

**Web Streaming Considerations**  
**Presented to the Science, Technology and Telecommunications Committee**  
**June 23, 2015**

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**to the Legislative Council Service**

Current process and rules includes streaming of all legislative hearings from the Capitol. The streams are currently available in real-time with no archival of the streams.

To expand the availability of the live streams, the legislature could choose to (1) offer live streams of meetings outside the Capitol and (2) archive all those streams.

*Archiving Considerations*

- the current system configuration is capable of providing an archive of the web streams with minor changes;
- storage costs to archive the current web streams would add about \$25K per year to the current cost for the streaming service; current costs for streaming without archival are approximately \$50K per year;
- the current legislative web site would need to incorporate the user interface provided by the web stream hosting vendor for viewing of the archived streams; modifications are not extensive and design/development would be done in-house with tools from current provider; and
- the legislature would need to determine for how long the web streams would need to be retained and accessible for viewing and it is possible this decision would impact the final additional cost.

*Streaming of Meetings Outside of the Capitol Considerations*

Current policy (set through separate House and Senate rules, and then Legislative Council policy) provides that floor sessions, standing committee meetings and interim committee meetings in the Capitol be streamed; equipment includes cameras, audio equipment and computers with encoder software in chambers and committee rooms. We have also been able to provide the web stream from other selected locations (i.e. universities and colleges).

The legislature may choose to expand the current policy in order to provide web streams from additional locations where interim committees are held. This would involve significant changes as necessary equipment and staff would have to be increased to facilitate the streaming of hearings outside the Capitol.

To provide a quality, professional stream from locations outside of the Capitol would require mobile equipment similar to the current configurations (cameras, audio equipment and computers with encoder software) and additional staff trained to set up, operate and troubleshoot the equipment at the site of the meeting.

For example:

- each interim committee location would need an internet connection with upload speed equal to or above 2Mbps (5Mbps is recommended for upload of high-quality video);
- for audio only, an internet connection could be provided with a “hot spot”

connected to the computer if a strong and reliable 4G wireless signal was available;

- equipment needed for each stream would include a computer with encoder software, web camera(s) and a microphone system for sound input;
- because as many as three committees can run simultaneously, we would need four complete sets of this hardware and software; the cost is estimated at just under \$10K per set;
- the LCS would need to provide the internet connection with a sufficient upload speed; this would not be required if the location provider was also responsible for the internet connection;
- an additional staffer at each interim committee meeting to set up (about 60 minutes prior to the meeting), operate and troubleshoot during the meeting; and
- in some locations, the existing audio system in a given meeting room or auditorium may not interface with the LCS's equipment, which may present other challenges.

Component Costs for Mobile Equipment, without internet connection:

<b>Component</b>	<b>Cost</b>
Camera - i.e. Sony D100PTZ, cabling, tripod	2,000
Audio equipment - standalone omnidirectional microphone and mixer	400
Computer (laptop, USB Capture, cabling, carrying case)	3,000
Encoder software	450
Configuration/setup	4,000
<b>Total for each mobile set</b>	<b>9,850</b>