



## IT Transition Report as of December 2019

**To:** The Honorable Ralph Northam, Governor of Virginia  
The Honorable Luke E. Torian, Chair, House Appropriations Committee  
The Honorable Janet D. Howell, Chair, Senate Finance and Appropriations Committee

**From:** Nelson Moe, Chief Information Officer of the Commonwealth

### **Summary**

This report summarizes the executive branch's information technology (IT) infrastructure transition over the past few years, including discontinuation of the Unisys mainframe, the end of the contract with Northrop Grumman, settlement of the litigation with Northrop Grumman, the beginning and current status of the multi-supplier model, one-time transition costs, and the use and repayment of VITA's line of credit.

Overall, the transition of the Commonwealth's IT infrastructure to a multi-supplier model was successful, despite resistance by Northrop Grumman. Key transition objectives were achieved, eight suppliers are currently providing services under contracts with VITA, and data shows progress in stabilizing and improving services over time. The one-time transition costs were financed through VITA's line of credit, and repayment of those line-of-credit expenditures will be completed by the end of FY20, so VITA's FY21 rates will include a decrease reflecting completion of that repayment.

The years ahead will include further IT infrastructure transitions – to new suppliers, to the cloud, and out of the CESC data center – and the Commonwealth is better positioned to accomplish those transitions, and realize the benefits of new services and technologies, because of the transition to a multi-supplier model.

### **Report**

#### *Background of this report*

This is the first formal written report by the Virginia Information Technologies Agency (VITA) pursuant to item 84.30(D) of the Appropriation Act, which provides as follows:

The Chief Information Officer of the Commonwealth shall report to the Governor and Chairmen of the House Appropriations and Senate Finance Committees on progress toward transitioning to new information technology services that will replace the information technology services currently provided by Northrop Grumman under the Comprehensive Infrastructure Agreement. Such a report shall be made at least quarterly, in a format mutually agreeable to them, and shall (i) describe efforts to discontinue the Unisys mainframe, (ii) assess the Virginia Information Technologies Agency's organization and in-scope information technology and telecommunications costs, and (iii) identify options available to the Commonwealth at the expiry

of the current agreement including any anticipated steps required to plan for its expiration.

This report, and the data in it, is as of December 2019.

Prior reports came in the form of numerous presentations by VITA personnel to the House Appropriations Committee and Senate Finance Committee, as well as through the ongoing meetings of the Information Technology Steering Committee and Program Oversight Committee. Those bodies provided oversight of VITA's IT Infrastructure Sourcing Program (ITISP), met at least quarterly, and included staff from the Department of Planning & Budget, the House Appropriations Committee, and the Senate Finance Committee in its membership.

With VITA's recent closure of the ITISP, including that oversight committee, it is necessary to transition to a different reporting method. Moreover, the content of future reports also may be adjusted, given that two of the topics specifically mentioned in item 84.30(D) (discontinuance of the Unisys mainframe and the expiration of the Comprehensive Infrastructure Agreement with Northrop Grumman) have been completed. (Final summaries of those topics are below.) VITA welcomes feedback from executive and legislative policymakers and stands ready to work with officials and staff on the optimal content, timing, and method of reports going forward.

#### *Overall transition success*

From July 2006 until 2018, the Commonwealth's IT infrastructure, and most IT services for executive branch agencies, were provided through a single, monolithic contract with Northrop Grumman Systems Corporation known as the Comprehensive Infrastructure Agreement (CIA). In recent years, as the June 2019 expiration of the CIA approached, VITA developed a plan to transition away from that outdated approach to IT infrastructure to a more modern and flexible multi-supplier model. Our initial plan was based on agency, executive, and legislative stakeholder feedback, industry best practices, case studies from other states, and market-based data. Stakeholders in both the legislative and executive branches recognized the need to disentangle from our incumbent provider and supported VITA's plans to do so. Some changes to the transition plan were required over time, but VITA completed disentanglement from Northrop Grumman in August 2018. After an approximately four-month caretaker period overseen by Science Applications International Corporation (SAIC), commencement of services from new suppliers began in December 2018.

VITA is proud 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 during the planning stage.

Throughout 2019, VITA has been working to ensure that the new suppliers bring their services online, integrate them, and modernize the infrastructure that had been neglected under the prior model. There have been delays and challenges, and work remains to be done, but VITA is committed to continuous improvement, and the Commonwealth's IT infrastructure is much improved from just two years ago. Indeed, VITA's 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.

*Final summary regarding the Unisys mainframe*

On May 6, 2015, VITA notified Northrop Grumman that Unisys mainframe services would end in 12-24 months. VITA and the state agencies using that mainframe (including the Department of Human Resource Management and the Virginia Department of Social Services) then worked to complete migration off the Unisys mainframe. That migration finished in March 2017, within the original forecast timeframe.

But while the migration proceeded, contractual disputes related to the Unisys mainframe services developed with Northrop Grumman in 2016. Northrop Grumman included those disputes in the 2017 lawsuit discussed below. In 2018, those disputes were resolved as part of the overall legal settlement discussed below. That settlement included conversion of the Unisys mainframe services termination to a termination for convenience and the release to Northrop Grumman of the \$4,245,127.45 in early termination fees billed by Northrop Grumman on March 31, 2017.

*Final summary regarding the CIA, litigation, transition, and settlement*

After an extensive planning effort, assisted by industry-leading consultants (Integris Applied) and based on legislative, executive, and client agency input, VITA determined that it was in the Commonwealth's best interests, financially and technically, to terminate the Northrop Grumman contract early (prior to its June 2019 expiration) and in stages, so as to allow a phased transition.

After contractual dispute resolution procedures failed to resolve a number of disputes, Northrop Grumman sued in May 2017, seeking damages that were not fully quantified but in the tens of millions of dollars. Early transition efforts were stalled until VITA obtained an order from the Richmond Circuit Court directing Northrop Grumman to allow the email transition to proceed. Extensive discovery during the litigation imposed burdens not just on VITA but on dozens of agencies and officials. Throughout 2017 and 2018, Northrop Grumman also created and pressed many additional contract claims, seeking tens of millions more in fees as the contract wound down. The situation with the incumbent was fundamentally different 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.

In light of the need for transition services that Northrop Grumman did not provide and an increasing need for maintenance and modernization of the Commonwealth's IT infrastructure services, VITA adapted its plan – compressing transition by about six months (from approximately three years to just under two and a half years) and having VITA and SAIC assume many significant transition responsibilities. Other than some messaging and mainframe services provided by new suppliers, SAIC took over all IT infrastructure services from Northrop Grumman in August 2018, starting a temporary, four-month caretaker period before the beginning of the new multi-supplier model in December 2018. VITA made the decision to adapt the transition plan with the involvement of executive and legislative stakeholders, as well as VITA's consultants. At all times during this intermediate transition, VITA's foremost concern was the continuity of critical agency systems and services.

The caretaker period completed without significant disruption. VITA and SAIC were able to ensure retention of knowledge of Commonwealth operations by successfully transitioning

the overwhelming majority of Northrop Grumman's IT and project support staff to SAIC. Further, SAIC participated in the subsequent procurements and contracting, with VITA and SAIC holding integration sessions for the incoming suppliers.<sup>1</sup>

Both developments in court and the successful execution of the adapted plan to have SAIC temporarily take over most services created opportunities to resolve remaining issues with Northrop Grumman by agreement and settlement.

In August of 2018, with assistance from legal counsel and others, VITA was able to negotiate an assumption and assignment of Northrop Grumman's interest in the lease for the Commonwealth Enterprise Solutions Center (CESC), removing Northrop Grumman from management of CESC and enabling VITA and suppliers to continue using CESC.<sup>2</sup>

VITA and Northrop Grumman also entered into an agreement on August 7, 2018, concerning use of certain IP addresses provided by Northrop Grumman. VITA then worked with its new suppliers to end any public-facing use of those addresses.

Finally, after a confidential mediation in November 2018, the parties entered into an overall settlement of the litigation and all contract claims, invoices, and breach and default notices, effective December 14, 2018. The settlement included the Commonwealth paying Northrop Grumman \$35,754,873.00, and, as noted above, included the release of the withheld fees for early termination of the Unisys mainframe services.

*The new model is in place, with services stabilizing and improving over time*

The eight new suppliers are in place and actively working with VITA to resolve issues with existing services and bring new services online. Experiences in other states and in the private sector suggest that transition to a flexible multi-supplier model, and achieving integration and stabilization in such a model, occurs over a substantial period of time, not instantly. And the Commonwealth's new suppliers started not with a clean slate but with a significant backlog of IT service needs. In addition, the fundamental shift in the model required extensive change within VITA, which has been occurring throughout 2019.

Work certainly remains to be done, but, as VITA detailed in response to JLARC's September 2019 transition report, much progress has been made, and data shows positive trends. (The JLARC report, including VITA's detailed response letter, is available at <http://jlarc.virginia.gov/pdfs/reports/Rpt525-1.pdf>.)

Since that JLARC report, progress continued during the final quarter of calendar year 2019.

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<sup>1</sup> Contracts with suppliers for messaging (Tempus Nova) and mainframe services (Perspecta, then known as HP Enterprise Services) were entered into in 2016 under the initial transition plan. After VITA contracted with SAIC as the multi-sourcing integrator (MSI) in August 2017, VITA entered into further contracts in 2018 with suppliers for managed security services (Atos); end user services (Ironbow); voice data network services (Verizon); server, storage, and datacenter services (Unisys); and managed print services (Xerox).

<sup>2</sup> Both under Northrop Grumman and now, CESC, located at 11751 Meadowville Lane, Chester, VA 23836, has served as VITA's headquarters. As discussed below, the Commonwealth will be moving out of CESC in FY22.

VITA is holding suppliers accountable for properly reporting on their performance, meeting contractual service levels, and providing contractual deliverables. The October 2019 invoice, measuring the August service period, included \$461,854.70 in credits to the Commonwealth based on the service level agreements (SLAs) in the contracts with suppliers. Credits increased in November, with \$696,046.17 in SLA credits and \$226.182.71 in credits for critical deliverables. (Details on the credits are in the appendix to this report.) After an initial spike in credits, VITA expects the credits to wane as they serve their purpose of incentivizing suppliers to meet contract and service delivery requirements.

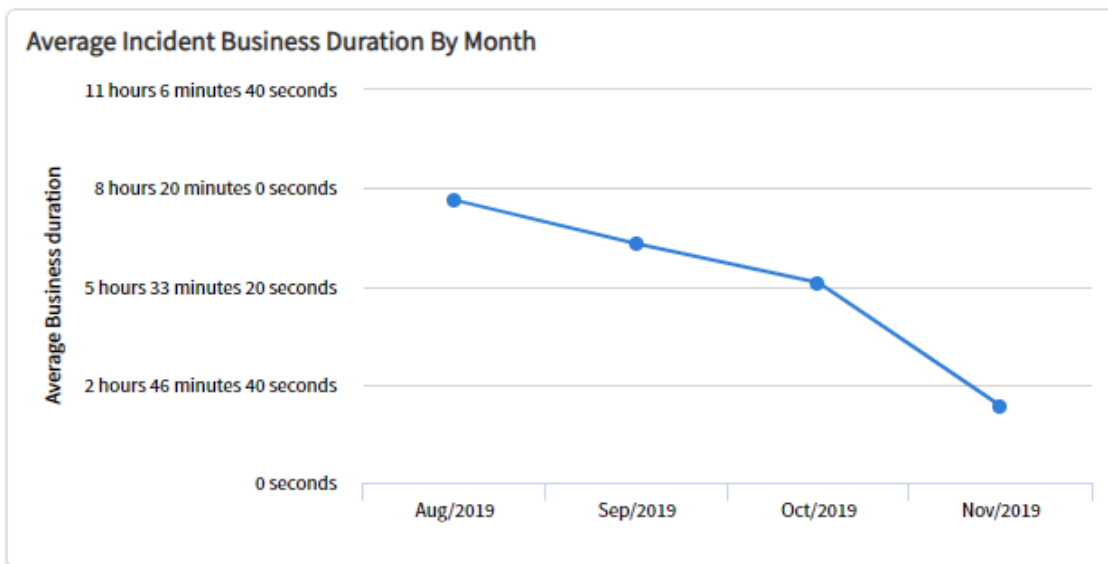
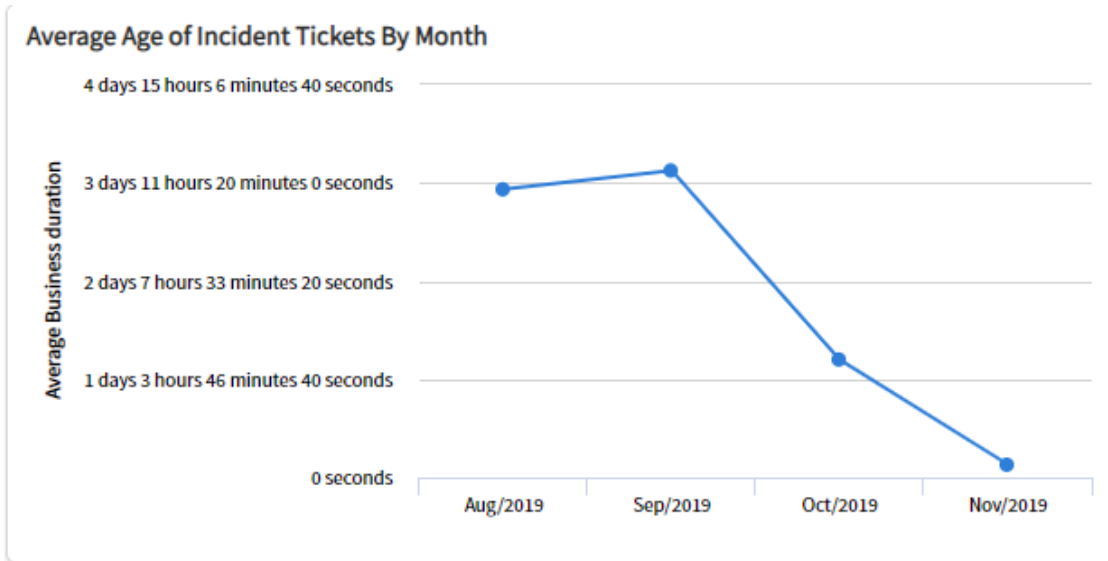
On November 12, 2019, Google Drive functionality went live at VITA and the 36 other agencies that opted in on or before October 31. Agencies that want Google Drive for calendar attachments and other cloud document storage and collaboration now have it, after VITA completed working with Google, Tempus Nova, and agencies to address security concerns (to ensure that information sharing takes place in an intentional and targeted way and only within the Commonwealth).

October was the fifth month in a row showing progress clearing the PC refresh backlog:



VITA is committed to continuing to drive increases in the speed of the refresh process and the data available to customers.

Incident resolution data shows more responsiveness and action for VITA’s customers, through decreases in the average age and business duration of incidents:



*Infrastructure transition costs and ongoing costs*

As detailed in the appendix to this report, the Commonwealth incurred \$218,519,603 in non-operating transition costs, of which the largest components were termination of the Northrop Grumman contract (approximately \$79.3 million) and implementation of the new service tower suppliers (STS) (approximately \$75.4 million). The non-operating transition costs were approximately \$51 million more expensive than initially estimated in September 2016, due primarily to the initial estimate not including the settlement payment to Northrop Grumman and other one-time transition payments.

Over time, despite the higher than anticipated transition costs and settlement costs, the Commonwealth will still realize significant savings of approximately \$114 million as compared to the cost of services from Northrop Grumman. Whether the Commonwealth’s

costs ultimately will exceed or fall short of the estimate in the 2018 final business case depends on consumption, costs of existing services over time, and costs of new services. At present, not including the one-time approximately \$40 million costs associated with the Northrop Grumman settlement, VITA's forecasts overall remain slightly under the 2018 final business case. For the upcoming fiscal year (FY21), VITA forecasts approximately \$50 million in savings under the MSI model compared to the actual spend with Northrop Grumman in FY17.

#### *VITA's line of credit*

VITA's line of credit, fixed at \$165 million in the Appropriation Act (2019 Va. Acts ch. 854 § 3.2-03) was critical to financing the transition. As detailed in the appendix to this report, that line of credit paid a variety of transition costs, and repayment of those expenditures will be complete by the end of FY20.

The transition costs resulted in increased VITA rates in FY19 and FY20. With repayment of the line of credit and one-time implementation costs complete after FY20, however, FY21 rates will include a decrease.

VITA anticipates continued use of the line of credit may be necessary for both one-time and ongoing costs, but VITA's finances have improved with the transition. Use of the line of credit may be needed for costs associated with the transition out of CESC; unplanned, one-time operating expenses; and, on an ongoing basis, for further transitions (as suppliers and/or supplier contracts are replaced) and implementation of new services. But, starting in FY20, VITA no longer needs to use the line of credit to fund a working capital deficit, a problem that persisted during most of the Northrop Grumman contract term.

#### *Upcoming transitions*

Change is constant in information technology, and that holds true for the Commonwealth's IT infrastructure too: there will be further key transitions in the years ahead.

First, VITA will start a new IT infrastructure procurement and contracts cycle. One benefit of the multi-supplier model is that it allows VITA to replace particular towers of services on a staggered schedule, or as needed, and such transitions will occur in the years ahead. The messaging and mainframe services contracts, which are five-year contracts with two one-year renewal options, are again first in line, coming up for expiration or renewal in 2021.

Second, in accordance with Executive Order 19 (Sept. 17, 2018) (EO19), the Commonwealth is embracing cloud technologies (such as virtual servers and cloud storage) for both new uses and migration of existing, on-premises infrastructure. The number of physical servers at CESC has decreased by more than 10% in 2019, but much of that decrease resulted from retiring old systems, and much migration work remains. Depending on the applications involved and the time and resources available from agencies and involved vendors, migration from physical servers to cloud technologies can be difficult. Estimates put the costs of the cloud migration at \$6.36 million, but it is important to note that there are counterbalancing benefits to the use of cloud technologies that the Commonwealth will realize over time.

Third, the Commonwealth must transition out of CESC. The lease of CESC ends on June 30, 2022, and the 2019 Appropriation Act recognizes that date. Out of caution, VITA's goal is to transition out of CESC by the end of 2021. The transition out of CESC is not merely a move of VITA personnel and offices, although that alone is a sizable task. The transition out of

CESC requires VITA, client agencies, and Unisys and other suppliers to work together to move infrastructure hardware, applications, and Commonwealth data to other datacenter locations and, in accordance with EO19, to the cloud. The estimated costs for the transition of the IT infrastructure out of CESC are included in the contract with Unisys (Ex. 4.1 at p.16), to be paid as milestones are achieved and totaling \$4,371,374.

The Commonwealth is in a better position to complete each of these key transitions because of the accomplishment of the overall transition to a multi-supplier model.

### *Conclusion*

VITA appreciates the direction and support it has received from executive and legislative branch policymakers, including General Assembly members and the current and former administrations. VITA embraces this report as an opportunity to provide transparency and to document the significant, multi-year transition to modernize the Commonwealth's IT infrastructure and technology delivery platform and VITA's efforts to deliver cost-effective services with an optimum level of return on investment.