Lattice

Lattice Gateway

Lattice was conceived by core members of the Constellation Ecosystem

Overview

The decentralized finance (DeFi) revolution has created one of the most popular use cases in the cryptocurrency industry while creating a viable economic path for Web3 at the application layer. Speculation of cryptocurrency has evolved with DeFi to incentivize community participation through governance, which has paved the way for the foundation of the stakeholder economy with decentralized governance tied to bounties and rewards. While DeFi has created unparalleled adoption, the barriers to entry still remain high by requiring multiple currencies, user interfaces, and an extensive knowledge in complex financial instruments to interact and transact successfully. Furthermore, DeFi is still prone to price volatility associated with speculating on currency adoption and utility. On the other hand, DeFi projects have evolved to establish new metrics, like total value locked (TVL), that align long term support for visions that create technical parity with traditional finance. While these advancements have brought in more development resources, user adoption, and utility, DeFi will still require the underpinning and connection to real world utility (e.g. data) for a more sustainable growth trajectory.

Lattice Gateway, formerly called Lattice Exchange (v1), was originally launched in 2020 with the vision of creating ecosystem liquidity for Constellation Network's Hypergraph (a native mainchain) and other native blockchains. Since 2020, the cryptocurrency landscape has evolved dramatically following the advancements of decentralized finance (DeFi), including governance, yield optimization applications, and ecosystem-specific decentralized exchanges (DEX). Lattice has observed many successes and failures in projects across theDeFi landscape, which have helped to evolve our vision of the customer journey and the need to tie external revenue sources and utility to cryptocurrency. Lattice Gateway (Lattice v2), is an expanded vision that creates a more holistic and sustainable DeFi platform by productizing the tokenization of a data exchange while enabling liquidity generation mechanisms at each stage of the Token Lifecycle: from ideation to early stage token pre-sales to treasury management.

The following whitepaper defines each feature of Lattice Gateway and how Lattice captures adoption at every point in the Token Lifecycle. For projects, it offers both the building blocks for success and access to liquidity at every stage of their journey. For users it provides easy access to new projects at different stages in their maturity and products to earn rewards from. The $LTX and veLTX tokens play an extensive role throughout the

Lattice Gateway ecosystem, from utility to governance, giving holders the incentive to participate in numerous ways.

1. Incubation and Advisory: The Flight Program provides advisory support for new companies looking to launch a token. The program guides an entrepreneur through each phase of their Token Lifecycle (ideation, fundraising, token liquidity) with the intention to bring innovative solutions to the ecosystem. In exchange for advisory services, a project will dedicate a percentage of their token supply which will be distributed to veLTX holders.

   Over 70 companies have successfully completed the program to date.

2. LaunchPad: An application designed to connect early stage projects to potential backers of a token offering or product sale. The LaunchPad requires users on Lattice to use the $LTX and veLTX tokens to secure placement in a private token offering.

   Six companies have successfully completed their community-based token offerings on the Lattice LaunchPad. All six were tremendously oversubscribed and far exceeded their goals.

3. Node Management: Our vision that everything is a node and offers value and resources back to the network, is the platform's third application. The Node Management application, on Lattice, ties rewards and bounties to a designated data source. By connecting a data source such as a Twitter account, a health monitor watch API, Constellation Network's Hypergraph nodes, or a Dor Traffic Miner, we create programmatic rewards tied to data feeds. Furthermore, a project may choose to incentivize veLTX holders or existing token holders to create a node campaign and improve reward emissions. This is an open platform agnostic to any ecosystem, data source, or project regardless of the chain the token is minted on.

   V1 of the Node Management platform consists of staking rewards campaigns where the reward emissions are tied to a technical solution. Most notably the Constellation Soft Node Program which locks up approximately 50% of the

circulating supply of $DAG per month.

4. Liquidity Pools: Every project needs to source new liquidity. Lattice provides the ability to swap or exchange a project's token for other cryptocurrencies. In the spirit of decentralization, we have partnered with Exolix to create the minimal viable product (MVP) for swapping cryptocurrencies across ecosystems. Exolix is an aggregator of centralized exchanges and supports many of our incubated projects. To attract deeper liquidity from multiple blockchain ecosystems and networks, $LTX will be distributed as a reward mechanism for liquidity providers.

   We will continue to aggregate liquidity pools and upon technical readiness and increased ecosystem liquidity, we will introduce an ecosystem decentralized exchange (DEX) and cross-chain swaps built by a third party. This will provide further liquidity while rewarding $LTX for contributing to liquidity pools. As thinking evolves around implementation of the DEX, it may be of interest to develop a new token that is solely focused on DEX rewards. In this event, airdrops will be distributed to existing $LTX/veLTX holders.

5. Governance through veLTX: The new governance program disseminates control of Lattice Gateway business to $LTX holders. For governance-related purposes, a second, non-transferable token, called "veLTX" is minted. Platform users may only accrue veLTX by locking their $LTX tokens into a smart contract. Those who elect to lock their tokens for longer periods of time will earn greater voting power. veLTX holders may receive incentives and bounties from external projects that are featured on the Lattice platform.

   veLTX will debut upon the launch of Lattice Gateway V2 where we will initiate an airdrop of ecosystem tokens from projects that have successfully completed the Flight Program.

6. Bonding: Pulling from a popular DeFi bonding application, bonding will be introduced in an effort to expand liquidity into the ecosystem. A bonding campaign allows a project to offer its own token as a reward in return for users agreeing to

provide liquidity in the form of an LP token.
Coming soon.

Our goal is to make web3 innovation and applications easy to discover and navigate. Each product plays an essential role in guiding and educating users about innovative companies in web3 by providing a single user interface and gateway into the entire Token Lifecycle. To date, our development and deployment strategy has been to seed the foundational products of the Lattice Gateway, leveraging multiple blockchains and their tools, create MVPs for each product, and then evaluate customer engagement and monetization strategies. With these foundational products in place, we delegate decentralized control of future development projects, prioritization of the roadmap, all the while making our business strategies known to veLTX holders. Lattice Gateway brings together all the key elements necessary to support entrepreneurs and provide an easy one-stop shop interface for web3 customers.

Token Lifecycle

A company's path to liquidity

By understanding the path to liquidity, the community can better understand our strategic design decisions and product roadmap. Cryptocurrency has given rise to a stakeholder economy: a concept that evolves the idea of traditional equitable ownership. As companies migrate over to web3 platforms, they mint tokens to give access to users who can then participate in the direction of the company. The tokens give people a "stake" in the entity which doesn't necessarily entitle them to equity based voting rights and preferences, but gives them marketing power, direction over the technological developments, and authority through liquidity that indirectly impacts a company. It is essential that every company understands the path to liquidity as it greatly impacts their stakeholder economy.

Each token/currency follows a broad but similar path to adoption: increasing token liquidity attracts developers, ecosystem speculators, community members, and perceived and intrinsic value. Therefore liquidity becomes a prime goal for any token issuer. The current approach to achieving token liquidity is fragmented, takes time, and relies heavily on centralized exchanges that capture the majority of trading activity. Companies need

influxes of liquidity at each stage of their journey which attract more users and developers: starting with pre-listing liquidity in the form of investment, to post-token generation exchange liquidity in the form of liquidity pools or market makers, to treasury management and runway needs. The liquidity comes at a cost to entrepreneurs with staking programs that constrict the circulating supply of a token, being siloed and ecosystem specific; conversely centralized exchanges require up-front fees and often third-party market makers to maintain order books. There is a need for a gateway that navigates a company through each stage of acquiring and provisioning liquidity.

Today, Lattice Gateway has built product offerings for early stage developments of the Token Lifecycle with the goal of providing a pathway to true token liquidity. Each stage is designed to attract liquidity, which is conceptually the Token Lifecycle: from concept and ideation requiring education and community building efforts; to token launchpad events that increase wallet distribution; bounty and incentive programs for supporting the direction of the company (which retains liquidity); and cross-chain swaps to attract liquidity from other ecosystems allowing users to migrate their governance participation and utility to other companies.

Lattice Products

1. Advisory and Incubation: Flight Program

After launching several tokens, watching hundreds get launched in the industry, and observing numerous successes and failures, we saw the need to educate entrepreneurs on how to navigate web3 and the cryptocurrency industry. In turn, this would help build an ecosystem of users that could discover omni-chain projects, create applications that would be built in an omni-chain capacity, and bring to light the unique use cases in web3. The Flight Program was launched as an educational accelerator program that navigates early-stage companies on how to implement token economies inside their company. The knowledge transfer provided in the program gives a framework and playbook for any company to build a reputable web3 entity while emphasizing community building, token utility, and a path to liquidity.

Companies with a concept are encouraged to apply to the Flight Program. This is the deal flow aggregator program upstream of Lattice Launchpad. Companies are directed to fill out

an application form which acts as both a screening tool for acceptance and a set of broad criteria of the requirements for a successful crypto project. The most important criteria at this stage are the **concept** and the **team** bringing it to life. To be selected, each project goes through a decentralized committee selection process.

The Flight Program is a 12-week course of lectures and material provided by Constellation Inc. and partners, all of whom are leaders in their fields. Partners range from service providers, exchanges, liquidity provisioners, and other ecosystem partners. Companies receive a dedicated Flight Attendant who shepherds the companies through the program while holding them accountable to key milestones such as a whitepaper creation, community marketing, legal and operational structures, listing strategies, and fundraising targets. The first cohort launched in 2021, followed by a second in Q1 of 2022, with approximately 70 companies learning about the Token Lifecycle and the criteria and tactics to launch and list a token. By nurturing and educating companies early in their development, Lattice has been able to curate a secure pipeline of deal flow which improves the probability of each company launching a successful project on its Launchpad.

2. Launchpad

Crowdfunding in web2 became a popular path for companies to seek out investment from communities of people around the world. In web3 and crypto, crowdfunding is an essential part to a project in achieving vast distribution of a token. However, during the ICO craze of 2017 and 2018, many of the exclusive private rounds were reserved for backers with deep pocketbooks, making it nearly impossible for the average crypto holder to access exclusive private rounds of a token sale. With a "community first" mindset, it was the intention to ensure that communities and the people who put in a lot of time and skill toward evangelizing the project, secure a spot in early stage private token offerings.

The Lattice Launchpad is positioned to help companies as they near token exchange listing and distribution. It attracts presale liquidity (capital) and offers token buyers a democratic and accessible way to participate in promising companies in the early stage of their journey. The Launchpad is chain agnostic and open to a company regardless of which token standard they use. Typically companies come to the Launchpad as part of a concise listing strategy when they are post-concept, incubation, and have already received presale backing. For companies that graduate from the Constellation/Lattice Flight Program, they

are prepped to apply to be listed on the Launchpad and to be presented to the governance board that conducts the initial due diligence. Applications are scored on transparent criteria and acceptance is based on the overall score (contingent on the project's legal standing and fundraise status) and voting by veLTX holders. Once a company passes the initial review, a community governance vote is held by veLTX holders (conducted on Snapshot) to list the project. This multilayer governance process ensures high quality listings on the Launchpad as companies are extensively vetted.

Once accepted, a project will be available on Lattice for a limited period of time. During that time users can soft stake their $LTX, or locked $veLTX[1], on our smart contract through the Lattice interface. Usually there are three pools available to stake[2].

> Example: Project A proposes three pools:
> - 5-7 day campaign to $LTX and $veLTX holders.
> - The three pools could be 1) 3,000 $LTX max; 2) 10,000 $LTX max; and 3) an unlimited pool.
> - Project A allocates 3 million tokens to the LaunchPad event.
> - The 3 million tokens of Project A are applied evenly to each pool (i.e. each pool would have a total of 1M tokens allocated for sale).
> - Users stake their $LTX/$veLTX to one or multiple of the pools up to the max amount (ex. 3,000 LTX for pool 1).
> - At the end of the staking period, the total number of tokens staked to each pool is tallied to calculate a percentage of tokens from Project A that they will be able to purchase out of each pool.

After the LaunchPad campaign, an export is provided to the project showing the total token allocation that each user should be entitled to, along with contact info for that user (email). At this point, all communication around the TGE (token generation event[3]) and purchase of tokens will be directly between the project's team and users. The project will inform users how many tokens they are allocated to purchase and provide those individuals with a crypto

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[1] See "Technical Overview: Acquiring $veLTX"
[2] Configurable based on the project's request.
[3] A token generation event is when the token is minted, distributed, and listed on a centralized or decentralized exchange.

wallet address to send payment (typically with a stable coin but it's up to the project team how they want to handle this). The project also decides whether to enforce other requirements at this stage (providing terms and conditions, additional AML verification, etc.). The project is responsible for airdropping/distributing tokens during their TGE to users that have successfully sent payment.

Both the projects and users benefit from the LaunchPad. Projects that are listed on the Launchpad benefit by gaining access to a large number of wallet addresses that garners visibility and awareness, with the additional benefit of gamifying token allocations to the Lattice community; conversely, users discover and have early access to a project's token before an exchange listing when price discovery begins. The LaunchPad is a critical component to early stage adoption, marketing, and distribution for nearly every project. Additionally, it presents an opportunity for product pre-sales and early marketing awareness around innovation.

3. Node Management

The Constellation community's interest around mainnet nodes created the concept "I am a node" - humanizing a technical validator function on the Constellation Network. The Node Management application evolves this concept that everything is a node and contributes resources to the network. On the Lattice Gateway, the Node Management platform is both a marketplace and dashboard designed to help people manage their rewards for providing resources to the network. Thus the platform provides a value exchange between data, resources collected, and contributed via a verifiable data feed, to a cryptocurrency reward pool. This creates true data transparency and a programmatic value exchange between an entity looking to collect data and a user willing to collect value from their contribution. Beyond contributing technical resources in exchange for cryptocurrency, people can contribute resources and skills, as long as it is verifiable in a programmatic sense (e.g., connecting a Twitter account to provide proof of marketing) in exchange for tradable currencies; a project can create an airdrop campaign around locking/staking their project's cryptocurrency; or any organization can set up a campaign that rewards people for providing data (e.g., Dor Foot Traffic Data, healthcare data, or any IoT device). The Node Management platform is an accretive marketing path for nearly any web2 or web3

company looking to tap into web3 users.

In Lattice v1, we introduced staking, Soft Nodes, and the DTM Dashboard as the MVP to Node Management. Staking incentivizes the locking or staking of tokens for a period of time in exchange for a cryptocurrency reward. The value exchange is essentially a "vote" by the community around a particular campaign that outlines a technical feature they want to build and locking the token in exchange for a reward shows the support for the project and their direction.

Three examples of node campaigns:

Data Registration:
- User pre-purchases a Constellation Dor Traffic Miner (DTM) and receives an NFT (non-fungible token) as a receipt for the transaction and proof of ownership.
- Constellation distributes $DAG as a reward for registering and locking their NFT on the Lattice Gateway.
- Once the DTM's are shipped, and users install the hardware data mining device, Node Management will provide users a dashboard to manage the data being collected and sold through exclusive partners like FourSquare.
- Additional bounties may be established based on the value of data from certain locations.

Constellation Soft Nodes:
- Constellation's soft node program on Lattice is designed to establish a pipeline of Mainnet nodes that validate transactions and throughput on the Hypergraph Network. This campaign simulates the potential global reach and scale of the Hypergraph Network.
- Constellation's soft node program requires users to stake 250k $DAG (the collateral required for a Hypergraph Mainnet node) in order to receive additional $DAG as a reward.
- Each month users are required to restake after their accrued $DAG rewards have been distributed.

Bounties:

- Project A creates a bounty campaign to reward people in Project A's native token for creating a marketing campaign, growing their Twitter or Discord following, or for reviewing code.
- Project A then establishes criteria for the bounty and task.
- Project A then rewards the user(s) in their native token for connecting their Twitter account and showing verifiable proof of the completed task.

The Node Management application and platform is a glimpse into the Future of Work, validated on the basis of data, where people can earn rewards for providing their data and resources to the network. It provides an easy way for users to discover projects looking to gain more exposure and for projects to manage bounties and incentives that attract existing and new user bases. Our goal is that both projects and veLTX holders can approve data sources that are tied to compute resources like hash rates and data collection. Furthermore, we will explore Constellation's State Channel developer tools (akin to the Ethereum Smart Contract) to create validated data types attached to cryptocurrency reward mechanisms. This will provide a robust dashboard of rewards tied to data sources and help develop community owned and queryable data.

4. Liquidity Pools and Cross-Chain Swaps

The future of cryptocurrency is to provide interoperability between ecosystems, digital environments, and layer one infrastructures. Two years ago, a myriad of decentralized exchanges came into fruition to address the problem of centralized exchanges controlling an individual's assets with the mission to make digital assets more decentralized and freely traded. As a result, DeFi gained massive traction. Over the years, DeFi has evolved alongside layer one and layer two solutions to solve governance over treasuries, liquidity, incentivize participation, and address token emission schedules. This has advanced the entire DeFi space in an exponential capacity while giving more utility to cryptocurrency. As regulation comes down on centralized exchanges and layer one ecosystems begin to differentiate on design choices, developer tools, features, applications, and governance models, true interoperability of cryptocurrency becomes more essential. Decentralized exchanges play an evolving role in allowing people to freely move between different ecosystems and support and transact in an omni-chain world.

For Lattice Gateway, it is imperative to provide tools that facilitate cross-chain swaps across multiple ecosystems. This allows the user to freely decide which ecosystem is best for their ethos and skills without the constraints of centralized exchanges. To do this, an exchange aggregator will be built into Lattice allowing users to seamlessly move liquidity between chains. An aggregator will further expand upon the Token Lifecycle for projects as they grow.

While Lattice was initially scoped with the intention of creating this DEX, incorporating too many functions for the $LTX token would result in a DEX that would ultimately fall to any competitor that arises with a more focused token design such as Curve's CRV or Balancer's BAL token. This also coincides with regulatory pressures of creating a DEX and building ecosystem liquidity to match the business demand. Understanding the complexity and specificity of tokenomic designs behind the most successful DEXs on other ecosystems brings to light the need to create a DEX specifically for Constellation's Hypergraph and L0 tokens. With that being said, there is an external team building a truly decentralized AMM for Constellation's Hypergraph that will support the $LTX holders. By separating the two products we can more efficiently attract, retain, and deploy liquidity on the Hypergraph.

In the spirit of decentralized development and community participation, Lattice has integrated Exolix as an MVP to evaluate the business needs and demand across the community for cross-chain swapping. While Exolix is an aggregator of centralized exchange liquidity, it is the first of many aggregators slated to provide liquidity between different ecosystems and currencies. Following Exolix, a DEX will be built by a selected third party working alongside the Constellation team, with a new token and tokenomics, to solely support liquidity. As such, $LTX holders can expect an airdrop of the new token, and veLTX token holders can vote on distribution details.

5. Governance and veLTX

As regulatory scrutiny intensifies across all cryptocurrency based projects, governance and the focus of decentralized development and decision making becomes paramount to the viability of any project. The evolution of DeFi has brought advancements in governance

both from a theoretical and programmatic perspective. DeFi evolved governance to attach transparent incentives that encourage community growth and contribution through proposals. Additionally, it has aligned projects with liquidity goals in exchange for the dissemination of control on the future of the ecosystem.

With the advancements of DeFi and chain specific DEX's the industry has improved user engagement, utility of a network's token, and created programmatic governance incentives. By exploring the "Curve Wars" we see more applications being built to advance DEX utility. A good example of this is looking at Convex Finance's relationship to Curve, a decentralized exchange that solves the "slippage" problem most DEX's face. Convex incentivizes users to lock-up their veCRV tokens (Curve's governance token) in exchange for liquid cvxCRV tokens, allowing users to benefit from the passive income that the exchange generates but taking control of the governance power the user would have had in exchange. By creating this "liquid wrapped"[4] version of veCRV, Convex acquired over $15 Billion in user deposits in just the first three months of it going live. This symbiotic relationship between two different protocols is just one example of composability and innovation happening across DeFi and the interoperable omni-chain approach.

Over the years, we have observed many of these trends and the evolution of L2 solutions solving more complex iterations of DeFI. As a result, there has been a growing interest in the DeFi community to create more complicated decentralized financial tools. The DeFi space remains fragmented, ecosystem specific, and tough to navigate due in part to the restrictions associated with most common smart contract platforms, including but not limited to the difficulty of integrating standard application level infrastructure. Through our Constellation focused community, and appropriate incentives, they will develop new and flexible standards that have configurations to meet the needs of evolving DeFi.

Currently, the $LTX Token powers the platform's decentralized governance mechanism and is required to participate in decision-making. However, $LTX is freely traded creating a distraction between the development of the platform and speculation. In Lattice v2, $LTX must be locked and "converted" into veLTX to initiate or vote on proposals. The purpose behind this setup is to provide users the opportunity to control the direction of the project

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[4] A token representing another asset held in a smart contract that has trading liquidity available for utilization, typically for assets that were previously illiquid or non-transferable in some way.

while requiring them to put down substantive value to do so in order to minimize the likelihood of the platform being co-opted by malicious actors without undue centralization. Thus, platform users do not only govern in a superficial manner, they have substantive control over the project - but they must stake their $LTX to exercise such control.

100 veLTX is the initial required amount needed to create a proposal, and anyone can create proposals assuming they adhere to the structure set out through governance approved criteria. Voting will be confirmed on-chain. Votes will be counted until the vote close deadline. A quorum of 33% of all existing veLTX are required for a vote to become officially recognized. And 51% of these are required for a vote to pass.
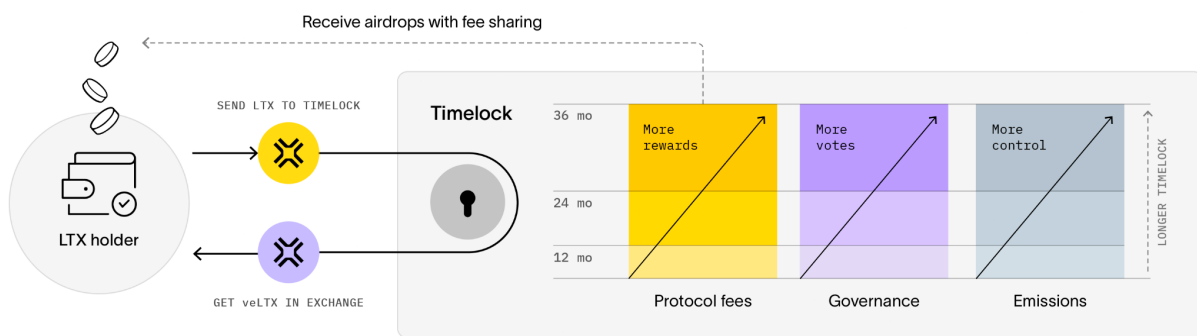

Diagram 1G.

Acquiring veLTX

a. veLTX will be acquired through an Ethereum smart contract, either by interacting directly with the contract or by interacting via a user interface on the Platform.
b. By initiating an $LTX lock with the smart contract, users will lock up their $LTX for a specific period of time and be granted veLTX during that time period in return.
c. 100% of the veLTX granted during the lock up period is granted immediately when the lock is initiated.
d. veLTX is non-transferable and the lock up period cannot be reduced after $LTX is initially locked.
e. Longer vote lock ups will increase the proportion of rewards received. **(see diagram 2F).**
f. Upon completion of the lock up period, 100% of initially locked $LTX will be available to withdraw from the smart contract and the veLTX grant will expire.
g. The user is responsible for all gas fees associated with interacting with the smart contract. At time of contract expiration, users can re-lock their $LTX or claim their $LTX.

Vote Escrowed Lock Up Terms

Lock Period	LTX locked	veLTX received	veLTX received per LTX locked
6 months	1,000	100	0.1
12 months	1,000	250	0.25
24 months	1,000	650	0.65
36 months	1,000	1,000	1

Diagram 2F.

Incentives and Benefits of veLTX

To further align incentives with governance participation veLTX holders will receive protocol fees that Lattice generates through its various programs.

Foundational Programs:

 A. veLTX holders could receive protocol fees from every token launching their project via Lattice Launchpad. (eg. Launchpad fees are currently 2% of a company's token supply).

 B. veLTX holders could receive protocol fees from every project using Lattice Gateway for their staking programs or node campaigns.

As new projects are drawn into the ecosystem they will exchange a percentage of their tokens in return for participating in various products featured on Lattice (e.g., the Flight Program, Launchpad, Bonding).

LaunchPad Distribution Example:
- If a 2% token supply fee is charged to the project being listed on the LaunchPad,

- Then 50% of tokens (or 1%) will be airdropped to users who have locked $LTX for veLTX and participate in governance[5]

Here's a simple example of how protocol fees or airdrops could be distributed between $LTX stakers based on the amount of time staked and the amount of veLTX received:

There are two stakers, A and B.
- User A stakes 10,000 $LTX for 6 months (and receives 1,000 veLTX), and User B stakes 10,000 $LTX for 36 months (and receives 10,000 veLTX).
- The fee/airdrop sharing pool would now have 11,000 veLTX in total, of which B owns ~91% (10,000 veLTX) and A owns ~9% (1,000 veLTX)
- As you can see, User B receives 91% of total fees/airdrops even though both users staked the same amount of $LTX.
- User B has staked for the longest duration of 36 months and thus has the biggest time bonus, while User A staked for the shortest duration of 6 months.

As more Lattice products begin to scale and grow, our vision for the community is to evolve the multiple business models to exponentially expand our stakeholder economy of decentralized governance while aligning with the future applications of web3. No other platform has multiple business models and opportunities for people to get involved in. One notable governance proposal on the horizon is around the reward structure for cross-chain swaps. Contingent upon technical readiness and business alignment, cross-chain swap fees will be rewarded to veLTX holders in the form of protocol fees from the cross-chain swap aggregator. Our goal is to align key stakeholders of the platform that understand the business needs, technical readiness and viability, and market opportunity.

6. Bonding

To further drive the vision of the Token Lifecycle and create a future for projects to attract liquidity from decentralized autonomous organizations (DAOs), bonding will be a new

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[5] Please note, that by locking tokens for longer periods of time will increase a veLTX holder's voting power around governance decisions while also increasing the percentage of air dropped tokens one would receive.

application and feature on Lattice. Bonding is a method/application used to attract protocol/project owned liquidity which helps retain liquidity on decentralized exchanges. Every project faces the problem of generating lasting token liquidity (trading liquidity) which can sometimes cost millions of dollars between market makers and incentivized staking pools. Furthermore, bonding evolves staking capabilities in the existing Node Management application on Lattice.

There are accretive benefits to both projects and users with bonding. Instead of incentivizing rewards for locking up existing token holders, bonding allows a project to acquire its own liquidity position for its token's DEX listing at a cheaper rate than can be obtained through traditional yield farming and staking strategies. The user benefits from the potential arbitrage of values between the LP and the native token.

Token Bonds, in DeFi, arose in popularity shortly after the launch of [Olympus DAO](#) as a way for projects to "own their liquidity". Before DeFi, most projects would seek centralized exchange listings and engage with market makers to help maintain their order books to attract speculators. As a result, DeFi was created with early iterations of DeFi including 'Staking Pools' or 'Liquidity Pools' that were incentivized by native token inflation to create attractive liquidity. This caused massive inflation and otherwise worthless tokens where people raced to be the first in and first out as no true token utility was realized.

The below example is Uniswap Pool2 Yield Farming, a system that creates excess inflation for protocols and a lot of impermanent loss for users.

Example:
- Protocol A wants to incentivize its users to provide liquidity for its aToken. To do this,
- Users must provide aToken/USDC LPs to a staking pool on Protocol A's website.
- As a reward for doing this, the user would earn a high % APR (Yield) paid in aTokens for as long as they didn't remove liquidity from the staking pool.
- Results: Protocol A's tokens inflated and dropped in value, hyperinflation kicked in. This inflation would mean massive amounts of Impermanent Loss (IL) for users and a drop in token price for the protocol.

Token bonding is just one new approach to liquidity provisioning in DeFi to alleviate these pain types of points. Bonding gives a project ownership over their liquidity while still allowing users to benefit from yield generating activity. This alleviates inflation on the project's token while creating long-lasting trade liquidity so users can transact with ease.

Example
- Project A allocates $100,000 worth of tokens currently trading at $2 per token in exchange for $1.80 worth of aToken/USDC LP for this campaign
- Users then "bond" their aToken/USDC LP (current market price is $1.80 per share) over the set period (typically 7-30 days) in exchange for aToken valued at $2 per token (a 10% arbitrage based on the current market prices).
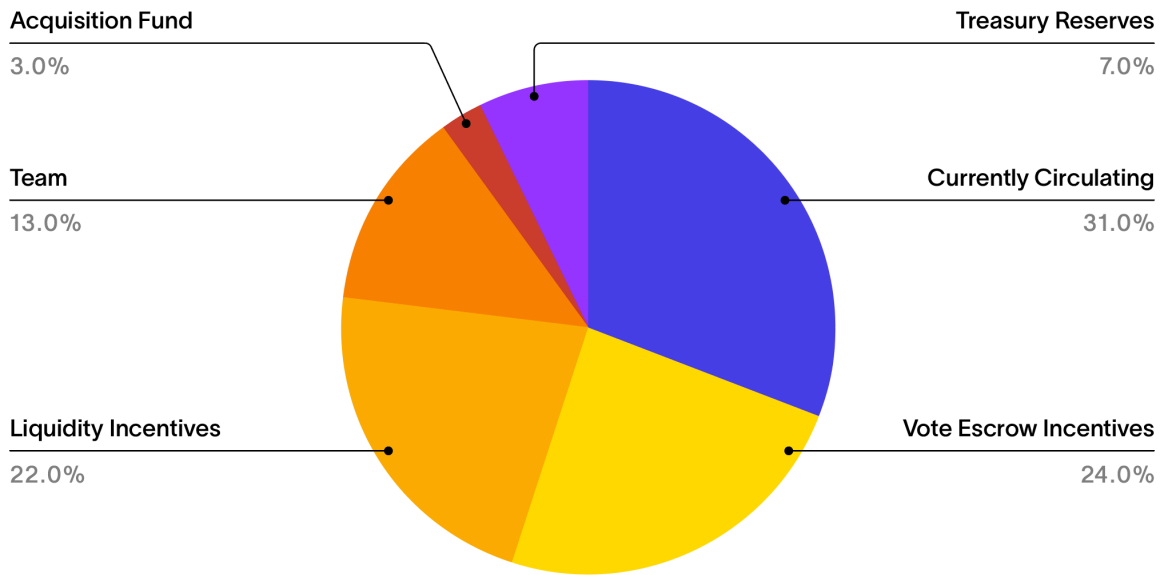
In this example, Protocol A will spend $100,000 of their aToken in exchange for $90,000 worth of aToken/USDC LP. This liquidity would now be owned by the protocol itself (Protocol Owned Liquidity). By owning this liquidity, the project no longer has to emit more tokens to maintain it, they simply hold it in their treasury. Paying 10%, as an arbitrage up-front, allows the users to participate in yield farming without destroying the protocol token value from inflation while creating long-term trading liquidity (without the need for market makers or centralized exchanges).

Bonding is an application that will bring together multiple chains and liquidity by way of decentralized governance. Furthermore, it will be another tool in a project's tool belt to deeply engage with various communities. Users will have a consolidated interface and marketplace that presents projects and bonding opportunities. When bonding is ready to be released, the quality and listing of bonding pairs will reside with veLTX and the governance of Lattice. veLTX holders can submit proposals through the Lattice governance channel and ultimately receive fees from each bonding pair. If this proposal is accepted, it will create accretive value to active participants. Lattice Bonding is a product that will leverage Constellation's Hypergraph and Mainnet 2.0 developer tools (state channels) which will make it cheaper and easier for people to transact.

Token Distribution

$LTX	Amounts	Notes
Currently Circulating	31,000,000	Released since 2020 Private sale vesting completed
Vote Escrow Incentives	24,000,000	Released over minimum 9 year period
Liquidity Incentives	22,000,000	Released over minimum 9 year period
Team	13,000,000	
Acquisition Fund	3,000,000	If needed for Grants/Incentivizing established projects to come to Lattice
Treasury Reserves	7,000,000	
Total	100,000,000	A total of 100M LTX tokens were minted. The protocol has a fixed token supply.

$LTX Token Distribution

Category	Percentage
Acquisition Fund	3.0%
Treasury Reserves	7.0%
Team	13.0%
Currently Circulating	31.0%
Liquidity Incentives	22.0%
Vote Escrow Incentives	24.0%

Summary

Lattice is the gateway for users to navigate Web3. Over the past several years, we have successfully deployed multiple products that serve as the foundation to Lattice and our vision of the Token Lifecycle. While Lattice v1 was an articulation of a decentralized exchange, the vision expanded as we gained a better understanding of our user base, the industry's technical readiness, and the desire to create multiple pathways to liquidity. DeFi presents one of the greatest advancements in crypto from a socioeconomic, political, and crypto utility perspective. However, the industry remains somewhat fragmented and complex with high barriers to entry. Our aim is that Lattice will not just provide a spot solution for one aspect of DeFi, but will provide multiple points of entry for more users to become acquainted with DeFi and for projects to capture liquidity at different stages of maturity. By introducing veLTX we set out to disseminate the future success and growth of the platform to our community. The Node Management application and platform provides a single dashboard for people to manage any connected data feed and the accrued rewards - from a Constellation Hypergraph node to a Dor Traffic Miner. Finally, each product on Lattice presents an opportunity to develop state channels on Constellation's Hypergraph thus aligning all stakeholders in the ecosystem while creating data transparency - from protocol to application layer.