Office of Legislative Information Technology (OLIT)
Project Status Update
2017 Biennium

1. Current Projects

a. Session Systems Replacement – Steve Eller
This is a major enterprise-level business system replacement project to upgrade multiple aging systems, including process design, MCA/annotations, editor system, engrossing and enrolling, codification, and the MCA publishing systems, all used to support the legislative session and related post-session publication processes. Some of the systems involved in this are over 30 years old and in danger of becoming obsolete, with potential significant consequences. If these systems do become obsolete, there is a good chance that the LAWS system will have unsupported software packages and could potentially become unusable. The name for the new system of applications is LAWS II.

In addition to the avoidance of system stability risk, the project is expected to produce the following benefits:

- Automation of manual processes resulting in improved service and gains in efficiency;
- Improvements in usability and comprehension of the proposed bills and amendments;
- Developed skill sets to support new toolset; and
- Consolidation of system resources resulting in lower costs of operation and maintenance.

b. Hardware/Software Replacement – Mike Allen
The current user computing environment has reached the end of the replacement cycle. The Branch printing solution was upgraded from Lexmark 540 to their new generation enterprise level 810 printer. The new printers are compatible with wireless printing to include mobile device support. The Branch has selected two new Dell laptop models which will be the staff workstations for the next cycle. Also selected were Microsoft SurfacePro notebooks to accommodate the users with mobile requirements. Along with the new hardware, the Branch will be deploying the 2013 version of Microsoft Office and the new version of Adobe Acrobat Pro. These applications will be deployed using new concepts required by the State Enterprise agreements via vendor-provided online portals. The project will be completed by June of 2016 to accommodate the 2017 Session preparations.
c. **Security Audit – Darrin McLean**
The last major security audit for the Legislative Branch was conducted in 2004. As threats have evolved and the likelihood of an event increases, an independent audit of the branch’s security posture is necessary. This project will partner the Legislative Branch with an independent entity to review the branch’s security program and provide a detailed analysis of our vulnerabilities. The security audit will focus on process and capabilities, people and organization, and technology-based assessments that will allow the Legislative Branch to adopt and standardize on security best practices.

d. **Remote Connection – Mike Allen**
The Branch currently uses Citrix for users to connect to the Legislative network from remote locations. Our current version of Citrix is outdated, complex, and costly for staff to administer and problematic for users. In an effort to upgrade and simplify our remote solution, the Legislative Branch is in the process of migrating to Microsoft Direct Access. Staff successfully tested the concept in July 2015. However, due to concerns from the State Information Technology Services Division (SITSD) we postponed implementation and began a joint project using this technology. OLIT is working with SITSD to resolve the technical issues related to Direct Access. This is a significant joint project with SITSD spanning the Legislative Branch network structure and the Executive Branch network.

e. **Service Management – Darrin McLean**
This project will analyze our ServiceDesk procedures and determine how we can employ industry best standards to create an effective and efficient Service Desk. This project will develop Key Performance Indicators (KPIs) that will clearly define the goals and objectives that will guide our new service management processes. Once OLIT has established a clear set of KPIs, the next step will be to develop Service Level Agreements (SLAs) with the divisions, and to create and maintain Operational Level Agreements (OLAs) between sections within OLIT. OLIT will transition into a Service Desk that will not only keep help desk incidents, but will also incorporate asset management and change management procedures.

f. **Budget Book Improvements – Steve Eller**
LFD publishes two main series of budget books for the Legislature. The budget analysis of the Governor’s proposed budget and the end of the Legislative session fiscal report. Each budget book encompasses multiple volumes. While the display on the web to end users is nice, the mechanics of posting to this format is not easy for content managers. The current format requires use of HTML/CSS code to populate and maintain. LFD desires an easier method for publishing the budget books to the web that do not require the content manager to use code.
g. Virtual Network Health Assessment – Mike Allen
In preparation of the new LAWS II infrastructure, staff performed a significant upgrade to the virtual environment. To ensure the stability of the virtual environment a third-party health check was performed in January 2016 to ensure system configuration quality and adherence to best practices. The result of the health check required some minor configuration changes and included a fail-over test to the disaster recovery site in Miles City. The recommended configuration changes will be completed by April 2016. This successful health assessment has increased confidence that the infrastructure is prepared to host the LAWS II Linux environment and continue to provide the Microsoft Windows services for the Legislative Branch core desktop applications.

2. Future Projects

a. Conversion of Programming Language – Steve Eller
This multi-biennium effort will convert the Branch’s core databases and programming language to a modern technology. The legacy applications throughout the Branch were built and maintained in a desktop level toolset, which were fine in their time, which presents a number of stability and security risks now. Furthermore, the legacy applications are not conducive to web-enabled applications – especially mobile application support. The switch to a modern programming toolset will support the Branch’s move to more web-based and mobile device-friendly delivery of information. A big part of this project is training staff in the new development language and environment, which will enable our internal staff to support the systems into the future.

b. Integrate Calendars and Noticing – Steve Eller
This is a carryover project from 2012-2013 that was not executed due to prioritization of other unplanned efforts. Over time the Legislative Branch has developed many (more than 10) electronic calendars to meet various business needs. There was little consideration of existing calendars when new calendars were developed. As a result, none of the calendars work together, and this means multiple updates are needed for one event change. Often one or more of the calendars has incorrect information, leading to miscommunication and lost time. This effort will improve efficiency and accuracy of calendar information throughout the Branch.

3. Completed Projects:

a. Session Systems Replacement – Hosting Infrastructure – Mike Allen
The new LAWS II system required a hosting infrastructure that would provide reliable hardware and server application software capable of accommodating the needs of the LAWS II environment. An analysis indicated the Legislative Branch data center configuration closely matched the requirements to host and support the new LAWS II environment with minimal additional hardware. More significantly was the addition of over 60 Linux RedHat servers into the Microsoft
Windows infrastructure. Staff completed the configuration and installation of the additional hardware and software, which included extensive Linux training. The LAWS II Linux environment was available to the project team as scheduled in October 2015 and support for the LAWS II development process is ongoing.

b. Legislative Fiscal Division Analysis Tools Upgrade – Steve Eller
The Legislative Fiscal Division (LFD) has been using user-developed desktop tools for much of their fiscal analysis and reporting. These toolsets are using aged technology, and one of the primary developers retired in 2012. That and the fact that the executive Branch is replacing their budget development system precipitated the need to enhance or replace LFD tools. These include: a) Fiscal Note system replacement; b) SABHRS data extracts re-work; c) MBARS and IBARS implementation and integration; and d) General Status Sheet enhancements.

c. Data Backup – Mike Allen
A business case analysis was completed in 2014 to review the automated data backup system that was being used at that time. It was determined that the current system was inadequate based on the many changes made to the Legislative Branch infrastructure, including the high percentage of virtualization, the physical move to the data center, and the addition of the disaster recovery (DR) data center in Miles City. The Legislative Branch implemented a software application from CommVault that includes new backup technologies, enables backup of the virtual environment, and provides replicated backup data to the DR. This project was completed in October 2014.

d. Data Center Move/Disaster Recovery Upgrade – Mike Allen
Completed two major projects in October 2014 related to the physical location of the Branch servers and associated hardware. One project involved moving the Branch Data Center from the basement of the Capitol to the new State of Montana Data Center (SMDC). The second project involved upgrading the disaster recovery system and moving it from the alternate location near the Capitol building to the Miles City Data Center (MCDC). At the same time the Branch also upgraded the applications and hardware used to transmit and secure the Legislative data to the remote location. The Branch now has the disaster recovery capability to overcome emergencies that could potentially affect the Helena area.