer and digital communication skill that can be transferable to the workplace

GOALS

- Expand internships and ongoing education within the county school districts
- Seek out new sustainable sources of income to support continued growth and expanded services
- Strengthen and expand community relations and connections to promote services, activities, and information throughout the county

EQUIPMENT ACQUISITION

Live Suite studio equipment	\$35,707.62
Media storage and computer upgrade	\$ 2,543.95
Location and accessories	\$10,383.51
Camera and accessories	\$ 449.48
Miscellaneous cables & connectors/facility	\$ 909.53
GRAND TOTAL	\$49,994.09



EDUCATIONAL ACCESS

CLACKAMAS COMMUNITY COLLEGE (CCC)

Clackamas Community College channel is broadcast in the unincorporated areas of Clackamas County. CCC programming is received on channels 9, 27, 58, 60 or 98 based on the individual cable company channel lineup. An Intergovernmental Agreement between Clackamas County Government Channel (CCGC) and CCC provided funding of \$100,000 this year for equipment and facilities. This funding is generated through PEG fees collected through cable providers in unincorporated Clackamas County.

LOCATION

The higher education channel operation is located on the CCC Campus, 19600 Molalla Avenue, Oregon City, Oregon. The main college campus is an ideal hub for this type of channel.

PROGRAMMING

Programming of the CCC channel is not regulated by any franchise requirements. Over the last year, CCC's cable access station (CCCTV) added an additional 40 locally produced segments, totaling 9 hours and 20 minutes to its programming schedule, with an additional 5 segments from Willamette Falls Media Center of the Oregon City School District Board Meetings totaling another 10 hours and 51 minutes of programming. College announcements are carried in a reader board format when produced programming is not airing.

STAFFING

CCCTV is staffed by a part-time classified programming manager who schedules and encodes programming, shoots and edits informational college productions, and troubleshoots the cablecast system. The programming manager is supervised by the Art Department Chair with assistance of the Video Production/Film full-time faculty member. Budget and programming oversight is provided through the CCCTV steering committee comprised of interdisciplinary faculty and college leadership. Additionally, the College supports operations through Information Technology personnel, the College Public Information Officer and Marketing Department staff time. Non-college freelance videographers are periodically contracted on an as-needed basis.

EDUCATION/ORIGINAL CONTENT CREATION

The purchase of industry-standard equipment through PEG funding allows the College to keep our curriculum current with the demands of our industry partners in film and media. Students are gaining the workforce skills needed to be successful in this growing sector of the Clackamas County economy. Original media content was created by students with PEG funded equipment such as the Arri Amira Cinema camera, Phasespace Motion Capture system, Drone equipment, and GoPro 360 degree cameras as part of the Digital Media Communications (DMC) program. The DMC coursework teaches students skills such as: digital filmmaking and advanced digital filmmaking; how to create computer generated animations and special effects; sound techniques; screenwriting; broadcast journalism, directing, and digital video editing.



In addition to their coursework, students continue to gain additional experience as interns on local productions. Recently, students worked on a Public Safety Announcement (PSA) on pedestrian safety led by David Cress, director of “Portlandia,” and several students have been interning on a CW (network) pilot for the Portlandia production team.

ACCOMPLISHMENTS

- CCC PEG fund purchases from Fiscal Year 2013-2017 have been invested in multiple professional level cameras, light sets, grip and electric gear, motion capture equipment, a DJI video drone, etc.
- Experience using PEG funded equipment has helped students find internships and jobs in the Portland/Metro area.
- CCC has developed and implemented Digital Media curriculum at the college that trains students on the latest industry-standard media production equipment which has resulted in extensive original programming content for CCCTV.
- CCC has steadily developed, expanded and explored new avenues for content creation such as the pilot taping of CCC board meetings, internal marketing of services, and relationship building with the City of Milwaukie, Clackamas County Government Channel (CCGC) and the Willamette Falls Media Center (WFMC). CCC has implemented a system with WFMC where the local educational content produced either at or by WFMC and also by other public schools within Clackamas County will be aired over CCCTV. CCC students are using WFMC facilities, as they are better equipped for live video production. CCC is also partnering with WFMC in order to run a Motion Capture workshop at WFMC. The College has limited space for offering the Motion Capture classes and WFMC has offered their facility so that we can offer classes using the motion capture equipment. This will allow us to produce more Motion Capture content for CCCTV and WFMC. We intend to offer the class at WFMC in the fall term of 2017.
- CCC used a significant amount of the PEG funds to purchase a new Tightrope broadcast server for CCCTV this year. We had issues with the previous broadcast server, which resulted in periods of downtime for the channel. Our decision to purchase a new server was motivated by these issues and recommendations from the College’s Information Technology staff. After much discussion and consideration, our new server was purchased from and installed by ABS in May. This new system allows us to broadcast in HD which is an improvement from the last server. The earlier system has been upgraded as part of the new purchase and is currently re-installed into our system and running at an idle as a completely redundant broadcast system.
- CCC has instituted a CCCTV oversight committee to assist in developing and implementing operational and long-term plans. The CCCTV oversight committee met formally once a term this year. Committee members also met with representatives from ABS regarding the Tightrope server during the process of purchasing our new server. The committee looked at proposals, considered and made recommendations regarding: the new server, station/ channel organization, education content from WFMC, and equipment checkout policies.



FUTURE PLANS

- Produce more live broadcasts that include college sports and other events.
- Expand studio facilities on a large enough scale to house a permanent Motion Capture studio and blue screen needed for advanced video compositing effects. In the short term, partner with WFMC to deliver motion capture classes.
- Provide higher quality production value for our programming material.
- Continue to develop partnerships with local stations like the CCGC and WFMC for student opportunities and the production of content for cable channels in an educational capacity.
- Refine the Digital Media Communications curriculum by infusing more entrepreneurship content to support the small business development.
- Continue to place students in internships with local productions to provide relevant work-based learning opportunities.

GOALS

- Upgrade broadcast operations with the acquisition of a state of the art production facility
- Prepare students for a variety of entry-level positions in the media industry, including entrepreneurial endeavors
- Provide Clackamas County with a well-trained workforce to grow its film and media industry sector
- Provide a pathway for students to continue their education at a four-year institution
- Increase viewership of CCCTV channel by providing content of interest to our service area

EQUIPMENT ACQUISITION

Tightrope System	\$ 52,923.71
Refurbished Harmonix Encoder	\$ 7,992.88
Magnus Video Tripod w/2 Way Fluid Video Head	\$ 194.85
Senneiser EW122P G3 Lav System	\$ 1,234.70
Rocco V-Hazer	\$ 1,168.04
Rosco Fog Fluid	\$ 47.90
Watson 25' Power Extension Cord	\$ 39.10
Rode VideoMic	\$ 229.00
Sachtler Bags Raincover for Canon EOS C100	\$ 97.02
SKB Iseries CS carry on Case	\$ 391.98
Porta-Brace Mini-DV Camera Case	\$ 449.62
Kopul Premium Cable 25'	\$ 32.32
Pearstone 1x6" Touch Fastner Cable Strap	\$ 23.49
JVC Dual Charger HM600	\$ 187.68
JVC Battery DT-X7X	\$ 350.84



Sennheiser ME 2 Lavalier Microphone	\$ 219.90
Rode NTG-2 Shotgun Condenser Microphone	\$ 339.90
Rode WS6 Deluxe Windshield	\$ 79.98
Rode Boompole for Rode NTG1, NTG2 and Video Mic (10')	\$ 319.96
DJI Osmo Handheld 4k Camera and 3-Axis Gimbal	\$ 1,044.00
Olympus WS-852 Digital Voice Recorders	\$ 193.96
Audio-Technica ATR3350iS	\$ 87.80
Pearstone Standard Cable HDMI to HDMI 6'	\$ 35.80
Pearstone Standard Series Cable HDMI to HDMI 1'	\$ 35.04
Battery for Monitor	\$ 231.20
Canon Battery Pack LP-E6N	\$ 359.40
Zoom H5N PRO Digital Multitrack Recorder - 2016 Version	\$ 1,040.00
Canon EOS C100 Mark II Cinema EOS Camera with EF 24-105mm f/4L Lens	\$ 4,499.00
Canon BP-955 Intelligent Lithium-Ion Battery Pack (5200 mAh)	\$ 548.00
5D Mk IV DSLR Camera (Body Only)	\$ 12,599.60
Sony NEX-FS700R Super 35 Camcorder	\$ 4,599.00
Lowel DV Creator 44 Kit, TO-83 Case	\$ 4,399.52
SONY 4K MXCAM Super 35mm Camera	\$ 3,499.00
Ikan VH8 8" Camera Monitor with Canon E6 Battery Plate	\$ 378.24
Dana Dolly DD75ADPT1 Mitchell to 75mm Ball Adapter	\$ 66.75
ProAm USA Professional Fluid Tripod Head (75mm Bowl)	\$ 72.70
SHAPE Quick Handle Rod Bloc and Grip Relocator Kit for Canon C Series Cameras	\$ 285.00
DJI Osmo Intelligent Battery (High Capacity)	\$ 63.00
Nebula 5100 3-Axis Handheld Gimbal Built-In Encoder	\$ 652.09
Rokinon 14mm f/2.8 IF ED UMC Lens For Canon EF	\$ 318.36
Canon EF 8-15mm f/4L Fisheye USM Lens	\$ 1,246.50
Canon - EOS Rebel T6i DSLR Camera with EF-S 18-55mm IS STM Lens - Black	\$ 1,295.40
Canon 100ES Shoulder Bags	Free
Pelican iM2050 Storm Case (Wireless Lav Kits)	\$ 83.26
Manfrotto 502 Video Head MVH502AH	\$ 789.75
Impact Atom Clamp with Ratchet Handle	\$ 55.52
Pelican 1200 Case with Foam(7" camera Monitors)	\$ 208.15
Manfrotto MT055XPRO3 055 Aluminium 3-Section Tripod with Horizontal Column (Black)	\$ 988.00
Pelican #1510 Case w/foam	\$ 151.57
RETURN	\$ (4,599.00)



RETURN	\$ (4,399.52)
RETURN	\$ (79.98)
Metabones Canon EF to Sony E Adapter	\$ 399.95
Inspire replacement propellar 1345T	\$ 11.99
Inspire replacement propellar 1345T - install kit	\$ 4.99
Inspire replacement propellar 1345	\$ 9.99
Inspire replacement propellar 1345 - install kit	\$ 3.99
Sennheiser Replacement Clip for Microphone	\$ 22.29
Amazon lightweight Tripod	\$ 53.18
Sony Omnidirectional Stereo Microphone	
Sony Wireless Microphone	
Sennheiser CL 1-N Output Cable	
Wasing Super Bright Rechargeable LED	
MaxBoost 300W Power Inverter	\$ 297.58
Apple Lightning to USB Cable	
Fotodiox Pro 5'x7' Soft Diffuser	\$ 131.33
CAME-TV Blotzen 60w Fresnal Lights	\$ 1,490.00
B&H Backpacks	\$ 152.00
SKB iSeries Case for Canon C300	\$ 199.99
10'x10' Instant Pop-Up Canopy	\$ 479.88
Carry case for new cameras	\$ 55.71
RETURN	\$ (83.67)
RETURN	\$ (255.86)
GRAND TOTAL	\$100,043.32

NORTH CLACKAMAS SCHOOL DISTRICT (NCSD)

Clackamas County provided a grant of \$100,000.00 for FY 2016-2017 to the NCSD for the continued equipment acquisition for the Educational Access channel.

In exchange for the contribution, NCSD agreed to continue to provide programming for the educational access channel. The North Clackamas School District contributed over \$210,000 toward operation of the channel, excluding facility support.

LOCATION

The channel is located at two facilities. The main studio is located at the Schellenberg Technology Center, 14450 SE Johnson Road, Milwaukie and the playback is located at the Sabin Skills Center, 14211 SE Johnson Road. The two facilities are linked by a fiber optic connection.



PROGRAMMING

The NCSD Educational Access Channel exceeded the annual average requirement of 30 hours of video programming per week. Total hours of programming for July 1, 2016 to May 31, 2017 was over 5,000 hours. A district reader board and audio from KMHD was on the air when video programming was not showing. We did have a break in programming during the installation of the new server during the month of January. A district supported website enables selected video programs to be streamed on demand. The department also has a YouTube channel to run programming. Our radio station is now live and can be heard on the Internet. We are also paying fees to ASCAP, BMI and other licensing companies for use of copyright music.

STAFFING

The North Clackamas School District's Technology and Information Services Department employs one full-time certified video production specialist who supports the access channel. In addition, the Sabin-Schellenberg Professional Center (SSC) employs one full-time Certified Instructor. Thanks to a grant from the State of Oregon, the department was able to hire an engineer for the television studio and one for the radio station on a contract basis.

STUDENTS

Currently, there are approximately 240 students producers enrolled in media production programs. We expect a higher number next year as we add in a journalism class to the department.

OVERALL EDUCATIONAL ACCESS GOALS

- Expand opportunities to middle school students in the district to learn more about professional broadcasting projects. We will continue to connect with middle school students to learn more about programming and the broadcasting field.
- Inform local residents about the organizations, operations, and services of the NCSD schools and departments.
- Provide students interested in broadcasting a hands-on learning experience and a place to showcase their educational projects.
- Provide and maintain, through the advice of a professional technical skills advisory panel, professional broadcast standards, equipment, and education so students are college and career ready.

ACCOMPLISHMENTS

- For the fifth year in a row, students in the program swept the regional competition at the Clackamas Community College Skills Competition. They took top honors in both broadcast journalism and video production.
- Our students provided 2 ½ hours of live programming on election night in November. Pre-production included interviews with Congressional candidates from Oregon, gubernatorial candidates, local candidates and state and local issues. For the first time ever, we used SKYPE to have students at the post-election night parties to provide coverage from both the republican and



democratic victory parties with live reports. The students in the field were able to interact with our student and adult anchors throughout the night and got exclusive interviews. Former Oregon House Speaker Dave Hunt joined the student anchors and former radio news broadcast Bill Cooper who provided insight and commentary. Reviews of the program were excellent from the community.

- Students worked with the Theater Department at Clackamas High School to produce promotional videos for upcoming theater productions this year.
- We began discussions and implementation of Virtual and Augmented Reality in our program this year. Thanks to another grant from Oregon, we expanded our curriculum to include understanding the new technology. Our Advisory Panel now includes the Executive Director of Oregon Storyboard. We are in conversations with the county, Clackamas Community College, and others in order to determine where this technology will connect to high wage jobs of the future.
- Students continue to produce a variety of programming from news, music videos, original programming, and productions for various district departments who sought student production crews this year.
- Students have been able to produce a number of district programs including those that provide information for families who do not have English as their first language. Those productions enable parents to better understand how to help their high school students apply for college. Another production was completed as our district opens up full-day kindergarten so students can learn how to safely board and ride school buses for the first time.
- Our department continues to be strong involved members with the Oregon Media Producers Association. We are the only high school broadcasting department recognized as members in Oregon. Students have been able to work with professionals and to interview AFTRA/SAG members as part of the cast on an independent production.

FUTURE PLANS

- Our department now includes a new journalism class where students will be in the field covering local and school news that will be on our webpage along with a local newscast for the cable channel
- Thanks to the expansion of the green screen, we will continue to update the television studio with virtual sets and make room for regular newscasts
- Students will again create their own script to produce a full-length feature film worthy of national competition
- Bring additional live studio and location productions to cable and especially to the web
- We will invite local and national lawmakers into our studio to take part in Town Halls that will be broadcast on the cable channel



- Provide additional support and training to produce a variety of programs to be cablecast and uploaded for streaming
- Prepare middle school students for our classes by inviting them to our studio to take part in programming
- Expand our sports programming with a new set for student sports coverage

EQUIPMENT ACQUISITION

Engineer/Design System Integration for the Video Server for TIS	\$ 571.25
Engineer/Design System Integration for the Video Server for TIS	\$ 1,425.56
Canon Camcorder, Battery Pack, Battery Charger, Memory Card, Shoulder Bag	\$ 560.96
1/2 Day Broadcast Pix training for Deborah Barnes	\$ 225.00
(4) Canon BP-727 Battery Pack, Hosa 6.6' Cable	\$ 394.45
HD Playback Systems Project (Including installation materials and freight)	\$ 9,347.00
HD Playback Systems Project (Including installation materials and freight)	\$ 13,062.00
HD Playback Systems Project (Including installation materials and freight)	\$ 718.00
Green Screen project for SCH TV studio	\$ 33,249.72
News Plus Broadcast Package	\$ 40.00
TX Multi - Limited to 1 in, 1 out	\$ 4,145.00
Rack Component wiring and assembly	\$ 11,420.00
64GB Memory Card	\$ 99.99
Research, Meetings, Spreadsheets, Printing, AutoCad Drawings and Mileage for Tighrope	\$ 984.95
Sennheiser and Clear-Com Items for SSC	\$ 5,873.06
2 DSLR Video Rig Set System	\$ 133.98
Reset and position studio lights	\$ 600.00
Shoe covers, dvd burners, hard drive, batteries	\$ 214.54
On-site Install and Configuration: (4 hrs) Quicklink, (8 hrs) Intercom, (3 hrs) Training and final testing	\$ 1,125.00
Docking Station, Barcode Labels, Barcode Scanner, Speaker System	\$ 400.77
Studio Lighting	\$ 82.92
10 Pack Microphone Cables	\$ 39.99
(10) Stereo Mini-Plug Cables	\$ 69.50
Television (Rm 202 replacement)	\$ 799.99
Eclipse (10 pack)	\$ 24.99
DVD Player	\$ 109.99



HDMI Splitter	\$ 12.54
Light Kits, Bulbs, Light Reflector	\$ 312.30
iDealshare VideoGo for Mac License	\$ 49.99
(3) Extron DSC HDMI to HDMI Scaler	\$ 1,410.14
RG6 F-Connectors	\$ 14.79
Certified Pre-Owned ELC-8240	\$ 7,950.00
(3) Ravelli Tripod, (3) Canon Lens Cap	\$ 143.52
Extron RSU 129 Universal Rack Shelf Kit	\$ 38.48
(2) Manfrotto Grub Screw Set (Tripod Repair)	\$ 15.40
Accell HDMI Cable w/ Locking Connectors (2m)	\$ 24.09
Wisetiger 5ft HDMI Cable (2pk)	\$ 9.99
Maximm HDMI Cable 3ft (3pk)	\$ 12.99
(3) Canon EOX 70D Camera Bundle	\$ 3,237.00
On-Camera Microphone, (2) Energizer AA Batteries, (2) On-Ear Headphones	\$ 171.79
(4) Sennheiser Body Transmitter, (2) Sennheiser Handheld Transmitter	\$ 4,260.00
NCSD Annual Gold Support (4/28/2017-4/27/2018)	\$ 700.00
(5) Pro-Panel 1x2 LED Light, Installation	\$ 11,000.00
Installation of green screen in studio	\$ 2,757.23
GRAND TOTAL	\$117,838.86

OREGON CITY SCHOOL DISTRICT (OCSD)

Oregon City School District participated in PEG funding for FY 2016-2017, for the fourth consecutive year. The Clackamas County Public and Government Affairs Department awarded the OCSD \$20,000 to finish the upgrade of the OCSD Board Room audio and to upgrade existing camera equipment. The broadcast equipment is used for live broadcast of various school board meetings throughout the school year. A final PEG project was to purchase a small portable video production system for Oregon City High School's Oregon City (OC) TV student group.

OC TV will use this equipment to expand their production capabilities and provide content to Willamette Falls Media Center (WFMC) to broadcast this student produced content. This live broadcast of district meetings and broadcast of student produced programming is an important part of the district's overall communication strategy to reach households throughout the school community and provide opportunities for student led productions. The board meetings are broadcast live by WFMC and then replayed at various times throughout the following weeks. In addition, the school developed programming that will be recorded and broadcast at later dates/times by WFMC. The OCSD Board Room is strategically located across the street from WFMC in



Oregon City. Several meetings of the OCSD Board are also recorded in the board room and then rebroadcast at a later time via WFMC and the public access channel.

LOCATION

The Board Room of OCSD is located in the Jackson Campus at 1306 12th Street, Oregon City, Oregon. A fiber optic link connects the OCSD Board Room to the WFMC, located at 1101 Jackson Street, Oregon City, Oregon. Programming is currently broadcast and recorded at the Jackson Campus location and then transferred to the WFMC for later rebroadcast if necessary. Programming via the WFMC mobile production unit will be recorded and broadcast at later times via WFMC.

Oregon City High School's OC TV is located at Oregon City High School and provides daily/weekly and special event broadcast content that will be delivered electronically to WFMC and rebroadcast in on a timely basis. We hope to see a significant increase in student programming on our local public access channel.

PROGRAMMING

The Oregon City School District provided an estimated 60+ hours of original programs including Board of Education and Budget Committee meetings. Many hours of rebroadcast allows OCSD patrons to be informed of current issues and decisions of the District by later viewing on the WFMC Public Access Channel. In the 2017-18 school year, the District hopes to see at least the same amount if not more of student produced content from throughout the District. OC TV staff are very excited at their expanded production capabilities and strengthened connection to WFMC.

STAFFING

The OCSD contracts with an hourly production assistant to facilitate the live broadcast and recording of almost every Board of Education meeting throughout the year. District staff provides support to the production assistant as needed to ensure quality programming and facility support. OC TV is staffed by students from Oregon City High School assisted by a paid staff advisor and other volunteers.

ACCOMPLISHMENTS

- Finished installation of new audio amplifiers and mixers begun in 2015-16
- Purchase of upgraded cameras to prepare for eventual transition to HDTV or 4K
- Purchase of portable production equipment for student produced programming

FUTURE PLANS

- Emphasize student produced programming using PEG funds for equipment acquisition
- Continue to analyze and upgrade broadcast equipment
- Add live digital streaming to broadcast capabilities and district/school website
- Continue to explore possibility of HD broadcast capability



GOALS

- Provide OCSD patrons multiple, high quality options to view Board of Education meetings
- Deliver high quality student programming to district households using fixed and mobile production capabilities
- Inform residents about the student activities, operations and decisions of OCSD
- Use cable broadcast to increase the cost effectiveness of public information efforts by the district
- Support WFMC with high quality programming for the local Public Access Channel

EQUIPMENT ACQUISITIONS

Finish Audio Upgrade – new amplifiers and mixers	\$ 4,990.32
Portable student production equipment	\$ 2,629.13
Camera Upgrade – 4K and HDTV cameras	\$11,683.14
GRAND TOTAL	\$19,302.59

WEST LINN-WILSONVILLE SCHOOL DISTRICT

West Linn-Wilsonville Schools broadcast into the communities of West Linn and Wilsonville. The channel is used to re-broadcast the most recent school board meetings and to run reader board style announcements about upcoming events. The school district did not utilize PEG funding from Clackamas County for FY 2016-2017.



GOVERNMENT ACCESS

CLACKAMAS COUNTY GOVERNMENT CHANNEL (CCGC)

The Clackamas County Public and Government Affairs Department (PGA) administers the CCGC under policy direction of the Clackamas County Board of Commissioners (BCC). PGA also regulates cable operations of nine cable companies and resolves disputes between the residents of Clackamas County and the cable providers. CCGC serves the public interest and promotes the Clackamas County communities while making government more accessible to its residents.

LOCATION

The video production and channel playback facilities are located in the Public Services Building at 2051 Kaen Road, Oregon City, Oregon. A Tightrope playback system cablecasts the CCGC from this facility through a fiber optic line to the Comcast head end.

The BCC hearing room is located adjacent to the government channel playback facilities. The hearing room is equipped with four wall-mounted robotic cameras, which are linked to an adjoining control room. Weekly meetings of the BCC are cablecast live from that location. Land Use Hearings and special meetings originating from the same facility are also carried live.

Across the campus in the Development Services Building, we have installed robotic cameras and a switching system in the auditorium for recording of budget meetings, presentations, and other public events.

More detailed information can be found on CCGC's web site at www.clackamas.us.

PROGRAMMING

CCGC channel is carried on the following channels:

- Comcast -- Channel 30
- Beaver Creek -- Channel 98
- Canby Telcom -- Channel 21
- Clear Creek Communications -- Channel 20
- ColtonTel -- Channel 63
- Frontier Communications -- Channel 40
- Reliance Connects -- Channel 75
- Wave Sandy -- Channel 9
- Wave Canby, Molalla, and Outlying Areas -- Channel 15

County and community announcements are carried in a reader board format when programming is not airing.

STAFFING

In FY 2016-2017, CCGC had 12 professional producers on contract. These producers created the majority of the programming material carried on CCGC and performed a



range of tasks including editing, script-writing, camera operation, program host, and animation.

Full-time staff include a Video Communications Specialist and Video Network Systems Specialist with support from other staff within Public and Government Affairs. The Video Network Systems Specialist maintains more than \$400,000 of production equipment, playback operation, video streaming system, and the live broadcast control facility.

ACCOMPLISHMENTS

- Won nine programming awards
- Increased promotion of channel programming on social media
- Upgraded the robotic cameras in hearing room
- Installed Broadcasts Pix system and robotic cameras in auditorium to record budget meetings and other presentations

FUTURE PLANS

- Expanding storage space in facility for equipment
- Purchase and install equipment for additional live switching location of government meetings and events
- Utilize shared mobile van unit
- Have cable carriers provide HD delivery options
- Develop production partnerships to expand creative resources
- Upgrade switching equipment in hearing room

BUDGET

CCGC spent \$114,772 in PEG fees on capital equipment expenditures during FY 2016-2017 and \$163,500.59 in video production services.

Adaptors for teleprompter	\$ 79.98
POE+network switch for BCC cameras	\$ 159.99
SDI to HDMI Converter	\$ 85.00
GoPro Cameras and accessories	\$ 983.70
Studio speakers for edit suites	\$ 299.97
bench tools	\$ 183.94
GoPro case and velcro fastners	\$ 145.16
Ergotron desk	\$ 2,392.70
Ergotron Desk Mount LCD arm	\$ 292.10
Ergotron outboard CPU siderack	\$ 175.27
Ergotron 12 receptacle powerbar	\$ 183.96
PXWFS5 Cameras	\$ 16,986.00
BP-V60 Batteries	\$ 1,560.00
BCU2 Dual battery charger	\$ 1,185.00



Metabones Tsmart	\$ 439.00
Sony 18-110 G055 lens	\$ 6,992.00
Portabrace RIG-Fs5Q	\$ 522.00
Miller DS10 Solo 75	\$ 4,155.00
AVX-MKE2 Lav. Mic	\$ 1,618.00
95CHZE Haze Filter	\$ 512.00
16 Channel Audio Mixer	\$ 974.98
Slim HDMI Cables	\$ 34.79
Audio cables, mic stands & mics	\$ 672.80
Right angle power cord for mixer	\$ 13.22
Network switch for playback system	\$ 61.96
No Flat wheels for production cart	\$ 248.99
Audio Cables	\$ 36.06
HDMI TX & RX kit	\$ 293.96
Audio adapter kit, video adaptor, cables	\$ 187.70
LCD field monitor kits	\$ 1,199.98
Hard Drive enclosures and drives	\$ 1,159.88
Camera rain jackets and wheeled equipment bag	\$ 759.81
Studio lighting kit for audio booth	\$ 210.00
Replacement headsets for edit suites & SD card for GoPro	\$ 269.46
Headphone & rack lights	\$ 419.83
Video capture card	\$ 1,340.00
replacement fan for battery charger	\$ 14.99
replacement cover for tripod head	\$ 20.05
Rear wheel set for production cart	\$ 61.96
Card reader for archive station	\$ 65.96
Parts for broken tripod	\$ 31.44
Sony E PZ 18-110 mm F14G Lens	\$ 6,594.00
Panasonic AWRP120 Camera controller	\$ 3,868.00
Panasonic AW-HE130KP Camera	\$ 37,000.00
Nigel B NB-AVCB Mounting Bracket	\$ 1,770.00
4K TV Monitor	\$ 649.99
Plastic Wire Clamps	\$ 1.54
USB Extension cables	\$ 24.80
Power distribution panel	\$ 69.99
VESA monitor mount adaptors	\$ 25.98
1/4 inch audio cables	\$ 74.66



M8 bolts for VESA monitor mount	\$ 6.52
Sync generator and XLR to RCA audio cable	\$ 192.24
Monitors, recording deck, accessories for broadcast console build	\$ 2,485.69
Replacement batteries for PA system	\$ 53.98
Audio mixer, drives, power back up, other accessories for broadcast console build	\$ 878.32
Broadcast console	\$ 2,209.95
Vaddio HD Video Camera with quick connect CCU & Installation	\$ 7,498.50
Replacement caster wheel for production card	\$ 62.69
POE+ switch for new BCC Camera	\$ 421.00
Remote Pilot Exam Fee	\$ 150.00
Registration fee for UAS	\$ 5.00
Landing pad for UAS	\$ 59.99
Ultrabright freestand teleprompter	\$ 999.00
UAS/Teleprompter field computer and case	\$ 2,361.67
Curved monitor for broadcast booth	\$ 279.99
GRAND TOTAL	\$114,772.09



**INSTITUTIONAL NETWORK SUMMARY (I-NET)
CLACKAMAS BROADBAND EXCHANGE (CBX)**

The CBX network is designed to provide low cost, point-to-point network access to public and commercial entities throughout Clackamas County including libraries, medical facilities, police, fire stations, and other public agencies. Broadband connections using CBX will be at less cost and will have higher bandwidth speed and more capacity than existing I-Net connections. For example, a pair of dark fiber that typically provides 1 gigabit of bandwidth can be obtained for \$255.00 per month for public institutions.

The design of the network infrastructure has allowed Clackamas County to plan for future growth. The CBX network interconnects with local service providers to allow them access to the state-of-the-art infrastructure in order to enhance and expand their current services to local businesses and households. CBX is part of the comprehensive Clackamas County Communications Plan to increase high-speed communications within the County.

CBX had a busy FY 2016-2017, building fiber laterals to more than 13 new sites and deploying more than \$1.5 million in new fiber infrastructure within the City of Lake Oswego. Due to this deployment, the Lake Oswego School District now has an I-Net and dark fiber connecting all of their school locations. This I-Net was completed by installing new fiber backbone infrastructure over the Sellwood Bridge to connect the Lake Oswego fiber to the rest of the CBX I-Net, using PEG funds. The Sellwood Bridge fiber project was completed in collaboration with the City of Portland.

CURRENT GOALS

- Incorporating a public-private partnership among government, non-profit and for-profit entities, and other key community stakeholders
- Deploy fiber to areas not covered by the current network, most notably remote areas and areas west of the Willamette River
- Deploy fiber to state sites to better connect Clackamas County to the Oregon Department of Administrative Services
- Spur economic growth in designated County industrial and enterprising zones

BUDGET

Description	Expense	Revenue
PEG Funding Balance carryover from FY 14-15		\$10,524.00
CBX Highway 43 Project from FY 15-16/ Sellwood Fiber Path reimbursements from City of Portland		\$50,979.70
REMAINING PEG FUNDS		\$61,504.70