TVMT Long-Term Planning Replacement Cycle Update – 2015 Prepared for Legislative Council By K'Lynn Sloan-Harris November 2015 – updated version

TVMT was established by the 2001 Legislature to provide gavel-to-gavel coverage and is administered by the Legislative Services Division. TVMT has been funded by a combination of various sources in the past, including state special revenue from lobbyists fees, general fund from the LSD portion of past Feed Bills, carryforward, and one-time only funding. In the 2009 session, TVMT funding was consolidated under a New Proposal to make funding more predictable and to enable planning. The Legislative Council had a TVMT Subcommittee in the 2007-2008 interim that recommended an expansion in transmission across Montana through Bresnan Communications (now Charter Communications) and the consolidation of the budget. At that time it was noted that the Senate cameras needed replacement and workstations needed upgrades (estimated to cost \$61,000 for 3 cameras and 3 workstations, but prior to HD). Because of the budget crunches in 2009 and 2011 sessions for the 2011 and 2013 biennia, no funding was requested for replacement and a limited present law budget was approved for maintenance and upgrade.

In 2012, we were informed that our current cameras were obsolete and could no longer be fixed. One camera in room 152 and a camera in the Senate chamber quit working. This presented an opportunity for upgrading to digital equipment. A phased approach was adopted to eventually replace all the analog, legacy equipment in the Capitol's broadcasting infrastructure.

Phase I (completed Fall 2012)

Phase I was accomplished in the fall of 2012 using Feed Bill funds approved by the Speaker and the President for a total cost of \$91,026. We were able to replace three Senate cameras with HD cameras and upgrade one workstation to HD capable equipment.

Phase II (completed Fall 2013-2014)

Phase II was proposed for the 2015 Biennium and was approved as a New Proposal for a total cost of \$275,000. This phase purchased the equipment to complete an HD upgrade of the infrastructure, which was required to transmit an HD signal had to be completed before further rooms, cameras and workstations could be upgraded to the new HD equipment. The equipment purchase came to a total of \$100,627, as most of the labor costs for Phase II were included in Phase II projects, which were installed at the same time. This phase also included digital cards to upgrade our cameras in the smaller committee rooms on the third and fourth floor to convert them to a digital (but NOT HD) signal compatible with the new digital infrastructure.

Phase III (completed 2014)

The timing of this phase was accelerated by the summer 2014 HVAC system projects in the first floor hearing rooms. All AV equipment needed to be pulled out of the hearing rooms during HVAC construction, so the upgraded equipment was installed in the rooms once the construction was complete. This large phase included the first floor hearing room upgrades, and two more production workstations in the basement. Additionally, the cameras were upgraded in the House Chamber, and the Old Supreme Court Chamber (Room 303.) The entire cost of equipment and labor for Phase III was \$346,078.

Phase IV (in progress)

The goal of Phase IV is to replace the rest of our legacy equipment (original audio and video equipment that is most at risk for technical failure) and the rest of the obsolete analog broadcasting equipment. The remaining cameras on the third and fourth floors (18 cameras), sound systems for rooms 405, 422, 455,

and 472, and the projector in room 405 should be upgraded. The sound systems on the fourth floor are some of the oldest in the building. This phase will also make sure the sound systems in the rest of the third floor hearing rooms will continue to function and make sure the equipment can continue to be serviced. The last three production workstations will be upgraded to digital equipment. These phased upgrades will enable us to continue our mission of compiling the recording of legislative events in the highest quality possible and allowing the public transparent access to our activities through our broadcasting services. Legislative Council approved requesting a one-time-only appropriation from the IT reserve fund for \$363,631 to complete the project and it was approved by the 2015 Legislature.

Cameras in 3rd and 4th Floor Hearing Rooms

The original plan for Phase IV included figures for new HD cameras in rooms 335, 350, 317, 405, 422, 455, and 472. However, our programming is not going out over television broadcast in HD. An HD signal is only available on the Closed Circuit TV system in the Capitol, so it was decided that the need to update these cameras was not imminent, and can be done at a later time. The existing cameras in these rooms have been fitted with digital cards, effectively converting the signal from analog to digital to feed our system.

Room Number	Equipment Needed	Cost
Phase I – completed 2012		
Senate Chamber/ Workstation in Room 1	HD Cameras for Senate Chamber, and upgraded corresponding production control workstation in Room 1	
	Phase I Total	\$91,026
Phase II – completed 2013-2014		
Room 1	HD/Digital Infrastructure Upgrade including router, QC monitors, waveform/rasterizer, HD modulators, updated recorders, distribution amplifiers, video processors, digital cards for 3 rd and 4 th floor cameras, equipment for future workstation upgrades	
	Phase II Total	\$100,627 (equipment only)
Phase III – completed 2014		
House Chamber + workstation	New cameras in House Chamber, and installation of HD upgraded equipment purchased in Phase II. (some of this labor paid for installing the upgrades in Phase II)	\$93,532
Room 102	New cameras, new sound system, presentation interface and direct feed of projector input to Room 1	\$45,129
Room 137	New cameras, new sound system, presentation interface and direct feed of projector input to Room 1	\$58,823
Room 303	New cameras and workstation upgrades (What about sound system?)	\$27,631

Room 1 (Media Center)	Three (3) more production workstations – (AV switcher, camera control, monitors, recording equipment)	\$30,882
Room 152/172	New cameras, new sound system, presentation interface and direct feed of projector input to Room 1	\$90,081
	Phase III Total	\$346,078
Phase IV – Current		
Remaining Productions Workstations (Room 1) – In Progress	Final monitors, AV/Digital Mixers, CG packages, installation	\$90,580
Servers– In progress	New broadcast servers for storage and programming TVMT channel	\$59,164
Room 317 – upcoming	Investigate sound system health and explore if need exists for any upgrades. Previous estimate no longer applies.	Not quoted yet
Room 335 – upcoming	Investigate sound system health and explore if need exists for any upgrades. Previous estimate no longer applies. exists for any upgrades.	Not quoted yet
Room 350 – upcoming	Investigate sound system health and explore if need exists for any upgrades. Previous estimate no longer applies.	Not quoted yet
Room 405 – upcoming	Updated sound system and microphones, presentation equipment including integrated phone conferencing, video monitors (instead of projector), updated control panel and rack	\$25,169** (estimated equipment only)
Room 422 – upcoming	Updated sound system	Not quoted yet
Room 455 – upcoming	Updated sound system, microphones and rack	\$12,874
Room 472 – upcoming	Updated sound system, microphones, proposed presentation equipment included integrated audio and video conferencing, updated control and rack.	\$44,690
Current Labor estimation for rooms 405/455/472		\$54,545

Cl0425 5316fhxa.pdf