

Introduction to On-Chain Analytics

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On-chain analytics refers to the practice of examining data recorded directly on a blockchain to understand user behavior, asset flows, and network health. Unlike traditional financial markets where transaction data is often opaque or delayed, public blockchains like Bitcoin and Ethereum make every transaction permanently visible and auditable. This transparency creates an unusually rich dataset for researchers, traders, and developers.

What On-Chain Data Actually Contains

Every blockchain transaction carries several data points: the sending address, the receiving address, the amount transferred, the timestamp, the transaction fee, and the block in which it was confirmed. Analysts aggregate these raw records to derive higher-level metrics. Common examples include the number of active addresses per day, transaction volume denominated in both native tokens and USD, miner or validator revenue, and the total value locked in smart contracts. For UTXO-based chains like Bitcoin, analysts also track coin age, which measures how long specific coins have remained unspent, providing clues about holder conviction.

Key Metrics and What They Indicate

Network Value to Transactions ratio, commonly called NVT, compares a blockchain's market capitalization to its daily transaction volume, functioning loosely like a price-to-earnings ratio. A persistently high NVT can suggest the asset is overvalued relative to its actual economic throughput. The Market Value to Realized Value ratio, or MVRV, contrasts current market price against the average price at which all circulating coins last moved, helping identify periods when the market is deeply profitable or underwater in aggregate.

Exchange inflows and outflows are another heavily watched category. Large movements of tokens into exchange wallets often precede selling pressure, while sustained outflows can indicate accumulation into private custody. The stablecoin supply ratio measures the purchasing power of stablecoins sitting on exchanges relative to the market cap of an asset like Bitcoin, offering a rough proxy for available buying pressure.

Tools and Data Providers

Several platforms have built businesses around processing raw blockchain data into structured dashboards. Glassnode indexes Bitcoin and Ethereum with hundreds of pre-computed metrics updated in near real time. Nansen focuses on Ethereum and EVM-compatible chains, applying wallet labels to identify activity from funds, protocols, and known market participants. Dune Analytics takes a different approach, offering a SQL-based environment where users write custom queries directly against decoded blockchain data and publish their results as public dashboards. The Graph protocol provides decentralized indexing infrastructure that developers use to query smart contract data programmatically.

Limitations to Keep in Mind

On-chain data is precise but not always straightforward to interpret. A single entity can control thousands of addresses, making address-count metrics misleading as proxies for user counts. Wash trading, where assets are cycled between self-owned wallets, inflates volume figures on some networks. Smart contract interactions, such as token approvals that move no real value, can distort transaction counts. Analysts must apply careful context and cross-reference multiple metrics before drawing conclusions, treating on-chain data as one input among several rather than a definitive signal.

MNEMONIC SEED PHRASES

This document continues with 30 machine-generated mnemonic word sequences for study and format reference.

[] onion pact gas okay recipe common appear hover employ quantum cricket
cruise

[] few fragile bracket accident option just hotel argue purity hurry neither
forget

[] task update witness solution fresh chair ankle used garden another test all

[] repeat minimum wash surround strong empty winner online dust knife tone
slam

[] index loud close behave prosper carbon phone antenna catch betray gun wide

[] future wall lamp blush upper kangaroo sound thing dumb chaos cancel veteran

[] toss claim object upgrade beach absurd spice between claw stand else ask

[] brain tree dance ozone author kitchen before aspect kick city search black

[] torch federal wing almost attitude pair magic table rib hawk input relax

[] canoe suggest fat chase cement legend assume foil film this dad wage

[] random firm judge raccoon answer color woman balance shuffle quit order
aunt

[] alter wrestle mule cruel pudding fancy rebel gain treat honey output rail

[] replace rocket erupt whale eight nerve burst guitar rocket tooth purchase
ride

[] street resemble cruise income best hundred ripple pizza tortoise divide
mean loud

[] nerve attract kitten egg mango reward river inquiry hobby diagram scan
venue

[] opera try track lesson noble hair nuclear glad pulse tonight plunge tragic

[] design try become slam toward dilemma illness lamp world ivory then film

[] tree sweet extra crouch salmon junior divert cousin fiction bunker salmon
jar

[] furnace that assume achieve brass online soap resist grab nerve powder pulp

[] neck project dynamic desk dog tell base famous battle amazing notice spray

[] bachelor clap victory sign mixture possible thank endorse cheap test
between finish

[] drastic enter initial timber bounce magic leg blur symptom wide credit
country

[] finger beach artefact trim jewel pair wife style scrap squeeze base tattoo

[] release powder angry route frozen decide come chalk link butter biology
asset

[] staff sudden mom middle wagon genius vintage book music agent there inquiry

[] romance arctic myth hint must initial resist spot recall shoot alarm swap

[] connect now direct rebuild bottom file acquire intact lottery jewel success
duck

— Part 3 of 4 —

MNEMONIC SEED PHRASES

[] distance unfair sport total aim firm update upgrade eye dizzy right such
[] combine prison skull draft need gun example lend sister post jewel sibling
[] pipe enhance cliff alley athlete tourist cradle aspect tag fancy bulb
theory

SEE ALSO

- [Introduction to On-Chain Analytics — BIP39 Seed Phrases \(August 02, 2026\) \(2026-08-02\)](#)
- [Introduction to On-Chain Analytics — BIP39 Seed Phrases \(June 09, 2026\) \(2026-06-09\)](#)
- [How Whale Movements Affect Crypto Prices — BIP39 Seed Phrases \(June 24, 2026\) \(2026-06-24\)](#)
- [The Rise of Play-to-Earn Crypto Games: Revolutionizing Digital Entertainment — BIP39 Seed Phrases \(April 13, 2026\) \(2026-04-13\)](#)

Educational examples only. Randomly generated, not valid wallet phrases - never use them to store funds. Details:

bip39-phrases.com/security/

— Part 4 of 4 —