HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/CS/HB 735   Blockchain Technology
SPONSOR(S): State Affairs Committee, Oversight, Transparency & Public Management Subcommittee, Santiago and others
TIED BILLS: **IDEN./SIM. BILLS:**   CS/SB 1024

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Oversight, Transparency & Public Management Subcommittee	14 Y, 0 N, As CS	Moehrle	Harrington
2) Government Operations & Technology Appropriations Subcommittee	11 Y, 0 N	Mullins	Topp
3) State Affairs Committee	22 Y, 0 N, As CS	Moehrle	Williamson

SUMMARY ANALYSIS

Blockchain is an open, distributed ledger technology that permanently records transactions between two parties without needing third-party authentication, creating an efficient process that is predicted to dramatically reduce the cost of transactions. Blockchain software is installed on computers to record and store every transaction that occurs on the computer network. The computers connected to the network can view the blockchain records and any change to the decentralized ledger is visible to all users on the network. Generally, a "committee" or "task force" is created as an advisory body to study a specific problem and recommend a solution or policy alternative, and upon completion of that mission the committee terminates.

The bill creates a 12-member Florida Blockchain Task Force within the Department of Financial Services (DFS) to explore and develop a master plan for fostering the expansion of the blockchain industry in the state and to recommend policies and state investments to help make the state a leader in blockchain technology. The task force must present its findings in a report to the Governor and Legislature and present its findings to the appropriate legislative committees in each house of the Legislature by a time certain. The report must provide information concerning the implementation of blockchain-based systems that promote government efficiencies, better services, economic development, and safer cyber-secure interaction between the government and the public. The report must include:

- A general description of the costs and benefits of state and local government agencies using blockchain technology;
- Recommendations concerning the feasibility of implementing blockchain technology and the best approach to finance the cost of implementation;
- Recommendations for specific implementations to be developed by state agencies;
- Any draft legislation the task force deems appropriate to implement such blockchain technologies;
- Identification of a pilot project that may be implemented in the state; and
- Any other information deemed relevant by the task force.

The bill specifies the task force terminates upon submission of the report and presentation of findings. The findings must be presented within 180 days after the initial meeting of the task force.

The bill has an insignificant negative fiscal impact on DFS.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Blockchain
Blockchain is an open, distributed ledger technology that permanently records transactions between two parties without needing third-party authentication, creating an efficient process that is predicted to dramatically reduce the cost of transactions.[1] Blockchain software is installed on computers to record and store every transaction that occurs on the computer network.[2] All computers connected to the network can view the blockchain records (blocks) and any change to the decentralized ledger is visible to all users on the network.[3] Essentially, a blockchain is a distributed type of database where different parties can read and write transactions with a built-in consensus mechanism that checks those transactions to ensure they are valid.

Transactions that are verified get hashed, or assigned a digital fingerprint, that identifies the transaction.[4] Validated transactions get grouped together into a block, which is assigned its own hash.[5] That hash becomes the first hash of the next block, linking the blocks together into a chain.[6] If a user changes any data in the chain, it should easily be detected by the hash value.

Traditional methods of recordkeeping require each participant to have his or her own separate ledger, relying on intermediaries for validation, which often becomes a multi-step paper-laden process resulting in frequent delays. Blockchain, however, uses a "single, shared, tamper-evident ledger" and once transactions are recorded, the data cannot be altered."[7] Moreover, all parties to the ledger must consent before a new transaction is added to the network.[8]

Blockchain software can create either a decentralized or centralized blockchain.
- Decentralized (Public): Cryptocurrencies such as Bitcoin utilize decentralized blockchain technology for their creation and other digital assets.[9] In a decentralized blockchain, any individual can download software to send and receive funds, without requiring a centralized financial institution to process the transactions.[10] Transaction processing is done "through a decentralized mesh of computers located around the world, with anyone being able to operate a computer to process transactions."[11]
- Centralized (Private): Centralized blockchain technology is utilized in the creation of secure and high-speed record-keeping by governments and businesses.[12] In a centralized blockchain system, access is restricted, with only known participants being permitted to process and view

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[1] Bernard Marr, *A Very Brief History of Blockchain Technology Everyone Should Read,* Forbes (Feb. 16, 2018), https://www.forbes.com/sites/bernardmarr/2018/02/16/a-very-brief-history-of-blockchain-technology-everyone-should-read/#26f7e3f67bc4 (last visited Feb. 26, 2019).
[2] Dave Berson & Susan Berson, *Blockchain Law 101: Understanding Blockchain Technology and the Applicable Laws,* 88 Feb J. Kan. B.A. 40 (2019).
[3] *Id.*
[4] Carrie Smith, *Block-Chain Reaction, How Library Professionals are Approaching Blockchain Technology and its Potential Impact*, Americanlibrarymagazine.org (March/April 2019).
[5] *Id.*
[6] *Id.*
[7] What is Blockchain, IBM, https://www.ibm.com/downloads/cas/KMAVML1D (last visited Mar. 12, 2019).
[8] *Id.*
[9] *Id.*
[10] *Id.*
[11] *Id.*
[12] *Id.*

records on the blockchain.[13] Centralized blockchains, also known as private blockchains, can process records and transactions at higher speeds and lower energy costs than decentralized blockchains.[14]

Task Force

Under Florida law, a "committee" or "task force" is an advisory body created by the Legislature without specific statutory enactment, for a time not to exceed 1 year in duration or created by specific statutory enactment, for a time not to exceed 3 years.[15] Generally, a committee or task force is appointed to study a specific problem and recommend a solution or policy alternative addressing the problem, and upon completion of that mission, the committee terminates.[16]

Section 20.052, F.S., provides the following requirements for statutorily enacted committees:
- Created only when it is found to be necessary and beneficial to the furtherance of a public purpose.
- Must be terminated by the Legislature when it is no longer necessary and beneficial to the furtherance of a public purpose. The executive agency to which the committee is made an adjunct must advise the Legislature at the time the committee ceases to be essential to the furtherance of a public purpose.
- The Legislature and the public must be kept informed of the numbers, purposes, memberships, activities, and expenses of the committee.[17]
- A committee may not be created or reestablished unless it meets a statutorily defined purpose and its powers conform to the definitions under s. 20.03, F.S.

Effect of the Bill

The bill creates a 12-member Florida Blockchain Task Force within the Department of Financial Services (DFS) to study the ways in which state and local governments can benefit from a transition to a blockchain-based system for recordkeeping, security, and service delivery. DFS must provide support staff for the task force and any relevant studies, data, and materials in its possession to assist the task force in the performance of its duties.

The 12-member task force consists of the following members:
- Three agency heads or executive directors of cabinet agencies, or their designees, appointed by the Governor;
- Four members from the public or private sector with knowledge and experience in blockchain technology, appointed by the Governor;
- Three members from the public or private sector with knowledge and experience in blockchain technology, appointed by the Chief Financial Officer;
- One member from the private sector with knowledge and experience in blockchain technology, appointed by the President of the Senate; and
- One member from the private sector with knowledge and experience in blockchain technology, appointed by the Speaker of the House of Representatives.

Members of the task force serve without compensation and are not entitled to reimbursement for per diem or travel expenses.

The bill requires the task force to create a master plan which:
- Identifies economic growth and development opportunities presented by blockchain technology;
- Assesses the existing blockchain industry in Florida;

[13] *Id.*
[14] *Id.*
[15] Section 20.03(8), F.S.
[16] *Id.*
[17] Section 20.052(1)-(3), F.S.

- Identifies innovative and successful blockchain applications currently used by the industry and other governments to determine viability for state use;
- Reviews workforce needs and academic programs required to build blockchain technology expertise across relevant industries; and
- Makes recommendations to the Governor and the Legislature that will promote innovation and economic growth by reducing barriers to, and expedite the expansion of, Florida's blockchain industry.

The bill requires the task force to submit a final report to the Governor, the President of the Senate, and the Speaker of the House of Representatives and present its finds to the appropriate legislative committees in each house within 180 days after the initial meeting of the task force. The report must provide information concerning the implementation of blockchain-based systems that promote government efficiencies, better services, economic development, and safer cyber-secure interaction between the government and the public.

The final report must include:
- A general description of the costs and benefits of state and local government agencies using blockchain;
- Recommendations regarding the feasibility of implementing blockchain technology in the state;
- Recommendations for specific implementations to be developed by relevant state agencies;
- Draft legislation the task force deems appropriate to implement such blockchain technologies;
- Identification of one pilot project that may be implemented; and
- Any other information deemed relevant by the task force.

Upon submission of the final report and presentation of its findings, the task force is terminated.

B. SECTION DIRECTORY:

Section 1. Establishes the Florida Blockchain Task Force at DFS, identifies the membership of the task force, requires how often members meet, defines the scope of study for the task force, and provides requirements for a master plan and final report.

Section 2. Provides an effective date of upon becoming a law.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   The bill does not appear to impact state government revenues.

2. Expenditures:

   The bill has an insignificant negative fiscal impact on DFS, which is required to provide support staff and any relevant studies, data, and materials to the task force.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   The bill does not appear to impact local government revenues.

2. Expenditures:

   The bill does not appear to impact local government expenditures.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

This analysis does not address the costs of potential blockchain projects that may be recommended by the task force. Blockchain-based projects may be costlier than more typical software development efforts, as blockchain engineers are the top paid specialized roles in software development.[18]

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. The bill does not appear to require counties or municipalities to spend funds or to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, or reduce the percentage of a state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 20, 2019, the Oversight, Transparency & Public Management Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment renamed the working group as a task force, revised the provisions for compensating a member of the task force to only per diem and travel expenses, located the task force for purposes of staffing at DFS, and altered the membership of the task force to include appointments of the heads of various agencies and appointments by the Chief Financial Officer, Governor, President of the Senate, and Speaker of the House of Representatives.

On April 18, 2019, the State Affairs Committee adopted an amendment and reported the bill favorably as a committee substitute. The amendment reduced the membership of the taskforce from 24 to 12 members and prohibited members from being reimbursed for per diem or travel expenses.

This analysis is drafted to the committee substitute as approved by the State Affairs Committee.

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[18] Salvador Rodriguez, *Salaries for Blockchain Engineers are Skyrocketing, Now on Par with AI Experts,* CNBC (Oct. 22, 2018), https://www.cnbc.com/2018/10/21/how-much-do-blockchain-engineers-make.html (last visited Mar. 22, 2019).