

Supreme Court of Vermont
Office of State Court Administrator

THERESE M. CORSONES, State Court Administrator
therese.corsones@vermont.gov
Mailing Address:
Office of Court Administrator
109 State Street
Montpelier, VT 05609-0701
Telephone: (802) 828-3278
FAX: (802) 828-3457



GREGG MOUSLEY, Chief, Finance & Administration
gregg.mousley@vermont.gov
MARCIA SCHELS, Chief Technology Innovation Officer
marcia.schels@vermont.gov
LAURIE CANTY, Chief, Trial Court Operations
laurie.canty@vermont.gov
SCOTT GRIFFITH, Chief, Planning and Court Services
scott.griffith@vermont.gov

www.vermontjudiciary.org

TO: Rep. Diane Lanpher, Chair, House Appropriations Committee

FROM: Teri Corsones

RE: Judiciary Budget Adjustment Act Request Testimony

DATE: January 17, 2023

Thank you for the opportunity to testify regarding the Judiciary's Request for a FY23 Budget Adjustment submitted to your Committee on January 11, 2023. The request is intended to fund the Vermont Judiciary's IT Infrastructure Modernization Project. Attached is a power point presentation that Chief Technology Innovation Officer Marcia Schels will present to summarize the reasons that necessitate the Project and the advantages that we believe the Project will afford Vermonters utilizing the Vermont court system. The Project includes four separate components:

- Judiciary IT Network Replacement \$4,680,000
- Internal Network Cabling Upgrade \$750,000
- Courthouses Sound System Replacement \$500,000
- Correctional Facilities Remote Hearings Improvement \$300,000

This request is being made as a budget adjustment and not as a request in the FY24 budget as the Judiciary was advised to not include one-time funding requests in the FY24 budget. In addition, there is an urgency to implement the new network due to the ongoing issues with poor network performance that the Judiciary has experienced over the past 7 months and which are progressively becoming worse. The response from ADS has been that network issues can be expected to persist every Tuesday/Wednesday/Thursday for the foreseeable future. The failure of ADS to upgrade their firewall network technology twice during the past several months does not give the Judiciary confidence in their ability to perform this upgrade to service the Judicial system. The ongoing issues are impacting the ability of the Judiciary to operate, affecting judges, staff, and litigants.

1. Judiciary IT Network Replacement

The first and the primary component of the Project pertains to the Judiciary separating from the Executive Branch ADS system and implementing, maintaining, and supporting a separate network system, thus ending the Internal Support Provider (ISP) arrangement. The funding request of \$4,680,000 covers implementation and five years of support.

The plan for the new network was developed by the Judiciary's Technology Services Center (TSC) over the past 9 months with cost estimates gathered through informal RFI's from vendors with specific areas of expertise including Palo Alto, Aruba Networks, Microsoft, Arctic Wolf, and Cortex IO. Firewall implementation and design has been reviewed by Palo Alto while networking has been reviewed by Aruba Networks. Competitive Computing (C2), now a subsidiary of Xerox Corporation, has reviewed and consulted on the overall system architecture with our TSC infrastructure team. C2/Xerox is a local Vermont IT vendor that has supported IT projects at the Judiciary for many years, including the implementation of a High Availability Architecture (HAA) for the Odyssey application, and they understand the Judiciary's infrastructure needs well. In addition, implementation project costs include a full architecture build out with multiple subject matter expert architects.

Within the "Project Components/Cost" table, the amount listed for the total network replacement cost (\$4,680,000) is solely for the new network build-out and support. The existing network hardware that will be replaced is currently owned and operated by ADS. All replacement switches and new Wi-Fi access points are included in the project cost. There are no other costs included for existing hardware that are due for an upgrade; for example, our data center hardware has been replaced within the last 3 years and will not need to be upgraded again in the time frame it will take for us to move our applications to the cloud.

Objectives of this network replacement include the following improvements for the Judiciary:

- (1) Network speed: In this plan, the speed of the primary E-LAN fiber optic network connection to each courthouse will be increased from 50MB to 1GB. TSC has already priced out and explored connectivity with several providers. There is no build out expense as this infrastructure is already in place in most locations but is underutilized in the current configuration.

In addition, most of the network issues the Judiciary has experienced with ADS are caused by their firewall lacking the throughput to handle the network traffic of the combined Executive and Judicial branches. This plan includes firewalls that are sized for the current state of traffic at the Judiciary and allows for traffic to double before seeing a slowdown, thus providing room for growth.

- (2) Network redundancy: The Judiciary has experienced 13 separate major network outages since June of 2022 alone. In this plan, every courthouse and Judiciary office space (24 locations) will have a redundant (backup) network to eliminate disruption in network connectivity. To accomplish this, every location will have a separate network firewall, vs. the single firewall

configuration for the entire Judiciary as the network is configured today. Having a separate firewall at each courthouse allows for multiple internet connections at each courthouse, thus providing a secondary backup network system for redundancy. The primary connection will be the E-LAN fiber optic network and the local ISP provider (e.g., Comcast) will be utilized as a secondary connection. In the event the primary network goes down, the second would automatically take over. Furthermore, the plan includes virtual firewalls in the cloud that will allow the Judiciary's network traffic to continue even if there is a firewall outage on site at the TechVault Data Center.

- (3) Secure Wi-Fi: Along with the next generation firewalls, the Judiciary has included advanced federally compliant Wi-Fi devices in the plan. Secure, private Wi-Fi for staff and judicial officers will be added at every courthouse, in addition to the public Wi-Fi, eliminating the need for Judiciary laptops to be hardwired to the network and thus removing the problem of losing connectivity when moving around a courthouse.
- (4) Cybersecurity: This plan includes an outsourced "Security Operations Center" (SOC) with staff that will monitor the Judicial network 24/7/365 and respond to any attacks to our network. This team would engage the Judiciary Technology Support Center (TSC) staff when needed and provide recommendations, financial guarantees, and assistance in case of a breach of the Judicial network. The SOC would also provide and manage training for all the judicial staff, keeping our staff current with network security principles. The cost for the SOC will be an annual expense that is accounted for in our operating budget. This vendor, Arctic Wolf, is a leader in the security sector and provides manage support along with dedicated teams to service their clients. Services include scheduled network audit services as part of the SOC as a service (SOCAAS) model.

In addition, the advanced next generation network firewalls are capable of not only blocking unauthorized traffic but also responding to unknown threats and unusual patterns of behavior. This firewall bundle also includes a network monitor that checks all traffic within the network, responding to and blocking malicious behavior. The proposed solution will only allow known devices on our network, segregating unknown devices to the public side of the network.

Finally, the plan includes implementing Akamai Technologies software to defend the network against cyberattacks. The use of this intelligent software is cost-prohibitive for the entire Executive Branch network, but affordable for the size of the proposed separate Judiciary network.

Overall, the fact is that the Executive Branch has many antiquated systems that are vulnerable (e.g., don't have the latest supported version of software) and pose a cybersecurity risk to the entire network. By continuing to operate within the Executive Branch's network, the Judiciary is at a greater risk than if we maintained a separate network. In contrast, the Judiciary's Odyssey system has just undergone a third-party security audit in the last 90 days and will be upgraded to

the latest version this calendar year. The Judiciary's operating budget includes funding for ongoing third-party security audits whenever new applications are implemented, or significant configurations are done to the network.

- (5) Proactive Responsiveness: The plan provides an advanced network monitoring system. This system will notify the TSC staff to anomalies in the network as well as any outages that may occur. This advanced warning will allow TSC staff to respond and communicate with the Judiciary before we are contacted by end users calling the help desk. This system will ensure that not only will we be able to respond to outages, but also to anything that may slow down network performance.

The Judiciary has 10 FTE's in the TSC to support this new network. The specific technologies were selected because of the ability to manage them with a small team. Artificial intelligence is built into many of the technologies allowing us to proactively and predictively respond to events.

- (6) Improved Help Desk Customer Service: By implementing its own network system, the Judiciary can then also assume independent help desk operations including Microsoft software license management and Microsoft cloud (Azure) management. Again, the situation today is that these functions are controlled and managed by ADS. The Judiciary's TSC is prepared to assume these responsibilities in-house while providing a greater level of customer service. TSC staff will be able to respond to and resolve most tasks within a matter of hours versus the status of 18 days (on average) with ADS.

The cost of the software for desktops is in the Judiciary's operating budget, and not included in this project funding. Today, the license costs are passed on from ADS to the Judiciary along with overhead fees such as per user fees for Microsoft support and ADS Shared Services desktop support, services which we do not need. In the future, the Judiciary will be able to purchase licenses directly from Microsoft with the same government pricing as the Executive Branch and the Legislative Branch (who are already independently managing their own software licenses).

- (7) Cost Savings: This one-time funding request of \$4,680,000 covers implementation and five years of support. The projected cost savings vs. continuing with the ADS ISP funding model is \$3.5 million over five years.

	FY23	FY24	FY25	FY26	FY27	FY28	Total
ADS Allocation	\$ 535,000	\$ 561,750	\$ 589,838	\$ 619,329	\$ 650,296	\$ 682,811	
ADS SLA	\$ 540,152	\$ 567,160	\$ 595,518	\$ 625,293	\$ 656,558	\$ 689,386	
							\$ 6,237,938
Comparative Judiciary Costs	\$ 460,000	\$ 483,000	\$ 507,150	\$ 532,508	\$ 559,133	\$ 587,090	
							\$ 2,668,880
						Estimated Cost Savings	\$ 3,569,058

Voice Over IP (VOIP) costs are included in this proposal and include the licensing for a cloud VOIP option, Microsoft Teams Voice, which integrates with client applications and will require less hardware. Teams Voice provides modern calling options such as voicemail to email, call history, call blocking, call transferring, call forwarding, and more. This system is compliant with Payment Card Industry Data Security Standard (PCI DSS) and will allow us to have dynamic call center capability.

The Judiciary’s IT strategy includes migrating all on-site hardware to the cloud within the next 2-3 years. This will allow for lifecycle replacement of servers to be eliminated and transferred to annual operating expenses. The Judiciary has also budgeted for the replacement of network infrastructure components as part of its operating budget.

2. Internal Network Cabling

The Judiciary’s need for a reliable high-speed network has increased exponentially with the rollout of Odyssey and the introduction of remote/hybrid Webex hearings. Vermont's courthouses have internal CAT3 network cabling (capable of 10Mbps, which is not adequate for today's network intensive applications) and need to be upgraded to CAT6 wiring (1 Gbps). Half of the courthouses will have their network cabling upgraded with \$750,000 from Pandemic Funding, but the second half requires this one-time BAA funding.

3. Vermont Courthouses Sound System Replacement

All of Vermont's courthouse sound systems are outdated and inadequate for use with the Judiciary's modernized systems. In addition, as the equipment breaks or requires a reconfiguration, a technician must travel to address the issue on-site at each courthouse across the state. This project will replace the sound mixer with a modern robust system that can be managed and configured remotely. It will also

replace the amplifiers in each facility with an appropriately sized one. The plan calls to install chamber microphones that will allow for chamber conferences to be recorded to the For The Record (FTR) court transcription. This paves the way for more advanced audio recording such as Simultaneous Interpretations and ASL hearings. This new equipment will also address the issue for media access to hearings by providing a more robust audio output, fix the Public Address (PA) systems in all the courthouse, and will allow for a more robust hearing assist system in the courts. It is expected that the new systems will last a minimum of ten years before needing to be replaced.

4. Correctional Facilities Remote Hearing Improvement

Vermont's Correctional Facilities lack the required infrastructure and equipment to adequately conduct remote hearings; this deficiency is a contributor to the increased backlog of court cases stemming from the Pandemic. Pandemic Funding was utilized to increase the number of Webex devices at Vermont's correctional facilities including at least one hardened large screen, hearing device, and multiple mobile units that will allow for confidential calls with clients, breakout rooms, attorney calls to clients, etc. However, this one-time funding is also needed for the facilities to be upfitted with sound proofing materials to increase sound quality and provide confidentiality. In addition, a secure Judiciary Wi-Fi network needs to be installed in every facility so that the new Webex mobile units can be fully utilized.

Cc. Rep. Robin Scheu, Vice Chair
Rep. Patrick Brennan, Ranking Member
Rep. Tiffany Bluemle
Rep. Eileen Dickinson
Rep. Katherine "Kari" Dolan
Rep. James Harrison
Rep. Rebecca Holcombe
Rep. Marc Mihaly
Rep. Woodman Page
Rep. Trevor Squirrell
Rep. Tristan Toleno
Maria Belliveau, Associate Fiscal Officer
Erin Viera, Senior Staff Associate