The Kansas Virtual Statehouse project will allow the public to participate in Kansas Legislative process from anywhere in the state using virtual technologies. The virtual technologies will create a secure environment that will allow legislators, staff, and the public to interact from any location using video, audio, and shared computer screens. The Statehouse Chambers and Committee rooms will be equipped with professional video conference systems that will enhance transparency and meet accessibility standards. This will allow remote testimony from anywhere connectivity and the technology is available. The video and audio of Legislative proceedings will be streamed to the public network for unlimited public viewing.

During the 2020 Legislative Session in March the Kansas Statehouse was temporarily closed due to the COVID-19 pandemic. However Legislative Committees continued to meet from March through May 2020. These meetings were conducted using online video conferencing systems that allowed individuals to connect on personal devices such as laptop computers and mobile phones. In June of 2020 the Statehouse reopened and meetings were then allowed in committee rooms but some participants still connected to the meetings remotely. There are significant challenges attempting to use devices intended for an individual in a large room setting, challenges such as using large monitors on mobile stands and no room audio integration. We now foresee the continued need of virtual technologies for the Kansas Legislature due to the current COVID-19 pandemic and the desire to allow for more participation and transparency in state government.

Accessibility is an important requirement of this project. Incorporate all aspects of accessibility in the planning and implementation, whether complete or phased-in, based on a motion made by the Legislative Coordinating Council at the December 2019 meeting. The motion directed staff “to develop a plan of implementation of the full video and audio streaming of Senate and House of Representative chamber session meetings and all legislative committee meetings over a reasonable period of time with regard to acceptable hardware and software options and reasonable costs associated with such implementation, including reasonable services for the deaf and hard of hearing segment of our citizenry.” The LCC requested a plan be presented at a subsequent LCC meeting.

Reports on the Kansas Virtual Statehouse were provided to the Legislative Budget Committee during the July 15th, 2020 and August 3rd, 2020 committee meetings, the two reports are attached. The reports list the items for consideration and a preliminary budget estimate. The Legislative Budget Committee directed the project be put through the RFP process if approved. A funding request for the project was submitted to the SPARK committee for Coronavirus Relief Funding on September 3rd, 2020.

We are requesting project approval from the Legislative Coordinating Council to move forward on the Kansas Virtual Statehouse Project.
Representative Ron Ryckman, Chairperson
Legislative Coordinating Council
Statehouse Room 370-W
BUILDING MAIL

Dear Chairperson Ryckman:

The Legislative Budget Committee has received testimony from the Legislative Chief Information Technology Officer (CITO) concerning the requirements to upgrade the communications technology in the Statehouse. The proposed upgrade would permit remote listeners and remote participants to effectively engage in meetings held in the Statehouse.

The Committee notes testimony from the September 3, 2020, meeting, at which the CITO advised the Committee that a request was being submitted to the Office of Recovery for funding from the federal CARES Act appropriation to fund these upgrades, estimated to cost $5.0 million. The Committee notes its support for the project and the funding application and requests the Legislative Coordinating Council approve the project. Because of the time-sensitive nature of purchasing and installing the equipment for the 2021 Legislative Session, the Committee requests the LCC meet as soon as possible to expedite this important technology project. Project approval would allow the CITO to proceed with a request for proposal.

Senator Carolyn McGinn
Chairperson, Legislative Budget Committee

cc:  Senator Susan Wagle, Vice-chairperson
     Chase Blasi, Chief of Staff, Senate President's Office
     Paje Resner, Chief of Staff, Speaker's Office
     Gordon Self, Revisor of Statutes
     J.G. Scott, Director, Legislative Research Department
     Tom Day, Director, Legislative Administrative Services
Background:
This report is intended to outline the current state and possible future of virtual technologies used to allow for remote access to the Kansas Statehouse and the proceedings of the Kansas Legislature. Remote access has the potential to allow citizens to hear, view, and interact with members of the Kansas Legislature from anywhere in the state of Kansas. The Kansas Legislature has implemented and used audio and video technologies for over a decade now to allow some virtual access. However the efforts have been limited due to immature technologies, pilot projects, funding, and limited support.

In March of 2020, the COVID-19 pandemic changed things quickly. The need to implement remote meetings and remote work environments with members, staff, and citizens was thrust upon us immediately. We had little time to plan for implementation of technologies and systems. The good news is the Legislature was in a good position to allow for remote work and meetings. This was due to our implementation of laptops for staff and members that have integrated video cameras and microphones and VPN to access the statehouse network which has been in use for several years.

Status from March 2020 to July 2020:
In March of this year we knew the need for remote meetings would be immediate. Some legislative staff had been using the Zoom video conferencing system and it was known to be fairly easy to use. There were some security issues when the Zoom system was not configured properly for secure conferences but we saw those issues being address by the company. In March our Kansas Legislative Office of Information Services (KLOIS) department purchased user licenses for Zoom. We sent out notices to staff and members on how to configure security and to install updates. Zoom was used through late March, April and May for legislative committee meetings where all participants were remote on the video conference and the committee rooms were not used. The Zoom system allowed the streaming of the video conference meetings to the Legislature's YouTube channel for public viewing. We also were able to stream the audio to our website audio archive system. These meetings worked fairly well considering the short time we had to prepare and implement the technologies. Legislators and staff seemed to adopt the use of the Zoom system without much trouble.

In June we started having committee meetings in the statehouse committee rooms with some participants in the room and some on video conference. There have been some issues with this set up. The issues are:

- No integration with the room audio systems to the video conferencing system.
- Some room acoustics make hearing on the video conferences difficult.
- Limited video cameras – no room cameras, using cameras on laptops.
- Placement of large monitors on stands in the rooms.

We are currently working to resolve the issues with integration to the room audio systems and adding additional cameras.
**Virtual Statehouse Planning:**
Below are items that should be considered in planning to implement a full Kansas Virtual Statehouse.

Committee Room audio system improvements:
- There may be updates required to the systems to interface into the video conference systems.
- Train KLOIS staff to configure and adjust room audio systems as required.

Committee Room video cameras:
- Implementation of wall mounted Pan-Tilt-Zoom (PTZ) cameras should be considered.
- Multiple cameras may be needed in each room to video members and the podiums.

Committee Room video monitors:
- Implementation of wall mounted video monitors should be considered.
- There are issue with using monitors mounted on roll-around stands.
  - Monitors and stands can block views of members and audience.
  - Monitors and stands can block walk ways.
  - Monitor cables across the floor create a safety hazard.
  - There is significant set up time for technical staff to prepare a room needing monitors.

Audio and video streaming:
- Implementation of full video and audio streaming from all 13 committee rooms should be considered.

Video conferencing:
- Video conferencing allows remote interactive participation in meetings for members and the public.
- Dedicated room video conference systems should be considered.

Closed Captioning:
- Closed Captioning (audio to text conversion) should be considered.
- Closed Captioning can be done either in real-time during the meeting or the conversion can be done later after the meeting.
- There can be significant costs associated with the accurate conversion of the meeting audio to text.
- Real-time Closed Captioning may require transcriptionist personnel to be hired or contracted to convert audio to text.
- Real-time Closed Captioning could also be accomplished through automated speech recognition software.
- We are working closely with the Kansas Commission for the Deaf and Hard of Hearing and the ADA Coordinator for the State of Kansas to ensure accessibility is achieved.

Statehouse Network:
- Possible updates and enhancements to the Statehouse network may be required to handle the increased bandwidth requirements.
Staffing:

- Currently setting up screens, projectors, monitors, and computers, configuring meetings in systems, and monitor the technology for meetings has been a add-on function of a few KLOIS staff members. During the Legislative Session temporary staff are contracted to provide additional help.

- When implementing a full virtual statehouse we need to ensure there is a proper amount technical staff to handle the configuration and monitoring of the audio and video systems.
Update:
The Legislative Budget Committee on July 15, 2020 requested the Legislative CITO, Alan Weis, provide cost estimates on implementing virtual meeting technologies for Legislative committees in the Kansas Statehouse. Below are preliminary cost estimates to implement systems based on the planning considerations outlined in the Kansas Virtual Statehouse report provided to the Legislative Budget Committee during the July 15, 2020 meeting.

This information is very preliminary and subject to change. A full analysis and review of the systems is ongoing. The analysis of the many details on features, functions, integration, business processes, room modifications, network impact, staffing, etc. are pending.

The effort to implement the Kansas Virtual Statehouse will be a state Information Technology Project as defined in K.S.A. 75-7201 due to the accumulative cost estimate being over the $250,000 threshold. A Project Plan will need to be created by staff of the Kansas Legislative Office of Information Services (KLOIS) that will include the project description and justification with cost estimates and a cost benefit statement (per K.S.A. 75-7209). The Project Plan will need the approval of the Director of Legislative Administrative Services and the Legislative Chief Information Technology Officer (L-CITO). Per Information Technology Executive Council (ITEC) policies, the plan will then be filed with the Kansas Information Technology Office (KITO) and reported to the Joint Committee for Information Technology (JCIT). Quarterly Project Reports will be filed by the KLOIS staff with the KITO office until project completion. The quarterly reports will be reviewed by the L-CITO and JCIT.

The Legislative Chief Information Technology Officer performs duties under the direction of the Legislative Coordinating Council and the Director of Legislative Administration. Therefore, I believe it is important that we receive a directive from the LCC, based on recommendations from the Legislative Budget Committee, to continue moving forward on the Kansas Virtual Statehouse effort. Other considerations as we move forward are to incorporate all aspects of accessibility in the planning and implementation, whether complete or phased-in, based on a motion made by the Legislative Coordinating Council at the December 2019 meeting. The motion directed staff “to develop a plan of implementation of the full video and audio streaming of Senate and House of Representative chamber session meetings and all legislative committee meetings over a reasonable period of time with regard to acceptable hardware and software options and reasonable costs associated with such implementation, including reasonable services for the deaf and hard of hearing segment of our citizenry.” This plan is to be presented at a subsequent LCC meeting.
Cost Estimates:
Implementation of video conference systems in the 13 Statehouse committee rooms:
Functions provided:
  • Video conference system hardware and software
  • Committee Room video cameras
  • Committee Room video monitors
  • Audio and video streaming
  • Closed Captioning

Initial cost estimate: $4,951,000.00
Annual cost estimate: $762,000.00

Statehouse Committee Room Audio Systems Upgrades:
9 committee rooms require equipment upgrades. Also the House and Senate Chambers require equipment upgrades. (5 room audio systems have been upgraded within the past year.)
Annual cost estimate is for a support contract on the audio systems.
Initial cost estimate: $110,000
Annual cost estimate: $25,000

Integration of room audio systems with video conference systems:
This includes additional interfaces, wiring, and software configuration for the 13 room audio system.
Initial cost estimate: $7,000
Annual cost estimate: none

Kansas Legislative Office of Information Services staffing:
Increase full-time staff by 2 staff members to support and administrate systems.
FTE annual cost: ($75,000 each FTE) $150,000

Total Initial cost estimate: $5,068,000
Total Annual cost estimate: $937,000