

MEMO

TO: Information Technology Planning Council Members
FROM: Dale Gow, Chief Information Officer, Legislative Branch
RE: 2021 Biennium Report
DATE: November 17, 2021

As we wrap up the 2021 biennium, the following report is to provide you with an overview of the major initiatives and accomplishments that the Office of Legislative Information Services (OLIS) staff have worked on over the past two years.

I look forward to working with you in the upcoming interim to continue building on the great work that has been done. A copy of the 2023 Biennium Information Technology Plan that was adopted prior to session is attached with this update:

67th Legislative Session 2021 – Hybrid: Much of the work done by OLIS for Legislative Sessions involves preparing information systems to process bills and votes and assisting Legislative Branch staff and Legislators with their devices, emails, and other business processes. Below is information and statistics regarding the work done by OLIS staff for the 2021 regular legislative session:

Hybrid Session Support:

- OLIS implemented several new systems and processes to support this session, held during a global health pandemic where members may or may not be in the same place and social distancing guidelines were being followed.
- All legislators and most session staff were provided Microsoft Office 365 accounts so they would have a way to interact and collaborate with Legislative staff using Microsoft Teams chat and video conferencing tools while limiting direct contact.
- The video conferencing application, Zoom, was integrated into 16 committee hearing rooms to facilitate remote member participation and public testimony options, further limiting the need for interpersonal contact.
- Remote Meeting Coordinators were brought on to orchestrate and manage public interaction with the committees, and IT systems were put in place to allow remote participants to register beforehand to testify, reducing the chance that meetings would be disrupted. 24 Remote Meeting Coordinators were hired to support each Legislative Standing Committee and Sub-committee.
- OLIS worked with the Vote System vendor to implement a Remote Vote system that would allow Legislators to cast their vote regardless of whether they were at their desk, in the chambers, or attending remotely.
- RSA two-factor authentication for all legislators and staff who would be working remotely was implemented to ensure the security and integrity of the systems, including remote voting.
- To limit the normally intense hands-on technical support legislators need, OLIS partnered with the Dept. of Administration IT team and temporary IT staff to help prepare legislator-supplied equipment using over-the-phone, Microsoft Teams, Zoom, and the remote assistance and desktop control application TeamViewer to ensure that legislators could use and access the new tools brought on for this "hybrid" Session.

Information Desk:

- Web Messages received and routed to legislators
 - 2021: 117,088
 - 2019: 53,880
- Phone Messages received and routed to legislators
 - 2021: 15,292
 - 2019: 11,912
- The Information desk was staffed with five full-time employees who handled all the above, in addition to taking all calls from public who were having issues joining remote meetings via Zoom, and fielding requests for testimony submitted remotely.
- There was no staff increase from 2019, despite the increased workload

Devices Supported:

- 330+ Legislator-owned devices (laptops, iPads, phones, etc.)
- 104 hour-long Remote IT Consultation sessions to assist with setup of Remote Vote, Zoom, Teams, VPN, RSA, etc.
- 150+ Legislative permanent staff devices
- 120+ Legislative Session Staff devices
- 80 Legislative copiers and printers
- 34 Dedicated AV/Zoom Meeting computers and Presiding Officer Laptops
- 24 Remote Meeting Coordinator Laptops

Montana Public Affairs Network (MPAN):

- The 2021 session saw a 20% increase in coverage overall, despite a reduction of events being held such as official addresses, concerts, and press conferences due to the pandemic.
- For the first time, all Legislative Session Committee meetings and Floor sessions were recorded and archived on video and audio.
- Total Run time for the 2021 Session: 1458 hours, an increase of 264.5 hours from 2019
- Total Number of events covered in the 2021 Session: 870, and increase of 54 events
- For 20 of the 80 legislative days 100% of the day's held events were produced
- 100% of the conference committee meetings held were produced

Preparation for 2021 Session**Legislator Orientation:**

- Hybrid orientation held in person and remotely
- 8 on-demand training videos created by staff for legislators to access at their convenience
- All Sessions live streamed and recorded
- Information Technology "Lunch and Learns" offered each Wednesday in December with average of 25 attendees each

Vote System Upgrades:

- Vote Boards in Senate and House chambers were all upgraded from analog to digital
- Project was done on time and within budget
- The addition of the remote vote system was developed, tested and implemented between August and November 2020 enabling legislators to securely vote on 2nd and 3rd reading.

Remote Testimony:

- 5,194 requests to provide remote public comment were processed which resulted in more Montanans engaging in the legislative process from around the state.
- A form was created and implemented on leg.mt.gov to allow the public to submit written testimony on any bill being heard in committee.
- OLIS supported the interim committees in the use of Zoom to allow for public access and testimony during 2020.

Session System Replacement (SSR) Project: This project started in 2013 and has continued in a phased approach. The fully integrated system will be complete for End-to-End Testing from the bill draft request, drafting, chamber and committee, through to codification by late 2021 or early 2022 to be ready for the 2023 session. The following pieces of this project were worked on during the 2019-2020 interim:

Bill Drafting Editor: This application, using Microsoft Word as the word processor, was developed and put into production prior to the 67th Legislative Session and it allowed bill drafters and editors the ability to work from home, which was an option that was not available to this extent in years past. WordPerfect in the old system of the past required both drafting and IT staff to be in the Capitol to do their work in order to transfer the bill to the next step in the process and to support the drafting process. This application gave us the ability to be a mobile bill drafting workforce, which helped keep Legislative staff safe and highly productive during the pandemic. This application was not tested to the level required for a production system, but we went into the Legislative session knowing we were going to have to work through issues. By the end of the session, we had made many adjustments in both bug fixes, enhancements, and business processes and are positioned for the interim to focus on the issues that remain to harden this application. Despite the pandemic, staff drafted and supported a record number of bill draft requests, bill drafts, and amendments. The Bill Drafting Editor continues to be improved and hardened.

Chamber/Committee: Continued development and final deployment of the Chamber and Committee applications were completed in September 2020, and approximately 90% developed, but had not been thoroughly tested by the State for final User Acceptance Testing. In order to use the applications for the 67th Legislative Session, devoted resources were needed to test the applications, and in addition, resources needed to be devoted to the training and support of these applications. In the face of a pandemic we had to concentrate our staff only on efforts that were needed to conduct a hybrid Legislative session, so we decided to take the Chamber and Committee applications out of our production environment and utilize our available staff to support other requirements. This did not come without ramifications as we still needed to test the remainder of the production environment to ensure it was in a stable state. We also had to retrofit back to Word Perfect to work with the Journals, but it was still the safest option to ensure we could complete the 67th Legislative Session.

Legislator Portal: Due to the pandemic and lack of available resources, this project was not implemented for the 67th Legislative session. The development of this application has been completed but is awaiting User Acceptance Testing by the State.

LAWSII Infrastructure Upgrade (Core 7): The LAWSII system was originally built on Propylon’s Core 4 infrastructure/datastore concept. We planned to upgrade to the new Core7 environment, which promised significant speed improvements in the system. We have completed this project and experienced improvements in our Bill Drafting Request, Codification, and publishing systems.

Audio/Video: Audio is the official record for the Legislative Branch. All meetings held must be recorded and archived to comply with this mandate.

- A model to conduct “hybrid” meetings was developed and implemented in three months
- Developed and implemented fully remote audio and video meetings in two months
- 196 fully remote Interim Committee and Executive Agency meetings were securely supported between March 16, 2020 and December 31, 2020 with no unauthorized participation (Zoom bombs).
- The following systems were upgraded between July 2019 – December 2020
 - Senate and House Chamber cameras and sound system
 - Sound systems and digital monitors in rooms 303, 335, 350, 405, 422, 455, 472
 - Broadcast archive system in Room 1
 - Vote board feeds from chambers to Room 1
 - Closed Circuit system
 - Addition of 12 video encoders and produced static streaming capabilities in all hearing rooms in the Capitol
- Live video streaming and archiving was available for all legislative hearings during session for the first time. In previous sessions only four video streams were available.

Network Infrastructure Upgrades:

- OLIS replaced its aging server hardware located in the State of Montana Data Center, including the blade server enclosure, networking and management components, and upgraded the servers with current generation hardware, increasing our ability to support our virtual server environment by a factor of three. Our storage systems were also replaced with newer, supported, hardware with better speed and size management functionality.
- The Disaster Recovery server hardware in the Miles City Data Center was also replaced, ensuring that the Legislative server environment can recover – almost immediately – in the event of a catastrophic loss of the Helena production environment with minimal data loss or disruption in service.
- In the Capitol Server Room, the uninterruptible backup power supply system (UPS) was replaced, increasing the runtime for the A/V encoders from 15 minutes to roughly 45 minutes.

Computer Replacement: As the current fleet of computer laptops used by Legislative staff had reached the end of its useful life, OLIS researched and purchased replacement systems to upgrade to current technology, with faster processing and storage hardware, supported and maintained by the vendor. Working with each staff member to transfer files and settings to their new systems, OLIS completed this project in time to prepare for Session. Total systems replaced exceeded 150 to support Legislative staff.

Legislator Information Management System Database (LIMS): LIMS is a replacement system for the legacy LegInfo system. It provides functionality that fills reporting needs; mailing labels; a portal for legislators to enter and change their own information; tracking legislator contact information; Capitol logistics; and much more.

The Legislator event data that is in LIMS does not accurately and reliably synchronize with LegInfo nor the website. This create confusion and unnecessary maintenance overhead. At some point these issues will need to be addressed by converging LIMS, LegInfo, and the Portal.

One other function of LIMS is the maintenance of legislator's preferences for getting documentation electronically. These preferences are also consumed by LAWS II's portal application in addition to the Web and Phone Messaging system.

Security Upgrades: Several security enhancements were implemented by OLIS over the course of the biennium.

- In concert with the Executive Branch, OLIS introduced SentinelOne as it's next-generation anti-malware and endpoint security application
- Set up a Tenable Nessus vulnerability scanning system
- Configured VaronisDatAlert data security and DatAdvantage data governance and protection
- Installed a segregated, high-security encrypted storage system for Audit Division personnel to store sensitive data

Summary:

At the conclusion of the 2019 Legislative Session, OLIS was prepared for a busy interim of fine-tuning and implementing the applications that support the legislative process. No one could have foreseen the pandemic, and the workload it would add to an already overstretched staff. The preparation for and support of a hybrid 2021 Legislative Session added to this workload extensively.

As outlined above, OLIS staff has had a tremendously challenging biennium. Staff braved the pandemic and kept the Legislative Branch up and running to conduct the people's business. The biennium has resulted in outstanding improvements to the technology and technical environments in which the Branch operates. This has not been without unavoidable setbacks. The challenges presented by the pandemic required resource shifting, and the ability for the OLIS staff to prioritize and work on projects that were required for a successful session. The enhancements to technology and processes developed in the past session will forever change the landscape of the Legislative Branch.

Although we have made great strides in our mobile and remote environments, we need to now complete projects that were affected by resource shifts and move to the 2023 biennium projects. Moving forward, end-to-end testing and complete integration of all aspects of the LAWS II applications will be top priority, with an emphasis on knowledge transfer and support for the LAWS II system. Priority will then be given to other projects identified by the whole Branch in the IT Strategic Plan.

Overall, this was a very successful biennium especially in support of the 67th Legislative Session with the mobile requirements. OLIS is prepared to develop a plan for the 2025 Biennium with the assistance of the IT Planning Council to meet the needs and challenges ahead while maintaining our current operations. We look forward to strategically planning for the Legislative Branch needs.