

Clause 17 in Report No. 9 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on May 25, 2017.

17 Video Streaming Council and Committee of the Whole Meetings

Committee of the Whole recommends adoption of the following recommendations contained in the report dated May 18, 2017 from the Commissioner of Corporate Services:

- 1. Council approve the installation of video streaming hardware, software and other controls in the Council Chambers in July and August, 2018, subject to approval in the 2018 budget.
- 2. Council determine that recorded meetings remain online for the term of this Council plus six months.

Report dated May 18, 2017 from the Commissioner of Corporate Services now follows:

1. Recommendation

It is recommended that:

1. Council approve the installation of video streaming hardware, software and other controls in the Council Chambers in July and August, 2018, subject to approval in the 2018 budget.

2. Purpose

This report is in response to Council's December 2016 direction to report back with options and costs associated with video streaming Council and Committee of the Whole meetings.

3. Background and Previous Council Direction

Council endorsed video streaming and directed staff to investigate implementation options

On <u>September 22, 2016</u> Council directed that, as of October 2016, Council and Committee of the Whole meetings be audio streamed, accompanied by a video feed of presentation material. Council also endorsed video streaming and directed staff to investigate options for video streaming Council and Committee of the Whole meetings, including online archiving of recordings for the term of Council and report back in three months.

On <u>December 15, 2016</u> Council received a memorandum containing additional information and directed that staff report back in 2017 with options and costs for video streaming.

4. Analysis and Implications

A consultant was retained to design a production system for web based broadcasting

Staff retained Dynamix, Professional Video Systems to assess the Council Chambers and outline a solution that would allow web based broadcasting of Council and Committee meetings. Dynamix has considerable experience in this area, having installed systems in other municipalities and in the private sector. In addition to the installation of audio/visual systems in The Towns of Aurora, Newmarket , Richmond Hill, the Cities of Markham, London, Toronto, Brampton, Orillia and Region of Peel, Dynamix has completed a number of projects for the Region including EMS Headquarters, 9060 Jane St. and the Bill Fisch Forest Stewardship and Education Centre.

In addition to the camera hardware, consideration was given to the back-end production equipment used to support the cameras. Different systems allow different levels of live and post-production work to enhance the viewer experience, such as picture-in-picture allowing simultaneous broadcasting of presentation material as well as the presenter.

The consultant also assessed the quality and suitability of the existing lighting in the Council Chambers. The lighting in the Council Chambers was measured at 300 lux which is not as bright as the approximately 1,000 lux used in television production.

Staff conducted preliminary testing with a single camera and found the Council Chambers' conditions are generally suitable for streaming video

Staff carried out a test using a single high resolution, low light camera in the Council Chambers to determine whether the current lighting environment in the Council Chambers can support video streaming. The findings were generally favourable and it is possible to video stream meetings using the current lighting setup. However, if Council wanted to broadcast at studio quality additional testing will be needed to consider lighting options. Screenshots of the test video are shown in Attachment 1.

The recommended configuration includes four cameras with the ability to pan, tilt and zoom

The consultant proposed a solution that includes a multi-camera system, with a full video production control desk providing the ability to:

- Record audio and visual streams simultaneously
- Archive
- Provide presentations and voting record feeds
- Let the operator monitor video and audio feeds during the broadcast to ensure everything is operating properly

The video cameras may require a dedicated operator

Depending on the complexity of the system additional staffing may be required to supplement the two staff that currently provide audio and visual support for Committee and Council meetings. Once the system design is complete, this requirement will be assessed and, if necessary, considered as part of the 2018 budget process.

Preliminary estimates suggest video streaming from the Council Chambers will cost approximately \$320,000 and this amount is not included in the approved 2017 budget

Four cameras are recommended to provide coverage of Committee and Council meetings. The approximate cost of these cameras along with the production software and hardware required to operate them, control panels and monitors is \$320,000 including installation costs.

The Region would need to contract with an external streaming service to best respond to unpredictable audience sizes and bandwidth demands and host archived recordings

In addition to capturing the video, web broadcasting requires streaming to make the broadcasts available online. There are two alternative models available. The Region could manage the internet broadcasting itself or it could engage one of a growing number of service providers specializing in managing public sector meeting streaming. It is recommended the Region use an external provider.

If the Region hosted the video streams it is recommended the Region's existing internet connection be upgraded from 200 megabits per second to 400 megabits per second. For backup purposes this upgrade should happen both for the Administrative Centre and the South Services Centre. This would provide adequate bandwidth to accommodate 50-75 viewers.

Alternatively, using an external service provider to manage the streaming offers advantages over doing it in house. External service providers are able to dynamically scale bandwidth in response to increased audience sizes without impacting the Region's available bandwidth. Conversely, the Region's network is not as agile and unexpected demand might interfere with the Region's own network requirements and provide a lower quality service to viewers.

Municipal standards for how long archived meeting recordings remain available online vary

Each municipality that archives meeting recordings online does so for different periods of time. Some municipalities do not archive their recordings while those that do range from three months to permanently. There is no technical impediment to archiving all meetings.

There may be future accessibility considerations for video streaming

The Accessibility for Ontarians with Disabilities Act (AODA) sets out accessible communications standards for material published by municipalities. For webbased material the standard is for conformity with the Web Content Accessible Guidelines 2.0 Level AA. Current standards do not require municipalities to provide closed captioning for live video but the Accessibility Directorate of Ontario suggests that archived recordings will need closed captioning. At this time, the cost of such a service is unknown.

Installing video streaming over the summer months avoids disruption to scheduled meetings

Installation and construction work is likely to take several weeks and it will be difficult to schedule this work around Council and Committee meetings. The work could be scheduled over the 2018 summer recess to reduce disruption.

5. Financial Implications

The cost for hardware, software and installation is estimated to be \$320,000 excluding applicable taxes, as outline in Table 1 below.

Estimated Costs for Video Streaming	
Cost Element	Estimated Cost
Hardware, software & controls	\$195,000
Design and installation	\$125,000
Total	\$320,000

Table 1 Estimated Costs for Video Streaming

This project and associated funding is not included in the Region's approved 2017 budget but could be considered as part of the 2018 budget process.

As well, should it be determined a higher quality of lighting is preferred, preliminary estimates indicate it would cost approximately \$316,000 to increase lighting from 300 lux to 700-900 lux.

The above does not include the cost of an additional staff person to operate the system. This will only be known once the system design is finalized and, if required, will be considered as part of the 2018 budget process.

6. Local Municipal Impact

There is no direct impact on the local municipalities. Video streaming may allow local municipal staff to better follow meetings at the Region. Presentation content is already available as part of the Region's audio streaming service.

7. Conclusion

The Region has been audio streaming Council and Committee of the Whole meetings, including visuals of presentation content, since October 2016.

In September 2016, Council endorsed video streaming Council and Committee of the Whole meetings. Since then staff engaged an audio video specialist to design a system for implementing video streaming and have conducted some preliminary testing to determine the current suitability of the Council Chambers to support video streaming.

The estimated cost of installing required hardware, software and other controls is around \$320,000 and this is not included in the Region's approved 2017 budget.

The video streaming project could be included as part of the 2018 budget deliberations. To avoid disruption to meetings, construction is best scheduled in July and August, 2018.

For more information on this report, please contact Christopher Raynor, Regional Clerk at 1-877-464-9675 ext. 71300.

May 18, 2017

Attachments (1)

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Accessible formats or communication supports are available upon request

ATTACHMENT 1

Test images from the Committee of the Whole meeting on April 13, 2017

Figure 1 – wide angle



Figure 2 – Council Members



Figure 3 – close up



Figure 4 – alternative close up

