- provisions for "read-back and play-back of official record," if required;
- requirements for screen viewing from multiple locations and angles;
- accommodations for confidential discussion off the record, such as attorney-client discussions and bench conferences;
- confidentiality requirements appropriate to the level of the proceeding; and
- a method to share materials and evidence if needed for the proceeding.
- 4. Recommended display technology standards that allows for variance in courtroom and hearing room layout:
  - LCD/LED televisions should display a minimum 720p resolution and provide a 30 frames per second refresh rate. LCD/LEDs above 40 inches should display a 1080p resolution and provide a 30 frames per second refresh rate.
  - Projectors should display a minimum 720p resolution and 30 frames per second. If you are projecting to a larger surface, 1080p resolution is recommended.
  - Dependent on room design, the LCD/LED television should have a viewing angle that allows clear viewing from identified viewing locations without dimming or color shifting due to viewing angle. Ideally, a 160 degree viewing angle would be the minimum requirement for a television display.
  - Projector images do not suffer excessively from dimming or color shifting when seen from an acute angle. Projector images are negatively impacted by the ambient light in the room. It is recommended that projectors have 2500 lumens at a minimum for use in the room with low ambient light or with good ambient light controls. Lumens at a minimum of 3000 are recommended for a room with moderate ambient light. A brightly lit room would require a minimum 4500 lumens if lighting controls will not adequately dim the ambient light.

## C. TECHNOLOGY OPTIONS BASED ON TYPE OF HEARING

- 1. **Choosing the right technology for the proceeding**. Following are issues to examine when identifying the appropriate videoconferencing technology standard for use in a specific proceeding:
  - Confidentiality;
  - The quality level required for audio;
  - The quality level required for video;
  - The number of participants and size and layout of facility;

- The official record requirement and official record creation technology and staff; and
- the impact of a smooth uninterrupted audio and video.
- 2. Basic Standard: Court proceeding session where audio and video quality is not paramount to the outcome of the proceeding. The base for this recommendation, as part of the Basic Standard, includes the frequent use of non-industry standard transmission and encoding methods. These Basic Standard systems often include encryption that lacks external verification and video that may pass through a vendor system rather than direct point to point communications.
  - a. **Description**: This applies to a courtroom proceeding session where audio and video quality level and potential interruptions in the signals would not affect the outcome. Potential examples include expert testimony where video detail and the ability to perceive fine facial expressions, for example, would not affect the value or perception of the testimony. Another example would be the testimony of a party who is verifying facts.
  - b. Recommended Technology: Skype, Facetime, laptop cameras, IP camera based systems, etc., are all examples that fit this lower quality requirement for a court proceeding. (Please note that vendor and product names are provided only as examples of products available at the time of this report which would meet the standards cited. They do not constitute endorsements of these products, nor do they constitute an attempt to exclude other vendors or products. As with all technology, these vendors and products are subject to change with advancements in technology.)
- 3. Enhanced Standard: Court proceeding session where audio quality and video quality are paramount to outcome of a courtroom proceeding. The base for this recommendation, as part of the Enhanced Standard, includes compliance with industry standard transmission and encoding methods. These systems often include encryption using externally verified standards and video that is transmitted point-to-point. System interoperability is key to any permanent equipment acquisition.
  - a. **Description:** This applies to a proceeding where audio and video quality are paramount to the courtroom proceedings outcome. Interruptions could affect the outcome of the courtroom proceedings. Potential examples include testimony where video detail and the ability to perceive fine facial expressions, for example, would affect the value or perception of the testimony. This is a courtroom proceeding where the continuous flow of

interaction through the video system is required to meet the court's needs.

- b. Recommended Technology: Polycom, CISCO, Tandberg (part of CISCO), and LifeSize, etc., are all examples that fit this Enhanced Standard quality and interoperability requirement for a court proceeding. (Please note that vendor and product names are provided only as examples of products available at the time of this report which would meet the standards cited. They do not constitute endorsements of these products, nor do they constitute an attempt to exclude other vendors or products. As with all technology, these vendors and products are subject to change with advancements in technology.)
- 4. Multipoint Standard: Court proceeding session where two or more parties, external to the courtroom proceeding room, would like to participate through videoconferencing.
  - a. **Description:** A multipoint video courtroom proceeding adds two concerns to the Basic Standard and Enhanced Standard requirements.

The initial concern is to ensure that confidentiality requirements, if any, continue to be met. The additional confidentiality concern results from many multipoint videoconferencing systems of the Basic Standard requiring that all signals, video and audio, pass through the vendors' systems to accomplish the multipoint video conferencing.

The Enhanced Standard offers an option for the court to control the multipoint system to avoid vendor control of the video and audio. This will offer the highest level of confidentiality. The Enhanced Standard vendors offer an option to install the multiplexing system in the local court or in a central court or statewide location controlled by the court or state. Such an implementation would offer the highest level of verifiable confidentiality.

The second concern with a multipoint videoconference is the complexity of implementing and maintaining a system if it is locally controlled and located. Staff and technical skills will be required for testing prior to the proceeding, initiation, and monitoring the multipoint videoconference.

## Minority Report

A minority of the committee members note that, while they concur with a majority of the conclusions and recommendations of the committee, they have some concerns regarding the use of videoconferencing in criminal proceedings. The majority of committee members recommend the use of videoconferencing in the early stages of criminal proceedings, including bond hearings pursuant to K.S.A. 2013 Supp. 22-2802 and motion hearings pursuant to K.S.A. 2013 Supp. 22-3208. While videoconferencing may be appropriate under some circumstances, it should be kept in mind that, under other circumstances, it could be important for the defendant to appear in person before the judge. For example, the defendant might be impaired in some manner that might not be apparent or perceptible through videoconferencing, or that it might be important for the judge or the public to be able to see the defendant in person to ensure that the defendant has not been injured or mistreated in some manner. While defense counsel could request that these hearings be held in person for good cause shown, these committee members cannot agree with placing the burden of arguing good cause on the defendant.

As a society, we have a well-deserved confidence in the court system. The ability to view court proceedings in person is a part of that confidence. The thrust of the videoconferencing rules should be not only increasing efficiency, but also increasing public access to and confidence in the courts.