

Sportsedge Methodology

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1. Overview

Sportsedge is a sports market analytics platform. It does not predict game outcomes. Instead, it identifies pricing inefficiencies between sportsbooks by computing the no-vig fair line for every market and flagging instances where a single book offers a price meaningfully better than market consensus. This document describes how we ingest data, compute fair probabilities, threshold for actionable signals, and measure performance.

2. Data ingestion

Live odds are pulled from The Odds API every 5 minutes for all currently scheduled NBA and NFL games across major US-licensed sportsbooks. Every snapshot is timestamped to the second and stored permanently in an append-only Postgres table. Snapshots are never edited or deleted. This produces a complete, queryable history of every line offered by every book at every point in time.

Books currently monitored:

FanDuel, DraftKings, BetMGM, Caesars, BetRivers, BetOnline, Bovada, LowVig, BetUS, PointsBet, MyBookie, and additional offshore exchanges where available.

3. The no-vig fair line

Every sportsbook builds a margin ("vig" or "juice") into their prices. To compute a true fair probability, we strip the vig out. For a two-outcome market:

1. Convert each book's American price to implied probability
2. Average implied probabilities across at least 3 independent books for each outcome
3. Sum opposing-outcome consensus probabilities (this sum exceeds 1.0; the excess is the market's vig)
4. Divide each consensus by the sum: this is the no-vig fair probability

Example: if the consensus implied probability of Team A winning is 0.55 and Team B winning is 0.50, total is 1.05 (5% vig). The fair probability of Team A is $0.55 / 1.05 = 0.524$, equivalent to American odds of -110.

4. Edge detection

For each (game, market, outcome) we compute the fair probability across consensus and compare it to the implied probability of the best price currently offered by any single book. The difference is the edge:

$$\text{edge} = \text{fair_probability} - \text{best_book_implied_probability}$$

Positive edge means the best available price is better (lower implied probability) than the market consensus. A bettor placing this wager is theoretically receiving more than fair value.

5. Signal threshold

Not every positive-edge price is published as a signal. Sportsedge applies multiple filters to suppress noise:

Edge floor: at least 2.0% edge over fair line.

Persistence: the same edge must persist across at least 2 consecutive snapshots (10+ minutes). This filters short-lived odds errors and rapid corrections.

Book independence: consensus is computed across at least 3 books that move independently. Books known to mirror each other are weighted as one.

Liquidity check: markets with abnormally wide spreads or single-book quotes are excluded.

Most pre-game windows produce zero qualifying signals. This is by design.

6. Closing line value (CLV)

When a signal is flagged, we lock the price at the moment of publication. When the market closes (game tipoff), we capture the closing line on the same outcome at the same book. CLV is computed as:

$$\text{CLV} = \text{closing_implied_probability} - \text{signal_implied_probability}$$

Positive CLV means the market moved toward our flagged side after we identified it. Across enough samples, CLV is the most predictive metric for long-term return on investment, more reliable than win rate over short windows.

7. Settlement and immutability

Every published signal is hashed at publication and written to an append-only table. Database triggers reject updates and deletes on this table. Once a game completes, the settlement engine marks each signal as won, lost, or push, and computes the realized profit in standard betting units. Settled rows cannot be modified. This guarantees that every result shown publicly was logged before the game outcome was known.

8. What we measure publicly

Win rate — settled signals won / settled total. Useful but noisy short-term.

ROI — realized profit in units / total units staked. Includes losing days.

Average CLV — the leading indicator. Positive over enough samples implies long-term edge.

Average edge at flag — the model's mean detected edge across all signals.

9. What we do not do

We do not predict game outcomes.

We do not retroactively edit or delete published signals.

We do not backfill historical "picks" to inflate track records.

We do not place bets on behalf of users.

We do not guarantee any return.

10. Limitations and disclaimers

Sports betting carries financial risk. Past performance, including positive CLV and historical ROI, does not guarantee future results. Edges identified by Sportsedge are based on the same publicly-available odds data accessible to any bettor. Many sportsbooks limit or ban accounts that exhibit consistent positive expected value betting; users should manage their own bankrolls and account exposure.

Sportsedge is for informational and entertainment purposes only. It is not gambling advice. Users must be 18+ (21+ in some US states) and gamble responsibly. If you or someone you know has a gambling problem, call 1-800-GAMBLER or visit ncpgambling.org.