#### HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 5201 PCB GOT 18-01 Information Technology

SPONSOR(S): Government Operations & Technology Appropriations Subcommittee, Ingoglia

TIED BILLS: IDEN./SIM. BILLS:

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: Government Operations & Technology Appropriations Subcommittee	13 Y, 0 N	Mullins	Торр
1) Appropriations Committee	27 Y, 0 N	Mullins	Leznoff

#### **SUMMARY ANALYSIS**

The bill makes changes in law relating to state agency information technology and modifies the responsibilities of the Agency for State Technology (AST). Specifically, the bill:

- Creates a cloud-first policy for state agencies, requiring each agency to first consider cloud computing solutions when sourcing technology.
- Requires the State Data Center and state agencies to show preference in procurement for cloud computing solutions that either minimize or do not require the use of the State Data Center.
- Provides authority in statute to allow AST to bill administrative costs of the agency to the customer agencies. Currently, the law provides that only data center services may be billed to customer agencies.
- Increases the qualification requirements for the state CIO, effective January 8, 2019.
- Designates the Department of Environmental Protection (DEP) as the state coordinating agency for Geographic Information Systems (GIS) and geospatial data.
- Removes the requirement for state agencies to utilize the State Data Center when initiating new computer services.
- Removes the limitation prohibiting state agencies from transferring existing computer services to any data center other than the State Data Center.
- Provides for a type two transfer of the AST budget and cost recovery/invoicing sections to DMS and amends statute to move the responsibilities of these sections to DMS.
- Repeals prescriptive language from statute authorizing 11 AST positions, three of which were eliminated in the FY 2017-18 General Appropriations Act (GAA).
- Amends statute to define the duties and responsibilities of AST in regards to developing an enterprise data inventory. Codifies current year proviso in statute related to the open data responsibilities.
- Conforms to the proposed House of Representatives' FY 2018-2019 GAA, which:
  - Funds \$3,702,908 for the AST's administrative functions (Executive Direction Budget Entity) by billing State Data Center customer entities,
  - Transfers \$524,017 in budget authority, 362,257 in salary rate, and five budget, cost recovery, and billing positions to DMS, and
  - Transfers the Geographic Information Officer and Research Administrator positions and funds \$238,273 in budget authority and 165,904 in salary rate to DEP.

Except otherwise specified, the bill is effective July 1, 2018.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives. STORAGE NAME: h5201a.APC

#### **FULL ANALYSIS**

#### I. SUBSTANTIVE ANALYSIS

#### A. EFFECT OF PROPOSED CHANGES:

# **Cloud-First Policy**

## **Current Situation**

In 2008, the Legislature created the State Data Center system, established two primary data centers, and required that agency data centers be consolidated into the primary data centers by 2019<sup>1</sup>. Data center consolidation was completed in FY 2013-14. In 2014, the two primary data centers were merged in law to create the State Data Center (SDC) within the Agency for State Technology (AST)<sup>2</sup>.

State agencies, unless authorized by the Legislature or granted exemption by AST, may not<sup>3</sup>:

- Transfer existing computer services to any data center other than the State Data Center.
- Initiate a new computer service except with the State Data Center.

The SDC relies heavily on the use of state-owned equipment installed at the SDC facility located in the state's Capital Circle Office Center in Tallahassee for the provision of data center services, often financed through the Department of Financial Services' Consolidated Equipment Financing Program and through lease-purchase arrangements with hardware vendors. This equipment must be replaced periodically, usually around five years. AST has identified \$43.1M in SDC equipment inventory currently financed or leased<sup>4</sup>.

Cloud computing is the delivery of on-demand computing resources, including data center services, software applications, and data storage, over the Internet on a pay-for-use basis. The definition of cloud computing issued by the National Institute of Standards and Technology (NIST) in Special Publication 800-145 is the most broadly adopted definition of cloud computing<sup>5</sup>. The NIST definition describes the essential characteristics of cloud computing, the types of cloud computing service models, and the types of cloud computing deployment models.

Section 282.0051 (6), F.S., provides the duty for the AST to collaborate with the Department of Management Services (DMS) to establish best practices for the procurement of information technology (IT) products in order to reduce costs, increase productivity, or improve services.

Section 282.318 (4) (h). F.S., requires that each state agency head include appropriate IT security requirements in written specifications for the solicitation of IT and IT resources and services that are consistent with the rules and guidelines established by the AST and DMS.

# **Cloud Computing Policies at the Federal Level and Other States**

California, Colorado, Illinois, Michigan, and Texas have adopted a cloud-first policy<sup>6</sup>. Some states have cloud strategies and plans with cloud computing components or are in the process of working to formalize policies and standards for cloud services<sup>7</sup>.

<sup>&</sup>lt;sup>1</sup> 2008-116, Laws of Florida

<sup>&</sup>lt;sup>2</sup> 2014-221, Laws of Florida

<sup>&</sup>lt;sup>3</sup> s. 282.201 (5), F.S.

<sup>&</sup>lt;sup>4</sup> State Data Center Inventory for proviso in 2017-70 s. 2924-2944, Laws of Florida, submitted on 12/15/2017 by AST (on file with the

<sup>&</sup>lt;sup>5</sup> SP 800-145, The NIST Definition of Cloud Computing, (9/2011), National Institute of Standards and Technology.

<sup>&</sup>lt;sup>6</sup> Email from Pamela Greenberg, Senior Fellow, National Conference of State Legislatures, to Government Operations & Technology Appropriations Subcommittee staff on 1/12/2018 (on file with the subcommittee). STORAGE NAME: h5201a.APC

The federal government has also implemented a cloud-first policy, first adopted by President Obama in 2011<sup>8</sup> and continued by President Trump in 2017<sup>9</sup>.

# **Effect of Changes**

The bill repeals the outdated intent language originally created in 2008 for data center consolidation and creates intent language in a new section of law establishing a cloud-first policy for state agencies. Specifically, the bill:

- Requires each agency to adopt a cloud-first policy that first considers cloud computing solutions in its technology sourcing strategy for technology initiatives or upgrades whenever possible or feasible.
- Requires the State Data Center and state agencies to show preference in procurement for cloud computing solutions that either minimize or do not require the use of the State Data Center.
- Includes the definition of cloud computing as defined in Special Publication 800-145 issued by the National Institute of Standards and Technology (NIST).
- Removes the limitation prohibiting state agencies from transferring existing computer services to any data center other than the State Data Center.
- Removes the requirement for state agencies to initiate a new computer service only with the State Data Center.
- Removes the outdated schedule and transition process for data center consolidation in Section 282.201 (4), F.S.
- Amends the AST duty in Section 282.0051 (6), F.S., to recommend best practices for the procurement of information technology products to include cloud computing services.
- Amends Section 282.318 (4)(h). F.S., requiring agency heads to ensure that IT security and cybersecurity requirements in both the written specifications for the solicitation and service level agreement of IT and IT resources and services meet or exceed the applicable state and federal standards for IT security and cybersecurity. New language in this subsection also requires that service level agreements identify service provider and state agency responsibilities for privacy and security, protection of government data, personnel background screening, and security deliverables with associated frequencies.

## Agency for State Technology – Administration/Executive Direction

## **Current Situation**

The AST is headed by an executive director, established in Section 20.61 (1) F.S., who serves as the state's chief information officer and is appointed by the Governor and confirmed by the Senate. Current law requires that the state CIO preferably have executive-level experience in both the public and private sectors in development and implementation of information technology strategic planning; management of enterprise information technology projects, particularly management of large-scale consolidation projects; and development and implementation of fiscal and substantive information technology policy.

Section 20.61 (2), F.S., establishes 11 positions within the AST appointed by the executive director. Three of these positions were eliminated in the FY 2017-2018 GAA.

While previously funded by General Revenue, in the current year, the AST's administration (the Executive Direction Budget Entity) is funded by billing State Data Center customer agencies. However,

<sup>&</sup>lt;sup>7</sup> "State Government Practices for Cloud Implementation", (2015), National Association of State Procurement Officials.

<sup>&</sup>lt;sup>8</sup> "Federal Cloud Computing Strategy", (2011), Vivek Kundra, Office of the U.S. Chief Information Officer.

<sup>&</sup>lt;sup>9</sup> Executive Order No. 82 FR 22391, 3 C.F.R. 22391-22397 (2017)

there is no statutory authority for this arrangement<sup>10</sup>, as current law provides that only data center services may billed to customer agencies<sup>11</sup>.

## **Effect of Changes**

Effective January 8, 2019<sup>12</sup>, the bill revises the qualifications for the state CIO by requiring at least 10 years of executive-level experience in either the public or private sector, with experience in the development of information technology strategic planning and the development and implementation of fiscal and substantive information technology policy and standards.

The bill amends Section 20.61, F.S. by removing prescriptive language in subsection (2) that specifies positions within the agency, allowing the executive director more flexibility for reorganization and assignment of duties.

The bill conforms to the proposed House of Representative's FY 2018-19 GAA by revising authority in statute to allow the billing of administrative costs to SDC customer agencies, to include an assessment for AST administration/Executive Direction.

# Agency for State Technology – Budgeting, Cost Recovery, and Invoicing Responsibilities

# **Current Situation**

Section 20.61, F.S. creates the Agency for State Technology within the Department of Management Services (DMS) as a separate budget program not subject to the control, supervision, or direction by DMS, including purchasing, personnel, and budgetary matters.

AST responsibilities in regards to budgetary management include:

- Developing and implementing cost-recovery mechanisms for the State Data Center.
- Implementing an annual reconciliation process on a timely basis and providing rebates that may be credited against future billings to customer entities when revenues exceed costs.
- Providing to each customer entity's agency head by September 1 the estimated AST agency assessment cost for the following fiscal year.
- Developing, preparing, and submitting the Legislative Budget Request for the agency.
- Providing a timely invoicing methodology to recover the cost of services provided to the customer entity pursuant to Section 215.422, F.S.

In recent years, AST has encountered fiscal challenges in the area of financial management that has required annual action by the Legislature to remedy. Specifically:

- In FY 2016-17, AST over-billed the customer entities by over \$1.2 million<sup>13</sup>. The Department of Children and Families alone was over-billed by the sum of \$1.0 million. The FY 2018-2019 House Proposed GAA includes the funding (\$641,494 in General Revenue and \$528,606 in AST's Working Capital Trust Fund) to repay the 18 customer entities the funds that were over-
- In FY 2015-16. AST over-billed the customer entities by over \$5.3 million utilizing a cash accounting methodology<sup>14</sup>. The extensive over-billing required the AST to move from a cash accounting methodology to an accrual accounting methodology. In response, the Legislature, in

<sup>&</sup>lt;sup>10</sup> HB 5301, which included the necessary statutory authority, was passed by the 2017 Legislature and vetoed by the Governor on 6/26/2017.

<sup>&</sup>lt;sup>11</sup> s. 282.0051, F.S.

<sup>&</sup>lt;sup>12</sup> The effective date of the next executive branch administration, as provided in FL. Const. art. IV, s. 5(a).

<sup>&</sup>lt;sup>13</sup> FY 2016-2017 True Up Summary Report, (12/1/2017), AST

<sup>&</sup>lt;sup>14</sup> FY 2015-2016 True Up Summary Report, (11/8/2016), AST

- the FY 2017-18 GAA, moved AST to an assessment model whereas the customer entities are simply billed based on the prior year's actual expenditures.
- In FY 2014-15, AST over-spent the data center budget by \$1.7 million. The Florida Legislature appropriated the AST an additional \$1.7 million to resolve the prior year outstanding invoices in the FY 2015-16 GAA<sup>15</sup>.

# **Effect of Changes**

The bill conforms to the proposed House of Representative's FY 2018-19 GAA, which transfers \$524,017 in budget authority, 362,257 in salary rate, and five budget, cost recovery, and billing positions to DMS, by authorizing a type two transfer of all records, property, personnel, administrative authority, administrative rules in chapter 74-3, Florida Administrative Code, pending issues, and existing contracts of the Budget and Policy Section and the Cost Recovery and Billing Section within AST to DMS.

The bill transfers the budgetary responsibilities of the AST to DMS. DMS is a large agency with a budget of \$607.9M in the proposed House of Representative's FY 2018-19 GAA and is well-equipped to administer AST's budget. DMS handles \$125.8M in billings for all telecommunications services for state agencies, as well as the allocation of \$135.5M in E911 funds to local entities. DMS also currently provides planning, budget, and financial management services for the Public Employee Relations Commission (PERC)<sup>16</sup> and the Florida Commission on Human Relations (FCHR)<sup>17</sup>.

The bill provides that the AST shall provide DMS all documents and information, as needed, to manage the AST's finances. The AST retains responsibility for the development of its Legislative Budget Request, which must be approved by the AST executive director prior to the preparation and transmission by DMS of the AST's LBR to the Governor and the Legislature.

The bill also changes the date by which customer entities shall receive its estimated AST agency costs from September 1 to October 1.

## **Open Data**

## **Current Situation**

Open data means data collected or created and structured in a way that enables the data to be freely used by the public.

The FY2017-2018 GAA funded a Chief Data Officer and included the following open data responsibilities in proviso language for the AST;

- Developing an enterprise data inventory and a process for agencies to submit data to the AST.
- Recommending state agency data standards and open data standards, and
- Recommending options for developing and maintaining a state open data catalog.

## **Effect of Changes**

The bill codifies current year proviso in statute related to open data responsibilities and provides definitions for open data terms.

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<sup>&</sup>lt;sup>15</sup> 2015-232 s. 89, Laws of Florida

<sup>&</sup>lt;sup>16</sup> DMS & PERC, FY 2017-18 Memo of Understanding (on file with DMS).

<sup>&</sup>lt;sup>17</sup> DMS & FCHR, FY 2017-18 Memo of Understanding (on file with DMS).

## **Geospatial Data Coordination**

# **Current Situation**

The FY 2017-2018 GAA funded a Geographic Information Officer at the AST. One additional position, a research administrator, was provided in support of this function. No other resources are provided to AST for this subject matter, nor are any duties or responsibilities defined in law.

## **Effect of Changes**

The bill conforms to the proposed House of Representative's FY 2018-19 GAA, which transfers the two positions and funds \$238,273 in budget authority and 165,904 in salary rate to the Department of Environmental Protection (DEP), by designating DEP as the lead agency of the Executive Branch for the development and review of policies, practices, and standards related to geospatial data. The bill also appoints DEP to coordinate and promote geospatial data sharing throughout state government and serve as the primary point of contact for statewide geographic information systems projects, grants, and resources.

DEP currently has 18 geographic information systems (GIS) staff and maintains an extensive mapping and spatial data library, including a public mapping application and an open data portal for geospatial data on the Internet.

Examples of states that have established state geospatial data coordination within an environmental or natural resources agency include Alaska, Arizona, Missouri, and South Carolina. Other states place the function within coordinating committees, central IT agencies, universities, and administration/planning departments.

#### B. SECTION DIRECTORY:

Section 1. Authorizes a type two transfer of all records, property, personnel, administrative authority, administrative rules in chapter 74-3, Florida Administrative Code, pending issues, and existing contracts of the Budget and Policy Section and the Cost Recovery and Billing Section within AST to DMS.

Section 2. Amends s. 20.22 by defining the financial management oversight responsibilities of DMS for the AST.

Section 3. Amends s. 20.255 by designating DEP to act as the lead agency for certain geospatial data responsibilities.

Section 4. Amends s. 20.61 by revising the qualifications of the AST executive director and repealing provisions specifying positions to be appointed by the executive director.

Section 5. Amends s. 282.0041 by amending existing definitions and creating definitions for "agency assessment", "automated programming interface", "cloud computing", "data", "data catalog", "dataset", "machine-readable", and "open data".

Section 6. Amends s. 282.0051 by revising the powers, duties, and functions of the AST.

Section 7. Amends s. 282.201 by revising the State Data Center's responsibilities, removing the intent, schedule, and transition process for data center consolidation, creating procurement requirements, and removing agency limitations.

Section 8. Creates s. 282.206, providing a cloud-first policy for state agencies.

**DATE**: 2/1/2018

STORAGE NAME: h5201a.APC PAGE: 6 Section 9. Amends s. 282.318, revising the duties of state agency heads regarding procurement of IT and IT resources and services by requiring specific IT security components in solicitations and service level agreements.

Section 10. Provides an effective date of July 1, 2018.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

# A. FISCAL IMPACT ON STATE GOVERNMENT:

	None.
2.	Expenditures:

#### B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

Revenues:
None.

None.

1. Revenues:

2. Expenditures:

None.

## C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill requires the State Data Center and state agencies to each adopt a cloud-first policy in its technology sourcing strategy and show preference in procurement for cloud computing solutions that either minimize or do not require the use of the SDC whenever possible or feasible, which should reduce SDC costs in subsequent years.

#### D. FISCAL COMMENTS:

The bill conforms to the proposed House of Representatives' FY 2018-2019 GAA, which;

- Funds \$3,702,908 for the AST's administrative functions (Executive Direction Budget Entity) by billing State Data Center customer entities,
- Transfers \$524,017 in budget authority, 362,257 in salary rate, and five budget, cost recovery, and billing positions to DMS, and
- Transfers the two Geographic Information Officer and Research Administrator positions and provides funding of \$238,273 in budget authority and 165,904 in salary rate to DEP.

#### **III. COMMENTS**

## A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

N/A

2. Other:

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- B. RULE-MAKING AUTHORITY:
- C. DRAFTING ISSUES OR OTHER COMMENTS:

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

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