



**House Select Committee on Blockchain and Digital Assets
Wednesday, December 17, 2025 at 2:00 PM
Room Auditorium of the Legislative Building**

MINUTES

The House Select Committee on Blockchain and Digital Assets meets at 2:00 PM on December 17, 2025 in Room Auditorium of the Legislative Building. Representatives Cairns, Chesser, Cunningham, Dahle, N. Jackson, Majeed, Schietzelt, Scott, and Willis are in attendance.

Representative David Willis, Co-Chair, presiding.

Introduction of Sergeant-at-Arms Warren Hawkins and David Leighton.

Remarks from Co-Chair Chesser.

Rep. Chesser: I appreciate everybody showing up today in what should be a pretty informative meeting. I'm excited about today. We're going to get into some use case applications of the blockchain technology, show the committee and the public some ways that this technology is currently being leveraged and potentially discuss some opportunities that we have moving forward. So, I thank the presenters for being here and look forward to the discussion.

Remarks from Chairman Willis.

Chair Willis: As we come together with this committee, obviously we've got a lot of unknowns out there, and a lot of maybe concern about the technology and blockchain. We hear a lot of words—digital assets and cryptocurrencies—and we get a little bit fearful about what that means and what that can hold for us.

But we're here today to talk about real-world applications and how that can be used for government efficiency, transparency, and accountability, as well as some real-world examples of how it's already being used, what other states are doing, and the benefits that this will have for the State of North Carolina.

As we mentioned in the last meeting, we had some great presentations, a lot of folks come to us and talk to us just about blockchain more from an overview perspective. But again, being the financial hub that we are in the State of North Carolina, the opportunity for us to be able to leverage new technology and be at the forefront of a new industry—that's going to

create new jobs and new companies—and to be able to partner with our financial institutions, our government institutions both local, county, and state level, I think is just a tremendous opportunity for us.

So, please ask questions, be engaged today. There are no dumb questions; this is new for pretty much all of us. We want to make sure that we have as much information available to our committee as we do the public.

Michael Postupak, Policy Engagement Manager, Blockchain Association, gave an presentation of blockchain technology. (Attachment 1)

Questions from Rep. Dahle to Mr. Postupak.

Rep. Dahle: I am no expert, I pretend to be one on TV. I've been listening to podcasts trying to unpack what blockchain technology is. And one of the concerns—and forgive me—I don't know how old this podcast was the speed. When they were talking about—you had first said something about speed—and they were talking about the difference in the speed in a transaction on blockchain and a transaction of a credit card, and credit cards far surpass. Has the speed gotten better, or is there a better way to measure that speed now?

Mr. Postupak: Thank you the question. I would say on the speed of transactions, it's something that is constantly improving, and we have many blockchains within our membership that rival the transaction speeds of Visa, a Mastercard, at a fraction of the cost. So, that is something that the industry refers to as scalability and is something that has improved drastically. We even see a lot of traditional institutions, like Visa and Mastercards, that are recognizing the benefit that this technology brings and are incorporating it.

So, I think that's very exciting to see the innovation, the pace of innovation to improve these products, and I would point to institutional adoption but also retail adoption that recognizes that the innovation is becoming faster to what they're used to and is becoming significantly cheaper. So, definitely a lot of improvements, and we're seeing a lot of promise going forward.

Rep. Dahle: When you talk about the decentralized computers, who are the decentralized? Are they companies? I'll tell you where I'm coming from. We had a conversation about who was keeping data for voters, and it wasn't in one central spot, so people felt like it was not safe. So, who are these decentralized computers, and how do we know that's a trustworthy source? Because what I understand is it's a private computer so I need a little bit help on that.

Mr. Postupak: So within the blockchain ecosystem, there are varying degrees of

decentralization, varying degrees of who can and cannot participate. I'll use Bitcoin as an example as a blockchain that is very decentralized, allows for open participation. It's considered permissionless, so anyone can participate and be a part of that ecosystem.

And so, what that brings in terms of security and preventing tampering of information is as you have more computers in a network—like the Bitcoin network has thousands of computers—in order to control a network, you would have to have over 50 percent control of the computers in that network. So as a very decentralized system—let's take Bitcoin—you would have to control many computers. Some have argued that to bring those amount of resources together, not only financially but in terms of getting the correct hardware together, is essentially impossible.

So from that regard, a very decentralized system with more computers and controlled by various actors around the world—which can be, you know, institutions, it can be private companies here in the U.S., it can be folks in Europe, throughout the world, it can be myself as an independent person—we are constantly adding resources to the network to ensure that no one can effectively control it. So it's making it very strong and tamper-resistant in that way.

Now, what I was alluding to in terms of other types of blockchains, there are blockchains out there that are often considered private or enterprise blockchains; that would be the other extreme of blockchains that limit who can participate and add transactions. They're often used in supply chain use cases or medical records. So if you view it from that sliding ruler of very decentralized—and decentralization through that process allows to protect against, you know, tampering and things along those lines—to private and enterprise blockchains that allow for a little bit more control around, especially sensitive use cases like supply chain. So there's a variety of options, it's just a matter of what say works best for an institution, a project, what people are trying to accomplish.

Rep. Dahle: Could we use this blockchain technology for voting online? I mean, would that make it a safer for casting ballots or for military people to cast ballots from overseas? Is there a way to make that safer than the US Mail or—

Mr. Postupak: I would have to take a closer look at our membership and do a little research on that use case. I know it is a use case that is out there in the universe and that's something that countries and municipalities around the world are looking at. But to ensure that I'm giving the best answer possible I'd love to email an appropriate response.

Rep. Dahle: That would be awesome. Thank you. That's all for this moment.

Questions from Rep. Majeed to Mr. Postupak.

Rep. Majeed: You know, Abbott and Costello had a skit they used to about who's on first, and who's on second, and who's on third—no, who's on seventh. But anyway, my, I'm prefacing my question or my about on the federal legislative level, they are developing rules and regulations pertaining to blockchain. And we're working on a state level here and now. I'm just trying to get where this meshes together as we develop these specific policies.

Does the federal level supersede—if they come up and they're in the process of doing, making policy and legislation, I take it that they supersede the state level. There's some talk about them executing that on that level, and would that wipe out everything on the state level that we're trying to do, or it's an issue of states' rights? Can you explain that to me, make a little clearer?

Mr. Postupak: Yeah, for sure. So at the federal level, there are a variety of pieces of legislation that are coming through, whether on market structure and then also the GENIUS Act, the stablecoin legislation I mentioned in my presentation.

So those are the two major ones that at the federal level, at the association, we're focused on. I'll speak to the GENIUS Act. So this one is law, the Treasury Department here in Washington is writing through the rules. But GENIUS Act creates a clear pathway for states to develop their own regimes to oversee certain issuers under \$10 billion in circulation, certain categories of issuers. So from that perspective, states will still have a role with stablecoins.

In addition, the GENIUS Act ensures that on areas of fraud and consumer protection, states will still have a voice. And as we're looking through where the federal government is on the GENIUS Act rulemaking, Treasury has had a series of rulemakings that have gone through for notice and comment period. One of those within the GENIUS Act is determining what a substantially similar framework at the state level to the federal level for issuers looks like. So that all being said, with that now being law, I think that's a really good indication of how there is still roles for states to be played here.

Chair Willis: Yeah, and I'll just make one comment on that, Representative Majeed. We, you know, have a desire as a part of this interim committee to try to craft some legislation that will help us influence the work at the federal level so that it's more amenable to what North Carolina wants to do and what would be favorable for us. And so I think twofold. One, we want to be able to set up that comparable entity, but we also want to be able to try to drive and help shape the federal policy.

Rep. Majeed: So, I like your answer. So, as far as North Carolina's concerned, would you say we're in the vanguard of this situation in the United States by forming this committee, as relates to other states?

Chair Willis: Yes, sir. I think we are one of a handful of states that are out ahead of this, and North Carolina has been, you know, at the forefront of this with the technology and the policy that we've put in place a few years ago to kind of lead us down that path. We are certainly in the forefront.

Questions from Rep. Cunningham to Mr. Postupak.

Rep. Cunningham: So I want to go to Ethereum 2015. So I want to kind of understand with the decentralization there's multiple entities involved. So that's all over the world, right?

Mr. Postupak: Yes, that's correct.

Rep. Cunningham: Okay. So are we currently using the digital oil to do processing for smart contracts for purchases of crude oil in the in the world? Are we doing it?

Mr. Postupak: So in reference to Ethereum as digital oil, it refers to not only the Ethereum network but the Ethereum digital asset, the token. So it's it's really a turn of phrase to describe when you initiate a smart contract transaction or you're transacting to interact with a decentralized application. Similar to how regular oil helps power cars and engines and things along those lines, Ethereum as digital oil allows you to power the decentralized computer, the decentralized applications that live on Ethereum.

Rep. Cunningham: Thank you, I was trying to understand that. So let me go back to the blockchain because I want to have a clear understanding. Somebody explained it to me that the security in the blockchain, you have a origin where you start, but millions connect to that one. You got another blockchain and another blockchain and maybe 200,000 more in that one little block. Is that what secures it because you got so many individual blocks connecting the chain? So that you got the if you go back to the original block it's too many in there to take the whole block down?

Mr. Postupak: Yeah, thank you thank you for that question. Um, that that is exactly um how I think of it in terms of blockchain security. It is that cryptography, it's that ability that anyone can view the code, improve the code, things along those lines. But to your point, um as you are adding blocks of data to the blockchain, you are adding more cryptography and blocks that are new blocks are calling back to information in old blocks. So it require you to to change what happened previously and the amount of energy, the amount of resources, that that would require is essentially I would say impossible.

Alexander Jivov, Director of Enterprise Sales, AvaCloud, Ava Labs, and Anthony Janocko, Senior Web3 Solution Architect, Ava Labs, gave a presentation on a case study of blockchain technology usage at the California DMV. (Attachment 2)

Question from Rep. Cunningham.

Rep. Cunningham: I saw the acronym F-R-N-T and I was trying to figure out what did the acronym stand for?

Mr. Jivov: Thank you for the question. Yeah, FRNT stands for Frontier. So it's the Frontier token.

John Bridge, President, Trust Stamp, gave a presentation of blockchain technology usage for property records.

Comment from Chair Willis.

Chair Willis: Thank you, John, that was very enlightening. I think, just the different ways that states are already using or looking at this is certainly interesting, and I think it's clear that, as you mentioned, this isn't just a fad or a passing thing in time. This is the future of how we're going to do data processing and data retention, and so whatever we can do to help get ahead and craft what that's going to look like and for the betterment of North Carolina and the efficiency of our government, I think we're all for.

Questions from Rep. Majeed to Mr. Bridge.

Rep. Majeed: Just for my clarity, you said you deal with state governments, sovereign states, and corporations?

Mr. Bridges: My company is primarily currently in the banking sector in the U.S.. Overseas we are involved more with government, and we did build something for the federal government here domestically. But we do not have currently any state projects, but I did register an entity in the state of North Carolina to build our StableKey. So we are a subsidiary here in North Carolina.

Rep. Majeed: You know, I mentioned that our Treasurer was investing in the blockchain assets investments for people's funds, retirement funds, and that kind of thing. I know Representative Orr asked a question about the security of that whole aspect. You know, we have a lot of theft and stuff in the banking system period. I mean, it's so much that they deal with every on a yearly basis.

Now blockchain is new, relatively new, and people are looking into it as it relates to security. So how would you—your company specifically—is it a smorgasbord of different entities like what they do like—is it a

CrowdStrike? Is it a Palantir? Is it a Salesforce/Snowflake? What you know in this area? I mean, it's all-encompassing. You know, companies like your companies to to deal with this threat of theft and pilferage. You know, how would you describe yourself in relationship to, you know, what you have to offer there?

Mr. Bridges:

Okay, great. There are two pieces to that. Um, I want to address first the security issue of of like the crypto investments and also crypto payments. In terms of payments, you have the ledger which makes those payments immutable and publicly visible and traceable. So, as a payment system it's very secure, and you can't go back and and alter um the record on those payments.

In terms of the investment for investing in ETFs or other specific types of crypto that really comes down to investing in the in the reliable assets and not, you know, there there are a lot of meme coins and other cryptocurrencies that you would not want to invest in. But there are very good uh cryptocurrencies that are stable and trustworthy. And there's going to be fluctuation, but you know, when you're investing long-term that's a safe investment in my opinion. I own some crypto as well.

In terms of my company, the the companies that we're closest to would be like Clear, um when you go through the airport and they scan your face. We are a biometric company, but we're a privacy-first company. So we we designed a technology that runs a biometric template through a neural network, creating a token. And we only use that token to do a zero-knowledge proof comparison uh with a subsequent capture. So that token cannot be reversed back into the original biometric. So this protects that biometric data from a potential breach. So it protects the consumer from losing sensitive biometric data. I was part of the OPM data breach um several years ago, so some hostile foreign government has all my biometrics now. I can't get those back.

Rep. Majeed:

So you would consider Bitcoin and Ethereum as one of the most stable aspects of this Bitcoin..?

Mr. Bridges:

I would consider, you know, Bitcoin fluctuates a lot. I've watched it go from \$0.23 in 2010 to \$120,000 earlier this year.

Rep. Majeed:

When I mention stable, as I'm talking about not the volatility. I'm talking about the network reliability, people accessing the network, and that security aspect.

Mr. Bridges:

Absolutely. Yeah, that's probably the single greatest aspect of cryptocurrency is that it's a peer-to-peer—it's designed as a peer-to-peer

system. So I traveled to Peru several years ago, and I purchased a trip from a local company, which means I had to send them money through the SWIFT network. So they gave me a SWIFT code for their bank and I went to my bank and it took a week for that to resolve, for the for it to go through the system. And it was expensive. I paid like \$60, I think, for that transaction. Whereas I could have done that same transaction using cryptocurrency in near real-time. So accessing those funds and being able to use those don't require a bank being open or, you know, the complexity of the current financial system.

Question from Chairman Willis to Mr. Bridge.

Chair Willis: Yeah, I if I could just follow up on [Rep. Majeed's questions]. We hear a lot about that and I think, you know as we think about fraud and theft and scams within the financial industry today, I mean we're seeing it all over the board and, whether it's folks calling in and trying to get your credit card or get you to buy gift cards and send it in or submit your card information to them so they can go and run up charges.

But I mean in terms of the cryptocurrencies I think to Representative Majeed's point, I mean how stable and secure are the coins themselves or the assets themselves in terms of being able to be hacked or to be, you know, stolen from someone else? I know there is a part of the blockchain itself, is there a record of ownership within that so that if I took some from him, would it still show his ownership of that?

Mr. Bridges: Oh no, that's a great question actually, that's kind of one of the things my company's building. But no, the blockchain itself is considered pseudonymous, so it's not anonymous because you can see the transactions moving, and there are companies that can kind of figure out large movements of money where those are coming from and where they're going—those are companies like Chainalysis.

But in terms of actual ownership, you control those funds with your seed phrase, and that seed phrase—[Mr. Postupak] talked about it earlier—it was that key where he showed the set of keys. So your ability to move those funds requires you to provide that seed phrase. So one of the things that my company has designed is called a "soul-bound wallet." And what that is is a wallet or an asset that's tied to a person's biometric, or a biometrically derived token.

So, one of the things that's risen significantly this year is an attack called a "wrench attack," which is a real-world attack where bad actors know that someone is publicly, visibly a Bitcoin holder—maybe a large volume holder—they will go physically force that person to reveal their key, that

private key. So these have resulted in fingers being cut off, people being taken at gunpoint. It's a serious rising problem. I actually published a paper on this a week or two ago about operational—what's called "OpSec," operational security—is one aspect that people that are publicly known to have Bitcoin should probably engage in.

And then the soul-bound wallet would prevent that person that's stealing it from liquidating it because they would have to register a biometric to be able to move those funds a second time. So there are ways to sort of secure it, but usually what I would say is good hygiene: having a trustworthy wallet—there's a process called "cold storage" where you move those assets off of the public blockchain onto a physical device that you can put in your safe or somewhere where it's not readily accessible. There are processes that are just good practice, and I think as, particularly with stablecoin as it becomes more ubiquitous, we'll see a lot more of those systems coming online where companies are taking advantage of the security aspect to ensure people's funds aren't being stolen.

Questions from Rep. Dahle to Mr. Bridge.

Rep. Dahle: Thank you, Mr. Chair and thank you, Mr. Bridge, for coming. So number one, you nodded your head when I said something about voting. Is—and this is just an aside—have you had any experience with that?

Mr. Bridges: I haven't had any experience with it, but when I first started looking at Bitcoin 15 years ago, the two things that I thought that Bitcoin would be amazing for were payments, which we're now seeing explode with the GENIUS Act and the the rapid evolution of stablecoins, and voting. And the reason for voting is that if you think about it in terms of the blockchain and that public ledger, when you're talking about transparency, I know I voted and I know I showed my ID, but I don't know that my vote counted. Right? So if I had my seed phrase, I could go back into the voting log and I could see there were 50,000 votes for this candidate. But then I can see my public key in that set of votes, or I can pull up my voting record and look back at my past record of voting and see everyone I voted for—that counted in that public ledger.

Rep. Dahle: So it appears to me—and I asked this question the first time this committee met—that there are companies that set up technology for other companies. I.e. so that's how the money is made, because I was trying to figure out where the dollar was, because it seems to be there's gotta be a dollar somewhere. So what I'm understanding is I engage with you to keep my information safe, and you then build out a company of individual computers or larger computers that then compute said data that becomes blockchain.

Mr. Bridges: So the blockchain is decentralized, so you can run a node—this really is like an architecture question. There's different ways to design a system like this, but I think that ideally, uh this type of system would have each county would have a node that's running on the blockchain. So they're actually providing their own um processing power. And then the state also. So you could run this entire network um through existing infrastructure.

Rep. Dahle: I guess I wasn't asking about infrastructures as much as I was asking, we pay you, you then either sub or have it internally—the information—I'm talking about who keeps the information, how's it kept. I understand it's secure, but I'm just trying to figure out, because the way it has been explained to me in the past is that it's almost as if it gets sent out, somebody bids on it, they come back and whoever has the lowest bid gets that contract. But what I feel like is that there are companies that now are holding those contracts per se or have those—I just don't get the whole transactional—

Mr. Bridges: Yeah, I'll see if I can clarify that a little bit. I'm not eloquent when it comes to this, but I'll try. So you have uh let's say that the—so the technology provider, say my company, were to come in and build the infrastructure or help you um tie that into the APIs for that technology. The blockchain itself could be completely operated on state and county systems. So all of the actual—even the ledger and logs—could be on the computer network owned by the state. Or that would be the way I think would be ideal. And then—so the underlying data, the—say the land record, the physical land records and the regular databases, the vendor can remain the same and who the current vendor that the county's using to maintain those records, and the blockchain would access that would tie into those records and record any changes that are made to it. But that also could sit at the county level as a node. And I'm not sure how Ava does that, but if they want to weigh in, but that's kind of how I envision that process would work.

Chair Willis: So if I could just interject there. So basically we could come in and partner with the Board of Elections at the state and the local level and they would have housed all the data, uh but your vendor would be providing you with the technology to be able to capture uh that and then—and then get it back to them.

Questions from Rep. Cunningham to Mr. Bridge.

Rep. Cunningham: So I want to go back to the Wyoming thing. It looks like they had to set up a Wyoming stable token commission, looks like they had to do that. But one of the things that we talked about is once they do go into the blockchain and if you come in and connect to the legacy system, it's

similar to cloud. So who is going to pay for that portion of—like similar to cloud—even though you're able to save us some money by coming in, connecting to the old system.

Mr. Bridges: No, that's a great question. Thank you, ma'am. So my company does use the largest cloud provider and then localization comes in, we're an international company. So, like we have GDPR, so stuff that's happening in the U.K. can't cross and on a server in the U.S. because of GDPR. So we're able to do localization, but with the blockchain you don't actually have to store anything in the cloud. It could be actually in the blockchain and those nodes would exist on state systems. So in terms of data storage, which is one of the most expensive parts of setting up a system, that can be done on existing systems.

Question from Rep. Cairns.

Rep. Cairns: I was interested in understanding digital wallets a little bit more, as someone who has bought and sold digital assets through like Robinhood and through Coinbase. I guess it's my understanding for me to send or receive them to others, I would need some form of digital wallet. And my question is, as I hear about other companies developing digital wallets, can anybody develop a digital wallet, and how would I go about choosing one? I mean, what protections are in place for the for the consumer?

Chair Willis: Thank you for the question, Representative Cairnes. We will ask our partners to follow up in lieu of the time that we've got

The meeting stands adjourned at 3:35 PM.

Representative David Willis, Co-Chair
Presiding

Sean Harrington, Committee Clerk