



Hamilton

INFORMATION REPORT

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	March 2, 2018
SUBJECT/REPORT NO:	Budget Referred Item: \$90,000 operating budget enhancement to support “on-demand” production services (PW18027) (City Wide)
WARD(S) AFFECTED:	City Wide
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SIGNATURE:	

Council Direction:

On July 14, 2017, Council approved all of the recommendations made in Report CM16006(a)/PW17058 (Copy hereto attached as Appendix A) including recommendation (c) as follows:

“(c) That staff be authorized to issue a new Request for Proposal for “on-demand” production services for select meetings including Council Meetings and some Committee meetings with an upset limit of \$90,000 annually funded from the City Hall Facilities Operating Budget Department ID#791501 and that staff put forward a 2018 operating budget enhancement of \$90,000/annually to support this service moving forward.”

At the General Issues Committee budget meeting of February 16, 2018, the above noted \$90,000 enhancement was presented and discussed as a Referred Budget Item. The General Issues Committee tabled the item subject to receiving a staff report with further information justifying the request.

This report provides the requested information in support of justifying the need for the operating budget enhancement of \$90,000 annually to be used for procuring “on-demand” production services (Audio Visual (AV) Specialist) in order to fully optimize the use of the new high definition live streaming system.

Information:

In January of 2018, the City made an investment of approximately \$350,000 into a sophisticated system that integrates high definition audio visual streaming equipment

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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with customized software. The system is installed in both Council Chambers and in Room 264 at City Hall.

For the first time, the City is capable of broadly broadcasting its own video on mass. This is a new and exciting opportunity that helps raise Hamilton to a new level but it should be managed carefully and with some prudence to ensure that technically it is of the highest professional quality so that it can become the factual (unedited) “go-to” reliable record on Council business.

However, the system is fairly complicated and includes microphones driven by software that control 5 cameras. The audio output is mixed with the video in real time to produce a live stream. There are outputs to the new agenda management system (Escribe), to Cable 14 and, soon, to the City’s dedicated YouTube channel.

The system is, in fact, designed to operate automatically. Often an operator has very little to do during a meeting and may even leave the meeting after it is well underway. However, from the beginning of the project, staff has strongly recommended that the services of an AV Specialist (operator) are still required “on-demand” in order to ensure that Council is professionally represented. Council was first informed of this recommendation at the beginning of the project, through the July 10, 2017 report (see Appendix A page 2 of 6).

“In addition, while the new video system is designed to work in automated mode, meaning that the cameras will pan to the speakers based on microphone activation, staff recommends issuing a further Request for Proposal for on-demand production services whereby an operator would manage the camera switching and ensure a high quality production including the correct speaker is on camera, proper graphics (speakers names) and real time camera switching occurs during the livestreaming of meetings.”

Reasons for recommending AV Specialist Services:

The staff recommendation for funding and procuring these services is based on the following reasons:

- a) For the first time, the video feed is leaving the City’s network and entering into the public realm, *in real time*. Once it is out in public it cannot be retrieved. Therefore, it is prudent to monitor and have control over the quality of the product going out.
- b) Camera adjustments can be necessary at any time during the meetings. For example, if an on-camera Speaker has moved positions and is no longer on camera, the operator can make the required adjustments or if a speaker has left his microphone on and has forgotten that they are on camera the operator can make the required adjustment.

- c) During meetings the operator can make adjustments to the audio system when there are mixing problems, such as lip syncing issues.
- d) Since January of 2018, Cable 14 is using the City’s video feed to broadcast Council Meetings and this is a benefit to the City. Cable 14 has high standards for their production requirements. Adjustments have to be made on a periodic basis to support the broadcast. Cable 14 has informed the City that if the quality of outgoing feed does not meet their standards they may abandon the use of the City feed.

Without a knowledgeable operator (the AV Specialist), the system will work but over time it will degrade. This is, in fact, what happened with the previous camera/audio system in Council Chambers. Over time the functionality of the 4 cameras was reduced to one camera that was fixed wide shot mode. The audio degraded and the voting system was abandoned. The same outcome is likely if the performance of this new system is not continuously monitored and managed.

What are the responsibilities of the AV Specialist (Scope of Work)?

The services provided by the AV Specialist will be “on-demand” meaning that the AV Specialist will be called in as needed. Staff expects that the Specialist will be required for all Council Meetings, General Issues Committee Meetings and Public Works Committee Meetings and may be required for other select meetings. The AV Specialist may be asked to attend the full meeting or only until the production quality is assured.

The main responsibility of the AV Specialist will be to monitor the output video feed and to ensure that the highest possible quality is produced.

The following tasks will be performed:

- a) At start of meeting ensure all equipment is turned on, tested and operating as designed. Ensure that the feeds are transmitting properly to the distribution channels including (Escribe, Cable 14, YouTube etc.)
- b) Ensuring that the lighting is on and adjusted to provide the best video quality without lighting distortion
- c) Verify that the presentation equipment is working as designed and optimized as required
- d) Consult with Speakers as necessary before and after meetings to assist with tips to ensure everyone presents at their best
- e) Address any media concerns
- f) During the meetings adjust camera views to ensure speakers are in frame and that the chosen frame configuration is suitable for the meeting in question, as well as, that the audio system is optimized during meetings

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- g) Using expertise and judgement make adjusts to the camera frames based on changes in workflows or in order to make improvements considering the end user’s experience and feedback received
- h) During meetings handle unforeseen situations and adjust the video shots as necessary to protect privacy or other sensitivity matters
- i) Monitor the outgoing feeds to make sure no interruption of service or mixing issues occur
- j) After meetings, ensure that the local back up of the video is completed successfully
- k) Provide on-demand video clipping services for Staff and Council only
- l) Provide staff with ongoing expertise and recommendations related to any issues/change requirements (software and hardware)
- m) Provide ongoing training to new Staff and Council on the current system
- n) Ensure the titling and voting system (soon to be deployed) is updated and accurately reflects current meeting configurations (Clerks may also perform this function). Where ongoing changes become permanent (such as new positions filled) make changes permanent in pre-defined pick lists for easier selection by users.
- o) Provides minor adjustments to system and minor repairs including ensuring audio jacks work and microphones are replaced if not working
- p) On request perform camera switching services in Room 264 (Room 264 does not have automatic camera switching)
- q) Be available to staff and Councillors during meetings to handle any malfunctions
- r) Interact with IT Services to facilitate, support and assist with any IT related requirements
- s) Troubleshoot any other issues that affect quality. For example, recently doors opening cause vibration in the cameras, this was a troubleshooting issue currently being addressed.
- t) Make minor changes to the code as required or authorized by Crestron or MacLean Media
- u) Order spare parts as required to keep on hand for repairs

The AV Specialist will be expected to be a Crestron certified technician (Crestron is the manufacturer of system) with previous experience in the video production industry.

Can these services be performed by City staff?

In some municipalities with similar systems these functions are performed by in-house staff. Information Technology (IT) resources were engaged during the implementation of the livestreaming solution. IT will continue to provide services to support the software and hardware components of the solution. However, IT does not have the subject matter expertise, skill sets or the resource capacity required to deliver the services of an AV Specialist.

In addition, given that the services would be used only as required, it is expected that a full time position is not warranted for this role. However, a minimum of two skilled people would be required to fulfil the function due to expected schedule of hours and to cover vacations/absences.

What are the benefits of contracting out this service (vs in-house)?

Contracting out these services will provide the following benefits:

- a) assures subject matter expertise in Crestron specific systems with ongoing training provided by the successful vendor
- b) provides flexibility (1 year contract term with renewal options, if services are not need or deemed not valuable there is no long term commitment)
- c) provides flexibility to cover evenings, partial meetings and ad-hoc scheduled meetings
- d) ensures that the City fully optimizes and fully uses the new system to its full extent

What alternatives were considered?

The following alternatives were considered:

- a) Use the system only in fully automated mode and accept the inherent risks (previously identified) of sending out a live feed with no quality monitoring or control. This option is not recommended.
- b) Call on the original vendor (MacLean Media) for support as required. Without a competitively procured contract, however, the rates for service (outside of warranty work) cannot be guaranteed.
- c) Approve a lower budget enhancement –the \$90,000 budget request was calculated by reviewing the number of select meetings for the year and estimating the length of the meetings. The \$90,000 was calculated as an “upset” limit and can be reduced, understanding, however, that contractor service levels will be adjusted proportionately. In addition, given that we are now two months into the 2018 year, a reduction in the \$90,000 is feasible for 2018. \$75,000 may be considered a reasonable option.

- d) Require that staff perform some functions despite having limited skills and resources to support the time commitment required. This option was the one exercised with the previous camera system and is not recommended because the system will degrade over time.

Appendices and Schedules Attached

Appendix A – General Issues Committee Report (CM16006(a)/PW17058) dated July 10, 2017 –Modernizing the City of Hamilton’s Live Streaming Capabilities and Experience