

Local Government Blockchain Resource (LGBR) Project @USF Proposal

The Center for Law, Tech, and Social Good proposes a four-year program to equip state officials with blockchain expertise through tailored training, practical resources, and a continuously updated legislative repository, fostering coherence and trust in state-level blockchain regulation. This initiative addresses fragmented legislation and the need for government-specific guidance to support informed policy-making.

EXECUTIVE SUMMARY

The regulatory landscape for blockchain and cryptocurrency in the United States is evolving rapidly, yet inconsistently across states. The result is fragmented and sometimes contradictory legal frameworks. The Center for Law, Tech, and Social Good (Center) at the University of San Francisco proposes a two-year proof of concept program to create a comprehensive, trusted resource for state officials.

This program aims to unify and enhance state-level understanding of blockchain-related legislation, improve the accessibility of relevant legal definitions, and offer training workshops tailored to the unique challenges faced by policymakers. Leveraging the Center's Blockchain Legislative Definitions (BLD) Project, this initiative will directly address the demand for government-specific expertise and resources.

With activities that include government training, practical use-case materials, and continuously updated research, this program will provide state officials with actionable knowledge and inform great knowledge and expertise amongst policymakers. The funding will support faculty expertise, a dedicated program manager, essential operations, and resources to create a secure digital platform accessible to officials nationwide. By filling a critical gap in blockchain legislative resources, this program aligns with the Center's mission to advance the social good by pioneering educational and legal solutions for emerging technologies.

CHALLENGE

Blockchain technology and cryptocurrency are gaining prominence and are increasingly subject to state regulations. However, these inconsistent regulations create significant challenges for legislators, policymakers, and enforcement agencies.

Fragmented Legislation

The landscape of blockchain legislation across the United States is highly fragmented, with states adopting laws at varying rates and often using inconsistent terminology and regulatory approaches. This patchwork of regulation complicates the environment for policymakers, who must navigate a range of definitions and legal interpretations that differ across jurisdictions. The Blockchain Legislative Definitions (BLD) Project highlights that terminology surrounding blockchain and cryptocurrency is not standardized, leading to confusion and potential compliance challenges for both state officials and businesses.

Legislative activity is uneven, with some states, such as California, New York, and Wyoming, leading in blockchain regulation, while others have little to no relevant legislation. Wyoming, for instance, has actively positioned itself as blockchain-friendly by refining laws to clarify digital asset definitions and tax statuses. This proactive stance is uncommon, as most states lag behind in adopting comprehensive regulatory frameworks for blockchain, leaving officials in those jurisdictions with limited resources or legislative guidance.

In addition to disparities in legislative activity, the scope of regulations varies widely. Blockchain-related laws span diverse domains, including finance, taxation, privacy, and healthcare, each of which may involve unique definitions and regulatory requirements. The BLD Project has identified that only three out of 18 major sources on blockchain legislation align with a comprehensive repository model, highlighting the difficulty in establishing a unified understanding of these laws. This variation across sectors further complicates efforts to create cohesive, effective blockchain policies that can operate smoothly across state lines.

This fragmented regulatory environment affects policymakers, businesses, and citizens who interact with blockchain technologies. Compliance becomes a burdensome and costly process for companies when regulatory definitions and requirements differ across states. For citizens, the lack of clarity and coherence can lead to confusion about the rights, responsibilities, and legal protections involved in blockchain transactions. Consequently, the need for a centralized, trusted source of information—like the BLD repository—becomes crucial to help state officials and stakeholders navigate this complex, evolving landscape.

Need for Trusted Resources and Expertise

Although blockchain technology is widely discussed, trusted and accessible resources tailored to the needs of government officials are scarce. Currently, most resources available are industry-centered, leaving state officials without the guidance required for confident decision-making on policy.

State officials lack a centralized, accessible source of trusted information regarding blockchain technology policy, resulting in challenges for policymakers who seek guidance on creating effective regulations. While federal resources exist, such as guidelines from the Financial Crimes Enforcement Network (FinCEN) and the U.S. Securities and Exchange Commission (SEC) on cryptocurrency and blockchain

compliance, these are often designed with broader national financial and regulatory standards in mind. Federal frameworks provide general directives on issues like anti-money laundering and securities classification, but they don't address state-specific concerns, leaving a gap in practical guidance for state-level applications.

At the state level, officials frequently need more localized resources that consider unique legal and economic conditions, such as specific tax implications, privacy concerns, and consumer protection laws related to blockchain. For instance, while federal guidelines offer broad advice on topics like blockchain's potential in finance, they do not extend to local issues such as property recording or voting systems that states may want to explore. The absence of state-specific resources makes it challenging for officials to confidently apply federal principles to their distinct regulatory environments, as they lack customized insights into both the opportunities and risks associated with adopting blockchain in localized services.

This lack of trusted, targeted resources also means that many state officials must rely on industry-centered sources, which may carry biases or promote specific interests that do not align with public sector goals. Industry resources often focus on private sector applications or emphasize the technology's potential without addressing regulatory concerns, legal liabilities, or ethical implications pertinent to government use. This misalignment restricts state officials' ability to create balanced, well-informed policies that consider both innovation and public protection, underscoring the need for reliable, government-specific resources to support informed, independent decision-making.

Gap in Government-Specific Use Cases

Officials need examples that apply to government functions, such as tax collection, public records, and cybersecurity. Without tailored use cases, policymakers struggle to foresee the implications and benefits of blockchain technology within state governance. There are some efforts to explore blockchain applications; the Department of Motor Vehicles (DMV) to put licenses put 42M car titles on blockchain.¹ But that's just one initiative.

Government officials seeking to incorporate emerging technologies like blockchain into public policy need specific use cases demonstrating practical applications in areas such as tax collection, public records management, and cybersecurity. Current examples, however, tend to focus on private-sector applications rather than illustrating how technology can enhance government functions. Entities like the National Institute of Standards and Technology (NIST) provide some government-oriented guidelines, particularly in cybersecurity,² but these are not comprehensive enough to cover blockchain's potential in diverse government services. Policymakers often lack a well-rounded view of how blockchain can be applied within their unique regulatory frameworks.

In some cases, federal bodies like the Department of Homeland Security (DHS) and the Department of Energy (DOE) explore blockchain's potential in specialized contexts, such as securing energy grids³ and managing digital identities.⁴ But these use cases remain limited and do not address broader, day-to-day government functions that states could apply, such as simplifying property transactions or streamlining welfare program management. This lack of practical examples tailored to state-level needs leaves many

¹ <https://www.reuters.com/technology/california-dmv-puts-42-million-car-titles-blockchain-fight-fraud-2024-07-30/>

² See, e.g., <https://www.nist.gov/blockchain>

³ <https://www.ledgerinsights.com/department-of-energy-blockchain-electricity-grid-cybersecurity/>

⁴ <https://www.dhs.gov/science-and-technology/blockchain-portfolio>

officials without clear guidelines for deploying blockchain to enhance transparency, efficiency, and security in critical state functions.

Without government-specific use cases, state officials are often left to interpret private-sector successes for public sector applications, which can result in misalignment with public policy objectives. For example, the General Services Administration (GSA) provides blockchain pilot programs in acquisition processes,⁵ but these efforts have yet to reach comprehensive, accessible models for state governments. More widely available and relevant government use cases would support states in developing technology policies that improve service delivery, ensure compliance, and build public trust in blockchain applications.

Need for Government-Specific Trainings

Traditional blockchain training often targets private sectors and technical roles. There is a need for government-oriented programs that emphasize legal applications, jurisdictional challenges, and regulatory compliance—allowing state officials to gain practical, applicable knowledge.

Two key issues highlight the need for government-specific blockchain and emerging tech trainings:

Tailored Content for Varied Governmental Needs

Government officials operate in distinct regulatory and operational contexts that require specific knowledge beyond what general tech training can provide. Each agency has unique challenges, whether they involve compliance with state laws, managing risks, or integrating new technology into existing infrastructure. Tailored content addresses these unique needs, enabling officials to directly apply what they learn to their specific roles. This approach supports more informed decision-making and strengthens the ability of state agencies to implement tech solutions that align with regulatory requirements and public service goals.

Real-World Example

Proposed legislation in Congress would require the U.S. Department of Veterans Affairs (VA) to conduct “*conduct a comprehensive study on the feasibility, potential benefits and risks associated with using distributed ledger technology across various programs and services.*”⁶ To effectively oversee this initiative, VA officials will need specific training on both blockchain technology and health data regulations like the Health Insurance Portability and Accountability Act (HIPAA). General blockchain training alone will not suffice, as VA officials required a tailored approach that addressed the intersection of blockchain’s capabilities with strict healthcare privacy and security standards.

Rapidly Evolving Technology and Legal Landscape

The rapid pace of advancement in technologies like blockchain and artificial intelligence (AI) creates significant challenges for state officials tasked with regulating and implementing these tools within government frameworks. As technology evolves faster than traditional training and education models can keep up, officials need ongoing, specialized training to understand new developments and their legal implications. This ensures that state policies remain relevant and effective, avoiding outdated or misinformed regulations that could hinder innovation or fail to address emerging risks.

⁵ <https://gsablogs.gsa.gov/technology/2018/10/29/think-it-modernization-think-gsa/>

⁶ <https://www.nextgov.com/emerging-tech/2024/07/new-bill-pushes-va-examine-how-blockchain-can-enhance-its-work/398477/>

Real-World Example

In recent years, the state of Wyoming has actively embraced blockchain, positioning itself as a leader in blockchain legislation to attract businesses and promote innovation. However, Wyoming's early adoption has required frequent updates and revisions to laws as the technology continues to evolve. For instance, Wyoming was one of the first states to pass legislation recognizing digital assets as property and allowing the creation of "blockchain banks." But as blockchain use cases and capabilities expand, Wyoming faces ongoing challenges in refining its regulations to ensure they provide adequate oversight while supporting innovation.

PROPOSAL

This proposal establishes a program at the Center that builds trusted blockchain knowledge and resources specifically for state government contexts. The Center proposes a four-year funded program that will consist of three primary activities. For the first phase, a two-year project is proposed to launch.

Government Training Sessions

The program will offer in-person and virtual workshops that cover blockchain fundamentals, regulatory frameworks, and practical applications within state governance. Training sessions will address issues pertinent to state needs, such as inter-state legislative coherence, and offer sessions based on the BLD repository's insights.

The Center offers government training sessions designed to educate public sector participants on emerging technologies and related legal challenges.⁷ These trainings are led by experts from law and computer science, and they are customized to meet the specific needs of each government organization. For instance, while some agencies require introductory sessions like "Blockchain 101," others request advanced training tailored to address complex issues they encounter.

Sessions are held virtually via Zoom and last between 60 and 90 minutes. In-person sessions are available depending on location, and topics range from foundational concepts in blockchain and AI to more specialized issues, such as the ethical and regulatory implications of decentralized technology for government. The Center has delivered trainings in single sessions or series formats, allowing for a thorough exploration of topics and flexibility in scheduling.

The impact of these programs is substantial, with over 1,000 individuals trained since 2022. The Center has worked with organizations such as the National Association of Attorneys General, the California Department of Financial Protection and Innovation, and the League of California Cities. These sessions provide participants with a comprehensive understanding of how emerging technologies intersect with evolving legal frameworks, empowering them to make informed decisions within their governmental roles.

Use Case: Custom Compliance Training for Financial Regulators

State financial regulatory agencies, such as those overseeing consumer protection, face the challenge of adapting to new financial technologies while enforcing existing compliance standards. For instance, the rapid growth of cryptocurrency trading platforms requires regulators to understand both the technology and specific compliance risks associated with digital assets. Tailored training on blockchain technology, combined with case studies on regulatory compliance, enables financial

⁷ <https://www.usfca.edu/law/school-life-careers/centers/center-law-tech-social-good/classes-trainings>

regulators to monitor emerging technologies effectively, develop appropriate policies, and conduct enforcement actions as needed. Customized content might focus on transaction monitoring, fraud prevention, and licensing requirements for cryptocurrency firms.

Development of Use Cases and Practical Resources

Materials tailored to state-level needs will be developed, highlighting blockchain use cases relevant to government operations (e.g., enhancing security in public records, tax processing). This material will support government officials as they consider integrating blockchain technology or updating current legislation.

Use Case: Updating Financial Compliance Standards

With blockchain-based financial products like decentralized finance (DeFi) growing in complexity, state officials must adapt compliance standards to address new risks such as smart contract vulnerabilities and liquidity concerns. Regularly updated training on blockchain's evolving financial applications can equip officials with the knowledge to modify or introduce regulations that protect consumers without stifling innovation. For instance, training might include insights into DeFi protocols, their risks to consumers, and potential frameworks for monitoring these decentralized products.

Ongoing Research and Repository Expansion

The Center's Blockchain Legislative Definitions (BLD) repository will continue to be a core program resource. Regular updates to the repository will ensure that it reflects the most recent legislative terminology and trends, offering a dynamic and reliable reference. Additionally, comparative analysis will be included as the repository expands to other jurisdictions, enabling state officials to benchmark policies against international regulatory practices.

FUNDING REQUEST

To implement these activities, the Center seeks four years of funding. The budget will cover personnel, operations, travel, and digital infrastructure, as detailed below. The initial launch is for two years.

FUNDING

We are seeking funding to support a transformative project over the next two years with a goal of raising \$800,000. To launch, the primary funding source sought includes a *Platinum and Name Funder* at the \$500,000 level, which will serve as the project's cornerstone, providing substantial resources and branding opportunities for the lead sponsor. We also invite two *Gold Funders* at \$100,000 each and four *Silver Funders* at \$25,000 each, creating a diversified support base. Together, this funding will enable impactful outcomes, including expanding research capabilities, fostering innovation, and building sustainable, long-term community resources aligned with our mission.

- Platinum and Name Funder—\$500k
- Gold Funders—\$100k (2)
- Silver Funders—\$25k (4)

TWO-YEAR PROOF OF CONCEPT BUDGET (rounded)

CATEGORY	YEAR 1	YEAR 2	TOTAL
Director/Faculty Lead (Salary: \$150k, 38% benefits)	\$241,000	\$241,000	\$482,000
Operations	\$0,000	\$50,000	\$20,000
Travel	\$10,000	\$50,000	\$20,000
Website and Digital Platform	\$25,000	-	\$25,000
Total (w/out Indirect Costs)	\$503,000	\$478,000	\$547K
Total (w/25% Indirect Costs)	\$670,000	\$637,333	\$729k

FOUR-YEAR FULL BUDGET (rounded)

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
Director/Faculty Lead (Salary: \$150k, 38% benefits)	\$241,000	\$241,000	\$241,000	\$241,000	\$964,000
Program Manager (Salary: \$80k, 38% benefits)	\$137,000	\$137,000	\$137,000	\$137,000	\$548,000
Operations	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Travel	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Website and Digital Platform	\$25,000	-	-	-	\$25,000
Total (w/out Indirect Costs)	\$503,000	\$478,000	\$478,000	\$478,000	\$1.937M

Total (w/25% Indirect Costs)	\$670,000	\$637,333	\$637,333	\$637,333	\$2,582,667
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ACTIVITIES

Programming

The program will run biannual workshops to provide up-to-date training for state officials. Topics will include the basics of blockchain, regulatory requirements, data security, and real-world applications within state government frameworks.

Research

The BLD repository will continue to be updated with new legislative data, ensuring state officials can access the latest definitions and terminology. The repository will feature data on federal and state laws relevant to blockchain and cryptocurrency, addressing the issues of fragmented terminology and regulatory disparity. Future expansions will include international comparisons, providing U.S. officials with insights into other jurisdictions' regulatory successes and challenges.

Trainings

The Center will conduct multiple in-person and virtual training sessions throughout the program. These hands-on sessions will involve case studies, interactive discussions, and practical exercises, enabling officials to apply learned principles in real-world legislative and regulatory contexts.

REQUIREMENTS

Staffing: Dedicated faculty, a program manager, and operational support staff.

Partnerships: The Center will establish partnerships with legal experts, state officials, and technology providers to support training content and expand the repository's relevance.

Digital Infrastructure: The program will require a secure platform for digital resources, workshop materials, and real-time updates to the BLD repository.

TIMELINE

YEAR 1	YEAR 2	YEAR 3	YEAR 4
<ul style="list-style-type: none">• Develop the initial curriculum for government-specific blockchain training and secure partnerships with initial states.	<ul style="list-style-type: none">• Expand state partnerships and conduct onsite training sessions.	<ul style="list-style-type: none">• Scale online resources, incorporating comparative analysis with international regulations.	<ul style="list-style-type: none">• Finalize and evaluate the program's impact, publish findings, and provide a summary of best practices for policymakers.
<ul style="list-style-type: none">• Launch the first update cycle for the BLD repository, incorporating new legislative definitions.	<ul style="list-style-type: none">• Gather feedback from officials and update the training curriculum and repository based on real-world applications and needs.	<ul style="list-style-type: none">• Offer advanced training sessions on new blockchain use cases relevant to state officials.	<ul style="list-style-type: none">• Secure additional funding or explore self-sustaining revenue options, such as paid access to the repository for private sector partners.

CONCLUSION

This program will empower state officials to understand, navigate, and leverage blockchain-related legislation more effectively, mitigating the fragmented and complex regulatory landscape that currently exists. By establishing the Center as a trusted resource, this initiative will position USF at the forefront of law and technology education for public benefit, directly impacting state governance and promoting cohesive blockchain policy across the United States.