IDAHO STATE CAPITOL

CASE STUDY: government

BIAMP®

THE BEAUTY OF IDAHO'S RESTORED, TURN-OF-THE-CENTURY CAPITOL BUILDING BELIES ITS NEW TWENTY-FIRST CENTURY, FUTURE-PROOFED AUDIO SYSTEM. "From an end-user standpoint, the new system has made life very, very easy. Compared to the old system, it's like going from a horse and buggy to a sports car." - JEFF TUCKER, PRODUCTION MANAGER, IDAHO PUBLIC TELEVISION.

"The flexibility of this system allows the receiver of the audio to get what they need. You can route any system anywhere in the building."

- John Karel, Account Manager and Designer, System Tech, Inc.

CHALLENGE

The Idaho State Capitol Commission created a plan to preserve, restore, and expand the state's beloved capitol building—ensuring its beauty and function for future generations. To accommodate this restoration and expansion, a flexible, future-proofed AV system would need to replace the antiquated one, without detracting from the beauty of this restored state treasure.

SOLUTION

Boise-based System Tech, Inc.—which provides innovative solutions for telecommunications infrastructures throughout the Western United States—partnered with longtime designers and installers of audio systems, Audio Solutions. Together, they designed and installed a high-tech, flexible system that ensures the capitol building is future-proofed while letting its restored splendor shine.

When visitors walk through the doors of Idaho's refurbished state capitol building, they are struck by the restored beauty of this turn-of-the-century statehouse. Built in 1905, the structure in its original design emphasized natural sunlight through the use of light shafts and skylights. Throughout the building, columns and reflective marble surfaces helped create a stately and sunlight-filled capitol. Remodeling projects during the 1950s and 1970s accommodated a growing state government, but outdated systems and decades of use eventually left the building in disrepair.

In the late 1990s, the state of Idaho recognized the need to save the historic capitol. Several years later, in 2005, the Idaho State Capitol Commission launched an ambitious, \$50 million project to restore, renovate, and expand the state's treasured capitol building. Renovation work began in 2007, and the goal was to stabilize and repair historic materials and features and maintain the historic integrity of the structure, while allowing the building to function into the future. As part of the expansion, two new 25,000 square-foot underground atrium wings were added to accommodate larger, more spacious legislative hearing rooms to allow for increased public participation in the legislative process.

Much of the restoration and expansion-like columns and marble surfaces, a tile mosaic of the state seal, and the atrium wings-are visible and striking. Others, including the new and expanded audio system, let the nostalgic splendor of the building shine while ensuring it is a high-tech government structure that will function well into the future.

idaho state capitol

CASE STUDY: government

www.biamp.com

John Karel of Boise-based System Tech, Inc. and John Lehmkuhl of Audio Solutions paired up to design and integrate the AV system. In addition to creating a design that would not detract from the beauty of the remodeled space, their team had a few more challenges. In the original bid, the Capitol Commission requested that Karel and Lehmkuhl transport and install the audio system from the Legislature's temporary relocation site into the remodeled building—but there was a problem. "The audio system at the temporary site had only about one-third of the infrastructure that would be



needed for the remodeled and expanded space," recalls Lehmkuhl. So this meant the team would need to build upon the existing infrastructure and design it as they went, as needs for the system became apparent. "I stayed awake a lot of nights figuring out point A to point B," Lehmkuhl remembers. The team was also faced with a time crunch. "We only had time to run a few tests before the 2010 Legislative session began. That was nerve-wracking." But with a few minor adjustments, the dedicated team pulled it off in time.

"The audio system at the temporary site had only about one-third of the infrastructure that would be needed for the remodeled and expanded space" - JOHN LEHMKUHL, AUDIO SOLUTIONS

The new design includes 30 AudiaFLEX units (many equipped with PA-2 amplification cards), 35 VS-8 wall-mount control panels, and 19 Multi-Channel Amplifiers—all from Biamp Systems—as well as 300 microphones and 200 speakers. This structure provides audio to 14 different systems: 5 committee rooms on the House side and 5 on the Senate side, the House chamber, the Senate chamber, the Joint Finance-Appropriations Committee (JFAC) chamber, and

the Governor's Office. "The PA-2 amplifier cards really saved a lot of rack space and time," Lehmkuhl says. All senators and representatives have their own individual speakers, requiring an amplifier channel for each. Installing individual amplifiers would have called for hard-wired connections and a great deal of rack space. Instead, the team conserved labor costs and space—as well as the electricity it would have taken to power and cool the amplifiers.

In addition to saving on labor, space, and electricity, the new design offers a level of accessibility and flexibility to those who use the building–including Idaho Public Television. Production Manager Jeff Tucker oversees the Legislature Live project, which provides live video and audio streams from the capitol. Tucker appreciates the flexibility and reliability of the new system design. Before the remodel of the capitol building, Legislature Live was housed inside the capitol. After the remodel, Tucker and his crew were moved into the basement of the building across the street. "At that point, we started to ask, 'how are we going to get the audio over there?'" Karel and Lehmkuhl solved the problem. "Now, with Audia and CobraNet, all of the video and audio in the capitol is directed over to us, and we disseminate it from there." Tucker also recalls the old system: "the House and Senate each had their own audio systems with their own contractors." These systems were circa-1970 and functioning with a lot of patches and workarounds. "The first design included these independent systems with a single analog feed down to the central entrance facilities so that Idaho Public Television could patch it out to the media truck on the curb, and that was as far as the thought process had gone," recalls Karel. "When we contracted it, we said, 'This is what we could do.'"

idaho state capitol

CASE STUDY: government

www.biamp.com

End users like Idaho Public Television are grateful for Karel and Lehmkuhl's future-focused vision. "From Legislature Live's point of view, the new system has made life very, very easy," Tucker says. "From the media-usage standpoint, it's like going from a horse and buggy to a sports car." Tucker says that typically, about six TV news organizations and two to three radio stations use the building—but depending on the issue and the day, there could be up to fifteen news organizations wanting feeds. In the past, getting audio from cramped committee rooms meant placing a stack of microphones on the podium, "and they would get what they would get." Thanks to Karel and Lehmkuhl's design, each room has audio-feed panels in the wall, so a media person can get a direct feed of audio from the microphones: no stacks of mics, no booms needed. "The new system allows the media to be able to record without being in the way," Tucker says. "From the end-user standpoint, this is so effective because these guys thought out the technical side of it well enough so that we can do what we need to do."

"The flexibility of this system allows the receiver of the audio to get what they need," says Karel. "You can route any system anywhere in the building." For example, if the governor were giving a State of the State address and not everyone could fit in the chamber where he was speaking, live audio from the address could easily be piped into the overflow seating rooms via the VS-8 control panels. Or a legislator, sitting in his office on the Senate side, could dial in from a small monitor speaker on his desk and listen in on a vote in the House chambers. "The old system was very static," Karel says. "For the price and the level of future-proofing, the new system has launched them into the future and has given the Idaho State Capitol building a lot of flexibility. It's a smarter system."

