Hi All. Clipper's application lost on a split vote (3 against, 2 for).

Positive feedback included: "clear and concise explanations across their application - KPIs, milestones, and objectives...grant sized was sufficiently justified with calculations...extra points for their stickiness mechanics...well-rounded proposal with sufficient justification."

Negative feedback from the judges who voted against included:

- 1. Three said the requested liquidity mining incentives are too large relative to Clipper's current TVL.
  - \*We have amended by cutting the liquidity mining request by 40% to 74,308 ARB from 123,846 ARB. This will of course reduce the acquired TVL, but it's a good first step and we can then show the results to the DAO for future incentive programs.\*
- 2. Three said the execution plan and milestones are too sparse. -
  - \* We have provided more explanation.
- 3. One said the data is hard to believe and we conflated unique wallets with unique users.
  - \*I'm not sure which data this judge is referring to, but the dune queries for all data are
    provided in the proposal so you can see for yourself. We report unique wallets instead of
    actual 'unique users' because its impossible to provide auditable and transparent
    onchain queries of 'users', just of wallets.

We made substantial revisions based on advisor feedback and would have been happy to accommodate these concerns as well if they had been raised prior to the judging itself. So we are happy to do so now.

## SECTION 1: APPLICANT INFORMATION

**Applicant Name:** Mark Lurie

Project Name: Clipper

**Project Description:** Clipper is a DEX designed for blue-chip token swaps (e.g., ETH, WBTC, ARB, USD stablecoins) with no impermanent loss for LPs. Clipper's novel architecture makes money for LPs using the same arbitrage strategy used by professional market makers, but implemented in a permissionless and non-custodial manner. Clipper incorporates prices formed off-chain into a sophisticated formula and validates them on-chain, removing the need for arbitrageurs and ensuring lower gas fees for traders.

#### **Team Members and Roles:**

Clipper is governed by <u>AdmiralDAO</u>, which has hired labs companies to provide certain administrative services. These include, among others, Shipyard Software, the original developer of the Clipper platform.

#### **Shipyard Software Team bios**

- 1 Co-founder (Business)
- 1 Co-founder (Smart Contract Dev)
- 2 Sr. Frontend Dev
- 3 Sr. Backend Dev
- 1 Smart Contract Dev
- 1 Head of Ops
- 1 Head of Content & Research

#### **Project Links:**

Website

**Docs** 

**Dune Dashboard** 

**Twitter** 

Discord

#### **Contact Information**

Point of Contact: Mark Lurie

Point of Contact's TG handle: @marklurie

Twitter: @marklurie

**Email:** mark@shipyardsoftware.org

Do you acknowledge that your team will be subject to a KYC requirement?: Yes

# SECTION 2a: Team and Product Information

**Team experience:** Please refer to Shipyard team bios for founder information: <a href="https://www.shipyardsoftware.org/about#team">https://www.shipyardsoftware.org/about#team</a>

#### Co-founders

Mark Lurie (Co-founder & CEO): 2 VC-backed marketplace exits, investor at Bessemer, FJ Labs, HBS, Harvard AB (Economics) '07. <a href="https://www.linkedin.com/in/mlurie">https://www.linkedin.com/in/mlurie</a>

Abe Othman, PhD (Co-founder): AngelList Head of Quant Fund, 2 VC-backed exits, Dissertation on Automated Market Making, CMU CS PhD, Harvard AB (Applied Math) '07.

#### What novelty or innovation does your product bring to Arbitrum?

On most DEXs, impermanent loss is rampant and traders are constantly susceptible to being front-run or sandwich attacked by MEV bots. Clipper's novel <u>formula market maker</u> uses a sophisticated pricing function that factors in both token ratios and up-to-the-second external market prices from centralized and decentralized oracles. This design results in zero arbitrage opportunities for bots to exploit (and no need for them) and eliminates impermanent loss

altogether. As a result, Clipper brings better yields to Arbitrum LPs and lower prices to Arbitrum traders.

Is your project composable with other projects on Arbitrum? If so, please explain: Yes, Clipper is already composed into 1inch and similar aggregators and solvers. Any protocol that needs to compose with swaps can compose with Clipper.

# Do you have any comparable protocols within the Arbitrum ecosystem or other blockchains?

Other DEXs, such as Uniswap and Sushi, are comparable insofar as they also offer swaps. However, Clipper has a radically different architecture and its lack of impermanent loss and toxic bot activity sets it apart. Namely, it's profitable for both LPs and the protocol, whereas CPMM DEXs are not.

#### How do you measure and think about retention internally? (metrics, target KPIs)

When we think about retention, we primarily think about liquidity providers, not traders. The reason for this is that Clipper's novel architecture (more on this later in the proposal) is structured so that the more TVL there is in Clipper's liquidity pools (there is one multi-asset pool on each chain), the larger the trade sizes for which Clipper provides better prices than the CPMM's x\*y=k pricing formula. Traders come in almost entirely from DEX aggregators, which route trades based purely on price competitiveness. In other words, traders tend to use Clipper via aggregators and aggregators only care about prices. This works to Clipper's advantage due to its architectural edge in pricing, but only if there is adequate liquidity. This means retaining LPs is vital to attracting and retaining traders.

We measure retention by focusing primarily on "TVL per LP" and secondarily on "Duration of TVL." Growth in those metrics implies LPs are happy and allocating more of their capital to Clipper. Volume will follow naturally from DEX aggregators.

#### Relevant usage metrics

Note that most people in DeFi have used Clipper, perhaps without even knowing it. Clipper has better yields than normal AMMs, which means it can offer better pricing. As a result, Clipper fills a lot of trades from 1inch and other DEX Aggregators. Most people in DeFi who have used a DEX Aggregator has almost certainly traded through Clipper at one point or another. Please also note that all datapoints are from the time the application was originally submitted several weeks ago.

Daily Active Users: https://dune.com/queries/3482220/5852863

Daily User Growth: https://dune.com/gueries/3482205/5852843

Daily Transaction Count: <a href="https://dune.com/queries/2629502/4366295">https://dune.com/queries/2629502/4366295</a>

Note: to find the transaction count for a specific day, take that day's value and subtract the previous day's value from it.

**Daily Protocol Fee:** This is not applicable to Clipper. LPs make money through Clipper's trading formula which results in pool appreciation, not through fees.

**Daily Transaction Fee:** This is not applicable to Clipper because LPs do not take explicit transaction fees.

**Daily ARB Expenditure and User Claims:** None. Clipper has not received any incentives to distribute. All usage to date is organic.

**Incentivized User List & Gini:** Not applicable—we have not and currently don't incentivize anything on Arbitrum.

**TVL:** Across all chains: \$7.5M, On Arbitrum: \$1M  $\rightarrow$  see in real-time <u>here</u>.

Trading Volume: On Arbitrum: \$26.48M (current)

**Price Impact:** Price impact is a function of trade size so it will vary based on that. The average minimum on Arbitrum is ~0.05%.

List of Traders: https://dune.com/gueries/3482174/5852793

**List of Liquidity Providers:** N/A - no incentivized period yet for Arbitrum.

Do you agree to remove team-controlled wallets from all milestone metrics AND exclude team-controlled wallets from any incentives included in your plan: Yes

Did you utilize a grants consultant or other third party not named as a grantee to draft this proposal? If so, please disclose the details of that arrangement here, including conflicts of interest: No

# **SECTION 2b: PROTOCOL DETAILS**

Provide details about the Arbitrum protocol requirements relevant to the grant. This information ensures that the applicant is aligned with the technical specifications and commitments of the grant.

Is the protocol native to Arbitrum?: Yes

On what other networks is the protocol deployed?: Ethereum, Optimism, Polygon, Mantle

What date did you deploy on Arbitrum mainnet?: The first version was <u>deployed</u> on October 18, 2022. <u>Transaction ID</u>.

Do you have a native token?: Yes

https://docs.clipper.exchange/governance-token/sail-supply-and-circulation

Past Incentivization: What liquidity mining/incentive programs, if any, have you previously run? Please share results and dashboards, as applicable.

We have not yet run any incentives on Arbitrum.

Current Incentivization: How are you currently incentivizing your protocol?

Clipper generates sustainable yields and prices organically. We do not have any incentives running on Arbitrum, which is why we're applying for this grant—to fuel growth.

Have you received a grant from the DAO, Foundation, or any Arbitrum ecosystem related program? The DAO received ARB in the initial ARB airdrop to DAOs who had been developing on Arbitrum, at the lowest tier.

**Protocol Performance:** Real-time and historical performance metrics can be viewed on <u>Dune</u> and <u>Clipper's Data Dashboard</u>.

Arbitrum Quick Stats:

1 month APY (current): 76.7%

TVL (current): \$1.11M

Total transactions on Arbitrum (past 4 months): 120,969

Note that with current TVL, clipper does small dollar value transactions, so its number of transactions is higher than its dollar volume relative to other DEXs. For the amounts of TVL contemplated in this proposal, Clipper's yields should increase with TVL as it will attract larger trades and thus more volume faster than TVL dilutes yields.

**Protocol Roadmap:** The DAO maintains a <u>public roadmap</u>. On the advice of counsel, we cannot make public statements that would create expectations about any individual's future efforts besides what has been formally approved by the DAO.

#### **Audit History & Security Vendors:**

https://docs.clipper.exchange/disclaimers-and-technical/audits

Security Incidents: None.

### **SECTION 3: GRANT INFORMATION**

Detail the requested grant size, provide an overview of the budget breakdown, specify the funding and contract addresses, and describe any matching funds if relevant.

Requested Grant Size: 174,308 ARB 249,004 ARB

Justification for the size of the grant:

#### • Liquidity Farming: 74,308 ARB <del>123,846 ARB</del>

- Clipper has one multi-asset <u>liquidity pool on Arbitrum</u>. The liquidity farming program will take place in that pool. ARB received from this grant will not be allocated to any other liquidity pools on Clipper. The objective of this program is to attract new LPs and additional TVL to Clipper's Arbitrum pool.
- To provide context for our calculation, Clipper has a unique market maker architecture called a <u>Formula Market Maker</u> (FMM). The FMM does not use the x\*y=k formula. Rather, it uses a more complex pricing formula that provides better prices (lower slippage) on trades than CPMM-based DEXs, given an equivalent amount of liquidity. This formula enables the pool to have a target trade size, which requires a target TVL. Note that the target TVL will differ from the current actual TVL (this is a function of the formula).
- To calculate the amount of ARB needed to attract new LPs and TVL to Clipper's Arbitrum pool, we must first determine the target trade size the pool should serve. Currently, 1inch data shows that 94% of swaps on Arbitrum are under \$10k and 77% of swaps are under \$1k. This implies we should target ~\$5k trade sizes in order to deliver best prices on ~90% of Arbitrum's trades. For the pricing formula to provide better slippage than CPMM DEXs on \$5k trades in the Arbitrum pool, Clipper mathematically needs to have \$3.5M liquidity in this pool (this is the target TVL). The analysis for this is complex but requires comparing Clipper's invariant (available here) against x\*v=k. These TVL and trade size targets are good starting points since they target the majority of current user demand. As the pool's TVL grows from the incentive program, it will be able to provide best prices on increasingly larger trade sizes and target a wider range of traders. Based on data collected from our past farming programs, we can assume that APYs of 30% (this is on top of LP profits the pool naturally generates) are required to create adequate incentive for new LPs. Lastly, this program will run for 12 weeks. If we are targeting \$3.5M TVL the incentives will need to provide 30% on \$3.5M. Considering all of those inputs, we arrive at the following calculation: \$3.5M (TVL) \* 0.30 (APY) \* 0.23 (fraction of year) = \$241,500 / \$1.95 (current ARB price) = 123,846 ARB (rounded).
- However, the feedback from the judges was that 123,846 ARB felt too large relative to Clipper's current \$1M TVL on Arbitrum. Thus, we are only requesting 60% of that, which is 74,308 ARB. Using the same inputs, we arrive at the following calculation: 74,308 ARB \* \$1.95 (the ARB price as of the original app submission) = \$145,000. Then \$145,000 / 0.30 (APY) / 0.23 (fraction of a year) = \$2,415,000 in TVL. This will roughly double the current TVL and allow us to test the inputs so that we can make a future proposal to the DAO for the remaining 40% of the initially requested grant.

• User & TVL Migration: 100,000 ARB

- This program will reward existing Clipper LPs who have provided liquidity to Clipper's Ethereum, Optimism, Polygon, or Mantle pools and migrate any portion of their liquidity on any of these chains to Clipper's Arbitrum pool. This program will give existing LPs an additional incentive to migrate to Arbitrum on top of the liquidity farming program that will be running in the Arbitrum pool concurrently.
- Clipper has more than 99k LPs and over \$10.53M TVL across all chains, but only 1.84% (1.833) of LPs and 11.1% (\$1.11M) of TVL is on Arbitrum. There are 97,623 Clipper LPs on chains other than Arbitrum. Not all of these are unique humans, but they have all been through captcha and discord authentication flows and most of them are human. This presents a large customer acquisition opportunity for Arbitrum within the Clipper community, which is why it makes sense to aggressively target migration by offering an additional incentive for it. The objective of this program is to incentivize user and TVL migration from Clipper's other chains to Arbitrum.
- To qualify for the ARB LP Airdrop Clipper LPs will have to bridge assets from Ethereum to Arbitrum within the program's 12-week window.
- Based on data collected from similar programs we have run, and considering average bridging costs (for various \$ amounts), we can assume it requires a minimum of \$50 to motivate an LP to migrate to Arbitrum. This accounts for the fact that the majority of Clipper's TVL currently resides on Ethereum and costs of Bridging from Ethereum are especially high. Given the grant program's 12-week timeline, we assume a 4% conversion rate is realistic (based on data from past programs). Given these inputs, we arrive at: 97,623 \* 0.04 \* \$50 = \$244,057.50 / \$1.95 (current ARB price) = ~100,126 ARB which is approximately 100,000.

**Grant Matching:** N/A.

Grant Breakdown: See above.

Funding Address: 0x4122E5aA4A998526D146235d6DDc067eCd0E11FF

**Funding Address Characteristics:** Multisig with 3/7 signers, which is the security model previously approved by the DAO for its Arbitrum multisig.

**Treasury Address:** Same as funding address.

**Contract Address:** Contracts supporting the incentive programs will be deployed upon receipt of the grant.

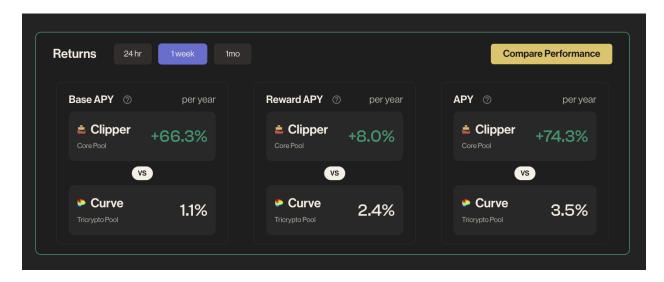
# SECTION 4: GRANT OBJECTIVES, EXECUTION AND MILESTONES

#### Objectives:

The objective of both programs is to grow the LP population and TVL on Clipper's Arbitrum deployment. The liquidity farming program specifically targets new LPs and new (or additional from LPs already in Clipper's Arbitrum pool) TVL. The user and TVL migration program specifically targets existing Clipper LPs on chains other than Arbitrum, incentivizing migration to Arbitrum from within Clipper's existing user base.

#### **Execution Strategy:**

- Liquidity Farming: Clipper's current Arbitrum liquidity pool has a weekly TVL of roughly \$1.11 M. To grow the TVL on Arbitrum Clipper will use funds from the LTIPP Grant to incentivize LPs via a farming mechanism similar to what we have deployed in the Ethereum mainnet pool. Clipper has distributed hundreds of thousands of dollars of incentives executing farming contracts on Ethereum mainnet and Optimism. Clipper's OP airdrop contract racked up over 23,000 transactions. With proper marketing, a long-term view, and the right incentives Clipper can double Arbitrum weekly TVL to \$2.22M in the first quarter of execution.
  - Timeline: Clipper will deploy a farming contract on Arbitrum immediately upon receiving the grant. Existing Arbitrum LPs will benefit and new potential LPs will see an immediate opportunity to earn ARB.
- Airdrop to catalyze User & TVL Migration: The promotion of the Arbitrum Liquidity Farming program will begin with an airdrop to every wallet that is both a Clipper LP on Arbitrum and a Clipper LP on another chain. These wallets will receive an airdrop flat amount to cover bridging costs and incentivize migration of users from other chains. The amount allocated to this will be prorated equally across 12 weeks, so that those who migrate earlier will get a greater amount than those who migrate later. The estimated blended average to be ~\$50 per user.
  - Clipper already possesses the airdrop infrastructure to send this ARB. Clipper successfully airdropped SAIL tokens on Arbitrum in 2023.
  - Arbitrum's Clipper Dashboard will be upgraded to match Clipper's most popular pool, Ethereum mainnet (see below) to display Rewards APY along with Base.



For each of these plans, we will have three monthly check-ins over the course of the Quarter to measure success against the goal and the actual CAC vs estimate.

What mechanisms within the incentive design will you implement to incentivize "stickiness" whether it be users, liquidity, or some other targeted metric?

The liquidity farming program will enhance the "stickiness" of new users. The Liquidity Farming program will require an 8-week "charge up" period during which any early withdrawals forfeit a logarithmic amount of the promised incentives (and each withdrawal restarts the clock). This is how we have implemented "farming pools" in the past and it has worked quite well. This should also help with stickiness for the migration program since migrants will want to take advantage of the farming program benefits as well.

Additionally, there is also already baked-in loyalty with the migrant group, as they are existing Clipper users who are choosing to remain on Clipper.

We shouldn't discount the endogenous pull of Clipper's high organic yields on Arbitrum, and that's before providing incentives. For example, Clipper produced an 84% APY for the month of February alone. The objective of these incentive programs is to provide a draw that brings in new users to experience Clipper's yields first-hand—we believe people need to experience it to believe it. Once users experience Clipper's already existing superior yields and zero impermanent loss, they will stay long-term. The platform itself is sticky, it's just a matter of getting users "in the door".

Specify the KPIs that will be used to measure success in achieving the grant objectives and designate a source of truth for governance to use to verify accuracy.

 For Liquidity Farming, the primary KPI will be TVL and the secondary KPI will be the number of LPs. We track this with the <u>Dune dashboard</u> as well as on <u>Clipper's data</u> <u>dashboard</u>. These dashboards can be used as sources of truth.  For User & TVL Migration, the KPI will be the ratio of the number of LPs on Arbitrum to the number of LPs on all other chains. We will be adding such a query to this <u>Dune</u> <u>dashboard</u> shortly.

#### **Grant Timeline and Milestones:**

#### **Liquidity Farming**

Total Duration: 12 weeks (10 weeks + 2 weeks setup)

Timeline: Once the grant is received, the team will need 2 weeks (maximum) to deploy and fund the farming pool contract on Arbitrum. This technology is already battle-tested since we've used it for past incentive programs on other chains.

After this, the program will begin and incentives will be distributed gradually over the course of 10 weeks.

Arb total: 74,308 ARB

Month 1: ARB Farming contract is live, TVL has risen 25% from baseline;

Month 2: TVL has risen 60% from baseline

• Month 3: TVL has risen 100% from baseline

#### **User & TVL Migration**

Total Duration: 12 weeks (10 weeks + 2 weeks setup)

Timeline: This program will begin on the same day the liquidity farming program begins, so as to create the dual-reward incentive. Rewards will be distributed to LPs upon migration to Arbitrum, for the duration of the 12-week program. The key milestone for this program will be achieving the target 4% conversion rate, bringing 4,000 new Clipper users to Arbitrum. A mid-point milestone will be achieving a 2.5% conversion rate.

Arb total: 100,000 ARB

- Month 1: Airdrop is executed and more than 50% claimed; 1,000 Clipper LPs have successfully migrated to Arbitrum pool.
- Month 2: Airdrop is >75% claimed; 2,500 Clipper LPs have successfully migrated to Arbitrum pool.
- Month 3: Airdrop is >90% claimed; 4,000 Clipper LPs have successfully migrated to Arbitrum pool.

Please note that if one campaign works very well and the other does not work very well we may reallocate the incentives from one campaign to the other.

How will receiving a grant enable you to foster growth or innovation within the Arbitrum ecosystem?

Clipper has long wanted to introduce incentive programs on Arbitrum but doesn't have sufficient funds of its own and has never received an incentive grant to do so. The grant will enable Clipper to:

- (a) Attract adequate liquidity to provide better prices on the trading pairs that matter most for everyone in the Arbitrum ecosystem. We know this will work because on mainnet we produced this study that showed Clipper beats 0x API on a \$10k USD<>ETH trade 90% of the time. That was with \$5M+ TVL in the mainnet pool. Currently, Clipper's Arbitrum deployment only has \$1.11M TVL. More efficient prices mean more Arbitrum economic activity can happen with the same resources.
- (b) Attract new users to the Arbitrum ecosystem. Clipper previously used a grant from Optimism to attract new users which resulted in over 100k additional Optimism users on Clipper (in the twelve months following the March 2022 grant).

Do you accept the funding of your grant streamed linearly for the duration of your grant proposal, and that the multisig holds the power to halt your stream? Yes

# **SECTION 5: Data and Reporting**

Is your team prepared to comply with OBL's data requirements for the entire life of the program and three months following and then handoff to the Arbitrum DAO? Are there any special requests/considerations that should be considered? Yes, we're prepared to comply. No special requests.

Does your team agree to provide bi-weekly program updates on the Arbitrum Forum thread that reference your OBL dashboard? Yes, <u>AdmiralDAO Operators</u> (the DAO that governs Clipper) will post bi-weekly updates on the forum on behalf of Clipper.

Does your team agree to provide a final closeout report not later than two weeks from the ending date of your program? Yes

Does your team acknowledge that failure to comply with any of the above requests can result in the halting of the program's funding stream? Yes

#### **FEEDBACK**

Clipper

Wintermute → PASS

Clipper's application was good and scored well in various criteria. They provided clear and concise explanations across their application - KPIs, milestones, and objectives.

Their grant size was sufficiently justified with calculations and their projections seem somewhat reasonable. We really liked how they calculated target TVL based on the most common execution size, this was great.

Extra points for incentivizing their existing users to LP on Arbitrum and their stickiness mechanics.

The only concern we have is the lack of protocol adoption given their age and whether or not Arbitrum needs another LM program.

Nonetheless, we will be supporting this application.

#### **GFX Feedback** → **FAIL**

This application would have been strengthened by focusing on the migration of existing user base to consolidate on Arbitrum. The liquidity mining portion is difficult to support at the requested grant size given Clipper's modest size. Some of the data also seems hard to believe (in both linked Dune queries and statements in the application text), and think the applicant conflates an address with being a unique users. Milestones should also focus on verifiable, specific metrics-based targets to avoid grantees having to argue their milestones were met in order to unlock full funding.

#### **GMX Feedback** → **FAIL**

While the proposal outlines clear objectives and strategies for incentivizing liquidity and user migration, we have concerns regarding the size of the grant requested in relation to the projected outcomes. The justification provided for the grant size seems inflated and lacks concrete evidence to support the proposed numbers. Additionally, while the objectives are outlined clearly, the execution strategy appears somewhat speculative. Without stronger evidence and a more conservative approach to estimating outcomes, We find it difficult to support this grant application.

#### Karel Feedback → FAIL

Vote AGAINST Clipper's proposal.

Well-written proposal but unable to endorse for the following reasons: (i) grant milestones and execution plan is sparse and needs to built out further in order to justify the spend by the DAO (should see specifics across a series of milestones on target conversion, user figures, TVL, etc.); (ii) the requested grant size is near half of the Arbitrum TVL at time of review which makes it difficult to justify the grants breakdown and its usage to incentivize liquidity and migration of users.

#### 404 DAO Feedback → PASS

Clipper presented a strong application and they have seen solid traction on mainnet in addition to some other chains. We felt their ask was fair and justified, despite the traction on Arbitrum a bit lacking. The liquidity migration is a little costly with additional concern on how loyal the capital base and/or protocol will be in the long term. We also would have liked to see stronger orientation of milestones with measurable success checkpoints. Overall though, this was a well rounded grant proposal with sufficient justification and we will be supporting application.

#### Synthesis:

Of the three judges who voted against:

- Three expressed concern that the requested liquidity mining grant size is too large relative to Clipper's current TVL.
- Three said the execution plan/milestones is sparse.
- One said the data seems hard to believe, and think the applicant conflates an address
  with being a unique user. → Honestly, this is mildly offensive. The dune queries are there
  to see, and we of course know that unique wallets are not the same as unique d

Karel:

- Grant milestones and execution plan is sparse. (should see specifics across a series of milestones on target conversion, user figures, TVL, etc.)
- The requested grant size is near half of the Arbitrum TVL at time of review which makes
  it difficult to justify the grants breakdown and its usage to incentivize liquidity and
  migration of users.

#### GMX:

- size of the grant requested in relation to the projected outcomes
- execution strategy appears somewhat speculative

#### GFX:

strengthened by focusing on the migration of existing user base to consolidate on
Arbitrum. The liquidity mining portion is difficult to support at the requested grant size
given Clipper's modest size. Some of the data also seems hard to believe (in both linked
Dune queries and statements in the application text), and think the applicant conflates
an address with being a unique users. Milestones should also focus on verifiable,
specific metrics-based targets to avoid grantees having to argue their milestones were
met in order to unlock full funding.