



Executive Branch Technology

Benefits Report

2022

September 2023

vita.virginia.gov

BACKGROUND

Pursuant to Virginia Code [§ 2.2-2007](#)(B)(2), the Virginia Information Technologies Agency (VITA) respectfully submits this report, which provides an annual update on the “use and application of information technology by executive branch agencies to increase economic efficiency, citizen convenience, and public access to state government.” This report summarizes initiatives undertaken by VITA and other agencies in 2022. Technology initiatives begun in 2023 will appear in next year’s report.

INTRODUCTION

The executive branch under Governor Youngkin’s administration is committed to enhancing service to Virginians and efficiency by improving the technological landscape, from the relocation of servers and employees to cutting-edge cybersecurity measures, the digitization of constituent services to the launch of user-friendly applications. This report explores the myriad benefits these initiatives bring to the Commonwealth, reflecting a dedication to progress, efficiency, and excellence in the ever-evolving world of information technology.

REPORT

Website Modernization

Under Governor Youngkin, the executive branch’s dedication to innovation and customer-centricity has prompted a transformative overhaul of agency websites, addressing long-standing frustrations stemming from design, inconsistencies, and suboptimal experiences. The Secretary of Administration, beginning in her first few weeks, initiated inquiries about citizen user experience across Commonwealth of Virginia (COV) websites. Her office partnered with a newly-established, VITA-led, multiagency workgroup focusing on web accessibility for all users. This collaborative

effort aims to streamline business and deliver toolsets to enable full accessibility and security and also to alleviate the burden on constituents who previously had to navigate multiple websites to access information.

The web modernization project was formally initiated in the latter half of 2022, at a time when the COV's digital landscape lacked central organization, utilized web standards from 2017, exhibited inconsistent design elements, and lacked the capability to track web content. Since then, the team began meeting with all executive agencies to rectify these issues. New standards were created (and have been published in 2023). A significant milestone is the establishment of a unified virginia.gov URL, providing a centralized gateway for Virginians. A new Commonwealth branding bar and logo with built-in enterprise search tools have been implemented across 100% of main agency websites. These monumental strides reflect the administration's commitment to enhancing the digital experience for citizens, ensuring a more cohesive and user-friendly online presence for all Virginians.

Website Services and Contracts to Support Modernization

VITA laid the groundwork for the important initiative to create more secure, accessible, consistent, and well-designed websites, thereby ensuring that all Virginians have an improved experience when interacting with state government. VITA awarded three new contracts for content management software, supplying hosting and vendor support for web development. VITA created a Virginia.gov website service, which empowers state agencies to build and manage websites more efficiently. This website service includes a content management system, citizen engagement tools, design assistance and templates, accessibility options, and features to support verification, hosting, user experience, training, analytics, and cybersecurity. The Virginia.gov website service equips agencies with the resources necessary for effective digital communication and standardization when possible. Website modernization and standardization enhances cohesion among executive branch agencies, fosters a more efficient and collaborative IT environment for the Commonwealth, and improves services to Virginians.

VITA Data Center and Office Move

In 2022, VITA completed a major project to relocate its servers and employees. The new location has a closer proximity to most customer agency headquarters and offices in the Richmond, Virginia area and reduces the time spent commuting to work for many employees. Moving offices may not be purely a technology project, but it produces improvements in IT services and other benefits. The new space facilitates improved collaboration with customer agencies and suppliers, supports hybrid work arrangements with updated video conferencing equipment, and aligns with VITA's commitment to deliver more customer-centric and efficient services. Notably, the move is also expected to result in savings of approximately \$2.6 million annually.

VITA's transformative journey toward modernization also included a significant data center move. This endeavor was executed in partnership with all 60+ executive branch agencies and facilitated the Commonwealth's move to cloud-based services. The agency and enterprise partners delivered a new data center, the establishment of a private cloud, and the seamless migration of over 4,000 servers, while ensuring awareness and alignment through extensive customer communications. This data center migration has made service delivery more visible and accountable, and it has decreased the Commonwealth of Virginia's physical server footprint. The migration has also been beneficial in leveraging the newest technologies to meet agency needs and to improve performance with sustained security, service reliability, and quality.

Agencies Improve on Feedback Solicitation Techniques

Virginia state agencies have made significant strides in enhancing their feedback solicitation techniques to better serve Virginians. These agencies recognize the value of input from constituents and have adopted diverse approaches and used different tools to engage stakeholders and collect valuable feedback.

The Virginia Department of Emergency Management (VDEM) conducts occasional focus groups to receive direct constituent feedback about their website and

communications. In tandem with this, VDEM harnesses data gathered from their on-site search tool, 404 report, and Google Analytics to enhance website navigation, resource naming, and page locations, ensuring an improved user experience.

Virginia State Police (VSP) began developing a fresh engagement model to maximize customer satisfaction, as well as to evaluate stakeholder input in the VSP IT Strategic Plan for 2022. Some features of this new engagement model include Google Analytics traffic and bounce rate, SiteImprove's quality assurance and accessibility scores and customer satisfaction surveys.

The Department of Conservation and Recreation (DCR) continues to leverage websites, the Virginia State Parks' newsletter, social media, digital advertising including Google AdWords and display advertising.

The Department of Motor Vehicles (DMV) solicits, receives, and responds to feedback from customers through social media, their hotline, business work units, and correspondence sent to the Commissioner's Office. DMV is actively exploring ways to further improve on their constituent engagement strategies, and they plan to publish new online surveys soon.

The Virginia Department of Health (VDH) adapted to the pandemic by introducing a chat bot and intends to expand and further evaluate this technology, highlighting the agency's commitment to continuous improvement and responsiveness to the needs of Virginians.

Enhancing Cybersecurity

2022 continued to illustrate the importance of improving cybersecurity across the Commonwealth. Just prior to Virginia's 2022 General Assembly session, the Virginia Department of Legislative Automated Systems (DLAS) fell victim to a ransomware attack that disabled crucial sites needed for legislative activities. VITA collaborated closely with DLAS to quickly establish a secure enclave, providing a temporary shield

that enabled DLAS to reconstruct affected sites. The interim solution allowed DLAS to resume critical functions and thwarted any ransom payments or significant loss. Ultimately, this proactive partnership ensured the seamless continuation of the General Assembly's operations while underscoring the importance of VITA's cybersecurity efforts in safeguarding the Commonwealth.

The General Assembly and Governor Youngkin responded by investing in cybersecurity and enacting [new legislation](#) to expand required cybersecurity incident reporting.

Virginia Code [§ 2.2-5514\(C\)](#) now requires incidents to be reported by all state and local public bodies within 24 hours. State, local, and private stakeholders came together over several months in an incident reporting workgroup that ensured smooth implementation of the new requirement, including a new incident reporting website at reportcyber.virginia.gov.

Investment in cybersecurity and increased collaboration also found expression in the beginning of Virginia's participation in the State and Local Cybersecurity Grant Program (SLCGP). The SLCGP is a multi-year effort to encourage a whole-of-the-Commonwealth approach to cybersecurity by making funds available for a state-led effort to plan for and fund improved cybersecurity. Virginia is expected to receive more than \$21 million in federal funding, and the General Assembly has appropriated \$4.9 million in necessary matching funds. Of this funding, 80% will go to localities and 25% to rural localities. More details are available in a separate legislative report on the SLCGP.

These important new steps build on other ongoing efforts to bolster cybersecurity. For example, VITA and other state agencies continued in 2022 to develop and implement an improved information security training program for all state employees, across executive, judicial, legislative, and independent agencies. VITA develops a curriculum and oversees delivery of security awareness training, which state agencies are required to provide to their employees. Realizing improvements in cybersecurity often takes time – in this case, from the initial [2020 legislation](#), to the adoption of [the security awareness](#)

[training standard](#) in 2021, to implementation in state agencies in 2022 and 2023 – but these ongoing efforts are critical to combating cybersecurity threats.

Secretary of the Commonwealth Digitizes Constituent Services

The Secretary of the Commonwealth's Office has undertaken a transformation in modernizing their constituent services, marking a departure from the traditional paper-based approach that often hindered efficiency and user satisfaction. Historically, the reliance on mailed checks and hard copy data records delayed business and created resource intensive challenges in providing vital services. Recognizing the need for a more stream-lined and responsive system, a collaborative effort between the Secretary's Office and VITA led to the digitization of services using Microsoft CRM. The team used Microsoft CRM to digitally transform every necessary service, such as requests for congratulatory acknowledgements from the governor, and restoration of rights for qualified petitioners, into a one-stop shop portal.

The impact of this transformation is remarkable, as over 50,000 applications are processed each year by Notary staff through the online system, and more than 4,000 applications handled for 900 appointed board positions. Over 100,000 petitioners have had their rights restored in Virginia. These achievements underscore the tangible benefits of leveraging technology to enhance efficiency and user experience, making government services more accessible and responsive to the needs of constituents.

VITA Upgrades Infrastructure Services

VITA embarked on significant infrastructure upgrade initiatives, geared towards providing its 65 state agencies and 55,000 state employees with the tools and technologies necessary for effective remote work and collaboration. This endeavor encompasses solutions from Zoom, Microsoft Teams, and Cisco WebEx, aimed at facilitating seamless conferencing and collaboration needs. Additionally, VITA procured the LiveAction LiveNX tool, to provide comprehensive visibility spanning across the enterprise network. This tool empowers network monitoring across various domains,

including campus, branch, data center, public cloud, wide area networking (WAN), and software-defined (SD) WAN. These tools offer an IT visualization platform that includes integrated flow and packet analysis, as well as network and application performance monitoring (APM), cloud monitoring, end-user experience monitoring, root cause analysis identification, and capacity planning, alerting and reporting.

VITA has made strategic procurements of remote access solutions like Zscaler and Prisma, allowing users to remotely access their agency's network and Commonwealth resources. The acquisition of Secure Access Service Edge (SASE) extends networking and security capabilities and lets users, regardless of location, take advantage of firewall-as-a-service (FWaaS), secure web gateway (SWG), zero-trust network access (ZTNA), and a medley of threat detection functions. These infrastructure upgrades and modernization promote efficient work and bolster network performance and security, benefiting state agencies and employees and the Virginians we serve.

Conclusion

In a rapidly evolving digital landscape, executive branch use of technology can be a catalyst for positive change and innovation in the Commonwealth. Strategic initiatives such as enhanced cybersecurity and the digitization of constituent services have delivered not only streamlined operations but also demonstrable improvements in the lives of Virginians. The tangible benefits of reduced costs, improved accessibility, and heightened efficiency underscore VITA's commitment to excellence. VITA appreciates the opportunity to report on the innovation and continuing new improvements implemented to better serve Virginians.