Appendix 4. Inflation Impact & Comparison Analysis

Figures in this appendix are computed on an approximate ~183-day (~26,352-block) boost window for modeling purposes. The SIP specifies the boost as exactly one bonding period (25,200 blocks, ~175 days); on that basis the boost adds ~12.6M STX rather than 13.18M, a difference that does not materially change the trajectory below (2026 with-boost ~8.5% either way).

Key takeaways

- 2026 inflation rises from 7.82% (1,000 STX/block baseline) to 8.54% with the boost, a one-time increase of 0.72 points, equal to 13,176,000 STX.
- Inflation then declines every year, from 8.54% in 2026 to 2.13% in 2031, as SIP-031 emissions wind down.
- Even in its peak year, the proposed issuance stays close to the 5-year median (8.17%) and the 2025 median (6.57%), and well below the top 50 average, both the 2025 average (15.9%) and the 5-year average (25.1%).

Impact of changing coinbase block rewards

The SIP affects the coinbase block rewards in two ways:

First, there is a permanent restoration to 1,000 STX/block, with the scheduled halvings removed. This returns the network to a stable issuance floor, with no further reductions planned.

Second, there is a temporary six-month boost. During the first bonding period (June to November 2026, or 183 days), an additional 500 STX is issued per block, bringing the coinbase to 1,500 STX/block. After that period, it reverts to 1,000 STX/block.

The effect on inflation is modest and concentrated in a single year. The boost adds 13,176,000 STX, about 0.72% of supply, on a one-time basis. In practice, 2026 inflation goes from 7.82% (without the boost) to 8.54% (with the boost), an increase of less than one point.

Inflation trajectory 2026-2031

Year	Inflation - 1,000 STX/block baseline	Inflation with boost
2026	7.82%	8.54%
2027	7.85%	7.80%
2028	6.31%	6.27%

2029	5.23%	5.20%
2030	3.69%	3.66%
2031	2.14%	2.13%

Inflation declines steadily, from 8.54% in 2026 to 2.13% in 2031. This decline is driven by SIP-031 endowment emissions, which fall from ~89.8M STX in 2026 to zero in 2031. In 2031, once SIP-031 is complete, only the 1,000 STX/block coinbase remains, corresponding to 2.13% annual inflation.

Beyond 2026, the boost no longer affects the curve. For the years 2027 to 2031, inflation under the boost scenario is in fact marginally lower than the baseline. This is because more STX was issued in 2026, so the total amount of STX in circulation is larger. The emissions in the following years, which are identical in both scenarios, therefore weigh a little less against that higher total, which slightly lowers the inflation percentage. The boost only costs inflation during the year it is applied.

Comparison with other ecosystems

Chain	2025 emission
Ethereum	0.20%
Avalanche	4.97%
Stacks - proposed + boost (1,500)	**8.54%**
Polkadot	8.61%
Tron	9.86%
Hedera	11.47%
Solana	16.75%
Cosmos	24.46%
Sui	26.17%
Aptos	34.47%
Celestia	81.55%
2025 emission - Top 50 average	**15.9%**

5-year emission - Top 50 average	**25.1%**
2025 emission - Top 50 median	**6.57%**
5-year emission - Top 50 median	**8.17%**

Compared with the top 50, the boost peak remains well below both averages, the 2025 average (15.9%) and the 5-year average (25.1%). Against the medians, it sits modestly above the 2025 figure (6.57%), at the 52nd percentile, with 24 of the 50 chains carrying higher inflation, and is effectively in line with the 5-year median (8.17%).

It is worth mentioning that 2026 represents the peak year. The network already stands at the highest point of its trajectory, and even at that peak it only marginally exceeds the median. As issuance declines in each subsequent year, inflation will converge toward the 2025 emission median and ultimately fall below it.

Conclusion

This SIP establishes a stable, predictable coinbase of 1,000 STX/block, with no scheduled reductions. This supports both network security and the Bitcoin Staking yield mechanism, on a network where coinbase emissions alone amount to only about 2% inflation over the long run.

The temporary boost is added as a one-time launch incentive, meant to bootstrap the new Bitcoin yield product. Its effect is limited to a single 0.72% increase in 2026. Even in that peak year, the network stays below its peers' average and within reach of their median. From there, the proposed issuance declines year after year and is calibrated to remain healthy over the long term.

Sources:

STX Emissions Coinbase Scenarios:
https://docs.google.com/spreadsheets/d/1MtNvPeeN9j2YPQgd8Am-6rNubL-_cnxIcrZ5buaBocc/edit?usp=sharing

Supply Emission of the Top Largest Chains:
https://docs.google.com/spreadsheets/d/1ZGyh_hfPldxVIP1siLpP-W6jtIhnYVPz8zGecdrYo_Q/edit?usp=sharing