



A 2025 REPORT ON THE BASE ECOSYSTEM





Over the past decade, blockchain networks have evolved from monolithic architectures into modular, horizontally scalable ecosystems designed to optimize transaction costs, throughput, developer experience, and user onboarding. Within this paradigm shift, Layer 2 networks have emerged as a critical component of Ethereum's scalability roadmap, enabling cost efficient computation while preserving core security guarantees.

Among these Layer 2 solutions, Base, launched by Coinbase in 2023, has rapidly grown into one of the most active ecosystems. This growth has been driven by low fee infrastructure, consumer oriented applications, and an increasingly vibrant developer landscape. Despite this accelerated expansion, the distribution, concentration, and long term sustainability of economic activity across the ecosystem's sectors remain under examined from investment and policy perspectives.

Public discourse around Base largely emphasizes transaction cost reduction and rapid user adoption. However, systematic, data driven evaluation of sectoral structure, protocol performance, and competitive positioning within the broader multi chain environment remains limited. In addition, the distribution of liquidity, developer activity, and user engagement across sectors such as DeFi, consumer social, gaming, infrastructure, NFTs, and real world assets has not been quantitatively benchmarked against the wider crypto industry.

Without this empirical mapping, key stakeholders including the Base Foundation, venture capital firms, founders, and policymakers lack a granular understanding of where value is being created, retained, or dissipated within the ecosystem.

This research addresses this gap by combining blockchain analytics, data driven market structure assessment, and comparative ecosystem economics. It develops a comprehensive sectoral analysis of the Base blockchain ecosystem, measuring protocol level and sector level market share, growth dynamics, economic sustainability, and competitive positioning relative to the broader global crypto ecosystem.

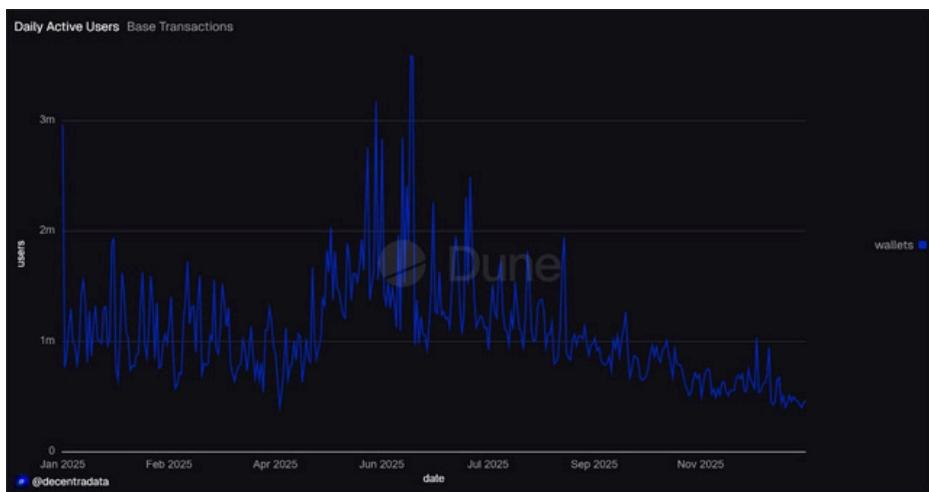
Ecosystem Overview

A blockchain ecosystem is best understood through the lens of its users, their scale, their behavior, and how these factors evolve over time. For Base, a chain built with a strong focus on accessibility, low fees, and consumer scale applications, user dynamics serve as the primary signal of ecosystem health.

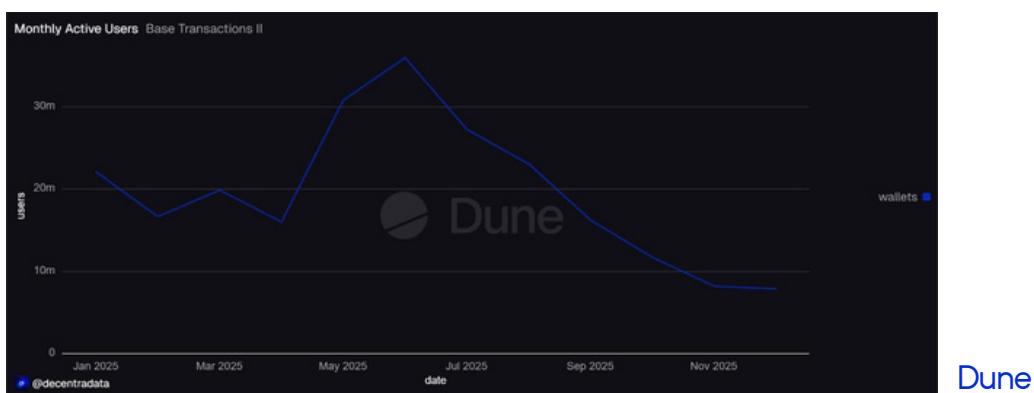
This section establishes the foundation for the entire report by identifying who is using Base, how frequently they engage with it, and whether observed activity is organic or distorted by Sybil behavior.

This section examines daily and monthly activity levels, as well as the depth of user engagement, measured through high sleep and low sleep patterns. Together, these metrics indicate whether Base is growing through genuine adoption, sustained retention, or short term activity driven by transient incentives.

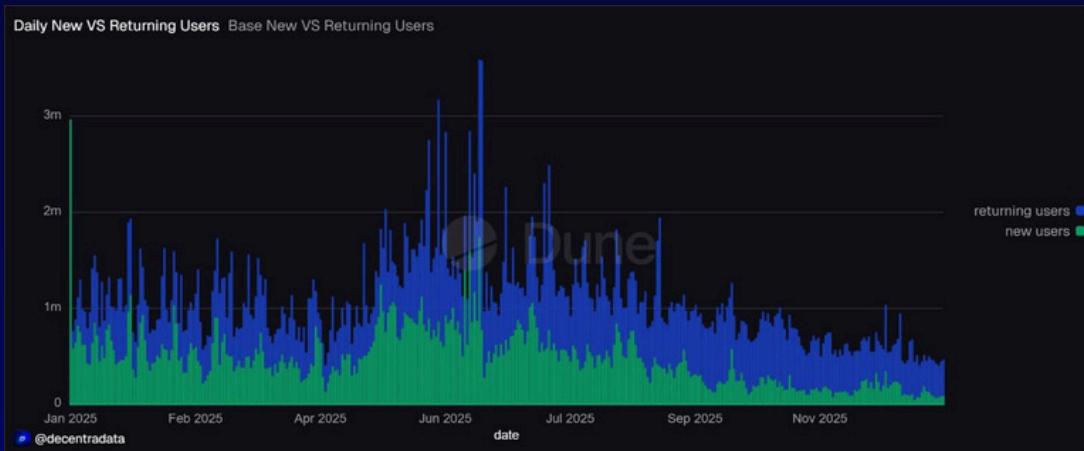
DAILY ACTIVE USERS LINE CHART



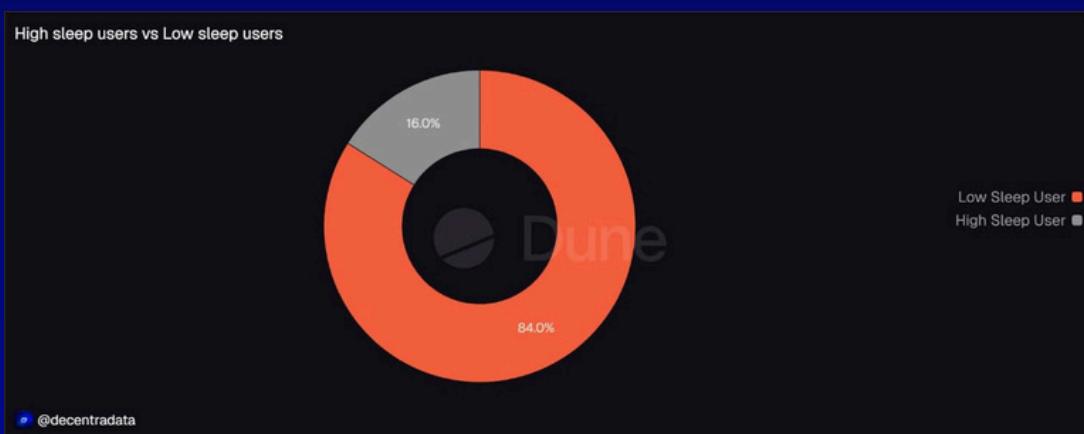
MONTHLY ACTIVE USERS LINE CHART



NEW USERS VS. RETURNING USERS



HIGH SLEEP VS. LOW SLEEP USERS OVER TIME



Daily active users fluctuated throughout the year, with notable spikes and sustained high interaction during April and June. Activity peaked at 3.5 million users in late June 2025. By December, daily active users stabilized between 400,000 and 700,000, representing an 80 percent to 85 percent decline from the peak. This decline reflects a post surge normalization following a high volatility growth phase.

Monthly active users trended upward steadily, with a sharp increase from April to June. Monthly activity peaked at 33.5 million users in June 2025. By December, monthly active users declined to approximately 8 million, a 76 percent drop from the peak. This mirrors the same post growth normalization observed in daily activity.

The high sleep versus low sleep user distribution presents a strong signal and deviates from typical airdrop farming behavior. A high sleep user is defined as a user who recorded at least one break of four or more consecutive hours from on chain activity within a day. Low sleep users did not record a break of four or more consecutive hours. The dominance of low sleep users indicates sustained and distributed engagement rather than short burst activity.

The new versus returning user breakdown provides additional insight. During the June to July peak, new user inflows increased sharply. However, returning users remained proportionally higher throughout the period. Following the peak, both new and returning users declined, but the ratio shifted materially. By December, new user acquisition had nearly collapsed, while the remaining activity was driven primarily by returning users.

The June to July volatility period coincided with several major ecosystem events.

In July, Coinbase rebranded and relaunched its wallet as the Base app. The app positioned itself as an all in one interface for on chain activity, integrating social features and a tokenized monetization model that allows creators and users to monetize attention and activity directly on chain.

Base also launched Flashblocks, reducing block times from 2 seconds to 200 milliseconds. This upgrade significantly improved transaction responsiveness, particularly for DeFi, gaming, and social applications on Base.

Zora experienced rapid growth following deep integration with the Base app and Farcaster, accelerating creator driven activity and onboarding new users into the Base ecosystem.

Base also marked Ethereum's 10th birthday in July, contributing to heightened visibility and user engagement during the period.

POSITIVES.

84 percent of users are classified as low sleep users. This indicates that most users engage consistently throughout the day rather than performing brief check ins associated with farming behavior.

At peak activity, returning users outnumbered new users by a ratio of approximately 3 to 1. This suggests strong short term retention and successful conversion of new users into repeat participants during the growth phase. Many ecosystems experience the opposite pattern during hype cycles.

NEGATIVES.

The June 2025 peak appears to have been driven by time bound catalysts. The subsequent 76 percent to 85 percent decline indicates that these drivers were not structurally sustainable.

December activity levels of approximately 8 million monthly active users and 500,000 daily active users likely represent Base's current organic user base.

New user acquisition declined sharply after the peak and failed to recover. By December, new user inflows were nearly negligible.

The June to July surge demonstrated that Base can scale under favorable conditions. The remaining challenge is repeatability. Sustained ecosystem growth will require renewed and durable new user acquisition.

NETWORK ACTIVITY

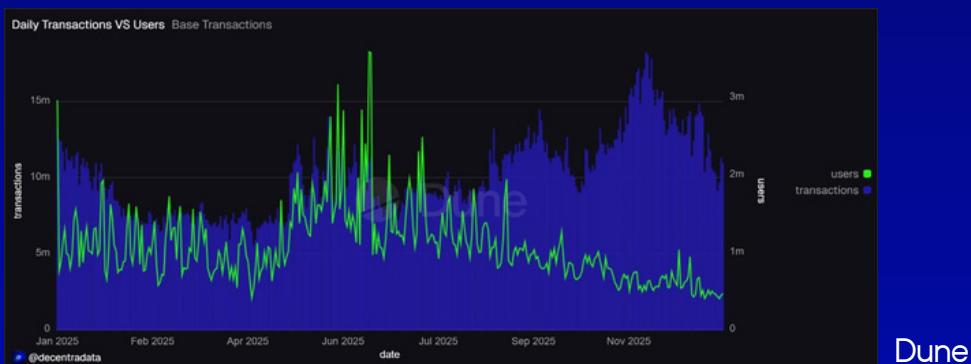
Transactions represent demand for blockspace, which is the most fundamental product a blockchain sells. This section evaluates how users on Base interact with the network by examining the intensity, diversity, and cost of activity occurring on the chain.

Metrics such as transaction volume, gas consumption, and fees provide a clear view of network utilization and operational efficiency.

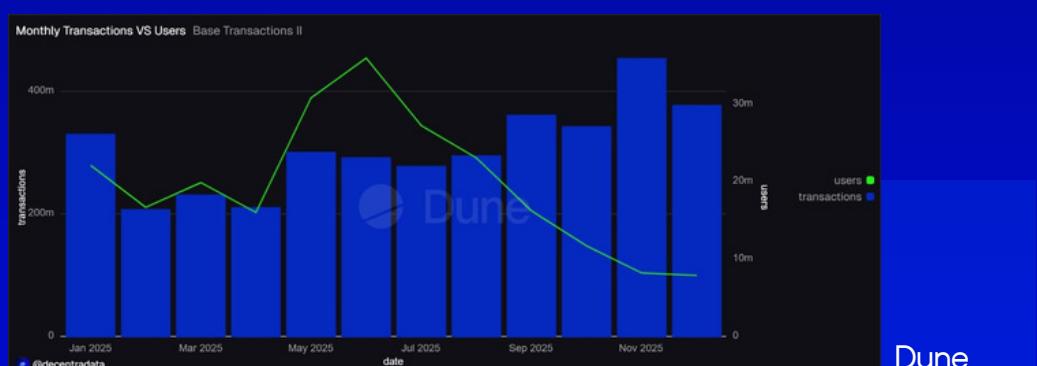
By analyzing daily transaction counts, average transaction values, gas consumed, and fee patterns, this section captures both the volume and value of on chain engagement.

High transaction throughput combined with low fees reflects strong technical scalability. Rising gas consumption signals increased computational load. Together, these metrics reveal activity cycles, congestion periods, and the overall cost experience for Base users.

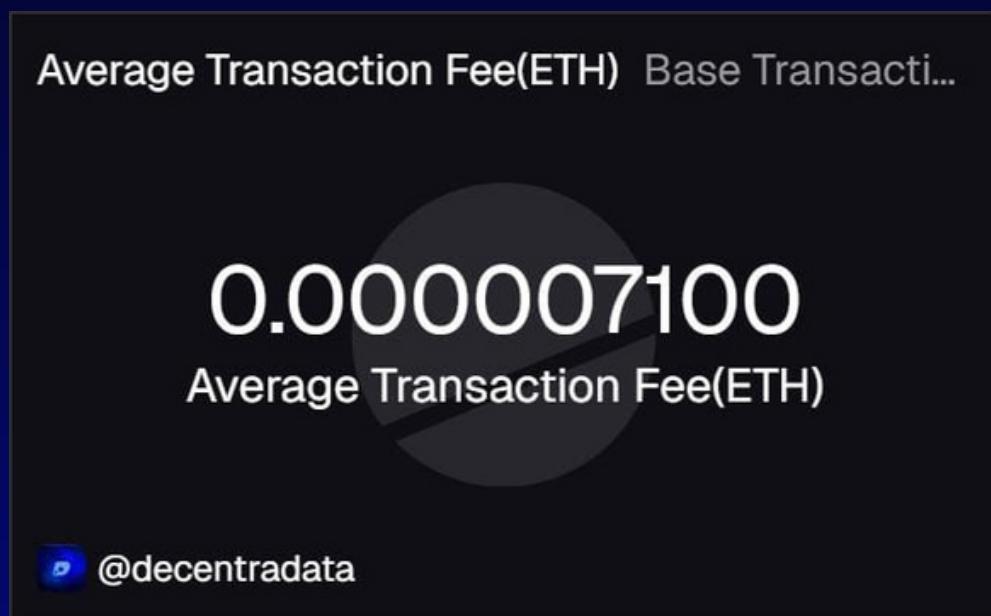
DAILY BASE TRANSACTIONS COUNT VS. ACTIVE ADDRESSES



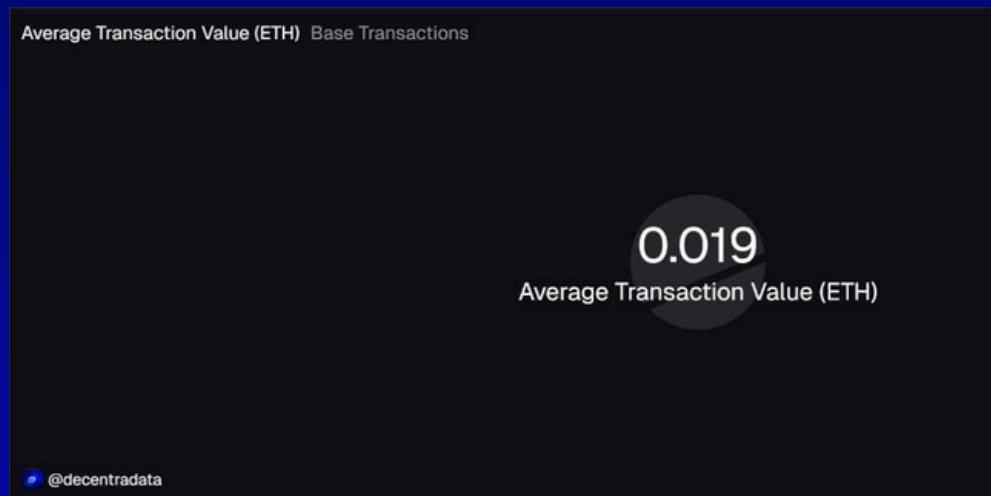
MONTHLY TRANSACTIONS



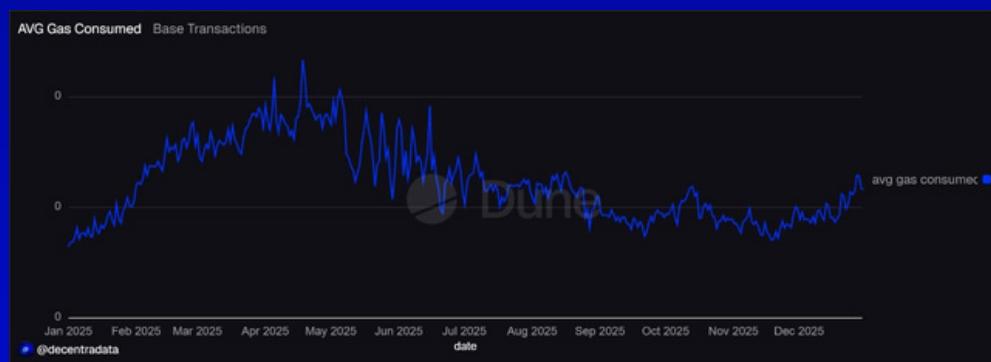
AVERAGE TRANSACTION FEE



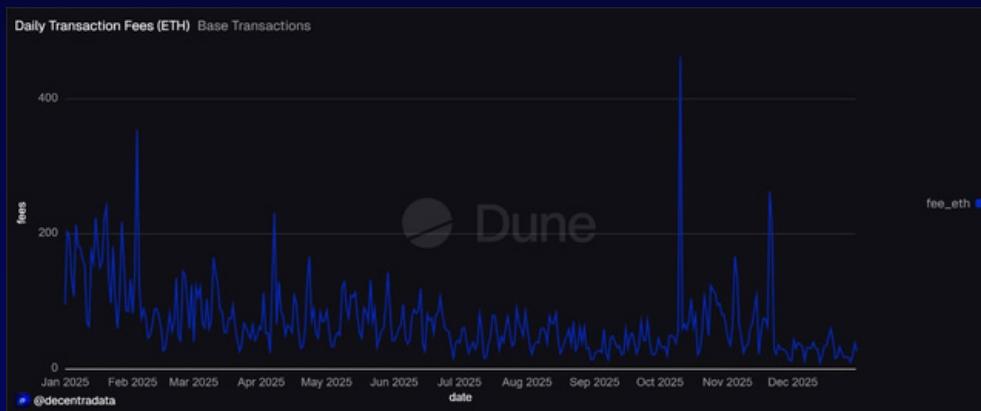
AVERAGE TRANSACTION VALUE



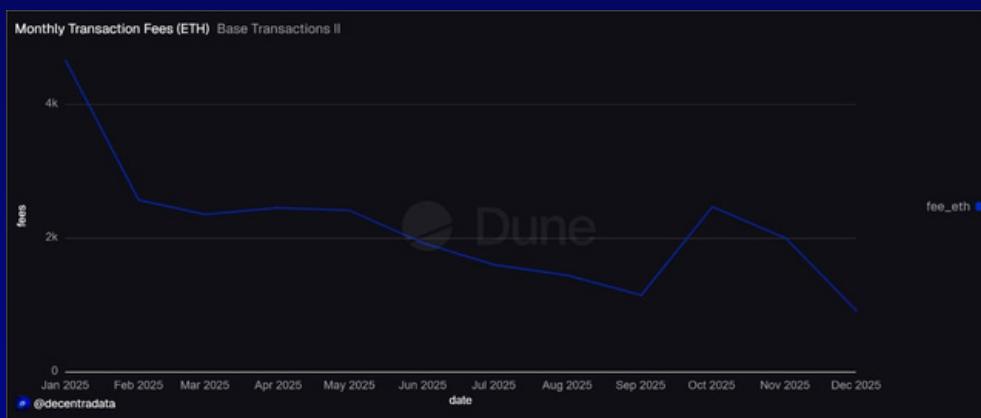
AVERAGE GAS CONSUMED



DAILY TRANSACTION FEES (ETH)



MONTHLY TRANSACTION FEES (ETH)



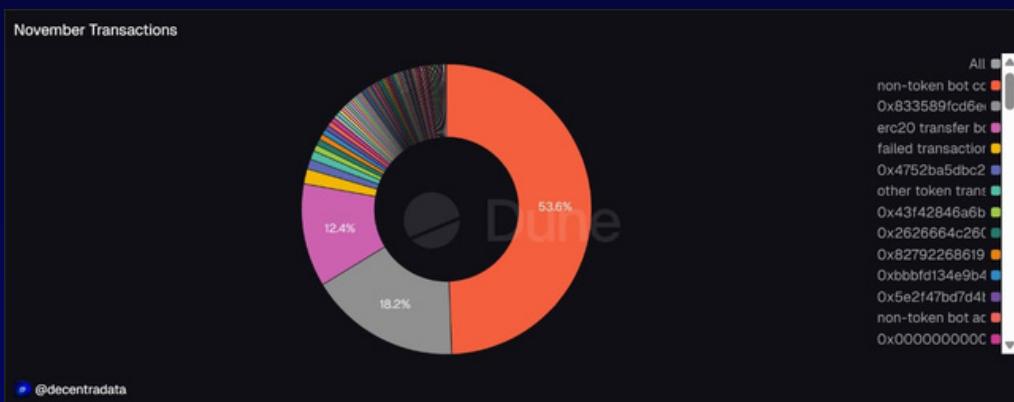
AVERAGE STABLECOINS FEES (ETH)



AVERAGE STABLECOINS FEES (USD)



NOVEMBER TRANSACTION ANOMALY



Throughout 2025, daily transactions and daily active users showed clear volatility, with multiple peaks across the year. June recorded the highest daily activity, reaching approximately 18 million transactions per day alongside roughly 3 million daily active users. Following this peak, activity declined sharply. The current baseline stands at around 3 million transactions per day and 400,000 daily active users.

November also experienced a notable transaction spike, reaching a peak of 3.5 million transactions per day. However, daily active users remained relatively flat at approximately 1 million during this period. This divergence signals a shift in the composition of activity rather than broad user growth.

On a monthly basis, November recorded the highest transaction volume at roughly 450 million transactions. In contrast, June recorded the highest monthly active users at 33.5 million. November processed approximately 35 percent more transactions than June while supporting roughly 75 percent fewer users, highlighting a substantial increase in per user transaction intensity.

Average transaction fees remained low at approximately 0.0017 cents, while the average transaction value stood at 0.019 ETH, indicating relatively modest value transfers. Daily transaction fees averaged between 200 and 350 ETH per day in January, with a peak of roughly 350 ETH in early January. A second major spike occurred in October, reaching approximately 450 ETH per day. Following this, fees declined steadily, reaching a current baseline of roughly 40 to 60 ETH per day.

On a monthly basis, transaction fees peaked in January at approximately 4,500 ETH. By December, monthly fees had declined to roughly 1,200 ETH, representing a 73 percent drop from peak levels.

Stablecoin transactions incurred an average fee of approximately 0.024 cents. This is 47 percent higher than the overall average transaction fee, indicating that stablecoin transfers are marginally more expensive than other transaction types.

Examining transactions per user provides additional clarity. In June, Base processed roughly 18 million daily transactions with 3 million daily users, resulting in approximately 6 transactions per user per day. This reflects healthy consumer activity and genuine application usage. The 84 percent low sleep user metric reinforces this conclusion.

Between July and October, both transactions and users declined in parallel, while the transaction per user ratio remained stable at approximately 5 to 6. This indicates that while the user base contracted, engagement intensity among remaining users was preserved. Base lost users, not usage depth.

November marks a clear inflection point. Total monthly transactions surged to approximately 450 million, while the monthly active user base stood at roughly 8 million. This implies an average of 56 transactions per user for the month. Compared to the June baseline of approximately 12 transactions per user per month, this represents a 367 percent increase in per user transaction intensity. This pattern strongly suggests that November activity was dominated by inorganic behavior rather than organic user engagement.

A single non token bot accounted for approximately 53.6 percent of November transactions, while another bot accounted for an additional 12.4 percent. Combined, these entities were responsible for roughly 66 percent of total transaction volume during the month. This activity was likely driven by automated behavior, potentially focused on stablecoin transfer farming.

Overall, transaction composition on Base is becoming less sophisticated over time. Activity is increasingly concentrated in simple transfers rather than more complex application driven interactions. At the same time, economic viability is weakening. In January, monthly fees reached approximately 4,500 ETH. At an ETH price of 2,400 dollars, this equates to roughly 10.8 million dollars in monthly revenue and an annualized run rate of approximately 130 million dollars.

By December, monthly fees declined to approximately 1,200 ETH, or roughly 2.88 million dollars per month, translating to an annualized run rate of approximately 34 million dollars. This represents a 73 percent collapse in fee based revenue.

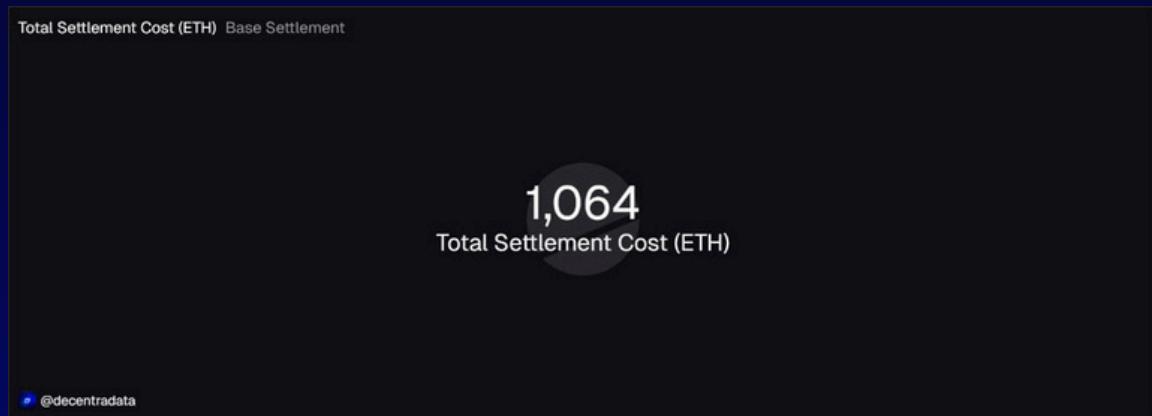
ECONOMIC ACTIVITY (FEES AND REVENUE)

This section evaluates the financial performance of the Base ecosystem. It examines the network's core economic drivers, including user paid fees, application generated revenue, settlement activity, and stablecoin usage. Together, these metrics provide insight into the sustainability of Base's economic model, the strength of its revenue flows, and the degree to which on chain activity reflects real economic demand rather than short term speculation.

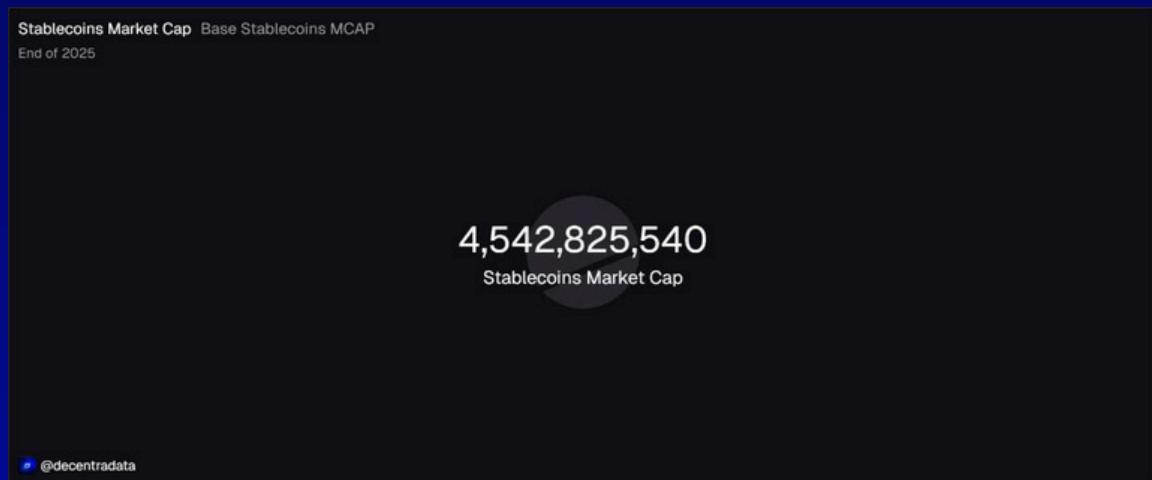
ANNUAL REVENUE



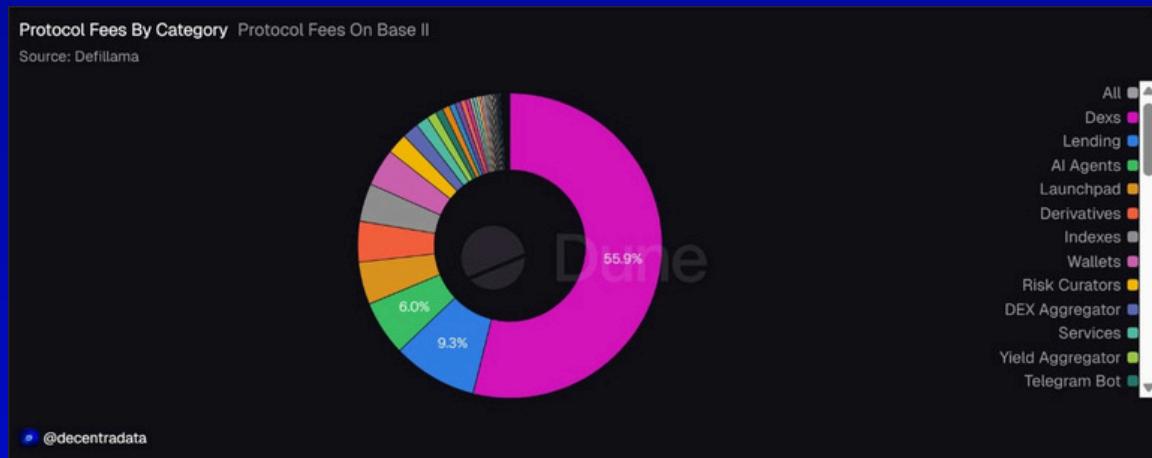
TOTAL SETTLEMENT COST



STABLECOINS MARKETCAP



FEES GENERATED BY SECTORS



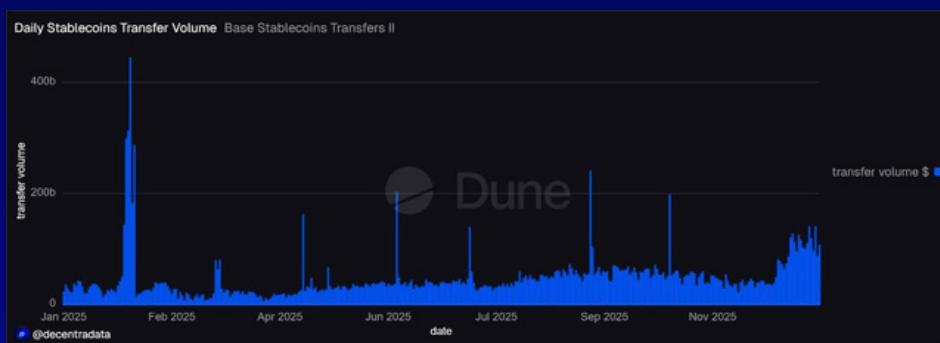
FEES GENERATED BY PROTOCOL

Query results Contract Creations II	
Top 50	
dAPP	Contracts Created
zora	7,455,983
uniswap_v2	1,934,860
uniswap_v3	1,629,222
nichesmartwallet	1,553,583
faircaster	266,288
monsta_vault	257,193
0xbase	151,526
luckydraw	123,897
moxie	105,726
neonpunks	86,842
sup	57,570
oneinch	50,340
arma	38,077
base_protocol_unauthorise_token	23,138
aerodrome	14,445
bcat	12,510
thirdweb	10,864
basemandy	7,677
basedllms	7,324
pancakeswap_v2	7,069
creatorbid	6,120
cannabisai	6,118
streme_fun	5,934
splits	5,666

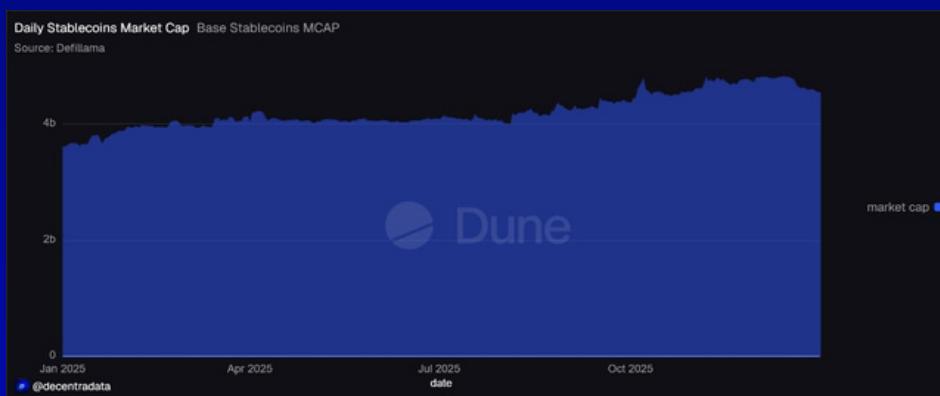
DAILY STABLECOINS MARKET CAP



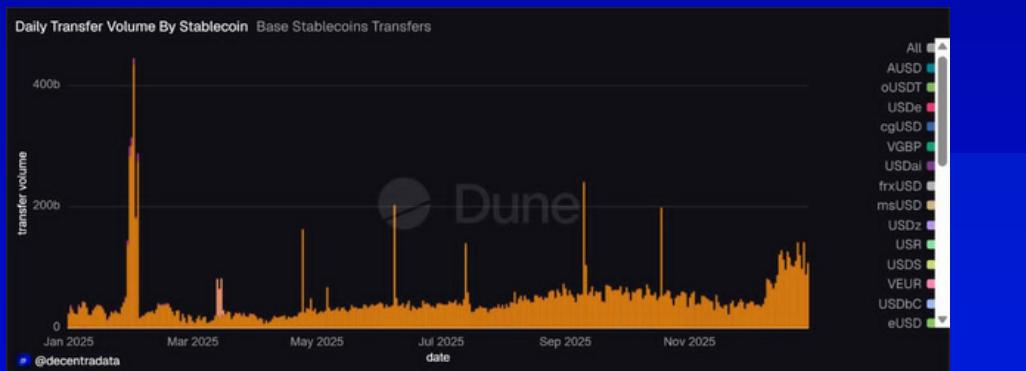
DAILY STABLECOINS TRANSFER VOLUME



DAILY STABLECOINS TRANSACTIONS



DAILY TRANSFER VOLUME BY STABLECOINS



FEES GENERATED ON BASE

Base ended the year with total annual revenue of 26,113 ETH. At an ETH price of 2,400 dollars, this equals approximately 62.67 million dollars in annual revenue. Base incurred 1,064 ETH in settlement costs, equivalent to roughly 2.55 million dollars paid to Ethereum. This results in a gross margin of approximately 95 percent, which is very strong.

Base currently operates at a fee multiple of 1 to 12.8. This is calculated by comparing total protocol level fees of approximately 800 million dollars to Base's own revenue of roughly 62 million dollars. This indicates that Base offers very low fees at the base layer while enabling high revenue generation for application builders, supporting strong protocol level economics.

DEXs account for 57.7 percent of total protocol revenue. Lending contributes 9.4 percent, while AI agents contribute 6.4 percent. Uniswap V2, V3, and V4 collectively generated approximately 258 million dollars in fees, broken down as 152 million, 84 million, and 22 million dollars respectively. Aerodrome generated approximately 173 million dollars. Together, these two platforms account for roughly 93.5 percent of all DEX revenue on Base. In contrast, Virtuals protocol generated approximately 45 million dollars in AI agent fees, suggesting that Base has potential to differentiate by leaning further into AI native applications.

Base ended the year with a stablecoin market capitalization of approximately 4.54 billion dollars. When compared to annual protocol fees of roughly 800 million dollars, this implies that Base generates about 0.17 dollars in protocol fees per dollar of stablecoin market cap per year.

Daily stablecoin market capitalization peaked in December at approximately 4.8 billion dollars. The trend remained relatively stable throughout the year, starting near 3.5 billion dollars and rising by roughly 37 percent in a near linear fashion. In contrast, daily stablecoin transfer volume displayed extreme volatility. The largest spike occurred in late January, exceeding 450 billion dollars in daily transfer volume.

This activity appears questionable. On that same day, total transaction count was approximately 1.5 million, implying an average transfer size of roughly 300,000 dollars per transaction. This pattern does not resemble organic economic activity.

Secondary transfer volume spikes occurred in May, June, September, and October, reaching approximately 170 billion, 200 billion, 240 billion, and 200 billion dollars respectively. In December, daily stablecoin transfer volume stabilized between 100 billion and 150 billion dollars, which remains elevated relative to earlier baselines.

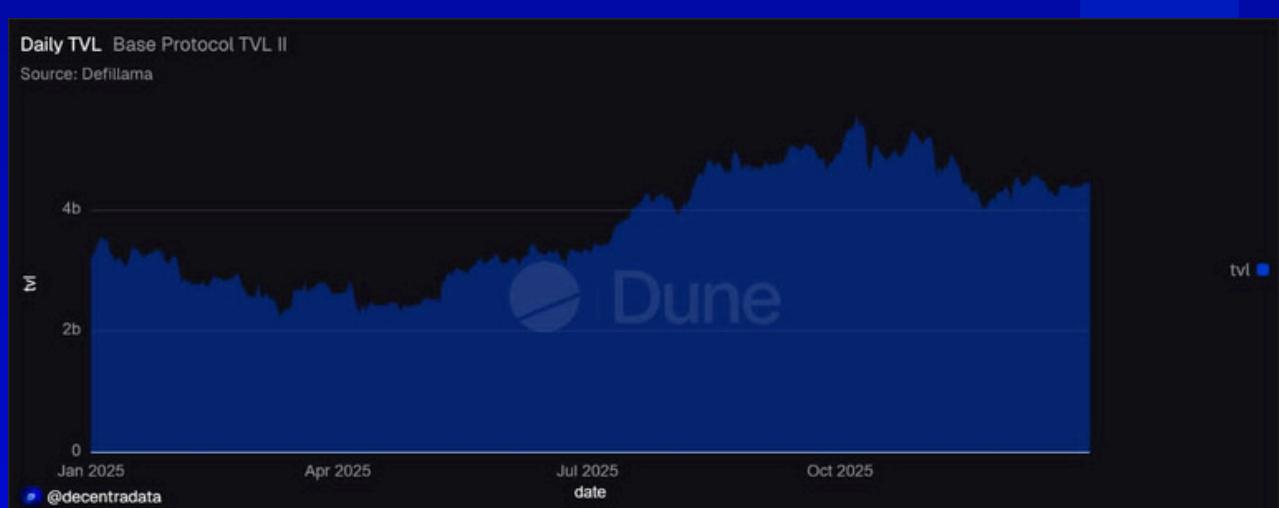
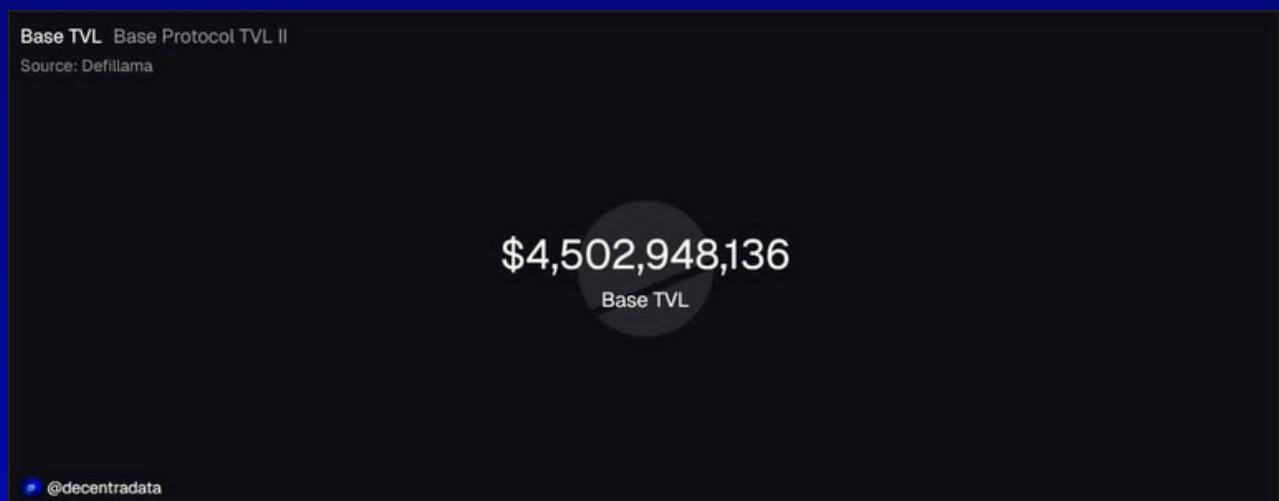
Daily stablecoin transaction counts averaged approximately 1.2 million transactions per day for much of the year. This later expanded sharply to between 6 million and 7 million transactions per day. This surge aligns closely with the transaction spike observed in November and is likely driven by the same underlying dynamics.

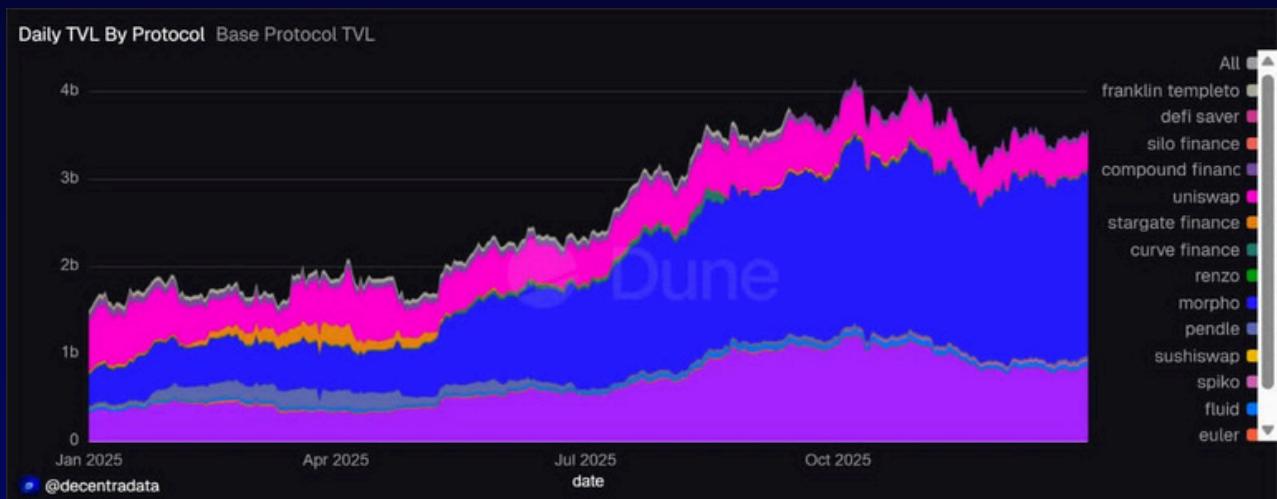
USDC dominates the stablecoin landscape on Base, accounting for approximately 95 percent of all stablecoin usage. Other stablecoins collectively represent the remaining 5%.

LIQUIDITY AND CAPITAL BASE

An ecosystem's liquidity base determines the sophistication of its financial markets, the scale of capital intensive applications, and the network's ability to support high frequency or high value activity. For Base, liquidity is especially important given its role as a fast and low cost L2 built to support consumer and DeFi innovation.

This section analyzes Total Value Locked, TVL, to assess the amount of capital available to applications. It also examines bridge flows to show how liquidity moves across ecosystems. TVL trends signal investor confidence and capital depth. Bridge inflows and outflows reveal how tightly Base integrates with broader multichain liquidity networks. Together, these metrics indicate the stability of Base's capital base over time.





At the end of December, Base TVL stood at \$4.5 billion across all DeFi protocols. TVL grew steadily from \$3.5 billion in January to \$3.8 billion in June. The chain then saw explosive growth, peaking at \$5 billion in early October. This was followed by a decline to \$4.5 billion in December, resulting in a net growth of 29 percent in 2025.

Morpho recorded the strongest TVL growth among all protocols, accounting for 60 to 70 percent of total Base TVL. Morpho grew from \$800 million in January to \$3.2 billion in October, before declining slightly to \$3 billion.

Uniswap remained relatively stable, with TVL between \$500 million and \$700 million throughout the year, and a mild increase around mid year. Protocols such as Compound Finance, Silo Finance, Stargate, and others with TVL below \$200 million collectively accounted for less than 20 percent of total TVL.

Base also experienced the largest single day outbound bridge event of the year, with \$1.8 billion leaving the chain in mid October. This amount equals roughly 40 percent of Base's current TVL. Notably, Base TVL peaked during a period when active users were declining.

Developer And Infrastructure Activity

Developers act as a leading indicator of future usage and value creation. Before users arrive, developers deploy contracts, test designs, and build the products that shape the ecosystem. This section focuses on Base's builder community, measured through contract deployments, infrastructural activity, and gas consumption tied to more complex applications.

By analyzing weekly contract deployments and application level contract counts, we assess growth in the number of teams building on Base and the breadth of innovation occurring. Rising deployment activity signals expanding builder interest, while stagnation may indicate ecosystem maturity or competitive pressure from other chains. In addition, rising gas consumption often reflects the launch of more computation heavy and feature rich applications, such as lending markets and yield protocols.

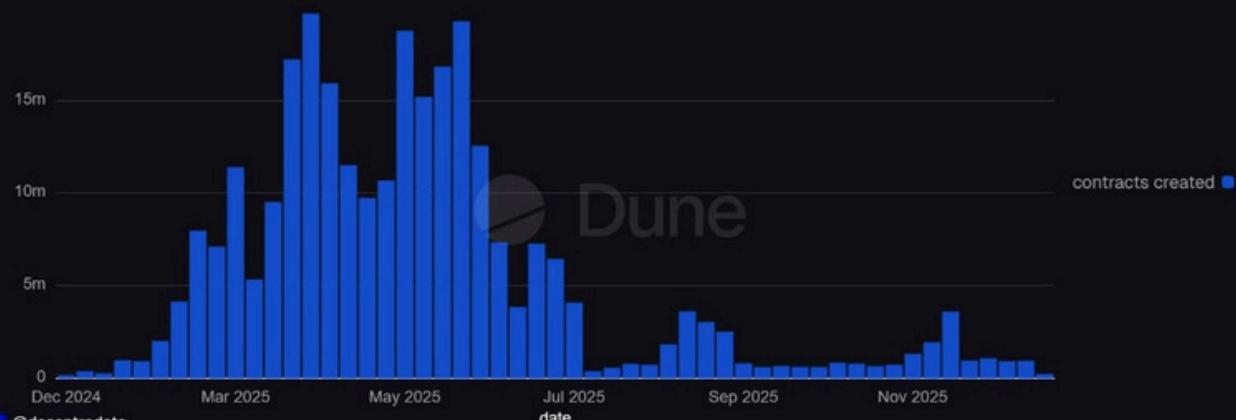
Query results Top 50 dAPPs By Gas Consumed	
Top 50	
dAPP	Gas Consumed
erc4337	77,513
cointool	23,562
xen_crypto	22,237
uniswap	17,310
aerodrome	16,436
base_usdc	12,597
uniswap_v2	12,432
base_proxy	7,782
relay	4,969
zeroex	4,196
seaport	3,990
lifi	3,974
gains_network	3,773
tarot	3,690
frenpetonbase	3,251
oneinch	2,871
kyber	2,812
vfat	2,617
clanker	2,611
odos_v2	2,531
cube	2,286
zora	1,943
gnosis_protocol_v2	1,572
boundless	1,566

Total Contracts Created Contract Creations

278,460,958
Total Contracts Created

• @decentradata

Weekly Contracts Created Contract Creations



Contract Count By dAPP Contract Creations II

Top 50

zora
• @decentradata

dAPP

smartfun_v1

contracts created ■

Dune

Query results Contract Creations II	
Top 50	
dAPP	Contracts Created
zora	7,455,983
uniswap_v2	1,934,860
uniswap_v3	1,629,222
nichesmartwallet	1,553,583
faircaster	266,288
monsta_vault	257,193
0xbase	151,526
luckydraw	123,897
moxie	105,726
neonpunks	86,842
sup	57,570
oneinch	50,340
arma	38,077
base_protocol_unauthorise_token	23,138
aerodrome	14,445
bcat	12,510
thirdweb	10,864
basemandy	7,677
basedllms	7,324
pancakeswap_v2	7,069
creatorbid	6,120
cannabisai	6,118
streme_fun	5,934
splits	5,666

ERC4337 dominates with 77k gas, which is 3.3x higher than CoinTool. The top three contracts account for a combined 123k gas, representing 53 percent of the top ten. DEXs also appear four times in the top ten.

Total contracts created reached **278,460,958**. This figure is unusually large. For context, Base has created five to six times more contracts than chains that are three to four times older.

The weekly contracts chart shows a peak of 19 million contracts created in a single week in late April 2025. Other peaks followed, with 18 million contracts in late May and early June. July then saw a sharp contraction, with weekly contract creation falling from 12 million to 4 million. The weekly data also shows extreme volatility, swinging from 1 million to 19 million and back to 1 million, an 83 percent decline.

Zora leads contract creation by dApp with 7 million contracts, 3.5x more than Uniswap V2. Uniswap V2 and Uniswap V3 together account for roughly 3.5 million contracts. Base is also pioneering mass market account abstraction. About 68 percent of developer activity targets consumer applications such as NFTs, social, and gaming, yet these categories generate less than 10 percent of total ecosystem fees.