

Cyber Commission Quick Wins

The following concepts/ideas could be developed and find life either through legislation or executive order. Executive order gets it done this year while legislation will have to wait at least till the next year's session; improved IT Security should be something both political parties can agree to and promote!

Create Good Paying IT Security Jobs and Significantly Improve Jurisdiction IT Security:

This concept is not a new idea it mimics the precedence set by legislation supporting the Library of Virginia Records Management mission. The VL legislation requires each jurisdiction to appoint a staff person to be tasked and responsible for Records Management. The new IT/OT security legislation or executive order would require jurisdictions to appoint a staff person to be responsible for IT/OT Security. We discussed how some smaller jurisdictions would find it challenging to fund a full-time position. There would be an option for those localities to establish mutual aid, support annual risk assessments, but utilize a shared staff resource. In Public Safety mutual aid is very common, counties share the cost of text alert systems, fire, and EMS response for example. Counties could share a CISO resource.

Insure Constituents Financial Transactions are Optimally Secured:

Advanced Point of Sale (POS) technology is moving to the US more quickly since the events of 2014 (Target, Home Depot, JP Morgan, etc.). The governor could issue an executive order that would require that all jurisdictions begin migrating to the new CHIP and PIN POS technology with conversion to start no later than 2Q2015. It sounds aggressive but it's coming in 2015 anyway, Virginia just takes the lead in making it a requirement rather than an option!

The jurisdictions must all comply with the State rules for communicating tax data to the state. The rules call for encryption of the data in transport but there is no requirement to encrypt the data at rest. Along with the new POS requirements jurisdictions that use SSN as constituent tracking numbers and or store such PII with tax data should be required to encrypt the sensitive data at rest. Both UVA and VT removed the use of SSN as an employee and tracking number over a decade ago.* It's possible to do this state wide. The leads for these projects are still employed at the universities and could be called up to assist the state in this important move to secure constituent data. Because Treasurers in the jurisdictions are elected officials they are driven by State IT Security guidelines more so than the jurisdiction where they serve. The local CISO will have significant difficulty attempting to impose encryption at rest for constituent SSNs if the state doesn't mandate this protection.

IT Security Economies of Scale:

Based upon my experience Arlington County it appears that at least in NOVA most school systems run independent of the jurisdiction with the exception of Health, Fire, and Police services. Regarding Information Technology in schools, throughout the various jurisdictions, there is significant duplication of resources and efforts which could benefit from consolidation. For example, a consolidation of duplicate fiber, TELCO, Enterprise infrastructure, PCs, IT Staff and IT security would create a streamlined, optimized, and worry free cyber experience for the end users. I have lost count on the number of calls we've received regarding IT Security issues with the school system's compromised network, etc. If schools were mandated to utilize capabilities already in existence in their jurisdiction, duplication cost

would be reduced Cyber Security would be optimized. Certainly, there would be significant push back to this recommendation (unjustified since the demands upon a jurisdiction Enterprise network far exceeds the requirements of a school system's), so why not launch a couple of well managed pilot programs to demonstrate the concepts effectiveness? Several years ago I asked the State Secretary of Education about supporting this concept and was abruptly told it was a local issue. I don't think it's a local issue and an engaged governor can make a difference that will improve efficiency, security, and reduce cost. Cyber Security is our shared responsibility. How is it that most if not all of the school systems in the State d not have a CISO who oversees

Reduce Operating Cost and Improve Efficiencies:

Not a core Cyber Security issue but none-the-less an important concern that if advanced into the 21st century will lower government operating cost for both the state and jurisdictions through reduction of paper documents physically being mailed, stored, etc., and the inherent efficiencies. Here in Arlington we currently have a working model (see attached). Today if we send a document detailing compliance to data retention or deletion the document (hardcopy) must be signed by the Records manager. We have the capability to send the document to Library of Virginia electronically, but they will simply hand it over to a staff person to print and re-type the information into a state database – senseless waste of work effort. Digital signatures should be approved for government employee use. I understand cursive will soon no longer be taught in schools so why continue to require cursive signatures?

IT/OT Security State of the State Questionnaire:

The attached questionnaire provides list of questions that I believe could be answered by Chief Administrative Officers (CAOs) of the state's counties and commonwealth cities. Gathering up the answers to these questions (a quick Cyber Security Health Check/ Knowledge /Policy Audit) and correlating and analyzing the results will provide an excellent view of the required education and work ahead of us as well as provide justification for the recommendations above and even additional efforts to place Virginia in a IT Security leadership posture when compared to other states. This was one of our governor's major goals if elected as he voiced at last year's COVITS and reiterated at the 2014 COVITS conference. I think it's doable!

(Questionnaire Attached; the questions are intended to promote a discussion within the local government's leadership as it relates to Cyber Security as practiced within that government's organization, as well it also promotes additional best practices such as including specific contract language requiring Cyber Breach liability language; requiring vendors to demonstrate their use of Cyber Security Best practices, etc.)

* Converting SSN to Customer ID is not new for Virginia, VT and UVA both went through the process several years ago; http://www.it.vt.edu/itell/itnewsletter05_05.pdf . The federal sector has also started to address the SSN issue. HUD is moving toward significantly reducing the use of SSN; <http://www.hud.gov/offices/hsg/mfh/trx/meet/mdmwhitepaper1.pdf>

<http://www.virginia.edu/ssninitiative/multilayered-plan.pdf>
http://www.virginia.edu/ssninitiative/SSN_Initiative_Overview.pdf
<https://policy.itc.virginia.edu/policy/policydisplay?id=IRM-014>

The use of SSN in the Health Care industry for local, county, state government employees and constituents is the next area of concern. This white paper is a fast read and concludes that a change in this bad practice is needed and doable;

http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_049016.hcsp?dDocName=bok1_049016