

Report to the Governor and the General Assembly of Virginia

VITA's Transition to a Multi-Supplier Service Model

2019



Joint Legislative Audit and Review Commission

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Summary: VITA's Transition to a Multi-Supplier Service Model

WHAT WE FOUND

Implementation of multi-supplier model is significantly delayed, and preliminary performance suggests improvements are needed

Implementing a multi-supplier IT infrastructure model was a substantial undertaking for VITA. This transition was particularly challenging because VITA was not staffed or organized sufficiently to implement the new model.

In addition, VITA had to modify its strategy midway through implementation because of difficulties disentangling from Northrop Grumman, its previous IT infrastructure supplier. VITA has largely kept customer agencies' systems and services running under the new IT infrastructure model, but improvements are needed.

Full implementation of VITA's new multi-supplier IT infrastructure model has been delayed over eight months. As of July 2019, VITA's suppliers still had not completed all critical deliverables needed to fully implement the model. Delays have prevented VITA, customer agencies, and suppliers from accessing some core services.

Suppliers have not been reporting some performance data or meeting many of their performance requirements even though they are receiving full payment from VITA for their services. Suppliers have also already had three formal contract disputes with VITA even though most suppliers have been providing services in Virginia for less than one year.

VITA staff estimate that the cost of operating the multi-supplier model is at least \$49 million less each year than the cost of VITA's previous model; however, savings are not projected to be realized until FY21 because of the one-time, upfront costs of transitioning to the new model.

VITA's contracts with suppliers and procurements are generally effective and sufficient, with a few exceptions

VITA's new IT infrastructure contracts are generally aligned with industry practices and peers, and they include most of the provisions needed to ensure supplier performance and protect the state from risk, according to a law firm with expertise in IT outsourcing that JLARC staff hired to review VITA's contracts. A few contract deficiencies were identified that VITA should address as soon as practicable.

WHY WE DID THIS STUDY

The Appropriation Act directs JLARC to review and evaluate VITA on a continuing basis (Item 31 E. of Chapter 854, 2019 Acts of Assembly). As part of this on-going oversight, JLARC members approved a motion in December 2018 for JLARC staff to conduct a detailed review of VITA's IT infrastructure services. JLARC staff assessed the status of VITA's implementation of a multi-supplier model. JLARC staff also assessed VITA's contracts with suppliers, procurement and management of suppliers, resolution of service and supplier issues, and rate-setting process.

ABOUT VITA

One of VITA's primary responsibilities is to facilitate the provision of IT infrastructure services to Virginia's executive branch agencies. IT infrastructure services include end-user devices (computers and laptops), email, internet and phone, print, security, mainframe, and server storage and data center services. VITA outsources these services to eight suppliers and pays for them through customer agency billing.

VITA's procurements for IT infrastructure suppliers were competitive and each had three or more suppliers participate. VITA's procurements also included key stakeholders, such as staff from customer agencies, staff from Virginia's Office of the Attorney General, and IT outsourcing consultants. However, aspects of the evaluation of suppliers could be improved for future IT infrastructure procurements.

Contract management function has been inadequately staffed and has not held suppliers accountable for meeting contract requirements

VITA's contract management function was inadequately staffed to manage a multi-supplier model. As of March 2019, only two full-time staff were responsible for managing all eight IT infrastructure contracts. VITA recently created additional positions and now has six full-time contract manager positions to support the function.

In part because of inadequate staffing, VITA has not effectively held suppliers accountable for meeting contract requirements. VITA staff did not begin tracking whether suppliers had completed many contract deliverables until eight months after the contracts started. As of August 2019, VITA was still not formally tracking whether suppliers were completing hundreds of additional contract requirements related to the provision of services.

VITA also has not addressed the majority of instances where suppliers failed to meet contractual requirements. For example, VITA has not penalized suppliers for failing to report performance data or meet contractual performance requirements, even though it has the authority to collect penalties automatically in its contracts.

Major issues with IT services and suppliers are not being resolved in a timely manner

VITA and its suppliers are not resolving many major IT service incidents within their contractual timeframes. As a result, multiple agencies have experienced prolonged problems with key VITA services—such as phone, internet, and email—that have hindered their operations. VITA suppliers also have not resolved billing disputes or agency requests for new IT services in a timely manner.

VITA has an issue resolution platform for addressing unresolved and widespread service issues, but the platform is not resolving many issues in a timely manner. VITA has a growing backlog of unresolved major issues, and many of these issues have gone several weeks without any action. These challenges are partly due to VITA's lack of policies guiding how issues should be referred to the platform and resolved within it.

VITA also does not currently address all service and supplier issues through its platform. Staff have allowed agencies to circumvent the platform and appeal directly to VITA's leadership to resolve issues. Staff have also resolved some issues, such as formal disputes with suppliers, outside of the platform. This results in a lack of transparency, predictability, and perceived fairness in VITA's issue resolution process.

VITA leadership needs to better ensure the agency is implementing the multi-supplier model effectively

VITA's leadership is ultimately responsible for determining how VITA implements its multi-supplier model. To date, VITA's leadership has not required agency staff to hold IT infrastructure suppliers accountable for meeting their contractual requirements. This has allowed substantial supplier performance problems to persist. VITA leadership has not consistently supported VITA's issue resolution platform, preventing it from maturing effectively. Furthermore, VITA leadership did not reorganize the agency to operate a multi-supplier model until April 2019—eight months after the new model began. This delay caused key staff positions to remain vacant for several months during a critical time. It is also not clear whether the reorganization is complete.

WHAT WE RECOMMEND

Legislative action

- Require VITA to comprehensively review its organizational structure and staffing to determine whether any additional staff positions or structural modifications are needed for the agency to effectively operate the multi-supplier IT infrastructure model.

Executive action

- Address all deficiencies identified in IT infrastructure contracts as soon as practicable.
- Modify the procurement process to ensure that suppliers are evaluated using a reasonable number of criteria that are appropriately prioritized.
- Ensure the status of all IT infrastructure contract deliverables and obligations is tracked through a comprehensive tracking tool.
- Automatically collect penalties from suppliers that do not report performance data or meet performance requirements and develop guidelines for when penalties can be waived due to extenuating circumstances.
- Develop and implement policies establishing (1) criteria for when issues should be referred to VITA's issue resolution platform, (2) a target metric for how long issues should take to be resolved within the platform, and (3) a process for automatically escalating issues that exceed target metrics.
- Ensure issues experienced by customer agencies and issues with suppliers are addressed through the issue resolution platform.

The complete list of recommendations is available on page v.

Recommendations: VITA's Transition to a Multi-Supplier Service Model

RECOMMENDATION 1

The Virginia Information Technologies Agency should address all deficiencies identified in IT infrastructure contracts by Pillsbury Winthrop Shaw Pittman law firm as soon as practicable. (Chapter 3)

RECOMMENDATION 2

The Virginia Information Technologies Agency should establish a process to ensure that procurements for IT services have an appropriate number of evaluation criteria and that adequate weights are applied to important criteria, such as supplier experience. (Chapter 3)

RECOMMENDATION 3

The Virginia Information Technologies Agency (VITA) should, on an ongoing basis, ensure that the status of all deliverables and obligations included in its contracts with IT infrastructure suppliers is tracked through the use of a comprehensive tracking tool, beginning no later than July 1, 2020. (Chapter 4)

RECOMMENDATION 4

The Virginia Information Technologies Agency should develop guidelines describing the circumstances under which staff should request IT infrastructure suppliers to complete remediation plans or pay financial penalties for submitting critical deliverables late and implement the guidelines consistently across all IT infrastructure suppliers. (Chapter 4)

RECOMMENDATION 5

The Virginia Information Technologies Agency (VITA) should implement a process for automatically collecting penalties from IT infrastructure suppliers that do not report performance data or meet their performance requirements. VITA also should develop guidelines that specify circumstances under which VITA should temporarily grant suppliers relief from financial penalties on a case-by-case basis. (Chapter 4)

RECOMMENDATION 6

The Virginia Information Technologies Agency should establish initial deadlines for all contract deliverables that IT infrastructure suppliers are required to complete a minimum of 45 days prior to the date that the deliverables are due. Deadlines should be conveyed to suppliers as soon as they are established. (Chapter 4)

RECOMMENDATION 7

The Virginia Information Technologies Agency should review and respond to all contract deliverables submitted by IT infrastructure suppliers within the contractually determined review period and regularly track whether staff are meeting this requirement for all contract deliverables. (Chapter 4)

RECOMMENDATION 8

The Virginia Information Technologies Agency (VITA) should develop and implement policies establishing (1) criteria for when issues should be referred to VITA's issue resolution platform; (2) a target metric for how long issues should take to be resolved within the platform based on priority level; and (3) a process for automatically escalating issues that exceed target metrics. (Chapter 5)

RECOMMENDATION 9

The Virginia Information Technologies Agency (VITA) should ensure all customer agency issues and supplier issues are identified and addressed through VITA's platform for issue resolution. (Chapter 5)

RECOMMENDATION 10

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Information Technologies Agency to submit IT infrastructure service consumption estimates to agencies for validation each year prior to submitting rate information to the Department of Planning and Budget for approval. (Chapter 6)

RECOMMENDATION 11

The General Assembly may wish to consider amending § 2.2-2013 of the Code of Virginia to require the Virginia Information Technologies Agency to release a preliminary rate schedule to agencies upon the submission of the governor's budget each year. The rate schedule should be for the upcoming fiscal year. (Chapter 6)

RECOMMENDATION 12

The General Assembly may wish to consider requiring the Virginia Information Technologies Agency (VITA) to conduct a comprehensive assessment of whether VITA is structured and staffed effectively to operate a multi-supplier IT infrastructure model. Results of the assessment should indicate whether VITA requires any additional structural changes and whether VITA needs to fill, create, or remove any staff positions across the agency. VITA should provide the assessment results to members of the Joint Legislative Audit and Review Commission, Senate Finance Committee, and House Appropriations Committee by July 1, 2020. (Chapter 7)

1 VITA's Provision of IT Infrastructure Services

SUMMARY One of the primary responsibilities of the Virginia Information Technologies Agency (VITA) is to provide IT infrastructure services to Virginia's executive branch agencies. VITA has several other responsibilities to support the state's IT needs, including conducting oversight of IT projects and procurements and enforcing IT security standards. However, the majority of VITA's funding and staff support IT infrastructure services. VITA recently underwent a large-scale transition to a multi-supplier IT infrastructure model. Previously, Virginia's IT services were provided by a single supplier. VITA procured and is now managing eight suppliers that provide IT infrastructure services to state agencies. Only two other states currently have a multi-supplier IT infrastructure services model.

The Appropriation Act directs JLARC to review and evaluate VITA on a continuing basis. Specifically, JLARC is approved (but not limited) to review VITA's IT infrastructure contracts, the adequacy of VITA's planning and oversight responsibilities, and the cost-effectiveness and adequacy of VITA's procurement services (Item 31 E. of Chapter 854, 2019 Acts of Assembly). As part of this ongoing oversight, JLARC members approved a motion in December 2018 directing JLARC staff to assess (1) VITA's new infrastructure model, including procurements, contract management, and the transparency of rates charged to agencies; (2) VITA's structure for issue resolution under the new model; and (3) other relevant topics identified during the course of the review. (See Appendix A for study mandate.)

To address the mandate, JLARC staff interviewed VITA staff, customer agencies, suppliers, and other states with similar IT infrastructure models; surveyed customer agencies' IT staff and leadership to collect feedback on VITA's infrastructure services; reviewed statutes related to VITA's infrastructure responsibilities; and analyzed performance data of VITA's suppliers. In addition, JLARC hired a law firm to assess the adequacy of VITA's new IT infrastructure contracts. (See Appendix B for a description of research methods.)

Majority of VITA staff and funding support IT infrastructure services

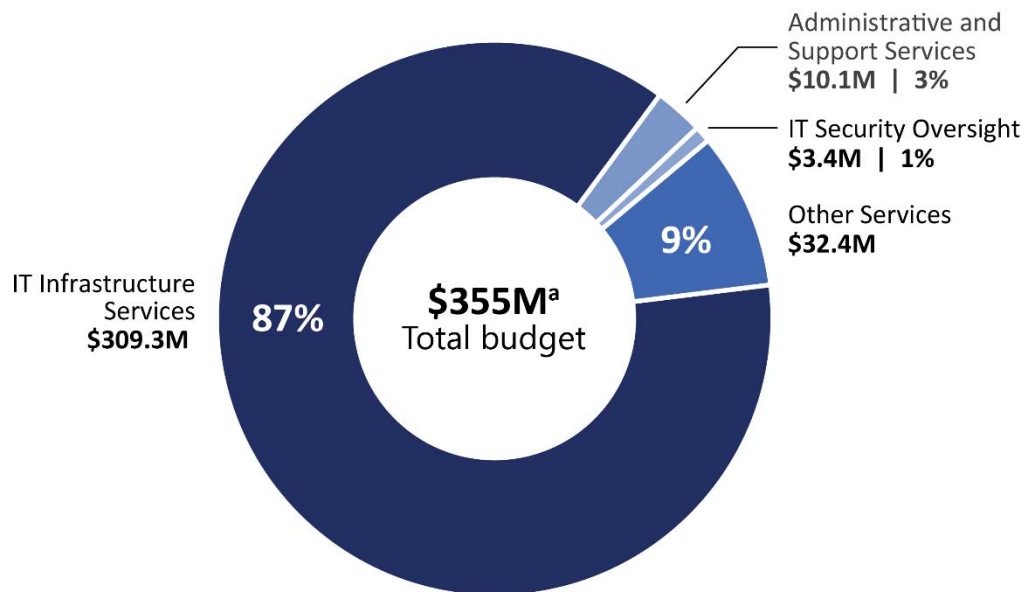
One of VITA's primary responsibilities is to manage, coordinate, and provide IT infrastructure services to executive branch agencies. VITA has several additional core functions, including overseeing agency IT projects and procurements, assisting agencies with IT strategic planning, and enforcing statewide IT security standards. However, the majority of VITA's resources are dedicated to supporting IT infrastructure.

Agencies depend on infrastructure services to carry out many of their core functions. For example, these services allow agencies to provide staff with computers and laptops (end-user devices), as well as access to email, internet and phone, and print services. Many agencies also rely on mainframe services or server storage and data center services to support agency-specific applications, data-sharing efforts, and record retention compliance. In addition, infrastructure services provide managed security services to monitor and prevent potential security risks.

Most of VITA's budget supports IT infrastructure services

IT infrastructure services and related costs made up 87 percent (\$309 million) of VITA's FY20 budget of \$355 million (Figure 1-1). (This includes some administrative and IT security funding that support IT infrastructure services.) The remaining 13 percent of VITA's budget is dedicated to administrative and support services and IT security oversight not related to IT infrastructure, as well as management of the state's geographic information system, support for IT business solutions, and assistance with the state's emergency communication systems.

FIGURE 1-1
Majority of VITA's budget is dedicated to IT infrastructure services (FY20)



SOURCE: 2019 Appropriations Act and internal VITA budget documents.

^a Total does not include funding VITA expects to collect from agencies in FY20 to pay down its line of credit and to recover revenue shortfalls from FY18.

VITA funds IT infrastructure services through payments made by customer agencies into an internal service fund (ISF). These funds are used to pay the suppliers that provide IT infrastructure services and to fund a portion of VITA's administrative costs. VITA's payments to suppliers vary by year, with the average annual costs ranging

from \$4 million for messaging services to \$53 million for voice and data network services.

When ISF amounts are not sufficient to cover day-to-day operations or unexpected costs, VITA can draw on a line of credit. The legislature set VITA's line of credit limit at \$165 million in the 2019 Appropriation Act. As of March 2019, VITA had charged approximately \$163 million on its line of credit because of shortfalls from yearly operating revenue and IT infrastructure transition costs (sidebar). A portion of this—\$36 million—was the result of a lawsuit the state settled with its previous IT infrastructure supplier, Northrop Grumman. VITA plans to pay down the line of credit in FY20 by factoring the additional costs into the rates that agencies pay for IT infrastructure services.

VITA paid off approximately \$56 million from the **line of credit** related to transition costs in FY19.

Over half of VITA staff have responsibilities related to IT infrastructure services

The majority of VITA staff have roles and responsibilities that either fully or partially support IT infrastructure services. At least 111 staff (56 percent of total staff) and eight of VITA's 11 divisions are tasked with responsibilities related to VITA's IT infrastructure services. For example, the supply chain management division leads procurement of new infrastructure suppliers. The contract management division manages IT infrastructure contracts and ensures the state receives the goods and services it has purchased from suppliers. The customer service division includes staff that oversee and assist customer agencies with the resolution of IT service problems.

The staff supporting VITA's IT infrastructure services report to VITA's executive leadership—the chief information officer (CIO), chief operating officer (COO), chief administrative officer (CAO) and chief information security officer (CISO). The majority of staff report to the COO. In addition to overseeing the management, coordination, and provision of IT infrastructure services, VITA's leadership is responsible for managing relationships with suppliers.

VITA provides IT infrastructure services to 65 state agencies

Sixty-five state agencies, which employ over 55,000 staff, rely on VITA's IT infrastructure services to fulfill core functions. Executive branch agencies are required to use VITA's IT infrastructure services, unless granted an exception by VITA for IT applications or systems that fall below a certain cost threshold. More than two-thirds of the state's total IT infrastructure service costs are concentrated in 10 agencies; the three largest are the Department of Transportation (VDOT), Department of Social Services (DSS), and Department of Corrections (DOC) (Table 1-1). These agencies rely on VITA's infrastructure services to support many of their most essential functions. For example, VDOT staff rely on these services to process invoices, monitor projects, and conduct data analysis and visualization. DSS relies on them to support

the administration of benefits by nearly 11,000 staff across 120 localities. DOC staff rely on them to access and maintain a database that stores information on over 30,000 inmates.

TABLE 1-1
Majority of IT infrastructure costs are concentrated in 10 agencies (FY20)

Agencies	IT infrastructure costs	% of total IT infrastructure costs
Department of Transportation	\$69.1M	17%
Department of Social Services	54.4	13
Department of Corrections	54.3	13
Department of Health	35.2	9
Department of Motor Vehicles	30.1	7
Department of Behavioral Health and Dev. Services	24.3	6
Department of Taxation	15.3	4
Virginia State Police	11.9	3
Alcoholic Beverage Control	10.8	3
Department of Medical Assistance Services	10.6	3
Top 10 agencies, subtotal	\$316.0	77%
All other agencies, subtotal	91.3	23
Total IT infrastructure costs	\$407.3	100%

SOURCE: VITA estimates for FY20 customer agency IT infrastructure costs.

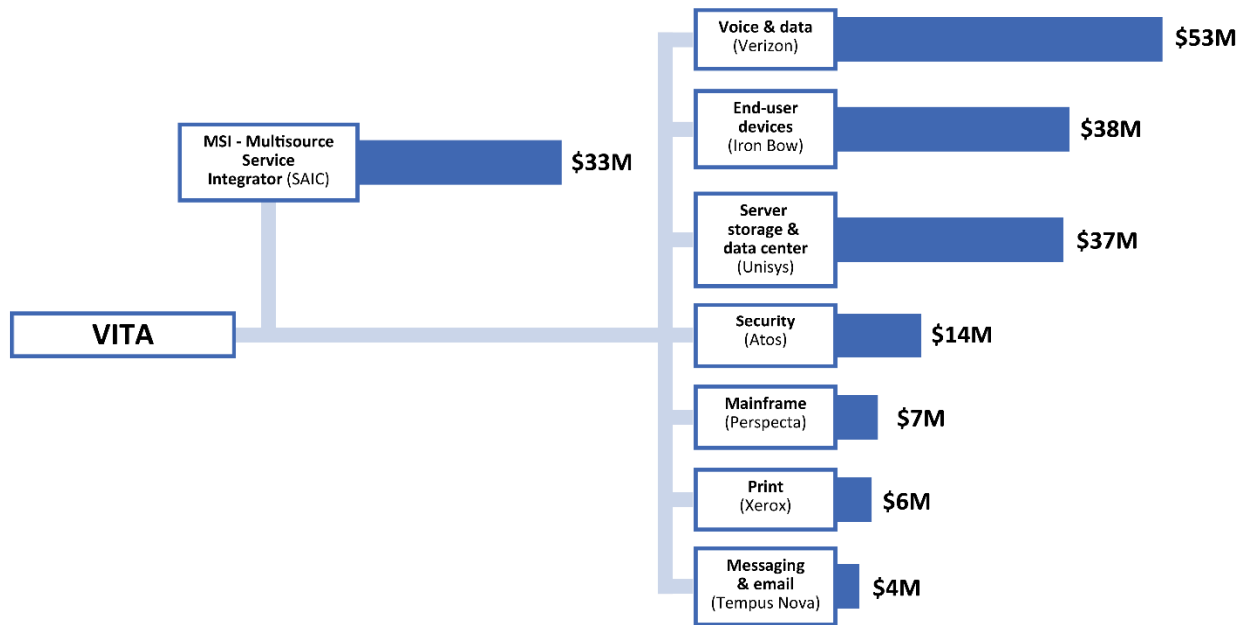
NOTE: Figures include the amount agencies are being charged in FY20 to pay down VITA's line of credit and to recover revenue shortfalls from FY18. Figures do not include the cost of IT infrastructure services provided to non-executive branch agencies, which total approximately \$11.2M.

VITA recently transitioned to a multi-supplier IT infrastructure model

The **integrator** in a multi-supplier model is responsible for coordinating other suppliers in their provision of IT infrastructure services.

VITA transitioned to a multi-supplier model in December 2018, after terminating its previous IT infrastructure supplier, Northrop Grumman. Under this new model, VITA procured eight suppliers, including an integrator, to provide IT infrastructure services to state agencies (sidebar). These services include end-user devices (laptops and PCs), email and messaging, voice and data services, and others (Figure 1-2). VITA holds separate contracts with each supplier, which can be individually re-procured as necessary. This model gives the state flexibility to procure additional suppliers to replace or supplement existing suppliers when needed, according to VITA staff.

FIGURE 1-2
VITA procured eight suppliers to provide IT infrastructure services



SOURCE: VITA data on annualized contract costs.

NOTE: These figures represent VITA's projections of annualized costs for each contract.

Virginia is one of three states—including Georgia and Texas—that currently have a multi-supplier model to provide IT infrastructure services. Virginia's model currently has the most suppliers, as both Texas and Georgia are using a more phased approach to add suppliers to their model. Texas adopted its model in 2012 and currently has six suppliers. Georgia adopted its model in 2015 and currently has six suppliers.

2 Status of Multi-Supplier IT Infrastructure Model

SUMMARY VITA’s multi-supplier IT infrastructure model has been in place for approximately 10 months, but full implementation of the model is significantly behind schedule. VITA expected to finish transitioning to the new model by December 2018. However, as of July 2019, a significant portion of the contract deliverables for implementation were not yet completed. In addition, suppliers are either not reporting performance data or not meeting the majority of their contractual performance requirements; customer agencies are dissatisfied with services; and VITA already has had three formal contract disputes with its new suppliers. According to VITA, annual operating costs are lower under the new model, but VITA projects that savings will not be realized until at least FY21 when the one-time costs incurred transitioning to the new model have been paid.

Implementing a multi-supplier IT infrastructure model was a substantial undertaking for VITA. VITA changed from one supplier (Northrop Grumman) to eight separate suppliers and implemented a variety of new systems and processes in just a few years. VITA initially planned to implement the new model in stages by procuring and transitioning services to new suppliers over three years. This strategy was approved by executive branch leadership and briefed to legislators and staff. However, VITA’s incumbent supplier—Northrop Grumman—did not give VITA’s new suppliers access to existing systems or provide them with key information to assist with the transition. As a result, VITA modified its implementation strategy, which involved terminating Northrop Grumman and accelerating implementation of the new model. This shift in strategy created challenges but was necessary to reduce the state’s risk related to the overall transition, according to VITA staff. VITA was not staffed or organized sufficiently to implement the new model, which created additional challenges.

Given the difficulties with the transition, it may take time for VITA’s new model to mature and perform as effectively as established multi-supplier models. Nevertheless, it is important to assess how well VITA’s new model is currently performing, given the scale and complexity of the model and agencies’ reliance on VITA’s IT services. Key considerations include the model’s implementation status, supplier performance, and expenses.

Northrop Grumman was VITA’s previous IT infrastructure services supplier and provided all of the state’s infrastructure services between 2005 and 2018. VITA terminated its contract with Northrop Grumman early—in August 2018—because the company was not fulfilling responsibilities related to helping VITA implement the new multi-supplier model.

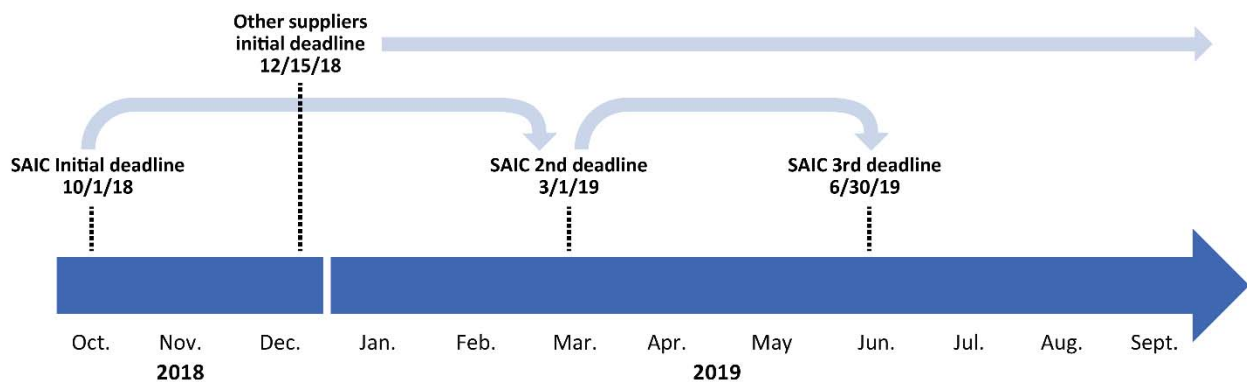
Implementation of new IT infrastructure model is significantly behind schedule

Critical deliverables are important items that suppliers are contractually required to provide to VITA. They can be due one time or on a recurring basis. Suppliers can incur financial penalties if critical deliverables are late or do not meet VITA’s acceptance criteria.

The implementation of VITA’s new infrastructure model has been significantly delayed. Implementation was originally scheduled to be complete by December 2018, but VITA’s suppliers have not yet completed 43 percent (24 out of 56) of the critical deliverables needed to fully implement the new infrastructure model as of July 29, 2019. For example, VITA’s managed security supplier (Atos) was scheduled to update the state’s database of IT assets by November 26, 2018, but was 245 days late in completing this deliverable as of July 29, 2019.

Delays are due in large part to VITA’s integrator, SAIC, being significantly behind schedule. Implementation of the new model largely depends on the success of the integrator (SAIC), whose systems and services other suppliers need. SAIC’s original deadline for implementation was October 1, 2018, but SAIC was not ready to meet that deadline. As a result, VITA agreed to delay SAIC’s deadline to March 1, 2019 and again moved it until June 30, 2019 (Figure 2-1). As of August 2019, SAIC had still not begun to provide all the services required. For example, SAIC was supposed to finalize updates to the structure of the state’s IT environment but had not yet done so as of August 2019. SAIC’s delays have negatively affected other suppliers’ abilities to implement their services and have delayed full implementation of the new model more than eight months (December 2018–August 2019).

FIGURE 2-1
Full implementation of new IT infrastructure model has been delayed multiple times



SOURCE: VITA contract documents.

NOTE: VITA did not set a new deadline for SAIC to complete implementation-related deliverables after June 30, 2019, but VITA is working with SAIC to ensure the company completes outstanding implementation deliverables.

Several other factors have contributed to delays in the implementation of VITA’s new infrastructure model, including VITA’s early termination of its contract with Northrop Grumman. VITA’s integrator, SAIC, temporarily assumed responsibility for all of the state’s infrastructure services from Northrop Grumman. This limited SAIC’s ability to

complete implementation tasks, even though the company was contractually required to have sufficient staff to complete both implementation tasks and temporarily assume Northrop Grumman's services. In addition, Northrop Grumman did not provide key infrastructure data to several new suppliers for many months, which delayed their ability to begin providing services. Other factors that likely contributed to implementation delays include unexpected challenges suppliers faced operating in the state's IT environment and the challenges related to VITA learning how to manage the new model.

Delays have prevented VITA, agencies, and suppliers from accessing essential tools and have increased the work necessary to perform required functions. For example, delays related to the new IT financial management system have prevented VITA staff from accessing budgeting and forecasting tools or testing the invoicing tool before generating invoices. Consequently, VITA staff and customer agency staff have needed to manually validate the accuracy of invoices, a process that was previously not required. Delays in the implementation of the IT financial management system also have caused increased costs and payment delays for suppliers. One supplier noted: "VITA's [IT financial management system] not being ready has financial impacts to our solution and our entire program. We are doing this work, and we are unable to get paid for it."

VITA has maintained service continuity but improvements are needed

VITA has kept customer agencies' core systems and services running under the new IT infrastructure model, with the exception of a few network outages. This is noteworthy, given the magnitude of change required to integrate eight new suppliers over a relatively short period of time.

Contractual relationships are the foundation of an effective multi-supplier model. Beyond maintaining basic service continuity, VITA needs to prioritize operating the model as effectively as possible and fully satisfying customer agencies' IT infrastructure needs. According to the National Association of State Procurement Officers, a healthy contractual relationship should include positive supplier performance, high customer satisfaction, and no contract disputes. VITA is not yet meeting these criteria.

New suppliers are not reporting a substantial amount of performance data or meeting some contractual performance requirements

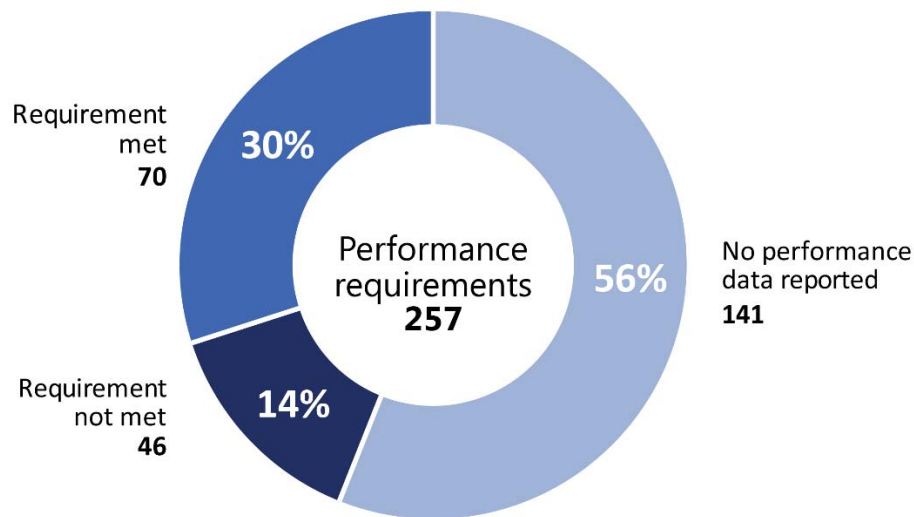
VITA's suppliers are required to report performance data and meet performance requirements established in their contracts. Both VITA and the suppliers agreed to these performance requirements during contract negotiations. Most requirements apply to a single supplier, but some are shared across all suppliers. Performance requirements are VITA's primary way to incentivize quality services from suppliers because suppliers can be penalized for not meeting them. For example, a supplier may be required to resolve IT service problems within a certain timeframe.

Performance requirements are the service-level agreements (SLAs) that suppliers have agreed to meet in their contracts with VITA.

Suppliers have not been reporting data for the majority of their performance requirements, even though they are receiving full payment from VITA for their services. Suppliers were not yet reporting data for over half (141 out of 257) of performance requirements as of July 2019 (Figure 2-2). If suppliers do not provide performance data, VITA can assume they are not meeting performance requirements, according to the contracts. Without performance data, it is unclear whether suppliers are meeting quality requirements required by the contracts. According to VITA staff, suppliers are not reporting data for the majority of performance requirements because SAIC has not finished developing a tool to collect this information from suppliers. Nevertheless, suppliers are required to monitor their own performance and should submit this information to VITA even if SAIC's tool is not ready.

Of the performance requirements for which data is being reported, VITA's eight suppliers collectively did not meet 40 percent (46 out of 116) of their requirements as of July 2019. For example, VITA's voice and data network supplier (Verizon) is required to resolve high severity issues related to centralized data centers within two hours or less, and other high severity issues within four hours or less, at least 95 percent of the time. As of July 2019, Verizon was only meeting these parameters 56 percent of the time; therefore, Verizon did not meet its requirement. Underperformance was relatively widespread across VITA's suppliers.

FIGURE 2-2
New suppliers are not reporting a substantial amount of performance data or meeting some contractual requirements



SOURCE: VITA data on supplier performance requirements as of July 2019.

NOTE: Figure reflects best available VITA data on supplier performance but may contain inaccuracies, according to VITA staff. Requirements shown as "not met" did not meet their expected performance level.

Many customer agencies are dissatisfied with quality and reliability of new IT infrastructure services

Despite VITA's ability to transfer most state services without major incident, a majority of the agency heads at customer agencies are dissatisfied with VITA's new infrastructure services. Nearly 60 percent of agency heads who responded to a JLARC staff survey in May 2019 indicated that shortcomings in infrastructure services had negatively affected their agency's ability to perform core functions over the past year. For example, one agency head reported a "lack of availability of basic needs, such as laptops to replace aging, failing equipment." Multiple agency heads were also dissatisfied with network outages and slowness, the process to purchase IT services, the PC refresh process, Gmail functionality, and the time it takes VITA to resolve service issues.

Many high-level IT staff at customer agencies were also dissatisfied with VITA's new infrastructure services. Approximately 40 percent of high-level IT staff who responded to a JLARC survey in May 2019 reported that their infrastructure services are not sufficiently reliable or of sufficiently high quality. For example, one IT staff member reported that "poor network performance has affected all agency departments and systems." Other high-level IT staff had similar complaints about network services at their agencies (sidebar). Many high-level IT staff also were dissatisfied with the inefficiencies and additional workload associated with VITA's new infrastructure services. For example, staff now have to enter IT requests for certain services into two separate systems—VITA's service request portal (Service Now) and the state's electronic procurement system (eVA). Previously, IT service requests only had to be entered into eVA.

VITA already has had formal contract disputes with suppliers

Although most new suppliers have been providing infrastructure services in Virginia for less than a year, VITA has already had three formal contract disputes with suppliers, including the integrator (SAIC). VITA notified SAIC that it was in a "material breach of contract" in April 2019 because of deficiencies with some of SAIC's financial management services (e.g., supplier invoicing and customer billing). A material breach of contract indicates that a problem has escalated because agencies have other contractual tools they can use first to address service deficiencies. A material breach notice is serious because it is a required precursor for supplier termination and is used when an agency needs to formally request a cure for deficiencies. VITA ultimately withdrew SAIC's material breach notice in July 2019 because SAIC had addressed some of VITA's concerns. However, VITA staff acknowledged that not all of SAIC's service deficiencies were completely resolved and required SAIC to continue working on a plan to remedy deficiencies. Moreover, VITA and SAIC have not resolved more recent problems related to the IT financial management system—such as voice and data networking billing.

In addition to the breach notice, suppliers have submitted two formal claims requesting financial compensation from VITA. SAIC submitted a claim to VITA in May 2019

JLARC conducted two customer agency surveys in May 2019, one of high-level IT staff and one of agency heads. Response rates were 80 percent and 79 percent, respectively. Surveys asked about agency satisfaction with VITA's infrastructure services, rates, communication, and resolution of service incidents. (See Appendix B for additional information.)

“ Network hardware is old, out of support and does not meet current industry standards as far as port speed. ”

– High-level IT staff at customer agency

“ Bandwidth limitations have forced us to incur increased travel costs. ”

– High-level IT staff at customer agency

requesting \$3.7 million in financial relief for services provided outside of the company's contractual requirements. In addition, Perspecta submitted a claim to VITA in September 2018 asking for \$3.4 million in financial relief for unforeseen costs associated with operating in the state's IT environment. These claims are notable given their size. (VITA also has received claims for financial compensation from Verizon and Unisys that total nearly \$2.5 million, but these claims have not yet been escalated to formal disputes.) Large financial claims are rarely escalated to the status of a formal dispute in established multi-supplier models because issues are resolved through effective supplier relationship management, according to staff in Georgia and Texas. If unresolved, formal disputes between VITA and its suppliers present financial, operational, and legal risks to the state.

VITA estimates new model will cost less but savings will not be realized immediately because of upfront costs

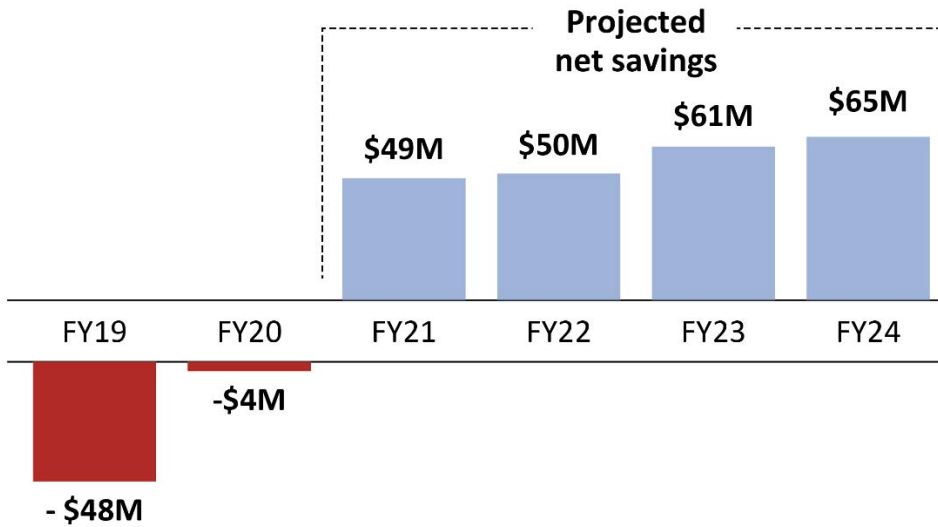
VITA's annual IT infrastructure operating costs have decreased under the new model. According to VITA staff, the new IT infrastructure services cost the state \$97 million less in FY19 than FY17, the last full year Northrop Grumman provided IT services. These savings are equivalent to a relatively large portion (36 percent) of the \$271 million that VITA paid Northrop Grumman in FY17. VITA staff expect annual operating savings under the new model to continue over the next few years. In total, VITA expects to save more than \$220 million over the next five years (FY20–FY24), assuming the agency does not experience significant unanticipated costs.

Transition costs include the fees associated with Northrop Grumman's early termination (\$125.9 million), new supplier implementation fees (\$75.4 million), and fees for third-party consulting and legal assistance to VITA (\$17.2 million).

Although VITA's new model is projected to reduce annual operating costs, savings will not be realized until FY21 because of the upfront costs. VITA spent approximately \$219 million to transition to the new infrastructure model, according to VITA staff. VITA put the one-time transition costs on its line of credit and is paying off the line of credit using annual operating savings from FY19 and FY20. When annual operating savings and transition costs are both accounted for, VITA paid \$48 million more for infrastructure services in FY19 than it did previously under Northrop Grumman (Figure 2-3) and expects to pay \$4 million more for infrastructure services in FY20 than it did in FY17. VITA expects to begin realizing savings in FY21 after all transition costs are paid.

FIGURE 2-3

VITA anticipates net savings for new IT infrastructure services starting in FY21



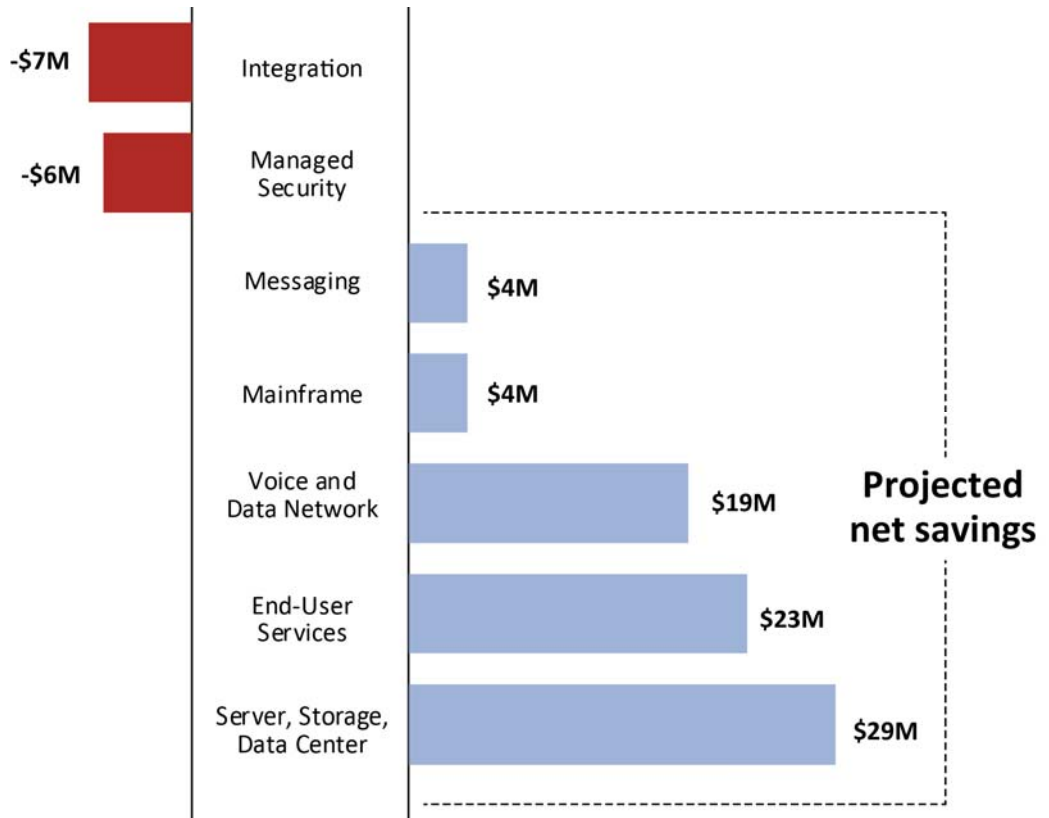
SOURCE: VITA data on actual and estimated infrastructure service costs (FY19–FY24).

NOTE: Data for FY19 is actual. Data for FY21–FY24 is based on VITA staff projections. Net cost/savings amounts reflect the annual operating costs of VITA’s eight infrastructure suppliers, as well as the transition costs associated with implementing a multi-supplier infrastructure model. Net savings are expected to increase over time because the cost of most services is scheduled to decrease in future years.

The annual operating cost of VITA’s new model is less overall, according to VITA, but the cost of a few services has increased compared with what the state paid previously. Northrop Grumman charged VITA differently for services than VITA’s new suppliers so an exact comparison is difficult. However, according to VITA staffs’ best estimates, the costs of managed security and integration services are higher under the new model than they were under Northrop Grumman during its last full year of service (FY17) (Figure 2-4). For example, VITA estimates that it paid nearly \$7 million more for integration services in FY19 than it paid to Northrop Grumman in FY17, the company’s last full year of service. (The total operating cost for integration services was \$36 million in FY19.) These increased costs are ultimately offset by the areas where VITA is experiencing cost savings, including mainframe, messaging, end user computing, managed print, voice and data network, and server storage and data center services.

FIGURE 2-4

Annual operating costs for the majority of services are lower, but integration and managed security are higher, according to VITA estimates



SOURCE: VITA data on annual operating costs of infrastructure services (FY19).

NOTE: Annual operating costs do not include one-time, upfront costs of transitioning to a multi-supplier model. Northrop Grumman charged VITA for services differently in FY17 than new suppliers charged VITA for these services in FY19. For example, Northrop Grumman spread charges for managed security across multiple other services. In addition, Northrop Grumman did not have a discrete charge for integration services, and Northrop Grumman provided fewer integration services than VITA's new integrator (SAIC).

3 IT Infrastructure Contracts and Procurements

SUMMARY VITA’s IT infrastructure contracts and procurement process generally appear effective. A law firm hired by JLARC concluded that VITA’s contracts with new IT infrastructure suppliers largely have the provisions needed to ensure performance and protect the state from risk. In addition, VITA’s procurement process was competitive and included customer agency representatives and subject matter experts. However, VITA could improve its procurement process by sufficiently involving the integrator in the procurement of other suppliers and by modifying the number and weighting of criteria used for supplier evaluations. VITA also had too many criteria and did not adequately prioritize potential suppliers’ previous experience with complex state IT environments. This created a risk of selecting a supplier without the skills necessary to satisfy the state’s complex IT infrastructure needs.

VITA chose suppliers for the new IT infrastructure model through six competitive procurements conducted between 2016 and 2018. These procurements were Requests for Proposals (RFPs), requiring VITA to convene evaluation panels, establish evaluation criteria, and review and score suppliers’ proposals. VITA issued RFPs for all infrastructure services except for voice and data network services. (Staff modified a pre-existing contract with Verizon to provide these services.) One of VITA’s procurements covered two service areas—end-user computing and managed print services. At the end of the RFP process, VITA staff worked with staff from Virginia’s Office of the Attorney General (OAG) to negotiate and finalize contracts with each of the suppliers.

Several challenges complicated VITA’s IT infrastructure procurements. This was the first time that VITA staff had procured infrastructure services for a multi-supplier model. VITA staff also procured a large number of suppliers to provide complex services in a relatively compressed timeframe. VITA’s initial plan was to procure suppliers gradually over three years, but staff were required to procure eight suppliers over two-and-a-half years because of the state’s early termination of Northrop Grumman.

IT infrastructure contracts generally structured to promote performance and protect state from risk

Contracts are critical to the success of a multi-supplier IT infrastructure model. Contracts dictate the legal requirements for each supplier, coordination required among suppliers, and the tools available for measuring and correcting supplier performance. JLARC staff hired a third-party law firm with extensive expertise in IT outsourcing contracts (Pillsbury) to review the sufficiency of VITA’s new IT outsourcing contracts. Pillsbury reviewed six of VITA’s eight contracts to assess whether they (1) include the

Pillsbury Winthrop Shaw Pittman law firm has 30+ years of experience handling over 1,000 IT outsourcing transactions valued at over \$500 billion. Partners at the firm reviewed six of VITA’s contracts: mainframe, messaging, integration, server storage, managed security, and end-user computing. Managed print and voice and data network contracts were not reviewed. (See Appendix B for additional information on Pillsbury review.)

infrastructure services VITA intended to procure; (2) are consistent with industry best practices and peers; and (3) contain the deliverables, performance metrics, and terms and conditions needed to incentivize good performance and protect the state from risk.

VITA's new contracts include the vast majority of infrastructure services that VITA intended to purchase. According to Pillsbury, VITA's contracts "substantially capture the IT goods and services sought by VITA in its RFPs." Some discrepancies exist between the RFPs and contracts; however, there are no significant gaps, according to Pillsbury. Discrepancies between the RFPs and contracts are likely the result of negotiations between VITA and suppliers, or VITA's improvements to initial RFP requirements.

VITA's new IT infrastructure contracts include most of the provisions needed to ensure supplier performance and protect the state from risk, according to Pillsbury. The contracts have clear, relevant, and measurable deliverables; performance metrics that allow for effective enforcement of deliverables; and terms and conditions that incentivize good performance and protect the state from security, financial, and other risks. In addition, the contracts are generally aligned with industry best practices. The contracts were drafted using a template that follows best practices for IT outsourcing, and they are substantially similar to contracts in the two other states with multi-supplier IT infrastructure models—Georgia and Texas.

Although Pillsbury's conclusions from the review of VITA's contracts were largely positive, Pillsbury identified several deficiencies in the contracts. The nature of these deficiencies is sensitive and cannot be publicly disclosed without compromising the state's ability to correct them through negotiations with suppliers. However, these deficiencies have been shared with VITA and the OAG. Although VITA may not be able to address these deficiencies immediately, VITA should address them as soon as practicable through contract modifications, contract renewals, or future procurements.

RECOMMENDATION 1

The Virginia Information Technologies Agency should address all deficiencies identified in IT infrastructure contracts by Pillsbury Winthrop Shaw Pittman law firm as soon as practicable.

Procurements were competitive and included key stakeholders

State law requires competition to be "sought to the maximum feasible degree" for procurements. Although there is no industry standard for an acceptable level of competition, state procurement experts agree that agencies should seek participation from multiple suppliers to select the most qualified suppliers. State procurement experts also indicate that procurements should incorporate feedback from key stakeholders, such as customers and subject matter experts. Stakeholders may participate in drafting the

RFPs, evaluating supplier proposals, or negotiating contracts with suppliers. Leveraging stakeholder expertise is important to ensure that procurements incorporate the services necessary to meet customers' needs.

VITA had sufficient competition during supplier procurements

Multiple suppliers submitted proposals in each of VITA's IT infrastructure procurements, including suppliers well-known in the industry. Competition ranged from three to nine suppliers for each procurement (Table 3-1). The largest number of suppliers submitted proposals for VITA's messaging procurement, while the least number of suppliers competed for VITA's integrator procurement. Fewer proposals were expected for VITA's integration procurement because these services are complex and offered by few companies. The number of suppliers that participated in VITA's integration procurement (three) was comparable to competition for similar procurements in other states with multi-supplier models. For example, Georgia had three qualified suppliers, and Texas had two qualified suppliers compete in their integration procurements. Overall, VITA procurement staff were confident that well-known suppliers participated in the procurements.

TABLE 3-1
Multiple suppliers competed for VITA's IT infrastructure contracts

Procurement	# Suppliers submitting proposals	Suppliers that competed	Supplier awarded contract
Messaging	9	ABS Technology, Achieve 1, AT&T, Carousel Industries, Dimension Data, IBM Corp., Microsoft, SADA Systems, Tempus Nova	Tempus Nova
Managed security	6	Atos, Carahsoft Technology Corp., Deloitte & Touche LLP, HPES/DXC Technologies, IBM Corp., Management Applications, Inc.	Atos
Mainframe	4	Atos, CAS Severn, Hewlett Packard Enterprise Services (HPES), IBM Corp.	HPES ^a
Servers, storage, and data center	4	Atos, DXC Enterprise Services LLC, IBM Corp., Unisys	Unisys
End-user computing	4	Iron Bow, NCS Technologies, NTT Data, Unisys	Iron Bow
Managed print	4	Canon, Iron Bow, NCS Technologies, Xerox	Xerox
Integration	3	Capgemini America Inc., CGI Technologies and Solutions Inc., Science Applications International Corp. (SAIC)	SAIC

SOURCE: VITA procurement documents.

NOTE: Table does not include Verizon because VITA did not conduct a procurement for voice and data network services along with other IT infrastructure procurements. Staff modified an existing contract with Verizon that was procured in 2013 and had competition from eight suppliers. ^a HPES was renamed after VITA's procurement and is now called Perspecta.

Key VITA staff, state agencies, and subject matter experts participated in procurements

VITA staff from several divisions participated in each IT infrastructure procurement. One staff member from VITA's procurement section led each procurement. These staff are certified procurement professionals; most have at least several years of procurement experience at VITA. Staff from VITA's security, finance, and enterprise architecture sections, among others, also participated in the procurements. These staff provided subject matter expertise on the state's IT security requirements, funding available for services, and the design of the state's IT environment. For most procurements, VITA staff comprised nearly half of the evaluation panel members who scored and selected the suppliers.

In addition to VITA staff, IT infrastructure procurements included representatives from over 12 customer agencies to ensure suppliers could meet their business needs. Participating agencies included the Department of Social Services, Department of Motor Vehicles, Department of Transportation, Department of Taxation, and the Library of Virginia. Customer agencies were voting members on the evaluation panels and typically had the majority of votes. As a result, they had significant input on the supplier selection process.

Integrus Applied is a third-party management consulting firm that provides services related to IT outsourcing, governance, and services management. Integrus was hired by VITA to help design, transition to, and assess the performance of VITA's multi-supplier IT infrastructure model. Integrus provided consulting services to Georgia and Texas when they transitioned to a multi-supplier model.

Moreover, several subject matter experts participated in VITA's IT infrastructure procurements, including OAG representatives and consultants from Integrus Applied (sidebar). OAG representatives provided legal expertise, and Integrus Applied consultants provided expertise in IT outsourcing. Unlike VITA staff and customer agency representatives, OAG representatives and Integrus Applied consultants were not voting members of the evaluation panels.

State agencies and suppliers are largely satisfied with VITA procurement staff and their IT infrastructure procurements process. Staff from several state agencies that participated in the procurements complimented the expertise and professionalism of VITA procurement staff. In addition, most of the suppliers that were awarded contracts provided positive feedback on VITA procurement staff and indicated that the procurement process was not overly burdensome.

Modifications to procurement process could further ensure new suppliers are prepared and qualified

Although VITA's IT infrastructure procurements were competitive and included key stakeholders, modifications could improve the process. These improvements may become relevant soon because VITA can procure new suppliers to provide additional services at any time under the new IT infrastructure model. VITA also is scheduled to start re-procuring current services in 2021, beginning with messaging, if VITA does not exercise contract renewals.

Integrator involvement in all future supplier procurements could help new suppliers integrate into state IT environment

VITA did not procure the integrator (SAIC) first, which hindered implementation of the new IT infrastructure model. VITA procured mainframe and messaging services first because staff anticipated these services would result in cost savings for the state, and staff wanted to begin modernizing these services. The integrator was procured later because integration services were expected to be complex and cost more under a new supplier. (Northrop Grumman provided VITA with integration services previously but did not have a discrete charge for this function.) This sequence of procurements was approved by key stakeholders in the executive branch and briefed to stakeholders in the legislative branch.

By not procuring integration services first, VITA missed the opportunity to have its key supplier assist in the procurements of all other suppliers. SAIC did not participate in the procurements of the first two suppliers that VITA hired. (VITA requested that Northrop Grumman participate in the procurements in accordance with their contract, but the company refused.) SAIC provided assistance in the remaining supplier procurements by reviewing suppliers' proposals and holding integration sessions to describe the state's IT systems and processes and the capabilities suppliers would need to integrate with them. Multiple VITA staff and subject matter experts acknowledge that it would have been beneficial to procure the integrator first. This sequence would have allowed the company to assist with procurements of all other suppliers.

Two states with established multi-supplier models—Georgia and Texas—have emphasized the benefits of prioritizing the procurement of the integrator before other suppliers, which allows the integrator to fully support subsequent procurements with other suppliers. Georgia procured its integrator before all but one supplier, which enabled other suppliers to align their contracts with the integrator's and ensured they could conform to the state's processes and tools. Similarly, Texas procured its integrator first during the most recent round of procurements for its multi-supplier model (sidebar). This sequence allowed the integrator to hold two-day "integration sessions" with other potential suppliers to clearly describe how they would need to operate in the state's IT environment, according to staff in Texas.

VITA has stated its intent to involve its integrator in the future procurements of other suppliers, as the integrator is contractually required to support the transition of incoming suppliers. To make the integrator's involvement as beneficial as possible, it is important for the integrator to participate in *all* procurements of other suppliers. It is also important for the integrator to continue to hold in-depth integration sessions with potential suppliers to provide information about the state's IT environment. Providing potential suppliers with this information upfront could shorten the time it takes new suppliers to begin providing services after they are hired by VITA.

Texas implemented a multi-supplier model in 2012. Texas procured suppliers simultaneously during the initial round of procurements. Texas recently re-competed its supplier contracts. Based on lessons learned, Texas prioritized procuring the integrator first and involved the integrator in the procurements of other suppliers.

Reducing number of evaluation criteria and greater emphasis on experience could better prepare suppliers for state's IT environment

“
The qualifications and experience of the supplier are crucial to the success of the project.
”

– VITA procurement manual

“
Experience is everything.
”

– Texas Department of Information Resources

“
The higher risk [of an RFP] due to a complex project or a broad or long-term RFP scope, the greater the potential need for offerors to have certain qualifications or an ability to demonstrate past experience with similar projects.
”

– National Association of State Chief Information Officers

The criteria used to evaluate supplier proposals affect the final selection of a supplier. Therefore, the number of criteria included, and how these criteria are weighted, are critical in the evaluation process. Supplier evaluations should include only a few evaluation criteria—normally no more than five—according to state procurement policy for non-IT goods and services. (There are no specific guidelines for IT procurements.) Too many criteria can dilute the importance of each criterion and the extent to which they factor into supplier selection. Similarly, key criteria, including supplier experience, should be adequately weighted, according to VITA staff and other procurement experts. This is especially true for VITA's IT infrastructure procurements, given the complexity of VITA's IT environment and the risks to the state if VITA's suppliers are unsuccessful.

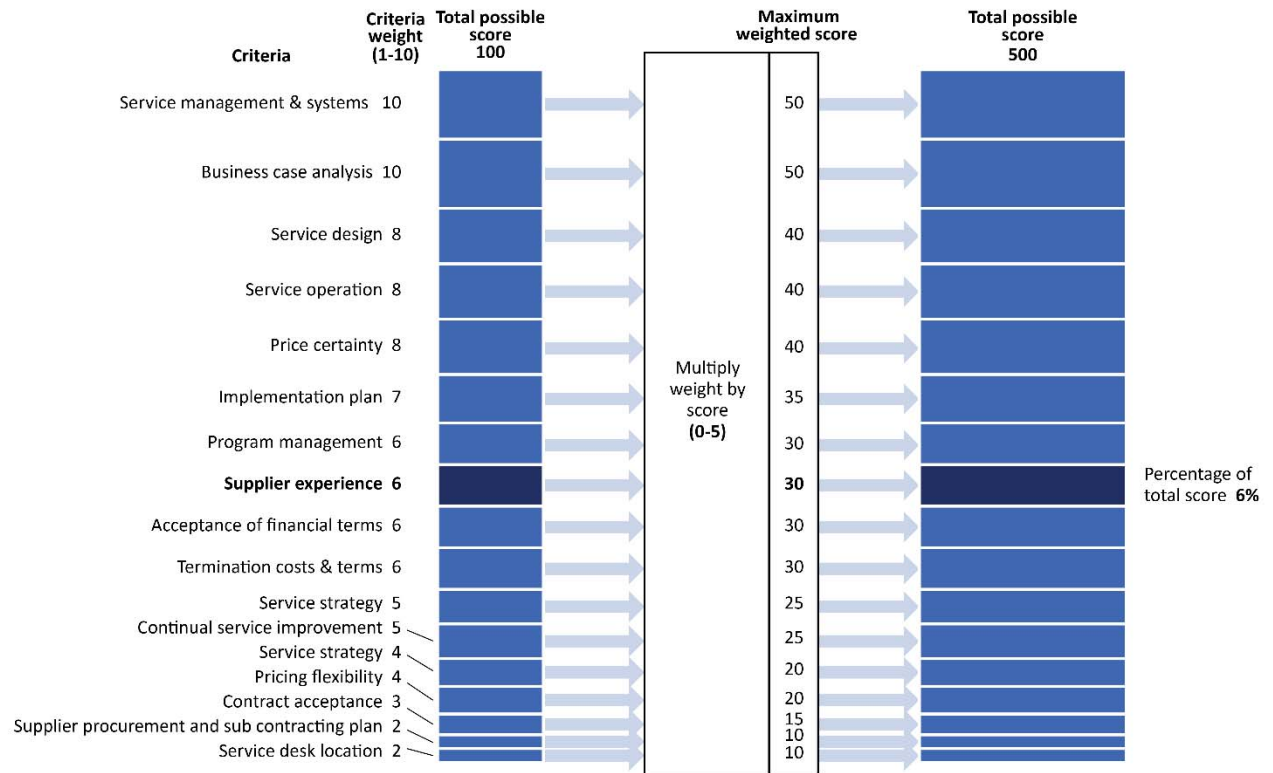
The scoring frameworks used by the evaluation panels for VITA's IT infrastructure procurements included too many criteria and did not sufficiently prioritize supplier experience. Each procurement had over 10 criteria, which limited the impact of each criterion. In addition, supplier experience was assigned a medium-level weight of between 5 and 7 (out of a possible 10) in each of VITA's procurements. This evaluation approach does not ensure that suppliers have sufficient experience to provide integration services successfully in Virginia. For example, VITA's scoring system to procure integration services had 17 criteria and gave supplier experience a weight of 6 (out of 10). As a result, supplier experience made up only 6 percent of the total possible evaluation score (Figure 3-1).

Shortcomings in VITA's process for evaluating potential suppliers exist partly because VITA does not currently have policies governing the number or weight of evaluation criteria. To ensure that supplier experience and other key criteria are appropriately prioritized in future procurements, VITA should establish a process to ensure that procurements for IT services have an appropriate number of evaluation criteria and that adequate weights are applied to important criteria. For example, VITA could limit the total number of criteria used to five and recommend that key criteria, such as supplier experience, be assigned a weight of 10. (The quality of a supplier's services is also a key criterion and may warrant a weight of 10.) This may not ensure that VITA selects suppliers with adequate experience in all cases. However, it would elevate the extent to which supplier experience is considered and reduce the risk of VITA selecting suppliers that are not qualified to meet the state's needs.

RECOMMENDATION 2

The Virginia Information Technologies Agency should establish a process to ensure that procurements for IT services have an appropriate number of evaluation criteria and that adequate weights are applied to important criteria, such as supplier experience.

Figure 3-1
Supplier experience had minimal influence on scoring and selection of integrator



SOURCE: VITA procurement documents.

4 Management of IT Infrastructure Contracts

SUMMARY Contract management helps ensure an entity receives the services it is paying suppliers to provide. Effective contract management is critical for VITA to oversee eight different suppliers operating in a large, complex IT infrastructure environment. For the first few months suppliers provided services in Virginia, VITA did not have sufficient contract management staff or expertise to effectively manage the contracts. This, in part, explains why VITA has not held suppliers accountable for fulfilling contractual requirements. VITA staff are not currently tracking whether suppliers are completing all contractual requirements or taking action to address the majority of poor performance. In addition, VITA staff have been slow to communicate key deadlines to suppliers and respond to them after receiving deliverables. Several improvements should be made to address these deficiencies.

VITA is responsible for managing eight separate suppliers under the new IT infrastructure model. This is a significant increase in contract management responsibilities, as staff managed only one supplier under the previous model. Managing several large contracts is a substantial undertaking, and VITA was understaffed and lacked sufficient expertise to manage large, complex contracts for the first few months of the multi-supplier model. Developing an effective, mature contract management function that adheres to industry standards takes time. However, effective contract management is essential to ensure that VITA maximizes the value of the contracts and that agencies receive the services they require to perform core functions.

Contract management is the process of ensuring the suppliers comply with their contractual requirements. Even though VITA's integrator, SAIC, is responsible for managing some of the day-to-day interactions with suppliers, VITA holds the contracts with suppliers and is ultimately responsible for contract management.

Contract management function was inadequately staffed, but improvements have been made

Effective contract management largely depends on having a sufficient number of staff with the right expertise. While there is no industry standard for the number or expertise of the contract managers that should manage a contract, several subject matter experts agree that large, complex contracts should have at least one full-time staff position dedicated to managing each contract. Moreover, managers for large, complex contracts require extensive experience in contract management, knowledge of the specific contract provisions, and communication skills for interacting with suppliers.

VITA initially did not have enough staff with sufficient expertise to manage the new IT infrastructure contracts, according to VITA staff. As of March 2019, there were only two full-time staff responsible for managing VITA's eight IT infrastructure contracts. VITA had five full-time positions allocated to manage the IT infrastructure contracts, but three of these positions were left vacant for multiple months. Staff from

other VITA functions provided part-time assistance with the management of two of the eight IT infrastructure contracts, but VITA's two full-time contract managers remained responsible for the majority of the contracts. In addition, VITA staff in place at the time did not have experience managing large, complex contracts under a multi-supplier model and were not familiar enough with the contract requirements to hold suppliers accountable for meeting them, according to VITA leadership.

VITA recently created additional positions to better support the contract management function. In April 2019, VITA moved contract management to a new division and placed it under new leadership. VITA also restructured the function and dedicated six full-time positions to managing IT infrastructure contracts. Five of these positions are currently filled, and VITA is in the process of interviewing candidates for the remaining position. However, VITA still may not have a sufficient number of contract managers to oversee all IT infrastructure contracts, especially if VITA adds additional suppliers, or if contract managers begin performing additional functions necessary to effectively manage the contracts.

VITA also is taking steps to ensure that contract managers have the expertise necessary to manage contracts in a complex, multi-supplier model. VITA required all new and existing contract managers to complete VITA-specific contract management training, according to the manager of this function. In addition, VITA is working with a consultant (Integris Applied) to improve contract management practices.

VITA has not held suppliers accountable for fulfilling contractual requirements

Contract deliverables are the quantifiable *items* identified in a contract that the supplier has agreed to provide (e.g., annual security plan).

Contract obligations are the *commitments, duties, or actions* identified in a contract that the supplier has agreed to fulfill or achieve (e.g., validating service catalog accuracy.)

Effective contract management is needed to ensure suppliers meet their contractual requirements and typically entails: (1) monitoring the status of all contractual deliverables and obligations; (2) addressing deliverables and obligations that are late or do not meet expectations; (3) communicating deadlines for deliverables to suppliers in a timely manner; and (4) promptly accepting or rejecting deliverables submitted by suppliers. These practices are not specific to IT infrastructure contracts; they apply to the management of contracts broadly. However, they are especially important to maximize the value of large and complex contracts like VITA's. VITA has not consistently utilized these practices with its new multi-supplier model. This is partially, but not completely, because of the lack of adequate contract management staff.

VITA has not been tracking the status of all contract deliverables and obligations

Contract managers should identify and track the status of *all* contract deliverables and obligations. Contract managers may be informally aware of the status of some key contract deliverables and obligations, but formally tracking them is important. This ensures the state receives what it is paying for, according to VITA's procurement man-

ual and multiple sources with experience implementing multi-supplier models. According to one subject matter expert: “Identifying these items at contract signature and managing them throughout is critical to ensuring that VITA receives all of the contracted services and does not delay implementation or set a bad precedent in the early stages of the relationship.”

VITA did not initially track some contract deliverables

VITA staff did not begin tracking the status of all contract *deliverables* at the start of VITA’s new IT infrastructure contracts. VITA initially focused on implementation of services, and staff began tracking approximately 60 critical deliverables related to suppliers’ implementation of services soon after the new contracts took effect. VITA staff did not begin tracking the status of 328 additional critical deliverables until eight months after VITA’s new contracts started. These additional critical deliverables are important to the state’s IT environment. For example, most suppliers are required to submit annual security plans that define the security requirements of VITA’s IT environment. Most suppliers also must submit annual technology plans, which provide a three-year schedule of technology projects and activities, such as refreshing IT hardware and software. Suppliers are required to submit these critical deliverables to VITA on a recurring basis and can be subject to large, non-refundable financial penalties if they are not submitted on time. For example, a supplier can be penalized approximately \$19,000 each month for failing to submit an annual security plan to VITA on time.

Critical deliverables are important items that suppliers are contractually required to provide to VITA. They can be due one time or on a recurring basis. Suppliers can incur financial penalties if critical deliverables are late or do not meet VITA’s acceptance criteria.

VITA is still not tracking contract obligations, which make up majority of contract requirements

As of August 2019, VITA staff are not formally tracking the status of contract *obligations*, even though the contracts have been in effect for over eight months. This has prevented staff from knowing whether suppliers are meeting these contractual requirements, let alone holding them accountable for any unmet obligations. This is especially problematic because the majority of VITA’s contractual requirements with suppliers are obligations. For example, VITA’s contracts with two suppliers (SAIC and Unisys) include over 600 discrete contract obligations for 2019. Examples of contract obligations include conducting daily reporting on service desk performance, providing monthly invoice reports, and validating the accuracy of the IT service catalogue. By not tracking contract obligations, VITA likely has lost some value of its contracts (sidebar).

“ If you don’t track [obligations], you will see value leakage and service delivery complaints coming from customers because everything is not getting done. ”

– Georgia Technology Authority

VITA has not implemented a tracking tool for requirements

One reason for the inadequate tracking of contract deliverables and obligations is that VITA has not implemented a comprehensive tool to track them. To help implement the new IT infrastructure model, VITA’s consultant, Integris Applied, provided a tool in September 2018 to help VITA track contract deliverables and obligations. VITA staff indicated that the tool was complicated and have not implemented it. However,

other tools are available for tracking contract deliverables and obligations. For example, staff in Georgia, another state with a multi-supplier model, recently began using a tool to track all of its contract deliverables and obligations.

“
It is recommended that the contract [manager] develop a checklist and calendar to ensure all performance requirements are exposed for scheduled monitoring.
 ”

– VITA procurement manual

To ensure the state is receiving what it is paying for, VITA should immediately begin tracking the status of *all* contract deliverables and obligations and should implement a tracking tool for this purpose. VITA could implement the existing tool developed by Integris Applied or purchase a new tool. (Integris Applied has continued to update the tool to include all of VITA’s contract management obligations.) VITA could initially use the tool to track all critical contract deliverables and then expand it to track all contract obligations. VITA’s integrator (SAIC) may assume responsibility for tracking contract deliverables and obligations in the future, according to VITA staff. If this occurs, VITA should ensure that the company uses a comprehensive tracking tool to track the status of all contract deliverables and obligations. Formally tracking all contract deliverables and obligations would enable VITA to verify whether suppliers are meeting all of their contractual requirements.

RECOMMENDATION 3

The Virginia Information Technologies Agency (VITA) should, on an ongoing basis, ensure that the status of all deliverables and obligations included in its contracts with IT infrastructure suppliers is tracked through the use of a comprehensive tracking tool, beginning no later than July 1, 2020.

“
Poor or non-performance should never be accepted.
 ”

– National Association of Procurement Officers

VITA has not consistently addressed late deliverables or missed performance requirements

Contract managers are responsible for using contractual levers—such as remediation plans and financial penalties—when suppliers do not meet contractual requirements. Contract managers should strategically decide which lever to use and focus on improving supplier performance rather than levying unnecessary penalties. Regardless of the approach that is used, it is essential to address continued underperformance. Failing to do so can disincentivize suppliers from meeting their contractual requirements and can result in a loss of contract value.

VITA can formally request suppliers to provide **remediation plans**, which document their approach to correct deficiencies with major contract functions. VITA can take over these functions if they are dissatisfied with the supplier’s plan.

VITA can request a remediation plan or levy a financial penalty for late critical deliverables, but it has not done so for the majority of significantly overdue deliverables. (The extent to which contract obligations have been submitted late by suppliers is unknown because they have not been tracked.) As of July 2019, six of VITA’s suppliers had critical deliverables that were significantly overdue (a median of 228 days overdue). Because of these delays, VITA was eligible for approximately \$6.7 million in financial penalties; however, VITA had tried to remedy underperformance with only one of its suppliers. VITA staff requested a remediation plan and collected \$1.7 million in financial penalties from the integrator (SAIC) to address a portion of the company’s late deliverables. VITA staff indicated one of the primary reasons they did not consistently

address delays was because VITA leadership did not want to jeopardize positive relationships with suppliers. This can be a valid consideration, but enforcing contractual requirements is also important.

To more consistently address late critical deliverables across suppliers, VITA should develop guidelines for when suppliers should be requested to provide remediation plans and/or pay financial penalties. For example, the guidelines could require VITA staff to request a remediation plan from suppliers for any deliverables that are more than one month past due. VITA should require staff to implement the guidelines consistently across all suppliers.

RECOMMENDATION 4

The Virginia Information Technologies Agency should develop guidelines describing the circumstances under which staff should request IT infrastructure suppliers to complete remediation plans or pay financial penalties for submitting critical deliverables late and implement the guidelines consistently across all IT infrastructure suppliers.

VITA also has not penalized suppliers for failing to report performance data or meet contractual performance requirements. The contractual levers that VITA can use to address missing performance data or unmet performance requirements are different than the levers it can use to address late critical deliverables. VITA can automatically collect monthly financial penalties from suppliers that fail to report performance data or meet their performance requirements, according to the contracts. As of August 2019, VITA had not collected any penalties, despite many suppliers failing to report performance data or meet their performance requirements for several months. VITA staff have not yet collected penalties because the agency has not had sufficient staff available to identify underperforming suppliers and calculate their penalties, according to VITA staff. Penalties for failing to report performance data or meet performance requirements would have been substantial for several suppliers. For example, VITA could have collected about \$2 million from Unisys for unmet and unreported performance requirements between December and June 2019.

Consistent with the authority established in its contracts with suppliers, VITA should implement a process to automatically collect financial penalties when suppliers do not report performance data or meet their performance requirements. In some cases, it may be unfair to penalize suppliers that failed to meet performance requirements because of extenuating circumstances beyond suppliers' control. Therefore, VITA also should develop guidelines that specify any circumstances under which staff should temporarily waive suppliers' penalties. VITA should only grant suppliers relief from financial penalties in limited circumstances on a case-by-case basis.

Performance requirements are the service-level agreements (SLAs) that suppliers have consented to in their contracts with VITA.

RECOMMENDATION 5

The Virginia Information Technologies Agency (VITA) should implement a process for automatically collecting penalties from IT infrastructure suppliers that do not report performance data or meet their performance requirements. VITA also should develop guidelines that specify circumstances under which VITA should temporarily grant suppliers relief from financial penalties on a case-by-case basis.

VITA has not assigned deadlines or conducted timely reviews for some deliverables

“
An ideal [process] will help identify deliverables and obligations at the beginning of the contract...and establish the rules and timings for collaboration, review, and acceptance...
”

– **Integrus Applied**

Contract managers are responsible for assigning deadlines to many suppliers’ contract deliverables. VITA’s contracts dictated deadlines for the contract deliverables related to service implementation. However, the contracts did not include deadlines for the 328 deliverables that suppliers are required to complete on a recurring basis. This design was intentional to allow VITA’s integrator to incorporate supplier deadlines into ongoing programs. This approach also gave VITA staff the flexibility to establish these dates with suppliers based on VITA’s business cycles (e.g., budgeting and rate forecasting). Deadlines should be assigned to deliverables and communicated with suppliers as early as possible—ideally at the beginning of the contract—according to subject matter experts. This gives suppliers ample time to plan for the deliverables they need to complete.

For many recurring deliverables, VITA has not established deadlines far enough in advance for suppliers to meet them. VITA staff established deadlines in August 2019 for over 100 deliverables due on varying dates throughout FY20. Consequently, suppliers have had limited time to plan for and complete some contract deliverables. For example, for six deliverables, suppliers were notified of the deadline only seven business days before they were supposed to be submitted for review. Suppliers knew they would have to complete these deliverables at some point during the year, but several of the deliverables are large reports (e.g., annual disaster recovery test plan, training plan) and are difficult to complete under the time constraints imposed. VITA staff have acknowledged that delays in setting deadlines have made it difficult for suppliers to meet them; therefore, staff said they have temporarily waived penalties for at least three months for late deliverables. However, suppliers are still required to complete the deliverables.

In the future, VITA staff should establish initial deadlines for all contract deliverables, and communicate them to suppliers, at least 45 days in advance. This timeframe is consistent with the amount of time that VITA has to notify suppliers if they add new recurring critical deliverables or modify existing ones. It is also relatively similar to the process used in another state with a multi-supplier model (Georgia), which reported establishing deadlines between two and three months in advance. Deadlines should be established and communicated earlier than 45 days, when possible.

RECOMMENDATION 6

The Virginia Information Technologies Agency should establish initial deadlines for all contract deliverables that IT infrastructure suppliers are required to complete a minimum of 45 days prior to the date that the deliverables are due. Deadlines should be conveyed to suppliers as soon as they are established.

VITA staff have not reviewed and responded in a timely manner to several contract deliverables submitted by suppliers. VITA staff are responsible for accepting or rejecting deliverables submitted by suppliers within 30 business days in most cases, according to VITA's contracts with suppliers. As of July 2019, VITA had 14 deliverables that had been under review for a median of 187 days. These deliverables were from six separate suppliers. Multiple suppliers have complained that VITA's prolonged review process has prevented them from working on other deliverables and can have a negative impact on their finances.

VITA should reduce the time staff take to review contract deliverables to comply with the review period established in its contracts with suppliers (typically 30 days). The review period established in the contracts should be the *maximum* amount of time that staff take to review deliverables, and VITA should regularly track whether agency staff are complying with this review period for all contract deliverables submitted by suppliers. Once VITA is able to consistently review deliverables submitted by suppliers within established review periods, VITA should work to reduce the number of days that staff take to review deliverables to between five and 10 business days to align with the industry standard.

RECOMMENDATION 7

The Virginia Information Technologies Agency should review and respond to all contract deliverables submitted by IT infrastructure suppliers within the contractually determined review period and regularly track whether staff are meeting this requirement for all contract deliverables.

5 Resolution of Service and Supplier Issues

SUMMARY Service issues experienced by VITA's customer agencies generally fall into three categories: incidents, billing disputes, or requests for new services. Many of the major issues that customer agencies are experiencing with VITA's new IT infrastructure services are not being resolved in a timely manner. When unresolved, these service issues can negatively affect staff productivity and agencies' abilities to accomplish their core operations. Service issues typically are addressed by suppliers, but those issues that are not resolved in a timely manner or affect multiple agencies may be referred to VITA's issue resolution platform. This platform currently lacks clear and actionable policies to effectively resolve service issues in a timely manner, resulting in a growing number of unresolved issues. In addition, all issues experienced by VITA's customer agencies (that cannot be resolved through the standard resolution process) or with suppliers should be addressed through this platform. VITA has been handling some of these issues outside of this process, which has inhibited the maturation of the platform and limited both agencies' and suppliers' understanding of how these issues are resolved.

In any large-scale IT environment, it is inevitable that customers will experience services issues. Laptops and phones will malfunction, network outages will occur, and users will need to gain access to new systems. As a result, it is essential to have an effective process for resolving service issues in a timely manner. It is also essential to have a platform in place to resolve longstanding or widespread service issues and those that involve multiple suppliers. This is particularly relevant for VITA, given the complexity of the new IT infrastructure model and the number of customer agencies that rely on VITA services to perform core functions.

Under the new IT infrastructure model, VITA has a standard process for addressing service issues. According to this process, suppliers are responsible for investigating and resolving agencies' service issues within contractual timeframes. When suppliers are unable to resolve major service issues within these timeframes, or when multiple agencies are experiencing the same problem, those issues are typically referred to VITA's issue resolution platform.

VITA and suppliers are not resolving major service issues in a timely manner

Agencies typically experience three types of service issues. *Incidents*, the most common type of service issue, cover any problems with an existing IT good or service (Figure 5-1). *Billing disputes* cover any discrepancies agencies or vendors find in their invoice or

payment. *Solution requests* include agencies' needs to purchase a good or service that is not available through VITA's standard catalog.

FIGURE 5-1
Service issues can be broadly categorized into three types



SOURCE: Interviews with VITA staff.

Major incidents include high- or critical- priority incidents, which typically affect an entire agency or multiple agencies. Examples include complete network outages or critical application failures.

Minor incidents include low- or moderate- priority incidents. These typically affect anywhere from a single employee to multiple departments. Examples include network slowness or password resets.

Many major incidents are not being resolved within contractual timeframes

VITA and its suppliers are not resolving many major incidents within contractual timeframes (sidebar). When incidents are submitted to VITA, they are assigned a priority (low, moderate, high, or critical), based on the urgency of the incident and the number of users affected. Each priority is associated with a specific contractual timeframe, and suppliers are expected to resolve 95 percent of incidents within their respective timeframe. However, since January, a significant number of major incidents were not resolved within those timeframes. For example, only 68 percent of high-priority incidents were resolved within the 4-hour timeframe, and only 22 percent of critical-priority incidents were resolved within the 2-hour timeframe. Many minor incidents also have not been resolved within their contractual timeframes.

Although the nearly 8,000 major incidents submitted since January represent a small proportion of all incidents (5 percent), it is important that they are resolved in a timely manner because they can significantly hinder agency operations and the delivery of citizen services. Agencies depend on VITA to provide essential services to support their operations, including internet, phone, and email access, among others. A significant number of agencies have experienced problems related to these essential services in recent months. For example, at least 27 agencies submitted major incidents related to internet or phone services since January. The Virginia Department of Agriculture and Consumer Services (VDACS) depends on phone services for contacting customers regarding the testing of agricultural or livestock samples, scheduling inspections,

“ VITA significantly supports our operations...we cannot function without their services. ”

– VITA customer agency

or responding to general information inquiries. However, recently a VDACS field office lost phone services for nearly a month (Case Study 5-1). In another example, the Virginia Department of Transportation (VDOT) has recently experienced an increase in network outages and slowness at several field offices, which have negatively affected staff's ability to carry out daily operations and access important software (Case Study 5-2). Both of these cases were categorized as high-priority incidents and were not resolved within the contractual timeframe.

CASE STUDY 5-1

VDACS field office went without phone service for one month

Agency Background

VDACS is a mid-sized agency with regulatory and marketing duties related to agriculture and consumer protection. One of the agency's key regulatory responsibilities is the inspection of facilities and sites that produce or sell food, such as manufacturing facilities, poultry and dairy farms, and grocery stores.

Problem

Beginning in March 2019, VDACS received reports from a field office that staff were unable to make calls using agency phone lines. The issue was submitted to VITA as a high-priority incident. High-priority incidents are supposed to be resolved in four hours. However, this incident was not fully resolved until 27 days later.

Consequences

During the outage, customers were unable to call the field office to schedule or receive updates on services offered by VDACS, including the results of animal product tests or agricultural inspections. VDACS staff indicate that many of their customers rely on their phones as a primary means of contacting the agency. Customers' inability to schedule these tests or inspections can negatively affect their businesses by delaying the sale of agricultural goods and present public safety risks by delaying the testing of animals for harmful diseases. Additionally, VDACS staff indicate they had to dedicate significant time to follow-up with VITA and the supplier to resolve this incident.

CASE STUDY 5-2

VDOT experiencing increased network outages and slowness

Agency Background

VDOT is one of the state's largest agencies and is responsible for building, maintaining, and operating more than 57,000 miles of highways and roads in Virginia. The agency relies on VITA for infrastructure services, but maintains certain operational technology (e.g., EZ-pass) separately from VITA.

Problem

According to staff at VDOT, the agency has experienced a significant increase in network outages under the new multi-supplier model. Additionally, slow internet connections at multiple VDOT field offices have hindered staff productivity and their ability to carry out daily operations.

Consequences

VDOT staff indicate that one of their large district headquarters has experienced 14 network outages since October 2018, resulting in a total downtime of 15 working days. These outages affect approximately 800 staff, and have lasted as long as 12 hours. During network outages, staff are unable to respond to emails, access VDOT's shared network, or process invoices. In some cases, staff have had to go to local businesses or use hotspots to carry out their daily responsibilities.

Another large field office has experienced network connectivity issues since March 2019. Network slowness has prevented staff from being able to access important software that supports their essential operations. According to VDOT staff, they requested to upgrade the network at this site in March but have not yet seen significant progress on the request.

Billing disputes and solution requests are not being resolved in a timely manner

Agencies' billing disputes are not being resolved in a timely manner. The average age of unresolved billing disputes increased from 47 days in March to 93 days in August, according to VITA staff. Multiple agencies have expressed dissatisfaction with the time it takes VITA to resolve billing disputes, citing an increased administrative burden on their staff to verify that billing inaccuracies have been fixed. In March 2019, VITA began working with the integrator (SAIC) to address agencies' concerns about aging disputes. As of August 2019, the total number of unresolved billing disputes (123) has remained largely unchanged, and the average time to resolve billing disputes has continued to increase.

“
It creates a huge administrative burden on our agency to try and reconcile whether VITA's bills are correct.
”

– VITA customer agency

Similarly, solution requests are not being resolved within contractual timeframes, resulting in delays to critical agency projects and services. Solution requests are submitted by agencies to purchase a good or service that is not available through VITA's

standard catalog. VITA has established contractual timeframes for responding to solution requests ranging from 10 to 25 days, depending on their size and scope. VITA had more than 70 solution requests (40 percent) that were over 90 days old as of June 2019. Although suppliers have begun to reduce the backlog of solution requests, they are still not resolving the majority of requests within contractual timeframes, according to VITA's performance data. Agencies indicate that these delays are particularly problematic when tied to programs or initiatives that have strict deadlines or federal funding. In one example, staff with the Department of Behavioral Health and Developmental Services (DBHDS) indicated that an approximately \$52 million project to establish an electronic health records system was significantly behind schedule because of VITA's delays to complete their solution requests. According to DBHDS staff: "The inability to get a solution to our business requirements is putting our timeline and milestones at risk...it's the biggest risk we face." Multiple other agencies have expressed concerns over the time it takes for solution requests to be completed (sidebar).

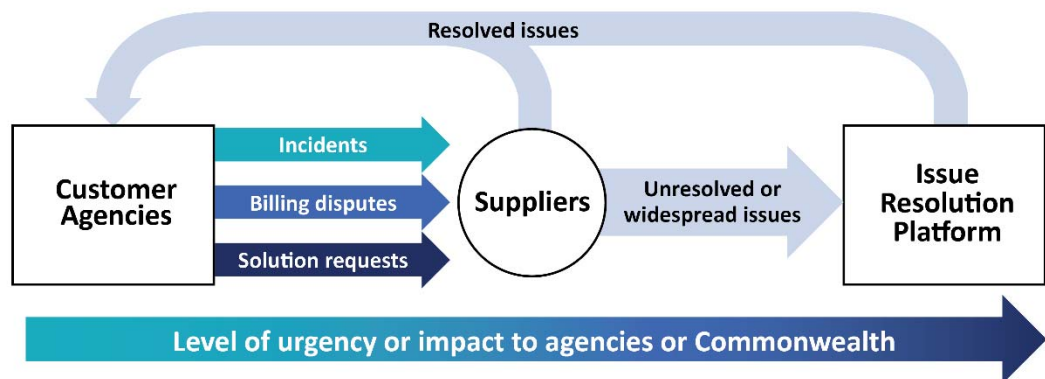
"The [solution request] process is extremely slow. Agencies need faster turn-around for servers and architecture review."

– VITA customer agency

VITA's issue resolution platform is not resolving many issues in a timely manner

Major service issues that are not resolved by suppliers in a timely manner or that affect multiple agencies are typically referred to VITA's issue resolution platform (Figure 5-2). These platforms are used in multi-supplier IT models to ensure service issues are resolved and supplier issues are addressed, according to subject matter experts. In VITA's platform, issues are first logged in the platform database and then referred to meetings staffed by individual suppliers and VITA subject matter experts. Issues unable to be resolved at this level may be escalated to higher-level meetings, which may include staff from multiple suppliers, the integrator, and VITA's director of the platform. (See Appendix C for a more detailed description of VITA's platform meetings.) A total of 600 issues had been referred to VITA's issue resolution platform since it was created in February 2018, and 57 percent of these had been resolved as of August 2019.

FIGURE 5-2
Unresolved service issues may be referred to VITA's platform



SOURCE: JLARC analysis of VITA documentation.

NOTE: The issue resolution platform is staffed with employees from VITA, the integrator, and each supplier.

Major issues are accumulating in VITA's platform, and many are not being resolved in a timely manner

VITA is referring a larger number of major issues to the platform, resulting in a growing backlog. The number of unresolved major issues (high- or critical-priority) increased by 52 percent between May and August 2019, from 60 to 91, representing 36 percent of all issues in the platform. Major issues are often more complex than minor ones, requiring more time and resources to resolve. As a result, as the number of these unresolved major issues increases, they place additional strain on the platform.

Many of the issues in VITA's platform have gone unresolved for a significant period of time and are not being acted on or escalated frequently enough. To ensure issues receive adequate attention, subject matter experts recommend that issues should be addressed by staff regularly and escalated when progress is not being made (sidebar). Updates are stored in the platform database and provide a record of actions taken toward resolving an issue, including communications among staff working on the issue. As of August 2019, 44 of the 91 unresolved major issues (48 percent) in VITA's platform had gone unresolved for at least 90 days. In Georgia—a state with a platform similar to VITA's—issues are escalated if no progress has been made within two weeks. Of the 91 unresolved major issues, 31 had not been updated in more than two weeks, and 13 of those had not yet been escalated. Several of these issues related to agencies' abilities to access mainframe and server storage and data center services.

Major issues that are not resolved quickly in the platform can affect a large number of VITA customer agencies. For example, one unresolved issue currently in the platform relates to problems with Google's calendar and storage services, which are used by all VITA customer agencies. Agencies were unable to access the full functionality of these services for over a year, affecting agency operations and employee productivity (Case Study 5-3).

“
It is not acceptable for something to sit there on a list and not get any movement.
 ”

– Georgia Technology Authority

CASE STUDY 5-3

Agencies have not had access to Google Drive services for more than a year

Background

All VITA customer agencies are required to use Google email services provided by VITA, which include messaging as well as calendar and digital storage capabilities. Many agencies rely on digital storage services to comply with archiving and retention requirements under the Freedom of Information Act (§2.2-3701). In addition to the standard suite of Google services, agencies had the option to purchase an upgraded tier of services in FY19 that would include unlimited storage through Google "Drive."

Problem

In early 2018, VITA identified a major issue related to the implementation of Google Drive services, because the software did not meet all of VITA's security requirements. VITA decided to postpone the full release of Google Drive services until the security requirements were met. While VITA has continued to work with Google to address this issue, it has remained unresolved for more than a year, during which time multiple agencies were locked into a one-year contract and unable to downgrade to a cheaper tier until the end of that contract.

Consequence

Agencies indicate that they have been unable to access certain essential functions, including the ability to include attachments on calendar invites or utilize the storage capabilities of Google Drive. This was particularly significant for agencies that opted to pay the additional costs for unlimited storage. As a result, many agencies have been forced to apply for security exceptions from VITA or procure additional services on their own while waiting for a solution from VITA and its supplier, even after having paid for Google Drive services.

VITA has not provided sufficient guidance to ensure issues are appropriately referred to the platform and resolved within it

VITA has not established metrics governing issue resolution within the platform and has not provided staff with sufficiently clear policies on when to refer issues to the platform or escalate issues within it. For example, staff do not have clear guidance on what conditions should be met before an issue is referred to the platform, or how long it should take for issues to be updated or resolved before they need to be escalated within the platform. Without clear policies, the process for addressing issues is ad hoc and largely dependent on the staff leading the various meetings within the platform. This increases the likelihood of issues being inappropriately escalated, or not escalated at all (sidebar).

“ At the procedural and mechanical level, there is not much yet in terms of policies...Right now we are sending out ad hoc instruction. ”

– VITA staff

To ensure that issues are being appropriately referred to the platform, VITA should establish criteria for when staff should refer an issue to the platform. Criteria could include the priority level of the issue, the time it has remained unresolved, and the impact to customer agencies.

To ensure issues are resolved in the platform in a timely manner, VITA should establish target metrics for issue resolution. These metrics should be based on issue priority and should be tracked through VITA's existing platform database. For example, an appropriate target metric for minor issues might be 30 to 45 days, while major issues might warrant a metric closer to seven to 10 days. VITA also should establish a process for automatically escalating issues that exceed these target metrics or are not being regularly updated. For example, VITA could automatically escalate issues that have not progressed toward resolution after two weeks. This would be consistent with Georgia's policy.

VITA staff have developed a draft policy related to the referral and escalation of issues that would include guidelines for referring issues to the platform, metrics for issue resolution, and an auto-escalation policy for issues that exceed the target metrics. However, as of August 2019, staff had not finalized or begun to implement the policy.

RECOMMENDATION 8

The Virginia Information Technologies Agency (VITA) should develop and implement policies establishing (1) criteria for when issues should be referred to VITA's issue resolution platform; (2) a target metric for how long issues should take to be resolved within the platform based on priority level; and (3) a process for automatically escalating issues that exceed target metrics.

To ensure that VITA's platform is used as effectively as possible and verify that policies are followed, VITA should work with a third-party consultant to conduct oversight of the platform. The consultant could be hired and overseen by JLARC to ensure objectivity. The consultant's responsibilities should include reviewing policies related to the platform, assessing whether policies guiding the platform are being implemented consistently, and making recommendations to VITA staff to improve issue resolution. Because the platform is still within its first year of maturation, third-party oversight may not be needed permanently and could potentially be discontinued after current problems are addressed.

VITA is handling some issues outside of its issue resolution platform

Some issues experienced by VITA's customer agencies and suppliers are being handled outside of VITA's issue resolution platform. This includes major service issues experienced by customer agencies, as well as issues experienced between VITA and specific

suppliers. All issues should be tracked and addressed through VITA's platform, according to subject matter experts.

Some customer service issues are being addressed outside the platform

VITA has not consistently addressed all customer service issues through its issue resolution platform, and instead, has allowed agencies to circumvent it. Multiple agencies indicate that they have often contacted VITA's CIO directly when they need to have an issue resolved quickly, rather than allowing it to be referred to and resolved through VITA's platform. For example, staff at one customer agency indicated that a field office was without internet access for five days and that the issue was not resolved until the CIO was contacted directly. While it is appropriate for the CIO to be made aware of customer agency concerns, VITA staff indicate that this practice can divert resources away from issues that have already been formally referred to the platform and may be higher priority. In another example, after multiple agencies expressed concerns about network latency at a monthly Customer Advisory Committee meeting, the CIO directed staff to put together an action plan to address the concerns. Despite its importance, this issue was never formally logged in the platform.

A majority of supplier issues are being addressed outside of platform

In addition to customer service issues, the platform should be used to resolve issues between VITA and suppliers that cannot be solved through the regular contract management process. For example, supplier issues addressed in the platform may include requests for additional compensation or differences of opinion in interpretation of contract language. These supplier issues can be initiated by either party. Using the platform to address these issues can help prevent them from becoming more serious contractual disputes that involve breach letters or lawsuits.

VITA does not currently address the majority of supplier issues through its platform. Most supplier issues are discussed weekly by VITA staff, but discussions often occur in internal meetings rather than in platform meetings that are open to suppliers. In some cases, VITA leadership has taken supplier issues that were already logged in the platform and worked to resolve them outside of the platform. For example, after multiple issues were logged in the platform related to a supplier's delayed contract deliverables, VITA leadership convened recurring Strategic Alignment Meetings to discuss the issues outside of the platform (sidebar).

Staff in states with platforms that are similar to VITA's (Georgia and Texas) have stressed the importance of addressing all issues, including supplier issues, within the platform to improve the transparency and integrity of the process. While VITA's ability to have internal discussions regarding supplier issues is necessary and appropriate, during interviews with JLARC staff, multiple suppliers commented that VITA's practice of handling their issues outside of the platform is exclusionary and does not allow them to participate in or understand the process behind VITA's decisions (sidebar).

Strategic Alignment Meetings were established by VITA in May 2019 and include high-level staff from both VITA and the integrator, SAIC. These meetings are not formally part of VITA's platform.

“ It goes back to that layer where we don't have visibility into the decision-making process... Things could be alleviated if there was more transparency, and we could see the back-and-forth. ”

— VITA supplier

All customer service and supplier issues should be addressed through VITA's resolution platform

“If you are solving issues outside of [the platform] and have no record of it, it really begins to erode the governance that you have tried to establish.”

– Georgia Technology Agency

To allow VITA's resolution platform to operate effectively and mature, VITA leadership should ensure all issues, both customer service and supplier, are addressed through the platform. If issues are brought to leadership's attention outside of the platform, they should be redirected to the platform so that they can be documented and their progress transparently tracked. Consistent use of the platform will allow predictability for both agencies and suppliers. Use of the platform also increases transparency because issues are logged in a platform database and can be accessed by VITA, suppliers, and agencies. Further, consistent use of the platform allows VITA to appropriately prioritize issues for resolution.

VITA may need to establish a new platform meeting dedicated to resolving supplier issues, or expand the purpose of an existing one, because a meeting dedicated to supplier issues does not currently exist. Tracking and resolving all supplier issues through the platform would be consistent with Georgia's practice. It also would fulfill a recommendation that VITA recently received from its consultant (Integrus Applied) that “VITA should have a standard process for addressing and resolving disputes between VITA and suppliers...It should use the [platform].”

RECOMMENDATION 9

The Virginia Information Technologies Agency (VITA) should ensure all customer agency issues and supplier issues are identified and addressed through VITA's platform for issue resolution.

6 IT infrastructure Rates and Budgeting

SUMMARY VITA is responsible for establishing the rates that agencies pay for IT infrastructure services each year, subject to the approval of the Department of Planning and Budget and the General Assembly. As part of the current rate-setting process, VITA does not work with agencies to validate their base IT infrastructure service needs for the upcoming year or provide agencies with rates early enough in the budget cycle. These practices have made it more difficult for agencies to effectively manage their budgets for IT infrastructure services. In some cases, agencies report receiving an inaccurate amount of funding to cover base IT infrastructure costs. Agencies have also been dissatisfied with the transparency of VITA's rates and have lacked a clear understanding of the full range of services included in VITA's rates. VITA made recent improvements to address agency dissatisfaction and enhance rate transparency in FY20.

VITA pays for the state's IT infrastructure services through charges to customer agencies. The amount agencies pay is based on the rates VITA charges for various IT services and the services agencies use. Agencies are required to use VITA's IT infrastructure services and therefore have limited control over their IT infrastructure costs. The legislature typically adjusts agencies' funding when rates or consumption increase or decrease, particularly general fund agencies (sidebar). (Non-general fund agencies must generate additional funds to cover their increased IT infrastructure costs.) However, if agencies consume more services than VITA has estimated for a given fiscal year, they may need to divert funding from other areas to cover the cost. Agencies need to know what the rates will be early enough to make informed decisions when managing their IT budgets.

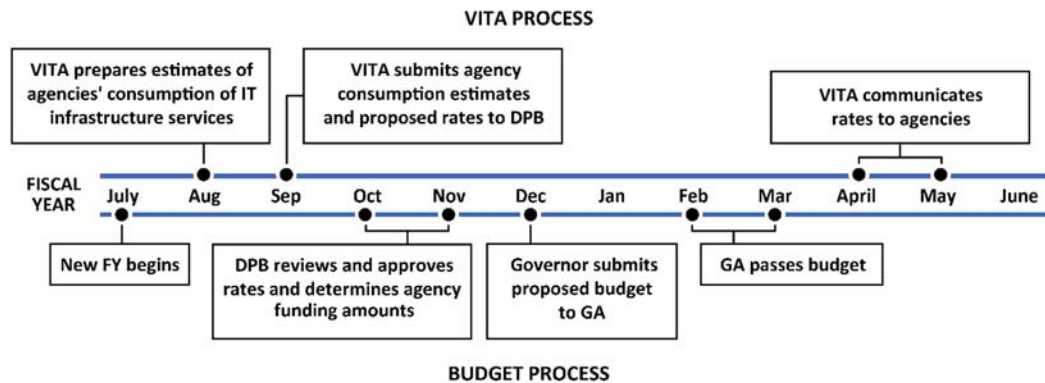
Rates refer to the total amount customer agencies are charged for IT infrastructure services. This includes the amount each supplier charges for a good or service, as well as an administrative surcharge set by VITA.

Consumption refers to the amount of IT infrastructure services that customer agencies purchase (e.g., number of computers, bandwidth capacity, or server storage).

The budget process for IT rates could be more accurate and transparent

VITA establishes rates for IT infrastructure services in collaboration with the Department of Planning and Budget (DPB) each year (Item 4-5.03 2019, Chapter 854, 2019 Act of Assembly). VITA bases the rates on costs outlined in its IT infrastructure contracts and its estimates of agencies' consumption of those services. DPB reviews and approves these rates and the estimated agency financial impacts and determines the funding needed to cover each agency's share of VITA's IT infrastructure costs to include in the governor's budget. Although VITA has a list of preliminary rates by December each year, rates are not typically shared with agencies until after the legislature approves the budget in the spring (Figure 6-1).

FIGURE 6-1
VITA process for setting and communicating rates occurs in annual cycle



SOURCE: JLARC interviews with staff from DPB and VITA.

VITA does not involve agencies in validating their estimated service consumption

VITA plans to improve the accuracy of agency consumption estimates after new functions are developed in the agency's IT financial management tool. Staff plan to use the tool to combine historical data with agencies' ongoing IT activities to generate consumption estimates and validate consumption estimates with agencies. Staff anticipate that these functions should be available by FY22.

VITA does not currently validate estimated IT infrastructure service consumption with agencies during the IT budgeting process. This can be problematic because agencies have the best understanding of the IT infrastructure services they expect to consume each year. For example, agencies may be aware of factors that will affect their base utilization of infrastructure services. VITA currently generates estimates of agency service consumption using historical data but does not formally verify with agencies whether these estimates are accurate. Consequently, some agencies report not receiving an accurate funding amount for their base IT infrastructure consumption. (Any policy changes affecting IT infrastructure consumption such as new programs or hiring additional staff should be submitted as a separate budget request and go through the formal budget review and approval process.) VITA plans in the future to improve agency consumption estimates through its new IT financial management tool (sidebar).

To improve the accuracy of IT service consumption estimates, VITA should submit IT infrastructure service consumption estimates to agencies in mid- to-late summer for validation as part of the budget process. This would provide agencies with an opportunity to review and identify any potential discrepancies between VITA's estimated IT infrastructure service consumption and agencies' own expected consumption. This validation process should occur each year before VITA submits rate information to DPB for approval in the fall. In order for agencies to receive the full benefit of this process, they will need to be responsive to VITA's request to review the preliminary consumption estimates.

RECOMMENDATION 10

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Information Technologies Agency to submit IT infrastructure service consumption estimates to agencies for validation each year prior to submitting rate information to the Department of Planning and Budget for approval.

VITA does not communicate rates early enough to give agencies adequate insight into their IT infrastructure budgets

VITA does not communicate IT infrastructure rates to agencies early enough for them to have adequate insight into their budget for IT infrastructure services. VITA and DPB establish preliminary rates by the time the governor's budget is submitted in December each year; however, rates are typically not communicated to agencies until the following spring, after the legislature has finalized the budget for the upcoming fiscal year. This delay prevents agencies from having adequate insight into their IT infrastructure costs, especially when rates change significantly from year to year. For example, the cost for a standard laptop increased by 23 percent between FY18 and FY19, and the cost for a standard printer doubled from FY19 to FY20.

Agencies have expressed dissatisfaction with the timeliness of VITA's communication of rates. Nearly half (44 percent) of the high-level IT staff at agencies surveyed by JLARC disagree that VITA communicates rates in a timely manner (sidebar). Agency IT staff expressed particular concern about the release of FY20 rates, which were not provided until May 2019, given the significant changes to many services under the new IT infrastructure model (sidebar).

To improve agencies' ability to manage their budget for IT infrastructure services and alleviate any confusion over rates, VITA should release a preliminary list of rates each year when the governor's budget is submitted. The list would include the rates on which the governor's budget is based and would be subject to approval by the General Assembly.

RECOMMENDATION 11

The General Assembly may wish to consider amending § 2.2-2013 of the Code of Virginia to require the Virginia Information Technologies Agency to release a preliminary rate schedule to agencies upon the submission of the governor's budget each year. The rate schedule should be for the upcoming fiscal year.

Agencies have been dissatisfied with transparency of rates but VITA has made recent improvements

It is important for agencies to understand VITA's IT infrastructure rates, and the services they include, so they can choose services that meet their needs and verify the accuracy of their VITA invoices. This can be challenging because there are over 500

JLARC conducted two customer agency surveys in May 2019, one of high-level IT staff and one of agency heads. Response rates were 80 percent and 79 percent, respectively. Surveys asked about agency satisfaction with VITA's infrastructure services, rates, communication, and resolution of service incidents. (See Appendix B for additional information.)

“ We are unable to forecast one of the largest expenses to our agency, which are the costs of VITA managed services. ”

– VITA customer agency

VITA's FY20 rates underwent more changes than usual because of the implementation of the new IT infrastructure model. Many new services were introduced, and the price of many services changed significantly.

“There’s a lack of transparency around the rates. Only comparison point we have is the private sector.”

– VITA customer agency

“There has been...a real difficulty to get a cross-walk in terms of what we were paying before, and what we’re paying now. From a budgeting standpoint, it’s difficult to determine if we’re getting a better deal or not.”

– VITA customer agency

rates for IT infrastructure services. These rates include the base cost of a good or service (e.g., laptop, server storage, wireless router). Rates also include the cost of any support included (e.g., ongoing technical support, warranties, or security software) and VITA’s administrative surcharge.

Many agencies have expressed frustration over a lack of clarity around what they are receiving for the rates they pay for infrastructure services, especially when the rates appear to be higher than standard market rates. About half (51 percent) of the high-level IT staff at agencies surveyed by JLARC in May 2019 believed that it was unclear what is included in VITA’s rates. In particular, agencies were concerned that they do not receive sufficient information about the type of support they receive from VITA suppliers for what they are paying. Without a clear understanding of this, agencies indicate that it is difficult to assess the reasonableness of VITA’s rates. Additionally, some agencies indicated that changes to the FY20 rates made it difficult to compare the cost of services to the previous year (sidebar).

VITA has recently improved the transparency of its rates for IT infrastructure services. Information on the support that is included in the rates agencies pay for specific goods or services is now available through VITA’s service request portal. For example, the entry for a computer now describes the specific hardware components of the device, as well as the technical support, additional software, and security protection included in the total cost. Agencies also can now see the specific cost of certain upgrades, such as higher tiers of support, or increased storage space. Lastly, VITA staff have recently engaged in outreach activities to enhance agencies’ understanding of rates, including communicating at agency stakeholder meetings, meeting one-on-one with agency staff, and holding “service fairs,” where agencies can learn about services from suppliers.

Agencies also have expressed concern over the rates they pay for IT infrastructure services. Over two-thirds (69 percent) of agencies disagreed that the rates set by VITA were reasonable, according to a survey of high-level IT staff at VITA’s customer agencies in FY19. Multiple agencies provided examples of VITA rates that were significantly higher than market rates. In one example, staff at an agency requested VITA’s approval to procure specific software from a third-party vendor, but were denied and required to use another software offered by one of VITA’s suppliers at a significantly higher cost. Agencies’ negative feedback on rates may be partially attributed to the extra fee included in VITA’s FY19 and FY20 rates to pay off the one-time, upfront cost of transitioning to the new IT infrastructure. Several agencies have expressed concern over having this additional fee in their VITA bill. Agencies indicate that, as their IT costs increase, whether due to more expensive services or additional administrative fees, they may have to divert funding away from core programs and personnel (sidebar).

“What you end up doing is cannibalizing programs to fund VITA charges, programs that are meant to serve citizens.”

– VITA customer agency

7 Organizational management

SUMMARY Effective organizational management is required to successfully implement and manage the complexity of a multi-supplier IT infrastructure services model. However, VITA leadership has not required staff to hold suppliers accountable for meeting contractual requirements, including critical contract deliverables and performance requirements. In addition, VITA leadership has not consistently supported VITA's issue resolution platform for identifying and resolving ongoing service and supplier issues and has addressed some issues outside of the platform. Moreover, changes to VITA's organizational structure were not implemented early enough to ensure that VITA was appropriately structured and staffed to implement a multi-supplier model. As a result of these shortcomings, VITA has not yet maximized the quality and effectiveness of its new IT infrastructure services model, which has had an adverse impact on agencies.

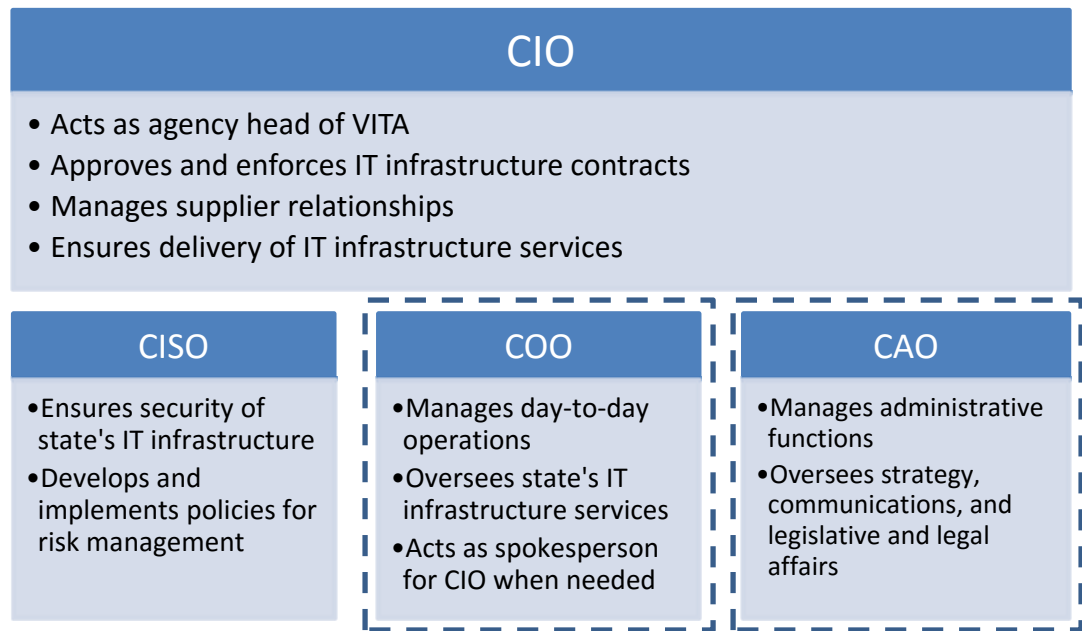
VITA provides essential IT infrastructure services to the majority of Virginia state agencies; therefore, it is imperative that VITA is managed effectively. Strong organizational management is needed at VITA now more than ever, given the complexity of VITA's new multi-supplier model and the magnitude of change that VITA underwent to implement it. When the new model was initially implemented, VITA was in the process of disentangling from Northrop Grumman, which hindered agency leadership's ability to focus fully on the new model. However, to operate the new IT infrastructure model effectively going forward, VITA leadership needs to ensure that suppliers are held accountable for meeting contractual requirements and that VITA's issue resolution platform is used to transparently document and address widespread and longstanding issues. VITA leadership also needs to ensure that VITA is suitably structured and staffed to carry out these functions.

VITA's leadership team is led by a chief information officer (CIO), who oversees VITA and reports to the secretary of administration. In addition to acting as the agency head, the CIO also oversees the provision of IT infrastructure services to executive branch agencies. In this role, the CIO is responsible for approving and enforcing IT infrastructure contracts, managing supplier relationships, and ensuring the delivery of services. The CIO largely delegates the action needed to fulfill these responsibilities to staff. The CIO is supported by a chief information security officer (CISO), chief operating officer (COO), and chief administrative officer (CAO), all who assist with leading VITA (Figure 7-1). Both the COO and CAO are new positions that were first filled in August 2019.

VITA's leadership team oversees IT infrastructure functions, as well as other agency functions (e.g., agency IT projects, agency IT strategic planning, and IT security). This chapter focuses only on VITA leadership's oversight of IT infrastructure functions.

FIGURE 7-1

Chief information officer is supported by three chief positions to oversee the provision of IT infrastructure services



SOURCE: Interviews with VITA staff and review of executive work profiles (EWPs) and job advertisements.
 NOTE: The COO and CAO positions were first filled in August 2019.

VITA leadership should consistently hold suppliers accountable and support issue resolution platform

VITA's leadership is ultimately responsible for determining how and when VITA holds suppliers accountable for contractual requirements. The CIO is the state's signatory for all contracts with IT infrastructure suppliers and decides how VITA interacts with its suppliers. The daily management of suppliers is largely delegated to VITA staff, but certain decisions require CIO approval and guidance. For example, the CIO must approve all contract modifications above \$1 million. The CIO and other members of agency leadership also determine VITA's strategy for handling particularly challenging supplier issues, such as how to address continued underperformance or respond to contractual disputes.

To date, VITA's leadership has not required agency staff to hold IT infrastructure suppliers accountable for meeting their contractual requirements. Despite persistent underperformance across several suppliers, leadership has not directed staff to request remediation plans or enforce financial penalties for almost all of the contract deliverables that are significantly delayed. Similarly, leadership has not directed staff to enact automatic financial penalties for unreported performance data or missed performance requirements. As a result, substantial supplier performance shortcomings have been allowed to persist in VITA's new IT infrastructure model. Leadership's inaction has set

a precedent for leniency on suppliers and is making it difficult for VITA to manage its suppliers effectively (sidebar).

VITA leadership has taken some steps to address poor supplier performance, but they do not appear to always be in the state's best interest. For example, leadership has regularly convened Strategic Alignment Meetings to discuss deliverable delays with its integrator, SAIC (sidebar). Rather than using the meetings to enforce the supplier's contract requirements, leadership has acted as a mediator between VITA staff and SAIC. As a result, these meetings put VITA at risk of losing contract value or awarding unwarranted concessions to the supplier for delays. VITA leadership also has agreed to multiple contract modifications with suppliers that extended deliverable deadlines. For example, VITA's second contract modification with SAIC allowed the company to delay full implementation of services five months. Moreover, VITA leadership approved putting SAIC in "material breach" of their contract for certain delayed deliverables but then allowed the material breach status to be dropped even though several concerns remained unresolved.

VITA leadership has not ensured that VITA's resolution platform is consistently used to address service and supplier issues. Agencies have been allowed to circumvent the platform by contacting VITA leadership directly to resolve customer service issues. VITA staff indicate that, in some cases, this has resulted in resources being diverted away from issues that were being addressed through the platform. VITA leadership also has taken issues that were already logged in the platform outside the platform for resolution. For example, SAIC's deliverable delays were initially logged in the platform. However, VITA leadership decided to address them in the Strategic Alignment Meetings, which were not formally part of the platform, according to VITA staff.

For the state to receive the maximum value from its contracts with IT infrastructure suppliers, VITA's leadership should fully represent the state's interests in contractual issues and ensure that suppliers are consistently held accountable for meeting contractual obligations. Failure to do so puts the state at risk of losing contract value, as well as not receiving the IT infrastructure service quality that agencies need to perform core functions. Additionally, VITA leadership should consistently address customer service and supplier issues through the agency's resolution platform to ensure issues are handled predictably, transparently, and fairly.

VITA leadership should ensure agency is suitably staffed and organized for multi-supplier IT model

When one of its core functions fundamentally changes, an agency's organizational structure often needs to be modified accordingly. VITA's transition to the new IT infrastructure model was a large-scale change that required new staff skillsets and processes. Given the scale of these changes, a reorganization was needed to ensure that key functions were structured and staffed appropriately.

“*The fact that I can't leverage [performance requirements] is making it difficult to manage suppliers at the moment. We are having negative performance.*”

– VITA staff

Strategic Alignment Meetings were established by VITA in May 2019, and included high-level staff from both VITA and the integrator, SAIC. These meetings are not formally part of VITA's issue resolution platform.

Reorganization occurred after implementation of new IT infrastructure model

VITA leadership did not implement an agency reorganization until April 2019, eight months after it began implementing its new multi-supplier model and four months after all eight suppliers started providing services. Leadership planned VITA's transition to the new IT infrastructure model several years in advance and had sufficient time to reorganize before the transition. Staff in two other states with multi-supplier IT infrastructure models—Georgia and Texas—indicate that they implemented agency reorganizations before fully implementing their models. Additionally, Ernst & Young, a third-party consultant hired by VITA to assess the new IT infrastructure service model in 2018, indicated that VITA's organization was not appropriately structured to undertake the new model (sidebar).

“VITA does not have a clearly defined operating model or the right capabilities to support the multi-vendor service model after December 15.”

— Ernst & Young

VITA's leadership also did not solicit staff input on the reorganization except in a few instances, which prevented staff from helping to determine the best organizational structure for key functions. There are several functions that do not appear to be effectively placed in the new organization. For example, the Internal Applications division was placed under the COO, despite the CAO being primarily responsible for internal functions. In addition, some functions were split across multiple divisions, including management of the issue resolution platform, strategic planning, and contract management, making it unclear who exactly is accountable for these functions. Soliciting feedback from key VITA staff on the new organizational structure may have helped to avoid these issues. Staff in at least one other state with a similar IT model, Georgia, indicated that they sought feedback from both high-level and lower-level staff in their reorganization.

Reorganization resulted in leadership void and prolonged vacancies in key staff positions

VITA's reorganization left key leadership positions vacant for several months, which hindered agency operations. After the reorganization was implemented in April 2019, several positions were directed to report to VITA's CISO, COO, or CAO; however, the COO and CAO positions were not filled until August 2019. (The COO position was first advertised in October 2018, while the CAO position was not posted until May 2019.) During this time, the responsibilities of the COO and CAO positions had to be carried out by the CIO or delegated to other VITA staff. This caused a temporary but significant increase in the number of staff (from six to 11) reporting directly to the CIO during a critical period of the new model's implementation.

“One risk is understaffing [areas that] manage service providers. You have to be able to manage your suppliers.”

— Georgia Technology Authority

VITA leadership also did not authorize staff to fill several key staff positions during the agency reorganization. According to VITA leadership, three of five contract managers were intentionally left vacant for between five months and a year until the COO was hired. This left two contract managers to manage eight different suppliers. Contract managers are critical to VITA's ability to hold suppliers accountable for delivering IT infrastructure services (sidebar).

Now that VITA's leadership team is fully staffed, leadership should conduct a comprehensive assessment of whether VITA is structured and staffed effectively to operate a multi-supplier IT infrastructure model. This assessment should be conducted by VITA staff (or a designated consultant) and should evaluate the structure and staffing of *all* of VITA's functions. However, extra attention should be given to functions where VITA has had staffing deficiencies (e.g., contract management). To ensure the rigor and objectivity of the assessment, JLARC staff should be briefed on key milestones throughout the process.

Results of the assessment should indicate whether VITA requires any additional structural changes to effectively operate a multi-supplier model. Results should also indicate whether any staff positions across the agency (including contractor positions) should be filled, created, or removed. If positions need to be filled, VITA should assign a priority level to filling each vacancy. If new positions are required, VITA should work with the Department of Human Resource Management to determine whether currently vacant positions can be reclassified. VITA leadership have indicated that they plan to complete this type of assessment to help ensure the effective deployment of agency resources.

RECOMMENDATION 12

The General Assembly may wish to consider requiring the Virginia Information Technologies Agency (VITA) to conduct a comprehensive assessment of whether VITA is structured and staffed effectively to operate a multi-supplier IT infrastructure model. Results of the assessment should indicate whether VITA requires any additional structural changes and whether VITA needs to fill, create, or remove any staff positions across the agency. VITA should provide the assessment results to members of the Joint Legislative Audit and Review Commission, Senate Finance Committee, and House Appropriations Committee by July 1, 2020.

Appendix A: Ongoing oversight authority and study motion

The Appropriation Act directs JLARC to review and evaluate the Virginia Information technologies Agency (VITA) on an ongoing basis. Under this authority, JLARC staff proposed conducting a more in-depth review of VITA's new IT infrastructure model, and the Joint Legislative Audit and Review Commission passed a motion to approve that review on December 10, 2018. The Appropriation Act language describing JLARC's ongoing oversight of VITA, and JLARC's motion for staff to review VITA's new IT infrastructure model are below.

2019 Acts of Assembly Item 31 E. of Chapter 854

1. The General Assembly hereby designates the Joint Legislative Audit and Review Commission (JLARC) to review and evaluate the Virginia Information Technologies Agency (VITA) on a continuing basis and to make such special studies and reports as may be requested by the General Assembly, the House Appropriations Committee, or the Senate Finance Committee.
2. The areas of review and evaluation to be conducted by the Commission shall include, but are not limited to, the following: (i) VITA's infrastructure outsourcing contracts and any amendments thereto; (ii) adequacy of VITA's planning and oversight responsibilities, including VITA's oversight of information technology projects and the security of governmental information; (iii) cost-effectiveness and adequacy of VITA's procurement services and its oversight of the procurement activities of State agencies.
3. For the purpose of carrying out its duties and notwithstanding any contrary provision of law, JLARC shall have the legal authority to access the information, records, facilities, and employees of VITA.
4. Records provided to VITA by a private entity pertaining to VITA's comprehensive infrastructure agreement or any successor contract, or any contractual amendments thereto for the operation of the Commonwealth's information technology infrastructure shall be exempt from the Virginia Freedom of Information Act (§ 2.2-3700 et seq.), to the extent that such records contain (i) trade secrets of the private entity as defined in the Uniform Trade Secrets Act (§ 59.1-336 et seq.) or (ii) financial records of the private entity, including balance sheets and financial statements, that are not generally available to the public through regulatory disclosure or otherwise. In order for the records specified in clauses (i) and (ii) to be excluded from the Virginia Freedom of Information Act, the private entity shall make a written request to VITA:
 - a. Invoking such exclusion upon submission of the data or other materials for which protection from disclosure is sought;
 - b. Identifying with specificity the data or other materials for which protection is sought; and
 - c. Stating the reasons why protection is necessary.

VITA shall determine whether the requested exclusion from disclosure is necessary to protect the trade secrets or financial records of the private entity. VITA shall make a written determination of

the nature and scope of the protection to be afforded by it under this subdivision. Once a written determination is made by VITA, the records afforded protection under this subdivision shall continue to be protected from disclosure when in the possession of VITA or JLARC. Except as specifically provided in this item, nothing in this item shall be construed to authorize the withholding of (a) procurement records as required by § 56-575.17; (b) information concerning the terms and conditions of any interim or comprehensive agreement, service contract, lease, partnership, or any agreement of any kind entered into by VITA and the private entity; (c) information concerning the terms and conditions of any financing arrangement that involves the use of any public funds; or (d) information concerning the performance of the private entity under the comprehensive infrastructure agreement, or any successor contract, or any contractual amendments thereto for the operation of the Commonwealth's information technology infrastructure.

5. The Chairman of JLARC may appoint a permanent subcommittee to provide guidance and direction for VITA review and evaluation activities, subject to the full Commission's supervision and such guidelines as the Commission itself may provide.
6. All agencies of the Commonwealth shall cooperate as requested by JLARC in the performance of its duties under this authority.

JLARC Motion for Review of VITA's New IT Infrastructure Model

Authorized by the Commission on December 10, 2018

JLARC staff are directed to review the Virginia Information Technologies Agency (VITA) and assess (1) VITA's new infrastructure model, including procurements, contract management, and transparency of rates charged to agencies; (2) VITA's current governance structure in light of the new model; and (3) other relevant topics identified during the course of the review.

Appendix B: Research activities and methods

Key research activities performed by JLARC staff for this study included

- structured interviews with staff from the Virginia Information Technologies Agency (VITA), VITA's customer agencies, VITA's IT infrastructure suppliers, other state IT agencies with multi-supplier IT infrastructure models, and various state and national subject matter experts;
- surveys of high-level IT staff and agency heads at VITA's customer agencies;
- third-party law firm review of six of VITA's contracts with IT infrastructure suppliers;
- collection and analysis of data on VITA's contract management activities, suppliers' performance, VITA staffing, and VITA funding;
- regular attendance and observation of VITA meetings, including internal VITA leadership meetings and meetings with VITA's customer agencies and suppliers;
- review of reports by national professional organizations (NASCIO, NASPO, NTT Data) and peer-reviewed articles on the subject of multi-supplier IT models;
- review of various other documents and data, including statutes and regulations in Virginia and other states, meeting minutes of ongoing VITA and stakeholder meetings, procurement files and policies, contract documents and exhibits, and previous consultant reviews of VITA.

Structured interviews

Structured interviews were a key research method for this report. JLARC staff conducted more than 100 interviews. Interviews were conducted with:

- 21 VITA staff;
- 11 VITA customer agencies;
- 8 VITA IT infrastructure suppliers;
- Office of the Secretary of Administration; and
- subject matter experts in Virginia and other states, including:
 - state agencies in Virginia (DPB, DGS, and OAG),
 - VITA's consultant, Integris Applied,
 - central IT agencies in two other states with similar IT models (Georgia and Texas), and
 - National Association of State Chief Information Officers (NASCIO).

VITA staff

JLARC staff conducted in-depth structured interviews with 21 of the 111 staff (19 percent) at VITA with responsibilities related to IT infrastructure services, many of whom were interviewed multiple times. VITA staff who were interviewed work in eight of VITA's 11 directorates or were in executive leadership roles. Interviews were conducted in person and by phone. Interview questions varied but were intended to (1) help JLARC staff understand VITA policies and staffs' roles and responsibilities related to the provision of IT infrastructure services and (2) receive ongoing updates regarding the status of the multi-supplier model.

VITA customer agencies

JLARC staff conducted in-depth structured interviews with high-level IT staff at 11 of VITA's 65 customer agencies. These agencies represent all executive branch secretariats and were selected for interviews based on their size (measured by total number of staff) as well as their spending on VITA's IT infrastructure services (Table B-1). Interview questions were designed to help JLARC staff understand agencies' perspectives on the quality and reliability of VITA's IT infrastructure services, including how their staff and operations have been impacted by those services, and the effectiveness of VITA's issue resolution platform.

TABLE B-1
Customer agencies interviewed by JLARC staff represented all secretariats

Acronym	Agency	Secretariat
DHRM	Department of Human Resource Management	Administration
VDACS	Department of Agriculture and Consumer Services	Agriculture & Forestry
DOLI	Department of Labor and Industry	Commerce & Trade
DOE	Department of Education	Education
TAX	Department of Taxation	Finance
DBHDS	Department of Behavioral Health and Developmental Services	Health & Human Resources
DMAS	Department of Medical Assistance Services	Health & Human Resources
DSS	Department of Social Services	Health & Human Resources
DOC	Department of Corrections	Public Safety & Homeland Security
VDOT	Department of Transportation	Transportation
DVS	Department of Veterans Services	Veterans & Defense Affairs

SOURCE: JLARC interviews with VITA customer agencies, 2019.

NOTES: Multiple agencies were interviewed from the Health & Human Resources secretariat, because those agencies are among the top consumers of VITA's IT infrastructure services.

Subject matter experts

JLARC staff conducted in-depth interviews with entities in both Virginia and other states with subject matter expertise in multi-supplier IT infrastructure models, IT outsourcing contracts, procurement, contract management, and budgeting.

Specific subject matter experts interviewed in Virginia, and the topic they were interviewed about, included:

- Department of General Services – procurement and contract management practices;
- Department of Planning and Budgeting – VITA's IT infrastructure rates and budgeting; and
- Office of the Attorney General – VITA's IT infrastructure contracts.

Additionally, JLARC staff conducted multiple interviews with VITA's consultant, Integris Applied. Integris Applied has expertise in multi-supplier IT infrastructure models and has assisted with the design and implementation of these models in Georgia, Texas, and Virginia. Integris Applied has assisted with VITA's multi-supplier model since 2015. Interviews with Integris Applied staff were designed to understand how VITA's multi-supplier model is supposed to work, gain the consultant's perspective on VITA's implementation of the model, and identify best practices related to multi-supplier models.

JLARC staff conducted multiple in-depth interviews with staff from two other states with multi-supplier IT infrastructure models—Georgia and Texas. (At the time of this study, these were the only two states other than Virginia with multi-supplier models.) Interviews were conducted with the chief information officer and high-level IT staff in both states and staff from Capgemini (the supplier that provides integration services) in one state. Interviews were designed to understand how each state implemented its multi-supplier model, including the state’s process for procuring suppliers, managing suppliers, and resolving service and supplier issues. Georgia and Texas were also asked about their best practices and any lessons learned related to their multi-supplier models.

Lastly, JLARC staff interviewed the executive director of the National Association of State Chief Information Officers (NASCIO). NASCIO is a national nonprofit organization that represents state CIOs and IT executives and produces reports on state IT best practices. The interview was designed to understand the benefits and challenges of the multi-supplier model and to identify best practices related to the implementation of a multi-supplier IT model in a state environment.

Surveys

Two surveys were conducted for this study in May 2019: (1) a survey of high-level IT staff at VITA’s customer agencies and (2) a survey of agency heads at VITA’s customer agencies.

High-level IT staff

The survey of high-level IT staff was administered electronically to the chief information officer (or equivalent position) at all of VITA’s customer agencies that employ at least 10 full-time staff. In total, JLARC staff sent the survey to high-level IT staff at 56 customer agencies and received 45 responses, achieving a response rate of 80 percent.

Topics covered in this survey included: (1) satisfaction with VITA’s IT infrastructure services; (2) satisfaction with VITA’s rate-setting process; (3) satisfaction with VITA’s process for resolving agency service requests; (4) satisfaction with VITA’s communication practices; and (5) ways in which agencies are affected by VITA’s IT infrastructure services.

Agency heads

The survey of agency heads was administered electronically to the agency director (or equivalent position) at all of VITA’s customer agencies that employ at least 10 full-time staff. JLARC staff sent the survey to agency heads at 56 customer agencies and received 44 responses, for an overall response rate of 79 percent.

The survey of agency heads was considerably shorter than the survey of high-level IT staff. Topics covered in this survey included: (1) ways in which agencies’ core functions had been impacted by VITA’s IT infrastructure services, if at all, and (2) satisfaction with VITA’s communication practices.

Third-party law firm review of VITA’s IT infrastructure contracts

JLARC hired a third-party law firm, Pillsbury Winthrop Shaw Pittman LLP (Pillsbury), with extensive expertise in IT outsourcing contracts to review six of VITA’s IT infrastructure contracts. Pillsbury was

hired through a competitive procurement process and was asked to review VITA's contracts for the following services:

- (1) mainframe (Perspecta);
- (2) messaging (Tempus Nova);
- (3) integration (SAIC);
- (4) managed security (Atos);
- (5) server, storage, and data center (Unisys); and
- (6) end user computing (Iron Bow).

Pillsbury did not review VITA's contract for voice and data network services (Verizon). VITA modified an existing contract with Verizon from 2015; therefore, the contract was not part of the procurement process for VITA's implementation of the new multi-supplier IT infrastructure model. Pillsbury also did not review VITA's contract for managed print services (Xerox) because these services present a relatively low risk to the state and cost less than VITA's other IT infrastructure services.

JLARC staff asked Pillsbury to review all contract documents (including exhibits) for each of the six suppliers to:

- identify whether the contracts fully capture the IT goods and services sought by VITA as described in VITA's request for proposals;
- assess whether the contracts (i) have clear, relevant, and measurable deliverables, (ii) have performance metrics that are relevant to the quality and timeliness of contract deliverables, and allow for effective enforcement of deliverables, (iii) have terms and conditions that effectively incentivize good performance and dis-incentivize poor performance, (iv) have terms and conditions that are adaptive to changing technology, and are appropriately protective of the Commonwealth's security, financial, and other interests, and (v) contain any other deficiencies that create risks for the Commonwealth of Virginia;
- assess the extent to which the agreements are consistent with industry practices and the contracts of a peer group consisting of other states that have adopted similar IT models (Georgia and Texas); and
- determine the risk to VITA of any deficiency, including the severity of the risk, any recommended remediation, and the relative priority of any such remediation.

As part of their contract reviews, Pillsbury staff conducted in-person interviews with JLARC staff, multiple VITA staff, VITA's legal representatives from the state Office or the Attorney General, and VITA's consultant (Integrus Applied). The purpose of the interviews was to better understand VITA's contract templates, negotiations process, and contract objectives.

Pillsbury provided JLARC, VITA, and VITA's legal representatives from the state Office or the Attorney General with a summary of findings from its assessment of VITA's contracts. The findings indicate where VITA's contracts align with industry standards and peer practices and identify several contract deficiencies, ranked by the potential risk they pose to the state. The nature of Pillsbury's findings is sensitive and cannot be publicly disclosed without compromising the state's ability to correct contract deficiencies through negotiations with suppliers.

Data collection and analysis

Several types of data analyses were performed for this study.

Agency funding (Chapter 1)

JLARC staff analyzed VITA's spending using data from state Appropriation Acts, as well as VITA's internal budget documentation. Together, these documents were used to determine the amount of VITA's budget that was dedicated to the provision of IT infrastructure services in FY20. Staff also conducted multiple interviews with VITA staff to verify this analysis.

Agency staffing and organization (Chapters 1 and 7)

JLARC staff analyzed VITA's organizational chart and interviewed VITA staff to determine the total number of employees with responsibilities related to IT infrastructure services, following VITA's reorganization in April 2019. Some of these staff have additional responsibilities that are not related to IT infrastructure services. Staff also reviewed the employee work profiles (EWPs) for the chief operating officer and chief administrative officer positions to assess their roles following the reorganization.

While JLARC did not formally assess VITA's overall organizational structure to determine whether key functions were organized efficiently and effectively, multiple VITA staff were asked about this topic during structured interviews. These interviews focused on the new organizational structure implemented by VITA in April 2019. Staff also reviewed VITA's organizational charts before and after the reorganization to calculate the total number of vacancies before and after the reorganization in certain functions (e.g., contract management) to determine if they were adequately staffed.

Assessment of the status of VITA's multi-supplier IT infrastructure model (Chapter 2)

JLARC staff evaluated the status of VITA's implementation of the new multi-supplier IT infrastructure model by identifying suppliers' deadlines for providing IT infrastructure services and calculating the number of months that the implementation of these services had been delayed. Deadlines were identified through reviews of contract documents and conversations with VITA staff. Deadlines varied across suppliers, with VITA's integrator (SAIC) having an initial deadline for full implementation of services on October 1, 2018. Other suppliers' initial deadlines were on December 15, 2018.

JLARC staff also evaluated several preliminary indicators of performance of VITA's multi-supplier IT infrastructure model, including: (1) suppliers' fulfillment of contractual performance requirements, (2) agency satisfaction with services, and (3) formal contract disputes between VITA and suppliers. Data on contractual performance requirements was compiled by VITA using data from the Keystone Edge database, and it was assessed by JLARC staff as of July 2019. Agency satisfaction levels were collected through JLARC's surveys of high-level IT staff and the heads of VITA's customer agencies (administered in May 2019). Moreover, formal contract disputes were identified through a review of contract documents provided by VITA as of August 2019. Contract disputes included financial claims, remediation plans, and material breach notices between VITA and suppliers.

Finally, JLARC staff evaluated the *actual* and *projected* costs of VITA's multi-supplier IT infrastructure model using data provided by VITA staff on the annual operating cost of the multi-supplier model (overall and by supplier) for FY19–FY24. Data for FY19 reflected *actual* spending, whereas data for

FY20–FY24 reflected VITA staffs’ *projected* costs/savings. In addition to annual operating cost data, VITA staff also provided data on the one-time upfront costs associated with transitioning to the multi-supplier model (e.g., suppliers’ implementation fees, fees for terminating and settling a lawsuit with Northrop Grumman, and VITA’s third-party consulting and legal fees). JLARC staff calculated the net costs associated with VITA’s IT infrastructure model by accounting for both annual operating costs/savings and transition costs. To assess whether VITA’s costs have increased under the multi-supplier model, JLARC staff compared FY19 costs to the cost of receiving services from VITA’s previous supplier, Northrop Grumman, during the company’s last full fiscal year of service (FY17). Northrop Grumman’s FY17 costs were provided by VITA.

Assessment of VITA’s contract management activities (Chapter 4)

JLARC staff assessed VITA’s contract management activities related to its eight IT infrastructure contracts, focusing on the status of: (1) contract deliverables, (2) contract obligations, (3) performance requirements (also called service-level agreements), and (4) VITA’s review of contract deliverables submitted by suppliers.

JLARC staff reviewed data provided by VITA staff on the status of all contract deliverables, including 56 one-time deliverables related to implementation of the multi-supplier model, and 328 recurring critical deliverables, such as annual technology plans. For one-time critical deliverables, JLARC staff identified the number of deliverables that were not yet completed as of July 29, 2019, calculated the number of days that these deliverables were past due, and estimated the potential financial penalties associated with these deliverables based on weekly penalty amounts. For recurring critical deliverables, JLARC staff identified whether deadlines had been assigned as of August 2019, and how many days in advance suppliers were notified of the deadlines.

VITA is not currently tracking contract obligations; however, JLARC staff estimated the potential volume of contract obligations using lists of obligations identified by VITA’s consultant, Integris Applied.

JLARC staff reviewed suppliers’ completion of performance requirements using data provided by VITA staff as of July 2019. Staff estimated the total amount of financial penalties that VITA could have penalized one of its suppliers—Unisys—for not reporting or meeting performance requirements between January 2019 and June 2019. The estimate was calculated using the formula outlined in Exhibit 3.1 of Unisys’ contract with VITA.

Additionally, staff calculated the average number of days VITA staff took to approve submitted deliverables and obligations using data provided by VITA staff. The data included 14 deliverables that VITA staff were reviewing from six separate suppliers as of July 29, 2019. Deliverables had been under VITA staff’s review for 60 to 348 days. The number of days that three deliverables had been in review was marked “unknown.”

Analysis of VITA’s service issue resolution (Chapter 5)

JLARC staff analyzed the performance of VITA’s suppliers using data available in VITA’s service management portal (Keystone Edge) as of August 2019. The three data sets included in the analysis (by type of service issue) were (1) incidents, (2) disputes, and (3) solution requests, defined as:

- **Incidents** – when agencies experience service issues (e.g., network latency, faulty equipment, etc.) or request standard services (e.g., password resets, new email accounts, etc.).
- **Disputes** – when agencies identify a discrepancy in a VITA invoice.
- **Solution requests** – when agencies need to modify an existing service or request a non-standard service (e.g., acquiring specialized equipment, relocating an agency office, etc.).

The analysis included a total of 207,951 incidents, 190 disputes, and 279 solution requests. Incidents and solution requests are categorized as either low-, medium-, high-, or critical- priority, while disputes do not have a priority. Staff assessed the overall performance of suppliers by looking at the average and median times to resolve each type of service issue, and compared those times to performance requirements based on the priority of the issue. The performance requirements for each priority were established in each suppliers' contract and varied depending on the issue type. For example, the performance requirements for *incidents* were as follows:

- **Low** – 95% of incidents expected to be resolved in under 72 hours
- **Medium** – 95% of incidents expected to be resolved in under 16 hours
- **High** – 95% of incidents expected to be resolved in under 4 hours
- **Critical** – 95% of incidents expected to be resolved in under 2 hours

In addition to this analysis, JLARC staff looked at preliminary compliance reports provided by VITA staff. These reports indicated the extent to which each supplier had met its associated performance requirement, by month. This information was used to assist in validating JLARC's own analysis of the data available in the service management portal. Lastly, JLARC relied on additional information provided by VITA staff through ongoing meetings in their governance structure to remain updated on issues related to the status of solution requests and disputes.

Analysis and review of service issues escalated to VITA's issue resolution platform (Chapter 5)

JLARC staff used data available in VITA's service management portal (Keystone Edge) to analyze whether service issues escalated to VITA's issue resolution platform are being resolved and how long issues have remained unresolved. This analysis included 600 issues submitted between April 2019, when VITA first established the governance structure, and August 2019, when JLARC concluded its research.

Service issues were categorized as either low-, medium-, high-, or critical- priority. JLARC staff calculated the average and median resolution times of each issue by priority, as well as the time since the issue was last updated.

In addition to analyzing all escalated issues for resolution rates and duration, JLARC staff also reviewed a selection of specific issues that related to incidents described by customer agencies during interviews or through survey responses.

Document review

JLARC staff reviewed numerous other documents and literature pertaining to the provision of IT infrastructure services in Virginia and other states, such as

- Virginia statutes and regulations on the authority of VITA;
- VITA IT infrastructure contract documents and exhibits;

- VITA IT infrastructure requests for proposals (RFPs), supplier proposals, and evaluation committees' consensus scores;
- VITA processes and policies related to procurement, contract management, and service issue resolution;
- VITA meeting minutes for internal VITA leadership meetings and meetings with VITA's customer agencies and suppliers;
- VITA organizational charts and staff employee work profiles;
- Customer agency invoices from VITA and other states with similar IT models;
- Virginia procurement policies established by the Department of General Services (APSPM) and VITA (BUY IT manual);
- Procurement and contract management standards and best practices from the National Association of State Procurement Officials (NASPO), The Institute for Public Procurement (NIGP), and National Contract Management Association (NCMA);
- Prior studies and reports on VITA, such as an Ernst & Young and Integris Applied consultant reviews, as well as a 2016 review by the Office of the State Inspector General; and
- Reports by the National Association of State Chief Information Officers (NASCIO) about the role of state CIOs and peer-reviewed literature on the IT multi-supplier model.

Meetings

During the course of the study, JLARC staff regularly attended many of VITA's ongoing meetings pertaining to IT infrastructure, including internal VITA leadership meetings, meetings with customer agencies, and meetings with suppliers in the issue resolution platform. Between October 2018 and August 2019, JLARC staff attended at least 50 meetings in person or by teleconference. These meetings included:

- Internal meetings (VITA staff only)
 - Transition and Operations Management Committee
 - Program Oversight Meeting
- Stakeholder meetings (customer agencies)
 - Customer Advisory Committee
 - IT Steering Committee and Program Oversight Committee
 - Agency Information Technology Resource meeting
 - Internal Agency Oversight Committee
- Issue resolution platform meetings (suppliers and/or customer agencies)
 - Relationship Management Committee
 - Platform Service Delivery Forum
 - Platform Relationship Meeting
 - Strategic Alignment Meeting
 - Service Tower Forums

Appendix C: VITA's issue resolution platform

As part of its new IT infrastructure model, VITA implemented an issue resolution platform to identify and resolve longstanding or widespread service issues experienced by customer agencies and suppliers (Figure C-1). These include incidents (problems with IT services), billing disputes, and requests for services not already provided by VITA.

The issue resolution platform is a series of meeting forums designed to address any service issues experienced by customer agencies that are not resolved through the standard process with suppliers. This can include widespread or longstanding issues or those that require multiple suppliers to solve. All service issues that are referred to the platform are logged and tracked. When issues remain unresolved they are escalated to other meeting forums throughout the process.

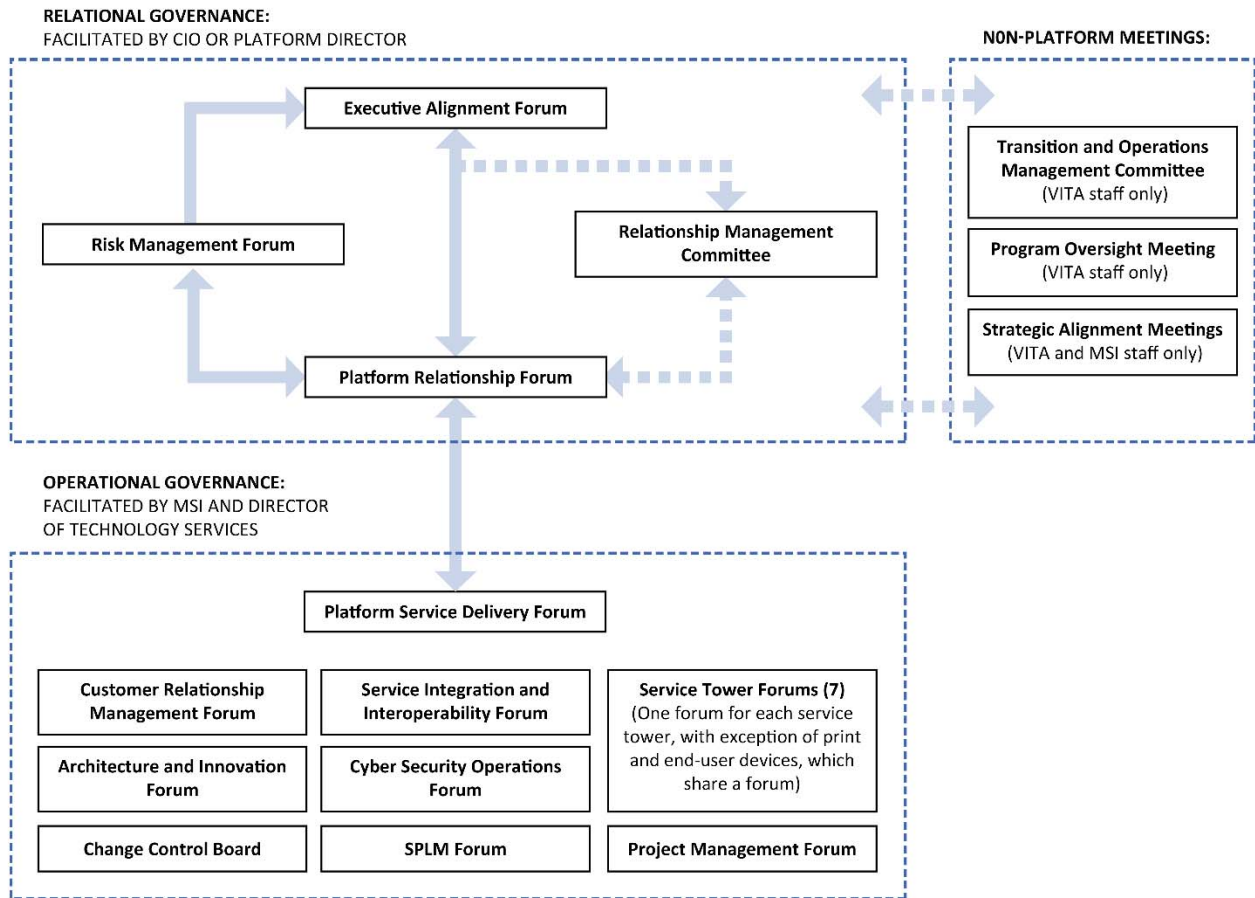
Issues affecting only one supplier are typically assigned to Service Tower Forums, depending on which supplier is affected. Issues affecting multiple suppliers are typically assigned to the Platform Service Delivery Forum, where staff from multiple suppliers may work together to resolve issues. When issues are unable to be resolved at these lower levels, they may be escalated to the Platform Relationship Forum, where staff from VITA and the integrator may become more involved in identifying the resources and actions necessary for resolving the issue. Finally, when issues are unable to be resolved at this level, they may be escalated once more to the Executive Alignment Forum, chaired by the chief information officer. Issues that are escalated to the Executive Alignment Forum may result in modifications to contracts or changes to supplier payments.

VITA staff also may discuss issues currently logged in the platform in non-platform meetings. Two of these, the Transition and Operations Management Committee and the Program Oversight Meeting, include only VITA staff. The third, Strategic Alignment Meetings, were convened by VITA leadership in May 2019 to discuss issues related to the implementation of the new IT infrastructure model and included high-level staff from the integrator.

In addition to agency issues, the issue resolution platform should be used to address any issues that arise between VITA and its suppliers. Examples include questions by suppliers or requests for additional compensation. Other states with multi-supplier IT models—Georgia and Texas—stress the importance of addressing supplier issues through this platform.

This higher level of the platform also includes bodies that address broad topics beyond just issue resolution. The Relationship Management Committee (RMC) includes staff from VITA and seven customer agencies, each representing a larger group of agencies with similar functions. The primary purpose of the RMC is to allow customer agencies to provide input into any technology-related decisions that may affect IT infrastructure services. The Risk Management Forum (RMF) is staffed by VITA's chief information security officer (CISO), the information security officer (ISO) from nine customer agencies, and several additional VITA staff with risk management responsibilities. The objective of the RMF is to monitor and mitigate risks to the state's IT infrastructure.

FIGURE C-1
VITA's platform consists of multiple meetings with varying purposes



SOURCE: VITA documentation and interviews with VITA staff.

Appendix D: Agency response

As part of an extensive validation process, the state entities that are subject to a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff sent an exposure draft of this report to the Virginia Information Technologies Agency and Virginia's Secretary of Administration. JLARC staff also sent relevant excerpts of this report to Virginia's Office of the Attorney General and the Department of Planning and Budget. Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report.

This appendix includes a response letter from the Virginia Information Technologies Agency.



COMMONWEALTH of VIRGINIA

Virginia Information Technologies Agency

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711

October 1, 2019

Mr. Hal E. Greer
Director
Joint Legislative Audit and Review Commission
919 East Main Street, Suite 2101
Richmond, VA 23219

Dear Hal:

Thank you for the opportunity to comment on the exposure draft of VITA's Transition to a Multi-Supplier Service Model. I welcome JLARC's assessment and recommendations regarding the challenges VITA is actively managing and has encountered during our multi-year journey to modernize the Commonwealth's technology delivery platform. As you know, VITA staff worked closely with JLARC throughout their assessment process, providing them with the data, artifacts, and personnel necessary to produce a report that will assist VITA's continuing efforts to improve our organization. On behalf of VITA, I want to thank Ms. Sarte, Ms. Axselle, and Mr. Galvin for their thorough and professional work throughout the study and to offer the following comments to supplement the feedback previously given to your staff.

For years, VITA has appreciated the support received from stakeholders across the Executive and Legislative branches, including members of the General Assembly. Our initial plan was developed based on agency and legislative stakeholder feedback. We used industry best practices, case studies from other states, and market-based data to develop a plan that was in the Commonwealth's best interest. Legislative and executive policymakers recognized the need to disentangle from our incumbent provider and supported VITA's plans to do so, both in their original form and after the changes forced by that incumbent's opposition and resistance. Our ongoing efforts to integrate our new suppliers are part of moving the Commonwealth's information technology (IT) platform in the right direction. In fact, I am proud to say that our transition program was recently recognized as a national success story; the National Association of State Chief Administrators named VITA as the recipient of an Innovations in State Government Award in the category of infrastructure.

VITA must continue to improve, and JLARC's report will help us do that. Many of the findings in this report reflect management challenges that we are addressing. The naming of a Chief Operating Officer (COO) and Chief Administrative Officer (CAO) will renew our focus on VITA's operational maturity and its five-year roadmap. We plan yearly, fact-based "health checks" and customer surveys that will anchor a culture of continuous improvement. In doing this, we look forward to continuing to work with the Administration, this Commission, members

of the General Assembly, our customer agencies, and the dedicated public servants at VITA to find the best ways to improve the citizen experience with our government.

Background and Overall Response

Over the past three years, VITA – with guidance and support from the Governor’s Office, legal counsel, a leading consultant (Integrus Applied), other Executive branch agencies, and representatives from the Legislative branch, along with our new infrastructure suppliers – has accomplished a fundamental transformation of the Commonwealth’s information technology (IT) infrastructure environment, moving from a single monolithic provider to a multi-supplier model. This model offers new technology, the flexibility and adaptability demanded by the pace of technological change and needed by VITA’s client agencies, and significant cost savings to the Commonwealth over time once one-time transition costs are paid back. VITA accomplished this transition to the multi-supplier model despite remarkable resistance from our incumbent single provider, Northrop Grumman.

I am proud to say that the key objectives for the transition were achieved, including:

- (1) maintaining continuity of IT services,
- (2) supporting client agencies’ other initiatives occurring during the transition,
- (3) transitioning key IT staff from our incumbent to our future suppliers,
- (4) awarding multiple contracts in a timely manner, and
- (5) remaining within the financial parameters projected by VITA during the planning stage.

With this in mind, and before addressing the specific JLARC recommendations below, it is helpful to consider how much the Commonwealth’s situation has improved.

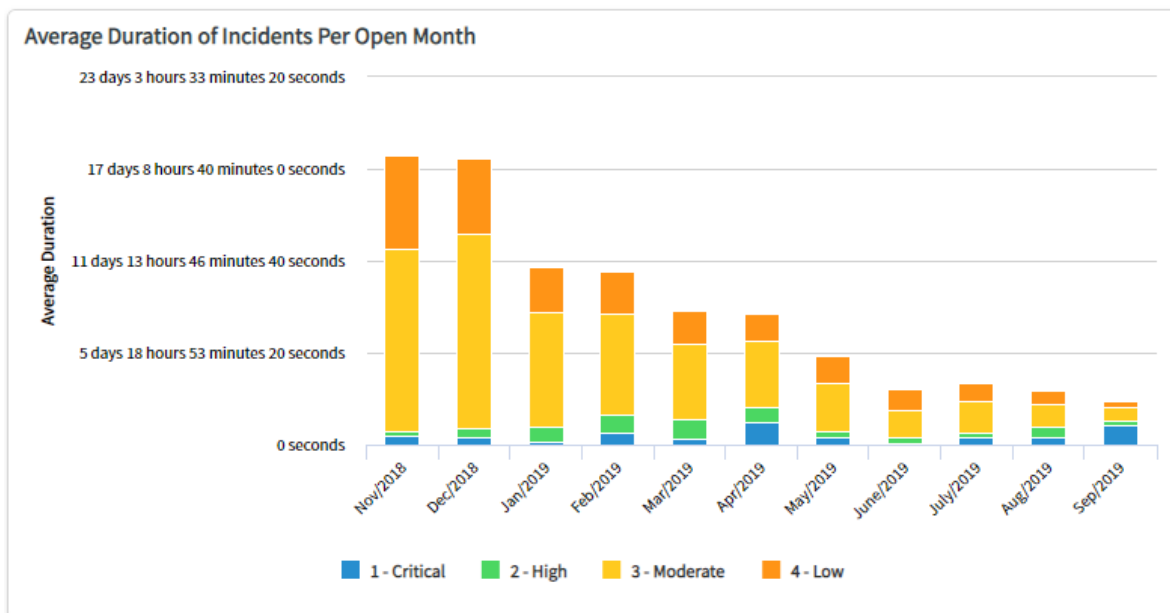
Two years ago, the Commonwealth had a decaying IT environment, and the transition was troubled. As you know, Northrop Grumman sued the Commonwealth in May 2017, exploited its control of the Commonwealth’s IT infrastructure to stall the email transition for over a year, refused to allow VITA to replace failed devices that backed up the Commonwealth’s payroll activities, and even threatened to cease operating the Commonwealth’s existing email system. Northrop Grumman’s refusal to fulfill its contractual transition and integration responsibilities deprived the email and mainframe transitions of the incumbent assistance that is important to the success and smoothness of any transition, increased costs, and delayed new functionality from the new suppliers. And the incumbent’s resistance created a fundamentally different situation from that in other states transitioning to the multi-supplier model; Georgia had a cooperative incumbent, and Texas was able to proceed with transition in waves over a more extended period of time.

Rather than simply allow the transition to be imperiled, VITA adapted its plan, and SAIC took over IT services from Northrop Grumman in August 2018. This created a temporary, four-month caretaker period before the beginning of the new multi-supplier model in December 2018. VITA made this decision with the involvement of the same executive and legislative stakeholders mentioned previously, as well as its attorneys and consultants. At all times during this intermediate transition, VITA’s foremost concern was the continuity of critical agency systems and services. VITA and SAIC were able to ensure the retention of knowledge of Commonwealth operations by

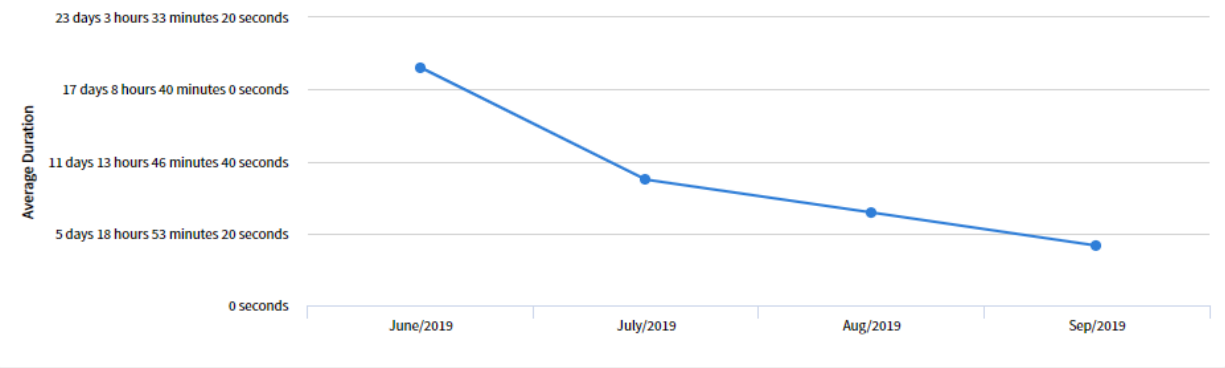
successfully transitioning the overwhelming majority of Northrop Grumman’s IT and project support staff to SAIC. And SAIC participated in the subsequent procurements and contracting, with VITA and SAIC holding integration sessions for the incoming tower suppliers for managed security, end user services, voice data network, and server, storage, and datacenter.

Today, all of the new suppliers are in place and actively working with VITA to resolve issues with existing services and bring new services online. They did not start from a clean slate – the incumbent single provider’s resistance up to the end of the contract and the inevitable ramp-up period with the multi-supplier model created a significant backlog of IT service performance. In addition, the fundamental shift in the model also required extensive change within VITA, which must occur and achieve stabilization for the Commonwealth to receive the maximum benefit from an agile multi-supplier model. The JLARC review came during this particularly tumultuous period. Work certainly remains to be done, and, as detailed below, metrics show progress due to the transition to the multi-supplier model, and early data from the service integrator’s platform management tool (Keystone Edge) and other sources reflects positive trends. For example:

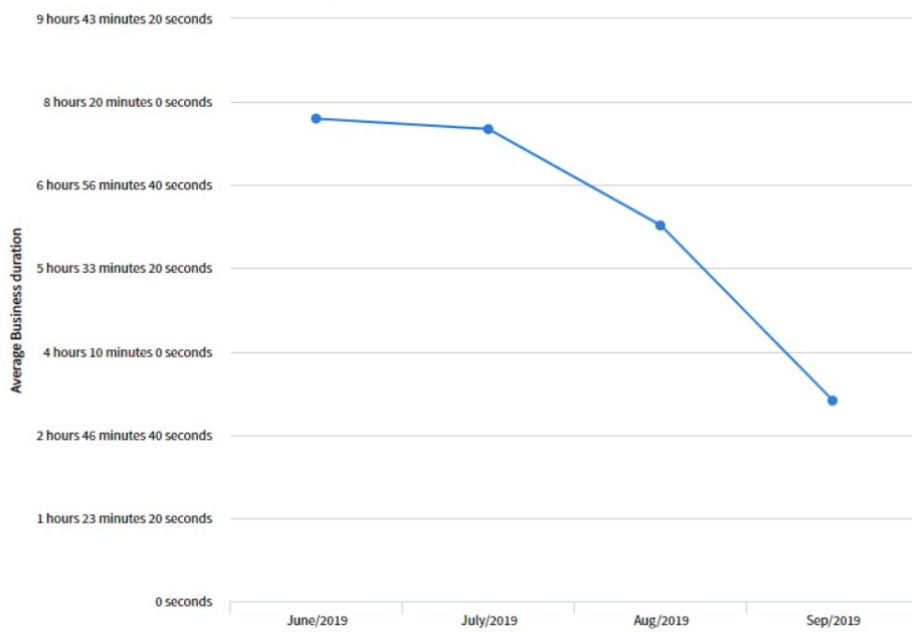
- The Average Problem Resolve Time for tickets and the Average Duration of Incidents have consistently been on a downward trajectory from calendar Q4 2018 through present, indicating internal process improvement, learning curve reduction, and overall stabilization.



Average Problem Resolve Time By Month

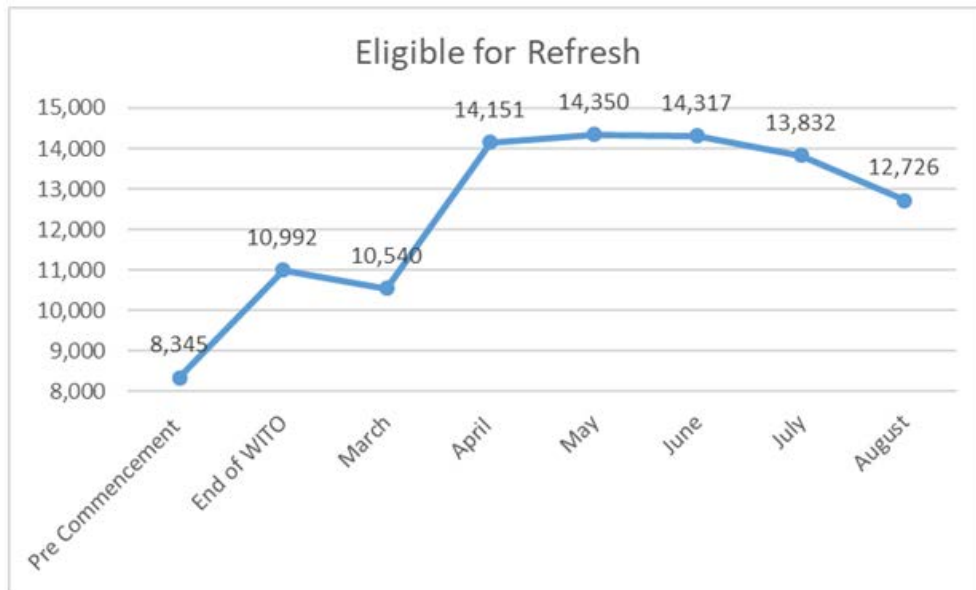


Average Incident Business Duration By Month

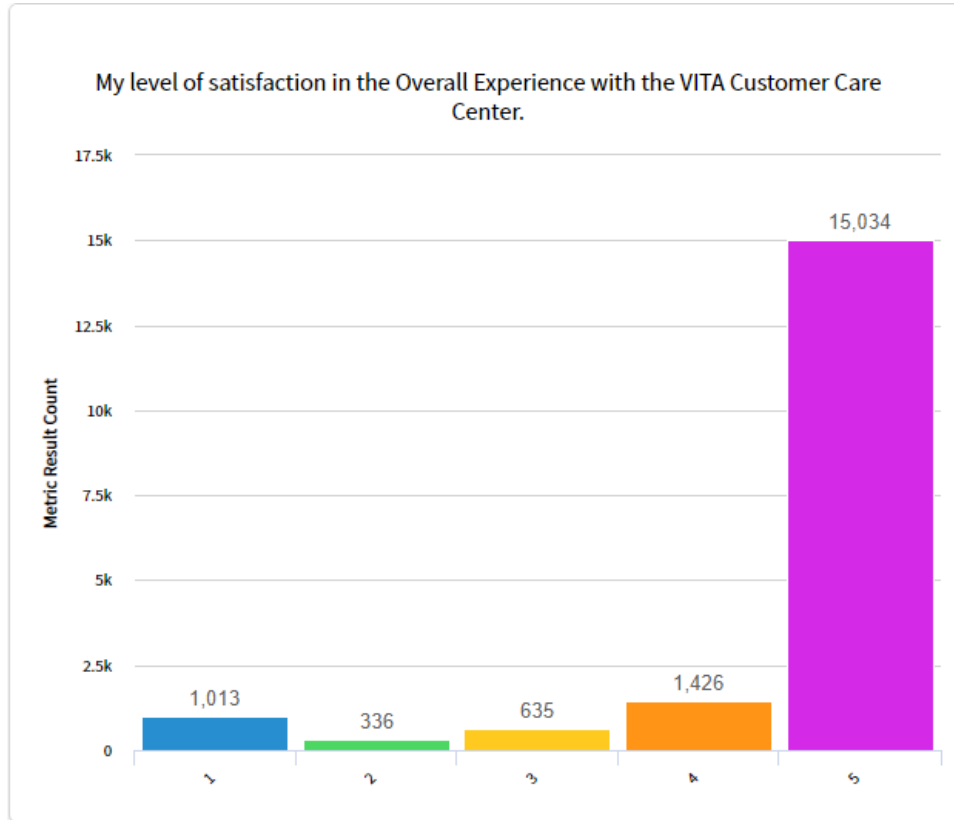


- Agency complaints are being tracked and are visible to facilitate resolution. Since the start of Q1 2019, complaint counts have stabilized and decreased.

- As the following graphic of total PCs eligible for refresh shows, the new end user computing supplier (IronBow) and agencies are successfully reducing the PC Refresh backlog accumulated at the end of the Northrop Grumman contract. This backlog had worsened significantly from Q2 2018 through Q1 2019 due to a number of factors, including the incumbent's refusal to acquire new devices in the waning quarters of that contract, agency reluctance to accept devices in anticipation of new options from the incoming suppliers, and the business decision to suspend PC Refresh during the four-month SAIC caretaker period. IronBow has completed refresh of more than 1000 devices per month in July and August and intends to continue an aggressive pace to resolve the backlog.



- Customer feedback is actively gathered within VITA and also through the VCCC Service Desk. Satisfaction scores on a six question survey indicate approximately 90% scores had a positive response, over thousands of gathered responses.



VITA is confident that, if JLARC returns to assess the new model a year from now, early issues will have been addressed, and the benefits from the new model will continue to accrue. VITA always cautioned that this initiative would be a long-term improvement; satisfying the Commonwealth’s extensive technology debt was never going to be a simple flick of a switch. The experience of private entities and other states moving to a multi-supplier model also shows that it takes time both to accomplish the transition and to stabilize and improve operations under the new suppliers.

Along with the fundamental shift in the supplier model, VITA also is undergoing a significant internal transformation. As the report notes, VITA implemented an agency reorganization in April 2019, hired new agency leadership in August 2019, defined new roles and expectations for existing personnel who will oversee the services and new vendors, and increased staffing in key areas, such as contract management. The time period of the review for this report means that the report can note some of these changes at VITA but cannot reflect how those changes are addressing issues identified in the report. Although the timing of this reorganization was not ideal, VITA recognized that two internal groups established prior to the transition (the Platform Relationship Office and

Supplier Relationship Management) were not meeting the most critical roles and responsibilities, so VITA implemented necessary additional changes to address those needs differently.

Finally, it should be emphasized that JLARC's consulting law firm agreed that the multi-supplier model and VITA's contracts were structurally sound and represented industry best practices. Although we are always examining ways in which we can more effectively and efficiently procure IT services for the Commonwealth, VITA is proud of the work performed by its procurement teams, which included VITA employees, as well as representatives from our customer agencies, the Office of the Attorney General, and our consultant, Integris Applied, particularly in light of the forced changes in transition and the distractions posed by the incumbent provider's litigation.

Specific Responses to Recommendations

Recommendation 1: The Virginia Information Technologies Agency should address all deficiencies identified in IT infrastructure contracts by Pillsbury Winthrop Shaw Pittman law firm as soon as practicable.

Response: As the report recognizes, VITA staff, legal counsel, and client agency representatives realized the critical objectives of conducting competitive procurements, including key stakeholders, and negotiating and awarding multiple contracts with new suppliers within a shorter time period than originally planned. The contracts reflect industry standards and incorporate provisions that encourage shared accountability between supplier, including operating level agreements between suppliers, shared service levels, and a modern governance model that includes agency participation. These provisions and mechanisms will improve the quality, flexibility, and competitiveness of IT services in the future.

The report provides welcome confirmation from JLARC's outside law firm that the contracts contain no significant gaps in services, have the provisions needed to ensure supplier performance and protect the state from risk, and follow best practices for IT outsourcing. VITA appreciates the law firm's recommendations for further, mostly-minor improvements to our contract model and will work with VITA's legal counsel to address those as soon as practicable.

Recommendation 2: The Virginia Information Technologies Agency should establish a process to ensure that procurements for IT services have an appropriate number of evaluation criteria and that adequate weights are applied to important criteria, such as supplier experience.

Response: VITA agrees that the evaluation process should have an appropriate number of evaluation criteria and appropriate weighting of those criteria and that credible and relevant experience is critical in selecting a supplier. The criteria in past procurements reflected the judgment of subject matter experts participating in those procurements, and VITA encouraged procurement teams to evaluate not just the overall strength of suppliers but also the specific proposal and project team offered, including solution fit, quality, and cost elements. VITA Supply Chain Management has a process to assess whether procurements have an appropriate number of evaluation criteria and weights, and VITA provides that guidance to evaluation teams. Supply Chain Management will create additional guidance concerning evaluation criteria in light of

JLARC's recommendation, and future procurements will keep in mind the need for focus and sufficient weighting of key criteria so as to assess important criteria, such as supplier experience.

Recommendation 3: The Virginia Information Technologies Agency (VITA) should, on an ongoing basis, ensure that the status of all deliverables and obligations included in its contracts with IT infrastructure suppliers is tracked through the use of a comprehensive tracking tool, beginning no later than July 1, 2020.

Response: VITA agrees that tracking of all contractual deliverables and obligations is important. Such tracking is included in the scope of the service integrator's management functions, and performance data is then used by VITA contract managers to analyze, provide input to decisions, adapt strategic planning, and take appropriate action with suppliers. Recognition of the importance of in-house oversight is why VITA leadership began to critically examine the contract management function within the agency in late 2018 and restructured that role within the COO's area of the organization in early 2019.

Since that time, VITA implemented process changes and improvements over the past year, including establishing centralized deliverables tracking and standardizing interaction with suppliers. VITA acknowledges that a lot of hard work remains to be done, and we will continue to work on improvements to the contract obligations and deliverables tracker to assist with aggregating the numerous items and their due dates for administration. In addition, processes are being written to document both what the service integrator provides as part of its contract management function and how VITA contract managers will track deliverables and obligations.

Recommendation 4: The Virginia Information Technologies Agency should develop guidelines describing the circumstances under which staff should request IT infrastructure suppliers to complete remediation plans or pay financial penalties for submitting critical deliverables late and implement the guidelines consistently across all IT infrastructure suppliers.

Response: VITA recognized the need for a contract management organization in the new multi-supplier model and, as the report notes, has created an internal commercial contract management group and hired new contract management staff. VITA has been increasing understanding of contract obligations and requirements, including submission of critical deliverables, across all of the VITA personnel who participate in IT service and platform oversight, and building an obligations and deliverables tracker to assist with aggregating those items and their due dates. VITA is committed to robust contract management, and VITA's contract managers will coordinate with service owners, finance, and the service integrator's supplier management. The service integrator's supplier management function is set forth in the contract, drives performance for the service tower suppliers, and provides transparency and escalation where service tower suppliers fail to perform.

VITA's supplier contracts contain a variety of possible tools to address performance issues, including contractually-defined financial compensation (e.g., service level and deliverable credits), root cause analyses, and corrective action and service remediation plans. The contracts address the circumstances in which contractual tools are to be used, and, in consultation with legal counsel and others, VITA will make use of those contractual tools as necessary.

Although a breach notice is a serious matter, the fact that a breach notice was sent should not be cause for alarm; rather, it shows that the new model is more successfully calling attention to performance deficiencies than occurred under the prior model. Taking contractual action often requires providing notice to the supplier of a performance deficiency. That breach notice triggers requirements to cure the breach; a breach notice does not usually or necessarily signal imminent or intended termination of an entire contract. The material breach notice to the service integrator, SAIC, in April 2019 reflected such a situation with respect to the operation of important financial and billing systems; was judged by VITA, after consultation with its legal counsel, to be necessary and appropriate; and led to additional performance effort to remediate issues. VITA's withdrawal of the breach notice reflected that operational issues were and are improving. Nonetheless, VITA remains committed to working with its supplier to improve these functional areas and ensure that the remediation continues to completion.

Similarly, contract claims are a statutorily-endorsed mechanism (*see* Va. Code § 2.2-4363) for suppliers and public bodies to address situations where monetary or other relief may be appropriate. VITA engages in ongoing dialogue with suppliers concerning issues and financial considerations, and works in conjunction with its legal counsel, the Department of Planning and Budget, and other executive and legislative stakeholders, to address financial, operational, and legal questions and risks raised.

Recommendation 5: The Virginia Information Technologies Agency (VITA) should implement a process for automatically collecting penalties from IT infrastructure suppliers that do not report performance data or meet their performance requirements. VITA also should develop guidelines that specify circumstances under which VITA should temporarily grant suppliers relief from financial penalties on a case-by-case basis.

Response: VITA agrees that, where contracts provide for automatic financial credits for missed or non-reported critical service levels, VITA will work with the service integrator to ensure that those levels are calculated and fed into IT financial management systems for inclusion of credits in supplier invoices. VITA is currently working with the service integrator and suppliers to determine the extent to which credits are due and to include the appropriate credits on upcoming invoices.

With respect to when suppliers should be granted relief, the contracts address when a supplier's non-performance may be excused, and the contracts also address when suppliers can obtain "Earnback" credits through long-term corrective actions and when suppliers share accountability for failures. Suppliers have opportunities to engage with VITA and show that they are performing their obligations sufficiently, and suppliers can and do have the ability to present arguments why they are entitled to financial or other contractual relief.

Recommendation 6: The Virginia Information Technologies Agency should assign deadlines to all contract deliverables that IT infrastructure suppliers are required to complete a minimum of 45 days prior to the date that the deliverables are due. Deadlines should be conveyed to suppliers as soon as they are established.

Response: VITA agrees with the recommendation to provide advance notice and tracking of deliverables. The contracts themselves define many of the due dates for deliverables, such that suppliers have ample notice of those dates, and VITA's launch of the ongoing programs with recurring deliverables offered an initial quarter to work through and improve the processes, meaning that suppliers have had at least three months of notice before penalties for late deliverables may apply. VITA is coordinating with the service integrator to clarify, and where necessary establish, deliverable deadlines that recognize the deliverables' relevance to Commonwealth business cycles (such as having the technology plan and technology refresh plan prior to agencies' development of strategic plans and budget decision packages) and that permit receipt, review, and testing by the Commonwealth. Timing of deadlines for recurring critical deliverables already has been conveyed twice at joint supplier forums and will be reminded and monitored as part of VITA's platform oversight. Moving forward, contractually-agreed processes for adding or changing deliverables, with contractually-defined notice periods and due dates, will apply, ensuring that suppliers have appropriate time to complete activities.

Recommendation 7: The Virginia Information Technologies Agency should review and respond to all contract deliverables submitted by IT infrastructure suppliers within the contractually determined review period and regularly track whether staff are meeting this requirement for all contract deliverables.

Response: VITA agrees that it is important to complete review of and response to deliverables submitted by suppliers within contractual review periods – or faster, if possible – and to track whether this is met for all contract deliverables. Suppliers, in turn, must submit deliverables in a timely manner to allow for the agreed, contractually-provided review periods. As part of VITA platform oversight, VITA service owner personnel will be responsible for leading and facilitating timely review and acceptance (or rejection with explanation) of deliverables from suppliers, with support as needed from contract managers, finance staff, and others. The deadlines, milestones, and steps leading to timely completion, delivery, testing, and acceptance will be maintained and monitored.

Recommendation 8: The Virginia Information Technologies Agency (VITA) should develop and implement policies establishing (1) criteria for when issues should be referred to VITA's issue resolution platform; (2) a target metric for how long issues should take to be resolved within the platform based on priority level; and (3) a process for automatically escalating issues that exceed target metrics.

Response: VITA agrees with the importance of managing in an organized way how issues are referred, resolved, and escalated. VITA has a plan that it expects to implement by the end of the year, including: (1) review of policies and targeted metrics for issue management; (2) sharing policy and aging issue reports with all governance participants during forums, including standing agenda items for forums to review and discuss aging issues; (3) addressing issues that are not properly being resolved during forums; and (4) implementing automatic escalation of issues that exceed target metrics to the proper governance forum (with escalation targets that improve over time). The type of issue involved (incidents, service requests, requests for solution, invoice disputes, integration challenges, etc.) can affect which governance processes and forums are used,

but VITA's issue resolution processes and mechanisms will always take into account the priority of the issue.

Recommendation 9: The Virginia Information Technologies Agency (VITA) should ensure all customer agency issues and supplier issues are identified and addressed through VITA's platform for issue resolution.

Response: Although no model can eliminate the need to be responsive to emergent or exceptional situations, VITA agrees that the governance model should identify and address issues for resolution, including through: facilitating escalation of customer issues to VITA when customers believe the service integrator is not addressing them sufficiently, tracking and measuring performance through tools, developing key performance indicators to set expectations, and monitoring patterns and trends to identify how issues are addressed. Whether issues come in through normal channels, such as help desk tickets, or through executive-level contact, VITA's governance model is capable of addressing them.

Commenting in detail on all of the specific situations mentioned in the report is beyond the scope of this letter, but as the following two examples show, VITA and suppliers are cognizant of the issues raised and committed to addressing them.

Google Drive (Case Study 5-3):

VITA is charged with overseeing and providing for the security of state governmental systems and information. *See, e.g.,* Va. Code § 2.2-2009. The overall GSuite solution for messaging included not just Gmail but additional applications such as Google Docs, Sheets, and Drive. As Gmail was implemented, VITA assessed the included Google Drive shared storage solution and concluded it did not sufficiently meet Commonwealth security needs and standards, so Drive has not been deployed throughout the enterprise. VITA worked first with the Messaging supplier, Tempus Nova, and then with Google on ways to address the situation, something that we would not have been able to do under the old model.

VITA is not the only GSuite customer who has sought improvements in Drive; Google has been working to meet customer requirements, and VITA anticipates that a solution will be in place soon.

Importantly though, agencies who took advantage of early pricing opportunities to purchase the higher unlimited level of Google licensing, rather than the 30 GB "basic" licensing, have been able to use that unlimited storage. The unlimited storage applied not just to Google Drive but to the user's data across all GSuite applications, including Gmail and Calendar. Further, agencies were able to make individual business decisions as to whether the use of Google Drive to support Calendar attachments was worth additional security risk. As such, they were able to submit security exception requests to VITA, and VITA has ensured that the process was not time-consuming or onerous for those agencies.

In short, VITA submits that the Google Drive situation reflects (i) security oversight operating in accordance with statutory mandates, (ii) successful use of VITA processes to accommodate agencies who nevertheless needed to proceed with using Drive, and (iii) the Commonwealth taking advantages of opportunities presented in the new model to drive technological change with suppliers.

Network latency:

VITA, the service integrator (SAIC), and the network supplier (Verizon) have heard and been actively engaged in responding to network slowness complaints. We have used processes in the new model to recognize this as a larger issue, then mobilized and begun to address it. VITA initiated a network performance assessment at the enterprise level and has proceeded to site-level and agency-specific diagnostics, in accordance with agency incident reports. We appreciate the feedback and input from our customer agencies and have worked with customers throughout this process, most notably the Relationship Management Committee.

Improvements have been achieved, but the causes of latency vary. Where particular fixes can address a problem, they are being made. VITA and its suppliers are also working with agencies to identify where latency is attributable to increased use of online services, more limited network options in some areas, or other situations that involve agency business decisions about their needs and appropriate levels of IT investment. Criteria for bringing closure to the special effort to address network latency complaints have been developed and are being cleared with bodies that include agency representatives. Verizon also is working on modernization of the Commonwealth's network. The substantial work on network latency shows that VITA and its suppliers under the new model are committed and working together to address agency concerns.

Recommendation 10: The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Information Technologies Agency to submit IT infrastructure service consumption estimates to agencies for validation each year prior to submitting them to the Department of Planning and Budget for approval.

Response: VITA agrees that service consumption estimates and submissions to the Department of Planning and Budget (DPB) should be based on the best available information. As you know, the Commonwealth's annual budget preparation cycle is an intricate process involving numerous stakeholders. The new model provides for the service integrator to generate a report that provides a rolling forecast of charges (by agency and types of charges) for the next three years, including not only historical data but also approved requests for services, solutions, and projects in service consumption estimates. Whether or not the Appropriation Act is modified, VITA agrees with the recommendation's goal and intends to seek annual agency feedback concerning IT service consumption estimates. In addition to helping ensure the most accurate estimates possible, early service consumption estimate review may help agencies as they consider whether to submit IT decision packages to DPB.

Recommendation 11: The General Assembly may wish to consider amending § 2.2-2013 of the Code of Virginia to require the Virginia Information Technologies Agency to release a preliminary rate schedule to agencies upon the submission of the governor's budget each year. The rate schedule should be for the upcoming fiscal year.

Response: VITA agrees that rates should be transparent and released to agencies as soon as possible. VITA has engaged in a variety of communication efforts concerning what its rates include, and VITA intends to continue doing so. For example: (1) VITA held two services fairs where VITA's services were presented and the VITA IT Finance team was available to agencies to answer questions, (2) VITA established a finance feedback group to review and validate the structure of the bill that would be generated for agencies, (3) VITA held one-on-one meetings with agencies both prior to the start of the new rate structure and recently, (4) VITA held three webinars on voice data network rate structures, and (5) VITA presented detailed end user computing rate breakdowns to agency representatives at the Relationship Management Committee. VITA also encourages agencies that have questions concerning rates to bring them to VITA so that future rate information communications can address agency questions.

Whether or not the Code is amended, VITA intends to work with the Department of Planning and Budget to release a preliminary rate schedule for the upcoming fiscal year upon the submission of the Governor's budget each year.

Recommendation 12: The General Assembly may wish to consider requiring the Virginia Information Technologies Agency (VITA) to conduct a comprehensive assessment of whether VITA is structured and staffed effectively to operate a multi-supplier IT infrastructure model. Results of the assessment should indicate whether VITA requires any additional structural changes and whether VITA needs to fill, create, or remove any staff positions across the agency. VITA should provide the assessment results to members of the Joint Legislative Audit and Review Commission, Senate Finance Committee, and House Appropriations Committee by July 1, 2020.

Response: As noted above and in JLARC's report, VITA recognized past management challenges and gaps and has been transforming its structure and staffing to fit the new multi-supplier model. VITA filled both its COO and CAO positions in August 2019, and in the year to date VITA has hired several new contract managers for the IT infrastructure contracts. The new VITA executive team immediately started working on assessing current vacancies, current organizational units/needs, and prioritizing hiring activities across the agency, working in conjunction with the Department of Human Resource Management. We anticipate that the implementation of VITA's new organizational structure, including the recent leadership and staffing changes noted in the report, VITA's improved focus on our five-year roadmap, and our data-driven maturity plan will address organizational issues identified in the report. Given the organizational assessment already underway at VITA, we welcome the opportunity to share our progress with JLARC, in the course of JLARC's ongoing oversight of VITA. Accordingly, VITA asks that JLARC and VITA revisit this recommendation in a year.

Thank you again for the opportunity to respond to the draft report, and I look forward to reporting to JLARC in the future on continued progress.

Sincerely,

Nelson P. Moe

Nelson P. Moe

cc: The Honorable Keyanna Conner, Secretary of Administration



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