# Tellor Layer: Incentives, Costs, and Security Coverage

**Operator economics + token utility (internal draft)**

Tellor Team

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# Agenda

- Framing & messaging guardrails
- Mechanisms: rewards, tips, disputes
- Operator economics: costs, break-even, scenarios
- What we still need to measure (roadmap)

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- How do we explain incentives without "expect profit" language?
- Show how operator profitability emerges (math + drivers), including break-even.
- Tie tokenomics to security (stake + disputes should cover what we secure).
- Position TRB as utility (gas, staking, disputes).

- Use: "earnings for providing service", "variable", "costs + risk", "competitive market".
- Avoid: "guaranteed yield", "passive income", "buy TRB to profit".
- Keep profitability numbers framed as operator P&L, not investor return.

# Mental model

## Layer is a service marketplace

Users/tippers pay for data ➜ reporters provide data ➜ validators provide base security.

- Two reward sources: time-based rewards + tips.
- Security enforcement: disputes with fees, voting, and slashing/jailing.

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# Units & terms

- Base denom: `loya` (1 TRB = 1,000,000 loya).
- Reporter "power" is effectively stake expressed in whole-TRB units.
- A report has costs (tx fees) and potential revenue (tips + time-based rewards).

- Time-based rewards: inflation + optional bootstrap "extra rewards" pool.
- Tips: user-funded; 2% burned; net goes to escrow-backed entitlements.
- Disputes: fees, burns, voter rewards, slashing/jailing (security lever).

# Time-based rewards (high level)

- Inflationary rewards are distributed continuously (block-time proportional).
- Split: **75%** to reporter incentive stream; **25%** to validator distribution stream.
- Framing: incentives for operating / securing / servicing, not guaranteed "yield".

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# Bootstrap extra rewards

- Extra rewards are pre-funded and distributed at a configured rate.
- Use this slide to explain early-phase bootstrap vs steady-state.
- **PLACEHOLDER**: current pool size, runway estimate (pull from profitability checker).

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- 2% tip burn → cost of influence / discourages spam.
- Net tips are escrow-backed until withdrawn.
- Tips create a demand-driven reward component (not only emissions).

# Disputes (security lever)

- Fees scale by dispute level; outcomes can trigger slashing/jailing.
- A portion is burned; a portion becomes voter reward pool.
- **PLACEHOLDER**: dispute activity stats (count, size, outcomes).

# Security coverage lens (setup)

- Security comes from bonded stake at risk + credible dispute penalties.
- Define: coverage = stake-at-risk / value-secured.
- **PLACEHOLDER**: define value-secured per integration (TVL, notional, etc.).

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# Canonical reward & token flows
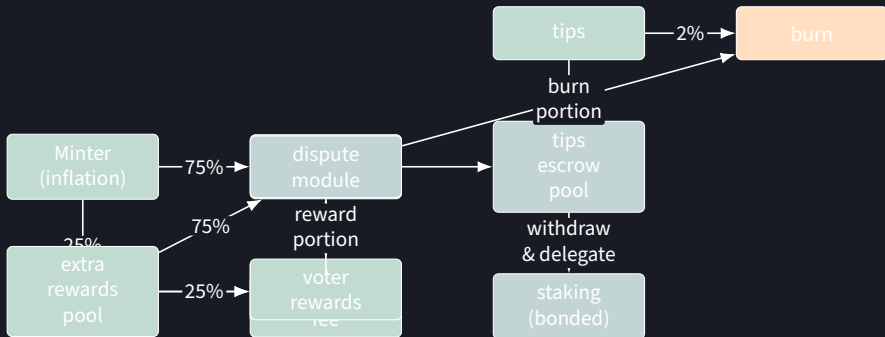


Note: "value secured" and external comps are intentionally placeholders in this deck draft.

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# Operator cost model

- Reporting tx fees (measured from recent `MsgSubmitValue` transactions).
- Operational overhead (infra, monitoring, on-call): **PLACEHOLDER** assumptions.
- Tail risks: downtime, missed reports, dispute risk (non-zero expected cost).
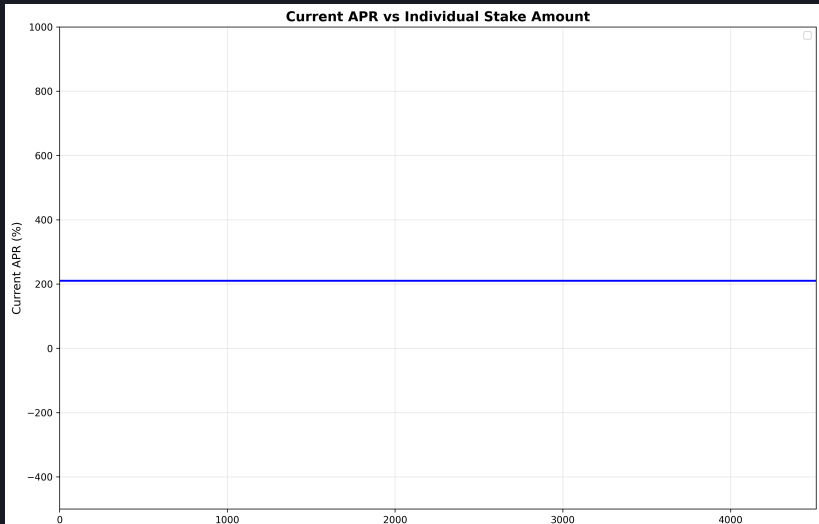
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# Operator revenue model

- Revenue sources:
    - time-based rewards allocation
    - tip earnings (net of burn)
    - dispute-related flows (case-dependent)
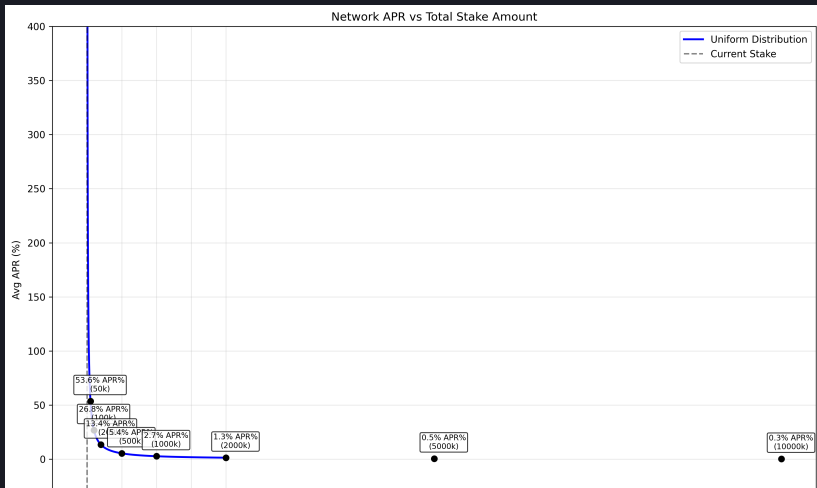- Frame as compensation for service performed → not "guaranteed yield".

# Break-even

- Break-even is where rewards share $\approx$ reporting costs (+ overhead).
- Sensitivities: block time, fees, mint/extra rate, reporting frequency.
- **PLACEHOLDER**: insert current break-even estimate from profitability checker.

# APR vs stake (chart)



Current APR vs Individual Stake Amount

# APR vs total network stake (adoption / saturation)



Network APR vs Total Stake Amount

- Uniform Distribution
- Current Stake

Avg APR (%)

53.6% APR%
(50k)

26.8% APR%
(100k)

13.4% APR%
(200k)

5.4% APR%
(500k)

2.7% APR%
(1000k)

1.3% APR%
(2000k)

0.5% APR%
(5000k)

0.3% APR%
(10000k)

# Realized vs modeled earnings (credibility)

- Use `rewards_accumulated` events + 24h balance deltas for a sample address.
- Compare against modeled expectation over the same period.
- **PLACEHOLDER**: choose address + sample window.

- Current tipped queries + totals (from checker).
- Message: users paying for data ➔ demand-driven component.

# Stake/power distribution (competition + concentration)

- Validator stake distribution (box/whisker + histogram).
- Reporter power distribution (active vs inactive vs jailed).
- Message: concentration is a measurable risk dimension.

- Compare "participating in Layer" vs Aave/Morpho/Kamino/Maker/Compound/ETH staking.
- Table template fields:
  - nominal APR / range
  - liquidity constraints
  - risk buckets (smart contract, oracle, depeg, liquidation, governance)
- **PLACEHOLDER**: you fill values + citations.

# LP cautionary example (PLACEHOLDER template)

- Example: Elixir LP issue (hardcoded stablecoin) ➜ tail-risk lesson.
- Template: risk type ➜ impact ➜ mitigation.
- **PLACEHOLDER**: you fill details + takeaway framing.

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- Compare risk buckets:
    - LP/levered yield: depeg, liquidation, oracle, smart contract risk
    - Layer operator stake: protocol/security risk, dispute risk, operational risk
- Keep language conservative: "risk-adjusted profile", not "safe asset".

- Goal: support operator-economics messaging (service incentives), quantify break-even drivers, and quantify security coverage.

- **Guiding rule**: prefer *realized* on-chain evidence over purely modeled APR whenever possible.

| Metric (priority) | Status |
| --- | --- |
| Realized operator P&L (per address) vs modeled | Partial now; small extension |
| Security coverage ratio (stake-at-risk / value-secured) | Stake now; value-secured placeholder |
| Dispute activity + deterrence metrics | Needs dispute queries/events |

1. **Realized operator P&L**: credibility; avoids "hypothetical yield" framing; ties earnings to service performed.

2. **Security coverage ratio**: directly answers "is security enough to cover what we secure?" (value-secured is a placeholder).

3. **Dispute metrics**: quantifies deterrence/security levers beyond "stake size".

Implementation note: we already ingest block results and events; extending to additional module events/queries is straightforward once endpoints are confirmed.

# What we can say now

- Mechanisms are clear: time-based rewards + tips + disputes.
- Operator economics can be framed as service compensation with measurable costs.
- Early phase may include bootstrap extra rewards (separate from steady-state).

# Next steps

- Fill external comps placeholders (blue-chip yields + LP risk cautionary).
- Add realized P&L reporting for a few operator addresses (credibility).
- Quantify security coverage ratio per integration (define value-secured).

# Thank You

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- Dispute fee schedule details (warning/minor/major): **PLACEHOLDER**
- Selector economics worked example: **PLACEHOLDER**
- Full tip tables / top-tipper distribution: **PLACEHOLDER**