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.)

| Pre | pared By: The F | Professional Staff of the Co | ommittee on Innova | tion, Industry, and Technology |
|-------------|-----------------|------------------------------|--------------------|--------------------------------|
| BILL: | SB 1024 | | | |
| INTRODUCER: | Senator Gruters | | | |
| SUBJECT: | Blockchain | Technology | | |
| DATE: | April 1, 201 | 9 REVISED: | | |
| ANALYST | | STAFF DIRECTOR | REFERENCE | ACTION |
| l. Knudson | | Knudson | BI | Favorable |
| 2. Wiehle | | Imhof | IT | Pre-meeting |
| 3. | | | RC | |

Ι. Summary:

SB 1024 establishes the Florida Blockchain Working Group comprised of government and industry 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 working group is established within the Agency for State Technology. 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 working group 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.

П. **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 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.

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).

² IBM, What is Blockchain? https://www.ibm.com/blockchain/what-is-blockchain (last visited Mar. 21, 2019). 3 Id.

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 cryptocurrencies are reliable forms of payment that do not expose Floridians to financial fraud.¹³

matter/blockchain-explained (last visited Mar. 21, 2019).

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-

⁸ Merriam-Webster, Cryptocurrency. <u>https://www.merriam-webster.com/dictionary/cryptocurrency</u> (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). <u>https://insuranceblog.accenture.com/ultimate-guide-to-blockchain-in-insurance</u> (last visited Mar. 21, 2019).

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

¹² Ch. 2017-155, L.O.F.

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

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 Working Group (working group) comprised of government and industry 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 working group is established within the Agency for State Technology.

The working group 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 working group 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 working group consists of 19 members who must demonstrate an interest, familiarity with, or knowledge of blockchain technology. At least 10 of the 19 members must have knowledge and experience in blockchain technology. Membership is as follows:

- Two members appointed by the Governor.
- Two members appointed by the President of the Senate.
- Two members appointed by the Speaker of the House of Representatives.
- One member appointed by the Minority Leader of the Senate.
- One member appointed by the Minority Leader of the House.
- One member appointed by the Chief Financial Officer.
- One member appointed by the Attorney General.
- The Secretary of the Department of Management Services or his or her designee.
- The executive director of the Agency for State Technology or his or her designee.
- One member of the Florida Technology Council, appointed by the council.
- One member appointed by the Florida League of Cities.

¹⁴ Martin E. Comas, Seminole Tax Collector Joel Greenberg Hires Blockchain Director as Legislators Study Technology, Orlando Sentinel (Mar. 4, 2019) <u>https://www.orlandosentinel.com/news/seminole/os-ne-seminole-tax-collector-greenberg-blockchain-20190304-story.html</u> (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 member appointed by the Florida Association of Counties.
- One member appointed by the Florida Local Government Information Systems Association.
- One member appointed by the Florida City and County Management Association.
- One member of the Florida Chamber of Commerce, appointed by that entity.
- One member appointed by the Chancellor of the State University System.

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

Specific topics the working group 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.
- 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 working group 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 working group deems appropriate to implement blockchain technologies.
- Identification of one pilot project that may be implemented in Florida.
- Any other information the working group deems relevant.

The Agency for State Technology must provide support staff for the working group and any relevant studies, data, and materials in its possession to assist the working group in the performance of its duties.

The working group 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 Agency for State Technology indicates the bill does not have a fiscal impact.¹⁷

VI. Technical Deficiencies:

Section 20.052, F.S., requires that the powers of a statutorily created advisory body, commission, board of trustees, or any other collegial body conform to the definitions under section 20.03, F.S. That section does not define the term "work force," and perhaps the bill's terminology should be changed to use a term from that section. Possibilities include the following.

• "Council" or "advisory council" means an advisory body created by specific statutory enactment and appointed to function on a continuing basis for the study of the problems

¹⁷ Agency for State Technology, *2019 Agency Legislative Bill Analysis SB 1024* Feb. 28, 2019 (on file with the Senate Innovation, Industry, and Technology Committee).

arising in a specified functional or program area of state government and to provide recommendations and policy alternatives.

- "Committee" or "task force" means an advisory body created without specific statutory enactment for a time not to exceed 1 year or created by specific statutory enactment for a time not to exceed 3 years and appointed to study a specific problem and recommend a solution or policy alternative with respect to that problem. Its existence terminates upon the completion of its assignment.
- "Coordinating council" means an interdepartmental advisory body created by law to coordinate programs and activities for which one department has primary responsibility but in which one or more other departments have an interest.

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 Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.