

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Rules

BILL: CS/CS/SB 1024

INTRODUCER: Rules Committee; Innovation, Industry, and Technology Committee and Senator Gruters

SUBJECT: Blockchain Technology

DATE: April 24, 2019 **REVISED:** _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Knudson</u>	<u>Knudson</u>	<u>BI</u>	Favorable
2.	<u>Wiehle</u>	<u>Imhof</u>	<u>IT</u>	Fav/CS
3.	<u>Knudson</u>	<u>Phelps</u>	<u>RC</u>	Fav/CS

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 1024 establishes the Florida Blockchain Task Force comprised of government and private sector representatives to study the ways in which the state, county and municipal governments can benefit from transitioning to a blockchain-based system for recordkeeping, security, and service delivery. The task force is established within the Department of Financial Services. It will explore and develop a master plan for fostering the expansion of the blockchain industry in this state, recommend policies and state investments to help make Florida a leader in blockchain technology, and issue a report to the Legislature. The task force will develop and submit recommendations to the Governor and Legislature concerning the potential for implementation of blockchain-based systems that promote government efficiencies, better services for citizens, economic development, and safer cyber-secure interaction between government and the public.

II. Present Situation:

Blockchain

A blockchain is a digital ledger that allows parties to conduct transactions without the use of a third party acting as a central authority to validate those transactions.¹ In a blockchain, the identities of each party to the transaction are verified, and as each transaction occurs and the

¹ Congressional Research Service, Blockchain: Background and Policy Issues R45116, pg. 1 (Feb. 28, 2018) <https://fas.org/sgp/crs/misc/R45116.pdf> (last visited Mar. 21, 2019).

parties agree to its details, it is permanently encoded into a block of data and given a unique digital signature.² Each block of data is permanently connected to the one before and after it.³ The ledger is available to all parties to the transaction.

The ledger may be audited because each block of transactions is dependent upon the previous block, and changes to the ledger would alert other users of a change to the transaction history.⁴ Blockchain is designed to allow transacting parties to avoid the use of a third-party, central validating authority, an example of which is a bank in a financial transaction between two persons.⁵ Blockchain may reduce the costs associated with verifying transactions to the extent that it obviates the need for intermediaries in transactions that charge fees for their services.⁶ To the extent blockchain reduces costs for parties to a transaction, it may allow individuals and small startup businesses to directly compete with more entrenched businesses. Security for the ledger is usually accomplished through cryptography.⁷

Promoters of blockchain technology point to a number of potential uses. Perhaps the most prevalent use currently is in the transfer of cryptocurrency. Cryptocurrency is digital currency that has no central issuing or regulating authority, uses a decentralized system such as blockchain to record transactions and manage the issuance of new units of currency, and relies on cryptography to prevent counterfeiting and fraud.⁸

A variety of other uses of the technology have been proposed. Blockchain may enable greater use of digital “smart contracts” that validate that the conditions of the contract are met and then transfer assets.⁹ Blockchain may be a useful tool to verify the ownership of real property as a smart contract executed to the purchase of a home or automobile could update governmental title records. Blockchain technology may have useful applications within the insurance industry to facilitate the claims process, allow insurers to gather reliable loss histories, and enable efficient payments between insurers and third parties.¹⁰ The healthcare industry may be able to use blockchain for purposes such as managing patient health information.¹¹

Florida has begun addressing cryptocurrency issues that use blockchain technology. In 2017, the Florida Money Laundering Act was amended to include virtual currency.¹² The Chief Financial Officer announced the appointment of a cryptocurrency chief for the purpose of ensuring that

² IBM, What is Blockchain? <https://www.ibm.com/blockchain/what-is-blockchain> (last visited Mar. 21, 2019).

³ *Id.*

⁴ See Congressional Research Service, *supra* note 1, at pg. 1.

⁵ See Congressional Research Service, *supra* note 1, at pg. 1.

⁶ Christian Catalini and Joshua S. Gans, Some Simple Economics of the Blockchain (Sept. 21, 2017). Rotman School of Management Working Paper No. 2874598; MIT Sloan Research Paper No. 51.91-16.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2874598 (last visited Mar. 21, 2019).

⁷ MIT Sloan School of Management, Blockchain, Explained (May 25, 2017). <http://mitsloan.mit.edu/ideas-made-to-matter/blockchain-explained> (last visited Mar. 21, 2019).

⁸ Merriam-Webster, Cryptocurrency. <https://www.merriam-webster.com/dictionary/cryptocurrency> (last visited Mar. 21, 2019).

⁹ See Congressional Research Service *supra* note 1, at pg. 7.

¹⁰ Jim Struntz, Ultimate Guide to Blockchain in Insurance (Dec. 5, 2018). <https://insuranceblog.accenture.com/ultimate-guide-to-blockchain-in-insurance> (last visited Mar. 21, 2019).

¹¹ See Congressional Research Service, *supra* note 1, at pg. 6.

¹² Ch. 2017-155, L.O.F.

cryptocurrencies are reliable forms of payment that do not expose Floridians to financial fraud.¹³ The Seminole County Tax Collector's Office in April 2018, began accepting bitcoin and bitcoin cash as payment for new identification cards, license plates, and property taxes.¹⁴

Aspects of blockchain may hinder its use in various industries. Data portability is a significant issue, for instance if a person chooses to use one blockchain, the records may not be transferred to a new system.¹⁵ Also, users of a blockchain access their funds using a private digital key. If the key is lost or the computer containing the key is corrupted, the user will be unable to access the resource tied to the encrypted key.¹⁶ Also, blockchain is a new technology, and thus there are different versions of the technology and its attributes may not prove appropriate for some of the purposes being proposed for it.

III. Effect of Proposed Changes:

The bill establishes the Florida Blockchain Task Force (task force) comprised of government and private sector representatives to study the ways in which the state, county, and municipal governments can benefit from transitioning to a blockchain-based system for recordkeeping, security, and service delivery. The task force is established within the Department of Financial Services.

The task force will explore and develop a master plan for fostering the expansion of the blockchain industry in this state, recommend policies and state investments to help make Florida a leader in blockchain technology, and issue a report to the Governor and the Legislature. The task force will develop and submit recommendations to the Governor and Legislature concerning the potential for implementation of blockchain-based systems that promote government efficiencies, better services for citizens, economic development, and safer cyber-secure interaction between government and the public.

The task force consists of 13 members as follows:

- Three agency heads or executive directors of cabinet agencies, or their designees, appointed by the Governor.
- Four members of the private sector with knowledge and experience in blockchain technology, appointed by the Governor.
- Three members from the 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.
- One member from the private sector with knowledge and experience in blockchain technology, appointed by the Speaker of the House of Representatives.

¹³ Department of Financial Services, CFO Jimmy Patronis: Florida Needs Cryptocurrency Oversight (June 26, 2018) <https://www.myfloridacfo.com/sitePages/newsroom/pressRelease.aspx?id=5057> (last visited Mar. 21, 2019).

¹⁴ Martin E. Comas, Seminole Tax Collector Joel Greenberg Hires Blockchain Director as Legislators Study Technology, Orlando Sentinel (Mar. 4, 2019) <https://www.orlandosentinel.com/news/seminole/os-ne-seminole-tax-collector-greenberg-blockchain-20190304-story.html> (last visited Mar. 21, 2019).

¹⁵ See Congressional Research Service, *supra* note 1, at pg. 8.

¹⁶ See Congressional Research Service, *supra* note 1, at pg. 9.

- One certified public accountant licensed under ch. 473, F.S., with knowledge and experience in blockchain technology, appointed by the governor.
- Members of the task force shall reflect the ethnic diversity of the state.

The task force must be appointed and hold its first meeting no later than 90 days after the effective date of the act. Members of the task force will serve without compensation but are allowed per diem and travel expenses as provided in s. 112.061, F.S.

Specific topics the task force must study include, but are not limited to:

- The opportunities and risks associated with using blockchain and distributed ledger technology for state and local government;
- Different types of blockchains, both public and private, and different consensus algorithms;
- Projects and cases currently under development in other states and local governments, and how these cases could be applied in Florida;
- Ways the Legislature can amend general law to support secure, paperless recordkeeping, increase cybersecurity, improve interactions with citizens, and encourage blockchain innovation for businesses in Florida;
- Identifying potential economic incentives for companies investing in blockchain technologies in collaboration with the state;
- Recommending projects for potential blockchain solutions, including, but not limited to, use cases for state agencies that would improve services for citizens or business; and
- Identifying the technical skills necessary to develop blockchain technology and ensuring that instruction in such skills is available at secondary and postsecondary educational institutions in this state.

The task force must, within 180 days of its first meeting, submit a report to the Governor, President of the Senate, and Speaker of the House of Representatives, and present its findings to the appropriate legislative committees. 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 in the state and the best approach to finance implementation costs;
- Recommendations for specific implementations to be developed by relevant state agencies;
- Any draft legislation the task force deems appropriate to implement blockchain technologies;
- Identification of one pilot project that may be implemented in Florida; and
- Any other information the task force deems relevant.

The Department of Financial Services 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 task force terminates upon submission of the report and the presentation of findings.

The act is effective upon becoming a law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill does not appear to have a fiscal impact.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill creates an undesignated section of the Florida Statutes.

IX. Additional Information:

- A. **Committee Substitute – Statement of Substantial Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS/CS by Rules on April 23, 2019:

The committee substitute adds a 13th member to the task force, a certified public accountant licensed under ch. 473, F.S., with knowledge and experience in blockchain technology, appointed by the governor.

CS by Innovation, Industry, and Technology on April 2, 2019:

The committee substitute:

- Creates a task force instead of a working group;
- Reduces the number of members from 19 to 12 members;
- Revises the membership and appointments; and
- Requires that the members of the task force reflect the ethnic diversity of the state.

- B. **Amendments:**

None.