

Community Hall Recording System; OPTION 1

PURPOSE

In a world that is growing more and more technical, having the ability to record and save public meetings allows for residents to watch meetings they were unable to attend or wish to watch from the comfort of their own home. By recording meetings, it also allows for better record keeping, readily accessible information, and clear audio of meeting discussions.

PROJECT INSTALL

The cameras would be mounted in two spots that allow for a wide range of coverage. The coverage main focus mounts would be the audience, the commenters, and the board. This allows to cover anyone who is talking or presenting. It would be recommended that the existing microphone system be integrated into the video system to ensure proper audio recording, while limiting unrequired expenditures.

MATERIALS NEEDED

This project will require a list of items to provide quality video and audio recordings. The items we need, as a rough idea, are as follows:

- (2) HD, 360° cameras.
 - (1) camera, front focused, covers the board, presenters, accessory personnel.
 - (1) camera, rear focused, covers the audience, commenters, overall room.
- (1) System/Camera Controller
 - Allows to control the movement of cameras, switch cameras, and adjust camera settings. These can be programmed with preset focus locations.
- System Recorder
 - Records audio and video.
- TV Studio
 - Gives the ability to stream video to recording device.
- LCD Screens
 - Ables operator of the system to preview the video while recording to ensure proper camera is being utilized.

PROJECT OVERVIEW

The cameras for this system will allow to show the entire room, speakers, and materials being presented.



The green circle to the left would be an ideal position for a camera because it can adequately show the community hall in its entirety. Allowing the viewers to see the audience as well as people adding comments at the commenting table (directly in front of the board table).



The Red circle to the left would be an ideal position for a camera because it can present the board and accessory personnel, such as the township solicitor, engineer and other officials.

By installing a camera in this location, it will give the audience a view such as these.



This camera location allows for a clear picture of the board from the view of the audience.



The camera can also take video of the presenter's location.



Finally, the front facing camera can take video of accessory personnel and any power point displays that may be on the screen.



The cameras that would best suit this project are the Sony SRG360s. They offer 360-degrees of rotation and a 65-degree viewing angle in HD. They are roughly 6" wide, 8" deep, 7" tall.

EXISTING AUDIO FEATURES



Board table and microphones.



Existing sound system and amplifier controls.

The existing microphones and sound system will provide clear audio, while utilizing existing features, allowing for less expenditures for audio.



Commenters microphone.

COST ESTIMATE

Video recording systems fluctuate in price due to quality of product ability. The average cost however for the system that would be sufficient for Worcester Township is as follows:

<i>ITEM</i>	<i>PRICE ESTIMATE</i>
<i>Cameras</i>	\$3,200.00/each; \$6,400.00
<i>Controller</i>	\$1,700.00
<i>System Recorder</i>	\$1,500.00
<i>TV Studio (system streamer)</i>	\$1,000.00
<i>LCD Screens</i>	\$800.00
<i>Planning, Installation, Materials</i>	\$8,000.00
<i>Miscellaneous parts/Expenditures</i>	\$1,000.00
<i>TOTAL ESTIMATED COST</i>	\$20,400.00

Access Television; Option 2

PROJECT OVERVIEW

Broadcasting public meetings live will allow for residents to see the meeting as it happens. Having the technological ability to broadcast a meeting gives many benefits, but also comes with many added costs. The materials required to broadcast on live television far surpasses that of the options noted before.

MATERIALS NEEDED

This project will require a list of items to provide quality video and audio recordings. The items we need, as a rough idea, are as follows:

- (1) HD, 360° camera.
 - (1) camera, front focused, covers the board, presenters, accessory personnel, and the commenters/audience (from the back).
- (1) System/Camera Controller
 - Allows to control the movement of cameras, switch cameras, and adjust camera settings. These can be programmed with preset focus locations.
- System Recorder
 - Records audio and video.
- TV Studio
 - Gives the ability to stream video to recording device.
- LCD Screens
 - Enables operator of the system to preview the video while recording to ensure proper camera is being utilized.
- Latronix and Server
 - Allows the video and audio feed to be broadcasted onto local television. This also gives the ability to have a constant feed of township information on television.
- Verizon and Comcast equipment
 - Allows township video to be broadcasted on Verizon and Comcast Municipal Channels.

PROJECT INSTALL

Similar to option #1, a recording system, the same materials will be needed and installed to broadcast the meetings. However, there will be additional items needed in order to broadcast public meetings live. Verizon and Comcast would both need to install equipment at the Community Hall that gives the ability to stream our meetings to residents. This equipment would be provided and installed by the cable companies at little to no cost to the Township, although some equipment will need to be purchased to connect into their services and broadcast. The overall added cost to broadcast live is roughly \$14,500.

COST ESTIMATE

Video recording systems fluctuate in price due to quality of product ability. The average cost however for the system that would be sufficient for Worcester Township is as follows:

<i>ITEM</i>	<i>PRICE ESTIMATE</i>
<i>Cameras</i>	\$3,200.00
<i>Controller</i>	\$1,700.00
<i>System Recorder</i>	\$1,500.00
<i>TV Studio (system streamer)</i>	\$1,000.00
<i>LCD Screens</i>	\$800.00
<i>Planning, Installation, Materials</i>	\$8,000.00
<i>Miscellaneous parts/Expenditures</i>	\$1,000.00
<i>Broadcasting Equipment & Connection</i>	\$14,500
<i>TOTAL ESTIMATED COST</i>	\$31,700.00

Overview & Recommendation

When reviewing the above options there was also the possibility of having Methacton School District record Township meetings. However, after further research, Methacton has decided to outsource their meeting productions. The two options that would be reliable and serve the Township better for the long term, are the options mentioned above. The options above come with a large initial cost, but have little to no maintenance once the systems are installed.

Option 1 is recommended for many reasons aside from being cheaper than option 2. Access television offers residents the chance to view meetings live, however they will not have direct access to the meetings after that point. By recording the meetings and uploading to the internet, it gives residents the opportunity to view the meetings at their convenience. Furthermore, when access television is used it is often a requirement to have a constant stream of messages of events occurring in the Township. This leads to more work from the Township in conjunction with more costs and annual maintenance.

While researching this project, it was found that many municipalities opt into uploading public meetings online rather than live-broadcasting them on access television. Option 1 will give the Township the best ability to record meetings while providing clear audio and video to residents. Starting with option 1 will also provide the Township a solid foundation for recording meetings while maintaining the option to broadcast live video on access television in the future. The recording system outlined in option 1 can be operated and maintained by one person, with little to no post production required. In conclusion, option 1 will best serve the Township.