

STATE OF VERMONT OFFICE OF LEGISLATIVE COUNCIL

MEMORANDUM

To: Members of the Legislative Information Technology Committee

From: Legislative Information Technology Staff Management Team

Date: March 12, 2015

Subject: Five-Year Information Technology Plan

The Legislative Information Technology Staff Management Team ("Management Team"), composed of representatives of JFO, House Clerk, Legislative Council, Senate Secretary, and Sgt. at Arms, has prepared this proposed five-year plan for information technology development at the Vermont State House. We are submitting it to the Committee for review, discussion and approval.

This plan should be reviewed and revised each year to accommodate changing technologies and organizational requirements. In order to maintain and improve the General Assembly's systems, yearly updates are essential. IT systems quickly become obsolete, and a failure to fund maintenance, improvements, and upgrades can quickly lock an organization into using outdated systems which are inefficient and more costly over the long term. To prevent this, the Management Team recommends that a base of \$150,000 be included in every fiscal year budget for IT related projects.

OBJECTIVES

This five year plan is built around the following objectives:

Improving access and usability: Ensure that members and staff have ready access to the information and systems they need to do their jobs, improve transparency and public access to information, and improve the usability of the website and systems.

Providing excellent customer service: Ensure that members and staff have the best support and training possible so that they can fully utilize the General Assembly's systems.

Improving system reliability: Increase the reliability and security of the legislative information system, and continue to increase the ability to recover from a disaster.

Planning for continual improvements in a cost effective manner: In the past systems were allowed to become outdated. This five year plan is built around the recognition that IT needs are constantly evolving, and the General Assembly must keep abreast of these developments. This must also be done in a cost effective manner by, for example, utilizing off-the-shelf solutions instead of developing unique in house programs.

PHONE: (802) 828-2231

FAX: (802) 828-2424

YEARS

I. Year 1 (FY 2016):

Proposed IT projects (in order of priority):

<u>Decouple Word from xmLegislator</u> – The xmLegislator legislative automation application uses MS Word 2010 as its primary editing interface. This causes performance problems (Word is a very resource-hungry application), compatibility issues with other applications (the DM document manager in particular), and prevents the replacement of specific technologies that may no longer meet operational requirements.

Rewire House offices & Council offices: The data wiring to the House and Council offices dates back to 1994 and is by far the oldest in the building. It is proposed to replace the existing wiring with a modern CAT5e or CAT6 infrastructure and install a network switch to improve speed and reliability. This will be carried out and paid for by BGS.

<u>Implement Virtual Server Redundancy:</u> The State House computer services are based on the VMWare virtual server environment, which provides high-quality performance and uptime. However, a failure of the VCenter server which manages this environment would disable much of the IT operation. It is proposed to install a second server and software support to allow the secondary machine to take over in the event of a failure of the primary.

<u>Updates to WiFi system:</u> Currently, access to the so-called "in-house" wireless network is managed through passwords, which are not secure and difficult to manage. It is proposed to implement a more advanced security server which will automate supporting member and staff access to this network. Also, WiFi traffic, incoming and outgoing, should be filtered through the new firewall.

<u>Digital recording pilot project:</u> Currently, committee meetings are recorded directly to CD. CDs are becoming obsolete and the equipment is aging. In 2013, quotes were received from two leading vendors for implementing digital recording throughout the State House. These quotes ranged from \$100,000 to \$165,000. During 2015 a pilot project is proposed to use free or low-cost software and hardware to record the meetings of two committees. The cost of this pilot is minimal; the recorders used cost less than \$100 each, and recordings will be stored on the existing storage network. The IT staff is exploring options with the Secretary of State's office and the Archives to make these recordings available to users through the web.

Estimated costs for Year 1 (FY 2016):

Total	\$143,500
Digital recording pilot	\$500
WiFi Updates:	\$6,500
VCenter redundancy:	\$16,500
Decouple Word from xmLegislator:	\$120,000

Note: This amount is slightly below the average legislative expenditure on new IT initiatives (as opposed to maintenance of ongoing IT operations) over the last four years.

* * *

<u>Plan for future JFO web development:</u> This may or may not include moving to the legislative web platform currently under development. Goals for the new JFO website include:

- Increased user accessibility,
- Increased transparency and easy access to information,
- Data visualizations and interactive functions
- Improved interaction between JFO website and fiscal committees, and
- Increased capacity for using revenue forecasting models (REMI and Chainbridge) for more accurate and flexible Vermont revenue estimation. (JFO)

<u>JFOBud:</u> Complete development of version 2 of the JFOBud budget system for processing budget and maintaining multi-year data and related report generation.

II. Year 2 (FY 2017)

Proposed IT Projects (Not in order of priority):

<u>Redundant Internet Connection:</u> A solid connection to the Internet is essential to State House operations. The current GovNet connection is of varying quality, and suffers more than occasional outages. It is proposed to add a second connection, load-balanced to provide uninterrupted connection

Off-Site Replication: Establish off-site replication of live server data, with redundant virtual server infrastructure. This would allow the transfer of IT operations to the off-site location quickly and without loss of data in the event of a fire or other incident.

Review IT staffing: Support for new services and increasing user support requirements are taxing existing staff resources. Also, the small four-person staff makes it difficult to maintain service levels when one or more staffers are busy on projects or out of the office.

<u>Automated Drafting:</u> Consider improving the automation of the drafting process in Word through specialized tools, macros, and improved integration between xmLegislator, DM, and the legal staff. This is dependent on decoupling Word from xmLegislator.

<u>Document Management:</u> Explore upgrading or replacement of the DM document management system: The current document management system is 16 years old and is a constant source of frustration to its users. Either upgrading or replacing is dependent on decoupling Word from xmLegislator.

<u>Intranet:</u> Establish "Intranet" services to support drafting process, in-house distribution of documents, access to reports, etc.

<u>iPad Replacement</u>: Begin phased replacement of 2nd generation iPad tablets with current generation equipment (possibly Windows-based tablets).

Paper Reduction: Continue reductions in paper consumption.

<u>Digital Recording:</u> Broaden Year 1 pilot project to record more committee rooms and the Senate chamber to server-based recording.

<u>Sound Systems:</u> Upgrade Senate sound systems and House chamber-side sound equipment.

<u>Presentation Systems:</u> Install permanently mounted presentation equipment (projectors, screens, monitors) in rooms 10 and 11.

<u>Records Management:</u> Continue incorporation of industry best practices for records and information management into legislative operations. Work with Secretary of State and Archives to improve transfer of records to Archives and improve public access and retention.

* * *

<u>Budget Systems:</u> Explore integration between JFO and administration budget and revenue systems, creation of unified budget processing system with protections for separation of powers. (JFO)

III. Years 3-5 (FY 2018-2020)

Proposed IT Projects (Not in order of priority):

MS Office: Upgrade to MS Office to the current version (or Office 365).

Off-site Data Center: Explore establishment of an off-site data center (possibly outsourced or cloud-based).

<u>IP Telephony:</u> Explore replacement of existing Centrex-based telephone systems with IP-based telephone technology, in coordination with the Telecommunications division of DII.

<u>Bring Your Own Device (BYOD):</u> Support for BYOD operation. (Continue phased replacement of 2nd gen iPads.) This may require development or purchase of a legislative automation application for these devices.

<u>Senate Chamber Electronics</u>: Support for electronic devices on Senate floor, limitation of WiFi in Senate chamber to chamber business only. (Requires Rules)

<u>Hyperlinking</u>: Add hyperlinks between documents on website, especially links from calendars to bills and amendments, links from bills to statutes.

<u>House Chamber Presentation:</u> Explore permanently mounted presentation equipment in House Chamber (for non-session use).

* * *

<u>Program Budgets:</u> Develop first generation program budgeting system that integrates with the administration to reduce errors and improve estimation. Integrate performance measures, goals and outcomes in the system (JFO)

<u>State IT Projects Database:</u> Develop database of all state IT projects and relevant budget implications. (JFO)

<u>Grant Tracking:</u> Enhance grant tracking system for use by legislators, staff, administration and public (JFO)