



What is the goal?

The goal of this project is to webcast live audio and video of public meetings of the Legislature that are held in the various meeting rooms in the Capitol building. This same system should also have the ability to archive the media for replay on demand via the Internet.

Currently, live audio webcasts are available to the public from any LRC meeting room in the Capitol building and archives of webcasts are available on demand. The audio system from each room is interconnected to a computer at a central monitoring location. An audio switch in each room gives the meeting chairman the ability to cut public access to the audio webcast. The webcast operator manually starts the webcast at the monitoring location and audio from the meeting is immediately available thru a pre-determined webpage link. The computer at the monitoring location is also recording a copy of the audio. A "back-up" recording of the audio is also manually started at the monitoring location. The "back-up" recording is vital in the event the computer initiating the live webcast fails. The audio back up preserves an archive of the meeting even though all or parts of the live webcast are lost. When the meeting is over, the webcast operator manually ends the live stream, and transfers the audio archive file to a server for on demand playback.

It is important to understand each step in this process, including the hardware, software, and FTE resources. All of these steps and additional equipment and FTE resources will be required to replicate the audio streaming process to an audio/video streaming process.

This is not, by any means, impossible. It is being done successfully in very similar circumstances. The most sophisticated model is C-Span. With hundreds of employees and funding, C-Span operates a professional television broadcast system. Media is available through the internet, cable, and satellite distribution. The media is also distributed to other broadcasters to use within their regularly scheduled news and public affairs programming. Similarly, SDPB Television makes a copy of the Governors annual State-of-the-State address available to C-Span for re-distribution nationwide.

A more comparable example is in practice in Lincoln Nebraska. Nebraska Educational Television, in partnership with the Legislature and the Supreme Court, operate a live video webcast system from selected legislative meeting rooms and courtrooms. Cameras are manually operated from a remote location. Video is distributed to the Internet, video conferencing systems, and is available for television broadcast.

Drawing from the experiences above: a transition to audio/video streaming could be accomplished all at once or a room or two at a time (including the House and Senate chambers. In any case, the transition will require a larger monitoring location, extensive rewiring, and more staff to operate and monitor the system... in addition to equipment and installation. Costs estimates for purchase, installation, and operation follow.



Video Streaming Estimates

2 Cameras minimum per room (three recommended for the House and Senate)

\$8,500 Per-Camera with mount for remote control operation

\$17,000 to \$25,500 per room

\$5,000 Manual switching terminal (will require a designated operator)

\$21,000 Automatic/voice activated switching terminal (same as 414)

\$1,500 to \$2,000 Monitors for each room (3 or 4 monitors - one per camera)

\$2,500 Desk-top PC, Video card, software for encoding and video streaming

Installation Costs

\$ 250 - Wiring and integration to each room's Audio mixer

\$ 25,000 (per bid) – WAN or Wiring, installation from Video cameras to a central monitoring location

\$0 – Utilize existing computer network infrastructure and distribution. May need expansion at a later point in time.

(one video stream = the 20 audio streams)

\$15 per operational hour – Operators for each video webcast (fewer operators will be needed if automatic/voice activated switchers are installed).

Total:

\$30,000 Base Infrastructure – Developing a larger central monitoring location for audio/video streaming and wiring infrastructure. Plus

Per Room - \$26,250 to \$51,250

Total Project (7 rooms) - \$225,000 to \$400,000

On-going operational – 1 to 5 FTE or seasonal staff during operational hours and technical maintenance.

Estimates are subject to a detailed study of the project scope, implementation and wiring infrastructure costs, the location of central monitoring and control center, and bids related to equipment specifications.

Adding video to the existing SDPB Webcast of a Legislative Committee Room / Chamber.

