Optimism's Retrofunding (RPGF) program has always been guided by the vision of sustaining public goods and equitably rewarding builders who demonstrate meaningful impact.

At its core, the program hinges on the idea that impact should translate into profit—a principle formally woven into the Optimism Foundation's official RPGF framework <u>during Round 3 in October 2023</u>. This tenet rests on a simple yet powerful insight:

"It's easier to agree on what was useful than what will be useful."

Since codifying this principle, the community has made substantial strides in refining Retroactive Public Goods Funding logistics and execution. Yet, as the ecosystem evolves, the question of how best to define, measure, and incentivize impact within such a complex environment remains unresolved.

Building on methodologies outlined in Osborne et al.'s

A Toolkit for Measuring the Impacts of Public Funding on Open Source Software Development\* (2024)

we plan to dedicate resources over the coming year to systematically evaluate the effects of Retrofunding. By
adopting and adapting the "toolkit" of metrics, community health methodologies, and assessment frameworks
proposed in that research, we can work toward establishing a set of "orthodox" evaluative practices. These
standardized methods will enable our community to more rigorously measure both the direct and indirect impacts of
Retrofunding, ultimately guiding data-driven improvements to funding strategies and policy decisions within the
ecosystem.

By incorporating valuation models and analytical perspectives like those presented in the table,

the OP ecosystem can approach impact assessment with a richer, more structured lens. For example, frameworks such as the Constructive Cost Model (COCOMO) or DORA metrics provide quantifiable ways to gauge development effort and process maturity, while socio-technical and economic models capture the interplay of people, tools, governance, and market forces that drive enduring value. To implement these frameworks effectively, we must invest in both data collection and interpretation capabilities. Tools like those under development by OpenSourceObserver—aggregating and normalizing metrics from code repositories, blockchain events, and community platforms—can be integrated with processes that map relevant metrics to each valuation framework. This work entails establishing data pipelines, curating comprehensive project information, training community analysts, and iteratively refining metrics and models as fresh insights emerge. Over time, this structured approach will anchor funding decisions in evidence-based methodologies, strengthening both trust in—and alignment with—our long-term objectives.

## 2025: Data-Driven Missions and Expanding Retro Funding

Looking ahead to 2025, we see a promising opportunity to refine our Retrofunding process through a continuous rewards program. Specifically, Retro Funding will focus on data-driven impact measurement with a human-centered approach

- , establishing clear "Missions" that allow the community to develop precise, iterative evaluation algorithms. These Missions consolidate various token allocations into a unified framework, aligning Retro Funding with other allocation programs in the Optimism ecosystem.
  - · Retro Funding: Onchain Builders
  - Objective
- : Reward projects driving cross-chain asset transfers, bolstering the Superchain's economy and interoperability.
  - Budget
- : Up to 8M OP from the Retro Fund.
  - Eligibility
- : Projects with contracts deployed on supported OP Chains. Deployers sign a message to confirm ownership.
  - Evaluation Algorithm
- : Monthly measurement starting in February, focusing on Superchain adoption, high-quality onchain value (e.g., TVL), and interoperability support.
  - Expected Impact
- : Grow the Superchain economy and adoption of interop among onchain builders.
  - Objective

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  - Expected Impact
- : Grow the Superchain economy and adoption of interop among onchain builders.
  - · Retro Funding: Dev Tooling
  - Objective
- : Continuously reward vital toolchain software—compilers, libraries, debuggers—that underpin onchain app development.
  - Budget
- : Up to 8M OP from the Retro Fund.
  - Eligibility
- : Open-source repositories and/or packages published (e.g., npm), with verified GitHub repositories.
  - · Evaluation Algorithm
- : Monthly measurement starting in February, focusing on adoption by onchain builders, tool importance for Superchain interop, and feature support for cross-chain development.
  - · Expected Impact
- : Facilitate the creation of interop-compatible applications, ensuring a vibrant onchain builder environment. Transition from complete dependence on onchain metrics (<u>such as in Round 4</u>), leveraging open-source repository metrics to have a better assessment of the impact within the developer base.
  - Objective
- : Continuously reward vital toolchain software—compilers, libraries, debuggers—that underpin onchain app development.
  - Budget
- : Up to 8M OP from the Retro Fund.
  - Eligibility
- : Open-source repositories and/or packages published (e.g., npm), with verified GitHub repositories.
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These two new missions herald a shift in how impact will be measured and rewarded: "Evaluation Algorithms"

will incorporate both quantitative and qualitative signals—data-based metrics and human insights—to determine monthly allocations. As these algorithms improve over time, Retro Funding can home in more accurately on meaningful contributions.

Looking forward to these developments, and the upcoming discussion regarding which methods we can appropriately apply to Governance rewarding, as well as Ethereum Core Development and contributions to the OP stack.

## **Applying the Toolkit Across the Ecosystem**

As the table above illustrates, each component of the OP ecosystem—from Ethereum's foundational security to the OP Stack's enabling of decentralized blockspace, and from the Superchain's broad support for builders and consumers to the onchain contracts and frontends that deliver tangible utility—has its own dependencies and value flows. Recognizing these relationships highlights where metrics can be applied most effectively. For instance:

· Dev Tooling Projects

benefit from open-source development metrics (community engagement, code quality, contributor trust).

On-Chain Builders

rely more on on-chain transaction data and network effects.

• Ethereum Core Development & Superchain Contributions

warrant a longer-term lens, tracking lifecycle maturity, ecosystem interoperability, and infrastructural roles over time.

## **Refining Our Methods for Each Category**

Dev Tooling

A shift toward continuous rewards offers a fresh opportunity to incorporate open-source repository metrics more effectively. Metrics like contributor counts, code longevity, and project trust can serve as dependable proxies for sustainable value and quality.

· On-Chain Builders

Applying transaction data with care will help differentiate genuine value creation from sheer scale. Thoughtful normalization or category segmentation can reduce power-law distortions, creating a more balanced reward curve.

• Ethereum Core Development & Mature Projects

Often boasting ample historical data, these projects allow us to test lifecycle-based assessments. Rather than treating every project the same, we might consider security contributions, development velocity, and infrastructural significance—reflecting the nuanced roles each project plays.

## A Unified Path Forward

By embracing these frameworks, data streams, and perspectives, we can develop a truly comprehensive, data-driven approach

to measuring impact. As OpenSourceObserver continues refining and expanding metrics for open-source software, combining these insights with community-driven sentiment and trust indicators will reveal where real, lasting value is generated. Such a holistic perspective not only provides a stronger foundation for decision-making but also ensures that Retrofunding remains aligned with the ecosystem's evolving priorities—ultimately bolstering both the legitimacy and the effectiveness of the program.

In short,

integrating these methodologies and datasets as we enter 2025 places us squarely on the path to more consistent, equitable, and actionable impact assessments. By orchestrating open-source repository insights, on-chain data, trust-based metrics, and a deeper understanding of each component's ecosystem role, we can further realize our vision of a truly impactful and community-driven Retrofunding model.

A final note: While these initiatives offer a clearer roadmap to achieving our "impact = profit" mission, they also raise new questions about scope, implementation details, and community governance. My personal view is that we should stay agile and open to feedback, consistently iterating on both the metrics themselves and the ways we interpret them. In doing so, we invite the broader community to help shape the future of Retrofunding—and ensure that this ambitious experiment continues to thrive. I am interested in helping enable discussions where sharper opinions regarding how impact should be considered in different segments of the ecosystem. Are people happy with the 'agnostic approach' that has dominated so far, or do we need stronger opinions to duke it out regarding what to prioritize and which projects should be rewarded?