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MEMORANDUM

TO: Members of the Joint Legislative Audit and Review Commission

FROM: Mark Gribbin; Principal Analyst for Ongoing Oversight and Fiscal Analysis

SUBJECT: Consultant's review of the state's central IT services

Over the past year, the Virginia Information Technologies Agency (VITA) oversaw a review of the state's central IT services. Central IT services, such as internet and data center services, are provided through a contract with Northrop Grumman. The term of that contract will expire in 2019. VITA employed a consultant, Integris Applied, to review services provided under the contract and determine how they should be provided in the future. This memorandum summarizes and assesses the consultant's review.

JLARC staff observed the consultant's review process and found that the consultant conducted a thorough, data-driven review that included key stakeholders. The consultant's work was overseen by a steering committee that included staff from VITA, state agencies, the Department of Planning and Budget, the Office of the Secretary of Finance, the House Appropriations Committee, and the Senate Finance Committee.

JLARC staff reviewed the consultant's interim and final reports and found they made reasonable recommendations for how the state's central IT services should be provided in the future. The recommendations address concerns that have been previously and independently identified by JLARC staff. The consultant's key recommendations are:

- The state should transition away from the services provided under the current contract with Northrop Grumman;
- The state should obtain central IT services through multiple suppliers and contract with a third-party services integrator to help manage suppliers;

- The state should transition to the new services model using a "wave" approach, whereby the state would immediately begin moving away from some current Northrop Grumman services to new services;
- VITA's internal agency structure should be modified so that it can better manage the new services model; and
- VITA should continue to better incorporate agencies into central IT service decisions.

Contract with Northrop Grumman does not meet state's current needs but did achieve original purpose

According to the consultant, the state's current central IT services, provided under contract with Northrop Grumman, do not meet the needs of state agencies. Under the current arrangement, services are costly because many of the fees charged are above current market prices for comparable services. The quality of services also lags agency needs. Many central IT services are viewed as unreliable, and Northrop Grumman is not able to quickly change existing services or introduce new services. Additionally, services are not priced in a way that allows agencies to move from one type of service to another without penalizing the agency or the state as a whole.

The consultant found that several of the problems with central IT services stem from how the contract with Northrop Grumman is structured. Many of the contract's terms and conditions are outdated when compared to the current marketplace. The contract's 13-year duration is much longer than a typical IT services contract. The contract's length reduces the influence of market competition and contributes to stagnant service quality. The contract's pricing structure is also out of line with the market. The contract includes relatively high fixed costs and minimum revenue commitments, which transfer most of the contract's risk to the state. The contract is also structured in a way that results in service prices that increase over time. In contrast, the consultant reported that service prices under most outsourcing agreements decrease over time as the supplier becomes more efficient at providing services.

The state's contract with Northrop Grumman is out of line with the current market in part because it was designed to finance the modernization of the state's IT infrastructure, rather than just provide central IT services. Under the contract, Northrop Grumman supplied the capital needed to upgrade and standardize the state's many outdated IT assets. Northrop Grumman's services are priced to allow the company to gradually recover its substantial up-front investment, which is why prices have not declined over time.

The consultant found that the original contract's objective of modernizing the state's IT infrastructure has been largely achieved.

State should transition to new multiple-supplier model to take advantage of market competition

The consultant found that, despite challenges, a central approach for providing IT services is still warranted for Virginia state government. The consultant identified three different models for central IT services: (1) outsource services to multiple suppliers; (2) continue outsourcing services to a prime contractor like Northrop Grumman; or (3) have VITA provide services directly to agencies ("insource").

The consultant identified these options by examining the current marketplace for central IT services, including how they are delivered in private sector companies and the two other states that outsource their IT services (Georgia and Texas). With VITA and agency representatives, the consultant then reviewed informational service delivery proposals submitted by 29 vendors and conducted additional follow-up sessions with 13 of those vendors.

Once the final options were identified, each option was evaluated based on how likely it was to meet the needs of agency customers and the state government as a whole. The consultant concluded that the first option, the multiple-supplier model, would be the best option for Virginia.

Consultant option 1: Multiple suppliers. Outsourcing IT services to multiple suppliers would best meet the state's needs because it maximizes state control and market competition. Under this approach, the state would enter into multiple contracts with different service providers, with each contract competitively bid. Each contract would be for a more narrow scope of services than the current contract with Northrop Grumman, and contracts would have shorter durations. For example, the state could have a contract with one supplier to provide internet services, and with another to provide mainframe services. Direct ownership of these smaller contracts would give the state more negotiating power, because it would be relatively easy for the state to terminate suppliers who underperform and to renegotiate with suppliers whose prices fall out of line with the market. The approach would also allow for the most market competition. Few companies are large and experienced enough to bid on contracts to provide multiple IT services. If contracts are for more narrow service categories, small and specialty service providers could bid for them. The added competition would help the state obtain competitive pricing and services.

The major challenge of the multiple-supplier model is coordinating the many different suppliers and the services they provide. The coordination of multiple IT services is called "service integration." The state could either directly take on the service integrator role or hire a third party to carry it out. The consultant found that the latter option was preferable, at least over the near term, due to VITA's resource constraints and its limited experience in managing multiple service providers.

Consultant option 2: Prime contractor. Outsourcing IT services to a prime contractor like Northrop Grumman would not satisfactorily address the state's service cost and quality needs. Under this arrangement, the prime contractor controls all central IT services and subcontracts. Ceding this authority would limit the state's ability to influence service cost and quality. For example, it would be difficult for the state to terminate an underperforming prime contractor without risking

a major service disruption. The state would also have limited ability to force the prime contractor to terminate an underperforming subcontractor. Consequently, service costs and quality may not remain competitive with the market throughout the course of the contract.

The prime contractor model has other drawbacks. Relying on the prime contractor to directly provide services can create a conflict of interest. The prime contractor may have a financial incentive to provide services that generate the most profit, rather than services that best meet the state's needs. Because the prime contractor oversees its own services, the state may have limited ability to influence service quality. Prime contractors are likely to employ subcontractors to provide some services, such as "cloud" computing services. The state may have limited ability to ensure that savings from new and innovative services are passed on to agencies.

Consultant option 3: In-source. In-sourcing IT services is not a viable option for the state because of the costs and risks involved. Under this option, VITA would provide services directly to agencies. This would require VITA to invest large amounts of capital to buy assets and facilities. VITA would also have to greatly increase its staff. The consultant found that this was a risky approach because it would require continuous investment to maintain service quality and adapt to future agency needs.

State should begin transitioning to new multiple-supplier model immediately

The consultant found that the state should begin transitioning to a new multiple-supplier model immediately, using a "wave" approach to minimize risk. The term of the Northrop Grumman contract expires in 2019, but the state can begin transitioning to new services at any time. This process, called "disentanglement," carries substantial risk. If disentanglement is not conducted appropriately, state government operations could be severely disrupted. That risk will be magnified if the state waits and disentangles all services when the term of the Northrop Grumman contract expires. Starting disentanglement early would allow the state to gradually transition to new services and better manage risks. The state could begin by disentangling smaller services and use the lessons learned to disentangle larger and more complicated services at the end of the contract.

The wave approach will make the best use of state agency resources. The transition of almost any central IT service will require an intensive effort by the agencies that use the service. For example, if mainframe services are transferred from Northrop Grumman to a new supplier, agencies that use the mainframe will need to dedicate staff to help transition their mainframe applications. Agency staff will need to assist with transition planning, implementation, and post-transition testing of their applications. If only a few services are transferred at a given time, agencies may be able to accomplish the transition with their existing staff instead of having to employ contractors to supplement their staff.

A wave transition approach will allow the state to get better services sooner rather than later. Contracts for transitioned services will be competitively bid, providing market-competitive quality and pricing that is likely to benefit agencies.

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The consultant reported that the wave approach will require up-front investment but the transition should be cost-neutral by 2019. Disentanglement from the current Northrop Grumman services requires the state to pay certain fees, such as resolution fees to purchase IT assets from Northrop Grumman. The state is required to pay some of these fees regardless of when it transitions to new services. The wave approach moves some of these future expenses to the near term. Early disentanglement will also trigger exit fees that would not have to be paid if the state waited until the end of the contract's term. The additional costs are expected to be offset by savings from lower prices negotiated under new service agreements.

VITA's internal structure should be modified and agencies should be better included in decisions related to central IT services

The consultant found that VITA's internal agency structure should be modified so that it can better manage the recommended multiple-supplier model. Currently, responsibilities for managing the Northrop Grumman contract and services are spread throughout different units of VITA. The consultant recommended creating a new unit of the agency that would be dedicated solely to managing infrastructure services and contracts. VITA's procurement capabilities would also have to be expanded because the agency would be required to solicit and manage multiple service contracts, which would be renewed or rebid every few years. Establishing these new functions within VITA would require additional resources.

While Virginia has several agency IT advisory groups that provide strategic guidance, such as the recently created Customer Advisory Council, VITA does not have a group that is focused exclusively on central IT services. The consultant recommended that VITA incorporate agency input into central service decisions by involving agencies in procurements of new service providers and having them participate in regular service management meetings with existing providers and VITA. The consultant also recommended that a steering committee, composed of staff from the executive and legislative branches, continue to oversee the transition to a new central IT services model.

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