

Adjacent

Event Contract Benchmarking and Indexing

RED Battleground Index Methodology

2026-07

RED Battleground Index Methodology

Adjacent Markets, Inc.

Version 1.1

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1. Executive Summary

Adjacent's RED Battleground Index is a forward-looking political index comprised of underlying event contracts from Kalshi's prediction market exchange. It provides insight into Republican power and sentiment projections across electorally competitive U.S. states, typically referred to as "Battleground states."

The index is centered at a neutral baseline of 100. When RED Battleground is above 100, the index is pricing in Republican advantage across the eligible Battleground market universe. Conversely, when below 100, RED Battleground conveys that Democrats hold an advantage across the eligible Battleground market universe.

RED Battleground is a part of Adjacent's U.S. political index family alongside RED. However, it differs in that it is geographically scoped to U.S. Battleground states, thus excluding non-Battleground markets that are eligible under the broader RED index.

The RED Battleground index is designed as a financial benchmark with multiple use cases (e.g., perpetual swaps, binary options, ETFs and ETPs, etc). RED Battleground's index value is derived from prices of underlying election event contracts. It is not a poll or survey.

For the RED Battleground index, Adjacent Markets, Inc. takes on the roles and responsibilities of Index Sponsor, Calculation Agent, and governance authority. The RED Battleground methodology and all constituent weights are maintained by the Adjacent Index Committee.

It is worth noting that RED Battleground and BLUE Battleground are independent indices. They are not paired indices that mechanically mirror one another. They are designed to measure Republican Battleground and Democratic Battleground constituent election market universes independently. They may often move in opposite directions, but the relationship is not guaranteed at all times.

2. Index Overview

2.1 Objective

RED Battleground measures the extent to which electorally competitive U.S. states are trending Republican from a political power and sentiment perspective using Kalshi election event contract prices. Its objective is to benchmark Republican advantage in Battleground states that play critical roles in electoral outcomes.

Unlike RED which measures broad U.S. Republican political power and sentiment, RED Battleground measures Republican advantage only within the Battleground State Universe.

2.2 Index Name and Ticker

- **Index name:** RED Battleground Index
- **Short name:** RED Battleground
- **Index ticker:** REDBTL
- **Index family:** U.S. Politics > Battleground State Composite
- **Index type:** Price-derived political power and sentiment reference index
- **Base / neutral value:** 100.00
- **Calculation unit:** Cents for contract-price and resolution-value purposes; index values are unitless
- **Target exposure:** Republican U.S. election exposure across Battleground states

2.3 Design Principles

Price-derived: RED Battleground values used in the index's calculation come from CFTC-regulated event contract prices.

Battleground-focused: RED Battleground includes only eligible markets in the Battleground State Universe. It is purposefully a narrow subset of RED and only intended to measure electorally competitive states.

Continuous: RED Battleground updates in near real time. The composite index recalculates every 60 seconds; constituent weights recalculate on the same cadence. Price changes from Kalshi feed into the index with a maximum 5-minute delay.

Fixed category architecture: RED Battleground uses four office categories: Presidential state winner, Senate, Gubernatorial, and House. These categories are assigned fixed category weights of 30%, 30%, 20%, and 20%, respectively.

Transparent: RED Battleground's methodology is optimized for transparency and the ability for anyone to easily reproduce calculations and weights.

2.4 Relationship to RED

RED Battleground inherits many core concepts from the RED methodology. However, it differs in these three important ways:

1. It applies a Battleground state filter
2. It excludes Mayoral markets
3. It uses category weights that are calibrated for electorally competitive states instead of broad national party power

2.5 Target Users and Use Cases

RED Battleground is intended for the following use cases:

- **Derivative exchanges** that seek to offer long Republican exposure in the most electorally competitive states through financial instruments.
- **Institutional investors and funds** to evaluate Republican risk exposure tied to the most electorally competitive states.
- **Market makers and traders** that need a benchmark to price baskets of electorally competitive U.S. states
- **ETF and ETP issuers** evaluating investable exposure to political trends surrounding electorally competitive U.S. states
- **Researchers and media** who seek to monitor political market signals across electorally competitive U.S. states

3. Universe Definition

3.1 Eligible Markets

RED Battleground constituents are Kalshi event contracts that:

1. Represent a binary outcome tied to a U.S. election
2. Are Republican-aligned under the RED methodology
3. Fall within one of the four eligible RED Battleground office categories
4. Are tied to elections in the Battleground State Universe including Presidential state winner, U.S. Senate, Gubernatorial, or U.S. House contests
5. Do not have stale 0.0% or 100.0% mid prices

6. Do not exceed the Mid Price Threshold and do not have Outlier Quotes, subject to temporary use of last valid mid price described in Section 6.5
7. Have not yet resolved

Eligible office categories:

- Presidential state winner elections
- U.S. Senate elections (both regular cycle and special elections)
- Gubernatorial elections (U.S. states)
- U.S. House of Representatives elections (both regular cycle and special elections)

3.2 Initial Battleground State Universe

The Battleground State Universe consists of:

State	Abbreviation
Arizona	AZ
Georgia	GA
Michigan	MI
Nevada	NV
North Carolina	NC
Pennsylvania	PA
Wisconsin	WI

The Adjacent Index Committee (AIC) initially selected this Battleground State Universe as these states are widely recognized as the primary presidential battleground states during the 2024 election cycle. They were critical to Electoral College outcomes in recent presidential elections. Further, they represent a core set of competitive states monitored by major election analysts, media organizations, and political campaigns.

This Battleground State Universe is intended to provide a stable and intuitive universe for RED Battleground. However, it is not intended to imply that there will never be changes made to it that may come through AIC governance.

3.3 Battleground State Review Criteria

The AIC may conduct interim reviews at any time to assess whether modifications should be made to the Battleground State Universe informed by political, market, electoral, legal, or data-availability developments.

The AIC may evaluate objective evidence including, but not limited to:

- Recent Presidential election margins
- Market availability and liquidity
- Changes in political conditions, election administration, legal considerations, or data availability

Adjacent will provide at least 30 calendar days' public notice before an addition or removal from a Battleground State Universe becomes effective. Such a notice will include affected states, rationale, and an effective date.

There may be instances where the AIC is required to implement changes on shorter notice in order to preserve index integrity, address exchange changes, market disruptions, legal or regulatory developments, or material data quality and availability issues.

3.4 Inclusion Criteria

A market is eligible for inclusion when:

- It is listed on Kalshi in -R format or in another Republican designated format
- It clearly ties to an eligible Presidential state winner, Senate, Gubernatorial, or House election in the Battleground State Universe
- It has a valid mid price calculated from best bid and best ask, with a bid/ask spread that does not exceed 50 percentage points
- It has been active for at least 48 hours following initial listing
- The Adjacent Index Committee has completed a screening review (weekly, on a rolling basis)

The 48-hour evaluation window exists to avoid inclusion of markets that list with wide, illiquid spreads immediately after launch. Most Kalshi markets normalize within the first day or two of listing.

3.5 Exclusion Criteria

A market is excluded if:

- The contract has resolved
- The mid price has been at 0.0% or 100.0% with no bid/ask activity for more than 72 consecutive hours
- The constituent exceeds the Mid Price Threshold for more than 4 consecutive hours
- The constituent has Outlier Quotes for more than 4 consecutive hours
- The ticker has been suspended or delisted by Kalshi
- The market is not tied to a state or district in the Battleground State Universe
- The market falls outside the four eligible office categories
- The AIC determines the contract does not represent a valid election exposure for the office category or the Battleground state, or that its inclusion would create a material data quality or benchmark integrity issue

3.6 Presidential State Winner Category

The Presidential category is only active when at least five eligible Presidential state winner constituents are available. The category is excluded from the composite calculation until the threshold is reached. When it is not satisfied, its category weight is redistributed pro rata across the remaining active categories.

Battleground states are critical to Electoral College outcomes, therefore the Presidential state winner markets receive a 30% category weight. Presidential state winner markets are eligible when Kalshi lists markets that are tied to which party or candidate will win in a specific Battleground state in a U.S. Presidential election.

It may be the case that Kalshi lists these markets as party-line markets or nominee markets (once nominees are known). The AIC may treat either as eligible markets for Republican exposure. If party-line and nominee markets both exist for the same party, state, and election cycle, the AIC will select only one contract based on contract rules, liquidity, market structure, and benchmark integrity considerations. RED Battleground will not include duplicative Presidential state winner exposure for the same party, state, and election cycle.

3.7 Senate, Gubernatorial, and House Categories

For Senate and Gubernatorial markets to be eligible, they must be clearly tied to states in the Battleground State Universe. Similarly, House markets must be tied to congressional districts located in Battleground states.

3.8 Mayoral Exclusion

Mayoral markets are excluded from the RED Battleground index. This is because RED Battleground is a narrower index designed to measure partisan advantage across electorally competitive states in the Battleground State Universe.

Mayoral markets are generally highly local, non-partisan, and thinly listed or unevenly available across Battleground states. They are excluded in order to avoid giving disproportionate influence to isolated municipal contests.

3.9 Special Elections

Special elections are eligible under the same criteria and considerations as regularly scheduled elections. Special elections fall under their corresponding office type and receive the same category weight treatment.

3.10 Constituent Thresholds

Each category must satisfy a minimum constituent threshold before it is included in the composite RED Battleground calculation.

Office Category	Base Weight	Constituent Threshold
Presidential state winner	30%	At least 5 eligible constituents
Senate	30%	At least 3 eligible constituents
Gubernatorial	20%	At least 3 eligible constituents
House	20%	At least 5 eligible constituents
Total	100%	

In the event one or more categories fail to satisfy their thresholds, those categories are excluded from the composite calculation. Their category weight is then redistributed pro rata across the remaining active categories.

RED Battleground will continue to publish index values as long as at least two office categories satisfy their constituent thresholds. Adjacent will halt publication if there are not at least two office categories satisfying their constituent thresholds.

Standalone category index values may continue when the composite halts because only one category satisfies its threshold.

4. Data Sources

4.1 Primary Pricing Source

All RED Battleground constituent prices are sourced from Kalshi, a CFTC-designated contract market.

Price type used: Mid price, calculated as:

$$\text{Mid Price} = (\text{Best Bid} + \text{Best Ask}) / 2$$

Kalshi's binary event contracts, per contract, are priced between 0 and 100. The price reflects the probability of the event occurring based on the underlying trading activity. E.g., an event contract trading at 63 implies a 63% win probability for the Republican-aligned outcome.

For quality screening purposes, bid/ask spread is measured as:

$$\text{Spread} = \text{Best Ask} - \text{Best Bid}$$

4.2 Supplemental Classification Sources

RED Battleground may use supplemental publicly available data to assist with classification, governance, and for weighting purposes, including Electoral College vote counts, and official election results. These sources do not replace Kalshi prices as the pricing input.

Electoral College vote counts are sourced from the National Archives / Office of the Federal Register as the primary source. Electoral College vote counts are used for the Electoral College Sensitivity factor described in Section 5.4.

Concerning the rationale for the initial Battleground State Universe, Adjacent references public election analysis and official election result sources, including

Cook Political Report's 2024 Swing State Project, Associated Press 2024 battleground-state election coverage, and official Presidential General Election Results compiled by the Federal Election Commission from state election offices.

These are not pricing inputs, but instead materials used for Battleground State Universe documentation and governance review only.

4.3 No Alternative Pricing Sources

RED Battleground is currently comprised only of Kalshi event contracts. Adding additional platforms is a potential future enhancement, subject to Governance review.

5. Weighting Methodology

5.1 Category Weights

RED Battleground has fixed category weights. They are a representation of Adjacent Markets' view of the relative importance of each office category when it comes to measuring Republican political power and sentiment in electorally competitive states.

Office Category	Weight
Presidential state winner	30%
Senate	30%
Gubernatorial	20%
House	20%
Total	100%

These weights represent judgment about political significance within the Battleground State Universe. They do not originate from a statistical model.

These category weights are used when all categories satisfy their constituent thresholds described in Section 3.10. However, category weights may temporarily adjust when one or more do not satisfy their constituent thresholds. Those categories are then excluded from the composite calculation and their category weights are redistributed across the remaining active categories.

$$\text{Adjusted Category Weight}_c = \text{Base Category Weight}_c / \sum \text{Base Category Weights of Active Categories}$$

RED Battleground will publish when at least two office categories satisfy their constituent thresholds. When fewer than two office categories satisfy their thresholds, the publication of the RED Battleground value is halted until at least two categories are active.

Example 1: Presidential category inactive

If the Presidential state winner category has fewer than five eligible constituents, its 30% weight is then excluded from the composite calculation and absorbed by the Senate, Gubernatorial, and House categories pro rata. The adjusted category weights in such an example would be:

Office Category	Base Weight	Adjusted Weight
Presidential state winner	30%	0.000%
Senate	30%	42.857%
Gubernatorial	20%	28.571%
House	20%	28.571%
Total	100%	100.000%

Example 2: Presidential and Gubernatorial categories inactive

If the Presidential state winner and Gubernatorial categories fail their constituent thresholds, their combined 50% base weight is excluded from the composite calculation and absorbed by the Senate and House categories. The adjusted category weights in such an example would be:

Office Category	Base Weight	Adjusted Weight
Presidential state winner	30%	0.000%
Senate	30%	60.000%
Gubernatorial	20%	0.000%
House	20%	40.000%
Total	100%	100.000%

Example 3: Only one category active

If only one category satisfies its constituent threshold, the composite RED Battleground value is halted rather than published as a single category composite. Adjacent may, however, continue publishing the standalone category index value during such a period.

5.2 Weight Rationale

Presidential state winner (30%): Battleground states are most commonly understood by their role in determining Electoral College outcomes and the national partisan control that follows. The category is capped at 30% so the index is not simply a benchmark for the Presidential election.

Senate (30%): Senate markets are statewide contests that reflect both partisan sentiment at the state level as well as the national level. Senate electoral outcomes have direct impacts on federal governance, appointments, legislation, and party control. Battleground Senate races frequently become national proxies for party strength.

Gubernatorial (20%): Gubernatorial election outcomes influence state policy, executive administration, emergency powers, budget priorities, redistricting, and appointments. They receive a higher weight in RED Battleground than they do in RED because Governors are instrumental to state level political power in Battleground states.

House (20%): House districts are more localized than statewide races and may not always reflect statewide political advantage. That said, the House category captures breadth across a wide collection of races and multiple jurisdictions. It provides meaningful signal below the statewide-level.

5.3 Differences From RED and BLUE Category Weights

RED Battleground and RED use different category weights. This is because RED Battleground measures Republican advantage within electorally competitive states. RED on the other hand is designed to measure broad national party strength across a comprehensive electoral universe. Consequently, statewide contests receive greater emphasis in RED Battleground than they do in RED.

5.4 Individual Market Weights Within Categories

RED Battleground inherits RED's weighting framework at the constituent level. Constituent markets are not equally weighted, but instead use three sensitivity factors that help determine each constituent market's weight:

Factor	Default Sensitivity	Applies To
Volume Sensitivity	0.7	All categories
Time to Expiration Sensitivity	0.6	All categories
Electoral College Sensitivity	0.5	All categories

Electoral College Sensitivity is unique to RED Battleground. It replaces Population Sensitivity used in RED. This methodology decision was made because RED Battleground is designed around electorally competitive states and partisan political advantage at the national level. Using both Electoral College votes and population would risk overweighting state size.

Electoral College vote counts for the Battleground State Universe:

State	Electoral College Votes
Arizona	11
Georgia	16
Michigan	15
Nevada	6
North Carolina	16
Pennsylvania	19
Wisconsin	10
Total	93

Standard formula for all categories:

```
marketWeight = (volumeScore × volumeSensitivity + timeScore ×
timeSensitivity + electoralCollegeScore × electoralCollegeSensitivity) / 3
```

Construction:

- **Volume score:** From a 0–1 scale, it is the relative ranking of lifetime/cumulative trading volume among constituents within the same category, with 1.00 assigned to the highest-volume constituent and lower scores assigned proportionally.
- **Time score:** $\max(0, 1 - \text{days_to_resolution} / 1460)$, using a 1,460-day linear decay horizon. A market resolving today scores near 1.0; a market resolving four or more years out scores 0; a constituent with no resolution date scores 0.5; and a constituent whose scheduled resolution date has passed but has not yet been removed or resolved scores 0.1.
- **Electoral College score:** The constituent state's Electoral College vote count divided by the largest Electoral College vote count among states in the Battleground State Universe.

Market weights within a category are normalized to sum to 1.0 after calculation.

Example: House category with five Battleground-state markets

In the following example, the House category has five eligible constituents, satisfying the House category constituent threshold. The sensitivity defaults are applied as Volume 0.7, Time to Expiration 0.6, and Electoral College 0.5. All factor scores in the example are expressed on a 0–1 scale.

	HOUSEPA-07-R	HOUSEGA-02-R	HOUSEMI-07-R	HOUSEAZ-06-R	HOUSENV-03-R
Volume score	1.00	0.70	0.80	0.50	0.30
Time score	0.50	0.80	0.70	0.40	0.60
Electoral College score	1.00	0.84	0.79	0.58	0.32

Using the standard formula:

$$\begin{aligned}
 \text{HOUSEPA-07-R raw weight} &= (1.00 \times 0.7 + 0.50 \times 0.6 + 1.00 \times 0.5) / 3 \\
 &= (0.700 + 0.300 + 0.500) / 3 \\
 &= 1.500 / 3 = 0.500
 \end{aligned}$$

$$\begin{aligned}
 \text{HOUSEGA-02-R raw weight} &= (0.70 \times 0.7 + 0.80 \times 0.6 + 0.84 \times 0.5) / 3 \\
 &= (0.490 + 0.480 + 0.420) / 3 \\
 &= 1.390 / 3 = 0.463
 \end{aligned}$$

$$\begin{aligned}
 \text{HOUSEMI-07-R raw weight} &= (0.80 \times 0.7 + 0.70 \times 0.6 + 0.79 \times 0.5) / 3 \\
 &= (0.560 + 0.420 + 0.395) / 3 \\
 &= 1.375 / 3 = 0.458
 \end{aligned}$$

$$\begin{aligned}
 \text{HOUSEAZ-06-R raw weight} &= (0.50 \times 0.7 + 0.40 \times 0.6 + 0.58 \times 0.5) / 3 \\
 &= (0.350 + 0.240 + 0.290) / 3 \\
 &= 0.880 / 3 = 0.293
 \end{aligned}$$

$$\begin{aligned}
 \text{HOUSENV-03-R raw weight} &= (0.30 \times 0.7 + 0.60 \times 0.6 + 0.32 \times 0.5) / 3 \\
 &= (0.210 + 0.360 + 0.160) / 3 \\
 &= 0.730 / 3 = 0.243
 \end{aligned}$$

After normalization within the House category:

Constituent	Raw Weight	Normalized House Weight
HOUSEPA-07-R	0.500	25.532%
HOUSEGA-02-R	0.463	23.660%
HOUSEMI-07-R	0.458	23.404%
HOUSEAZ-06-R	0.293	14.979%
HOUSENV-03-R	0.243	12.426%
Total	1.958	100.000%

This example highlights how a constituent's final weight is influenced by all three sensitivity factors.

6. Index Calculation

6.1 Core Formula

$$\text{RED Battleground} = 100 + (\text{RepublicanBattlegroundProbability} - 50)$$

The core formula is represented as a percentage. In other words,

`RepublicanBattlegroundProbability` is the weighted composite across all active RED Battleground categories (i.e., Presidential State winner, Senate, Gubernatorial, and House).

We've centered the index at 100. This value reflects the neutral baseline. E.g., when the Republican probability is exactly 50%, RED Battleground will equal 100.

Alternatively, when the Republican probability is 65%, RED Battleground will equal 115 or if the probability is 38%, RED Battleground will equal 88.

Scale interpretation:

RED Battleground Value	Meaning
> 100	Republican advantage across the active Battleground composite
= 100	Neutral; 50/50 across the active composite
< 100	Republican disadvantage; Democrats hold aggregate advantage

Theoretical range: 50 (0% Republican Battleground probability across all categories) to 150 (100% Republican Battleground probability). The practical trading range under normal election cycle conditions is expected to be narrower.

6.2 Probability Extraction

The probability used for each underlying constituent is pulled from the market's mid price:

$$p_i = \text{MidPrice}_i / 100$$

A Kalshi event contract with a mid price of 72 cents would therefore infer $p = 0.72$ or a 72% Republican-aligned win probability.

6.3 Composite Probability Construction

The composite value for RED Battleground is calculated in two phases:

Stage 1 - Category probability:

For each category c , the category probability is the weighted average of constituent probabilities:

$$P_c = \sum (w_i \times p_i)$$

Where w_i is the normalized market weight for constituent i within category c , and p_i is the mid-price-derived Republican-aligned probability for market i .

Stage 2 - Index probability:

$$\text{RepublicanBattlegroundProbability} = 100 \times \sum (\text{AW}_c \times P_c)$$

Where AW_c is the adjusted category weight for category c after applying category constituent thresholds and normalized category-weight redistribution rules.

Example 1: Category probability construction

Assume the House category has five active RED Battleground constituents with the normalized House weights from Section 5.4 and the following mid prices:

Constituent	Normalized House Weight	Mid Price	p_i
HOUSEPA-07-R	25.532%	62	0.62
HOUSEGA-02-R	23.660%	58	0.58
HOUSEMI-07-R	23.404%	55	0.55
HOUSEAZ-06-R	14.979%	46	0.46
HOUSENV-03-R	12.426%	40	0.40
Total	100.0%		

The House category probability is:

$$\begin{aligned} P_{\text{House}} &= (0.25532 \times 0.62) + (0.23660 \times 0.58) + (0.23404 \times 0.55) + (0.14979 \times 0.46) \\ &\quad + (0.12426 \times 0.40) \\ &= 0.5429, \text{ or } 54.29\% \end{aligned}$$

The example conveys how constituent weights used in the House category index calculation are normalized weights that sum to 1.0 before probabilities are blended.

Example 2: Composite probability with all categories active

The following example assumes all four office categories satisfy their constituent thresholds and therefore use their base category weights:

Office Category	Category Probability	Adjusted Category Weight	Weighted Contribution
Presidential state winner	57.00%	30.00%	17.10%
Senate	54.00%	30.00%	16.20%
Gubernatorial	49.00%	20.00%	9.80%
House	54.29%	20.00%	10.86%
Composite		100.00%	53.96%

The resulting RED Battleground level is:

```

RepublicanBattlegroundProbability = 53.96
RED Battleground = 100 + (53.96 - 50) = 103.96

```

6.4 Smoothing - 1-Hour Simple Moving Average

The RED Battleground raw index value is recalculated every 60 seconds and normalized with a 1-hour simple moving average (SMA). The SMA helps to reduce noise from large, short-term price movements and helps produce a more stable and reliable benchmark.

6.5 Price-Quality Treatment

The following price-quality definitions are used for determining constituent eligibility:

Stale: A constituent is flagged as stale when it has probabilities that have been at 0.0% or 100.0% with no bid/ask activity for more than 72 consecutive hours. Stale constituents are excluded from the index calculation.

Mid Price Threshold: A constituent exceeds the Mid Price Threshold when its bid/ask spread is greater than 50 points. When this occurs, the index holds the constituent's most recent valid mid price for up to 4 hours. After 4 hours, the constituent is excluded from the index calculation if it continues to exceed the Mid Price Threshold. It is reintroduced into the calculation after it satisfies the Mid Price Threshold requirement.

Outlier Quotes: Refers to situations where individual constituents have mid prices that are more than 25 points away from their last trade prices and there is no trading volume reported by the exchange and no executed trade in Adjacent's collected trade record in the preceding 24 hours. In the event a constituent has an Outlier Quote, its last valid mid price is held for up to 4 hours. After 4 hours, the constituent is excluded from the index calculation until its mid price returns to within 25 points of the exchange-reported last trade price or trading activity resumes on either signal.

7. Index Maintenance

7.1 Update Schedule

Component	Frequency
Constituent prices	Continuous; max 5-minute delay from Kalshi
1-hour SMA	Rolling, updated every 60 seconds
Constituent weights	Recalculated every 60 seconds
Composite RED Battleground value	Recalculated every 60 seconds
Category weights	Fixed; changed only through Governance process
New market screening	Weekly review
New market inclusion	48-hour evaluation after listing before inclusion
Resolved market removal	Immediate upon resolution
Category constituent thresholds	Evaluated whenever constituent eligibility changes and at least every 60 seconds during regular index calculation
Battleground State Universe review	At least annually; interim reviews permitted at any time

7.2 New Market Addition

New Kalshi markets are reviewed by the AIC on a weekly cadence. In the event they satisfy RED Battleground inclusion criteria the AIC will consider including them in the

composite index. Adjacent Markets, Inc. does not have formal advance notice of Kalshi market listings at this time. Consequently, eligible election markets may be listed by Kalshi without prior notification, which means the index may not include them initially.

7.3 Market Resolution

Underlying constituent markets are removed from RED Battleground after they've resolved. After markets are removed, the remaining underlying constituent markets absorb the weight proportionally within the affected category. There is no reconstitution delay. The standard 1-hour SMA continues to apply to the published index level.

7.4 Market Disruptions

The most recent valid mid price is held constant for up to 4 hours in the event of a Kalshi exchange outage or halt on trading of a constituent market. If the trading halt exceeds the 4-hour threshold, the AIC will determine whether to hold the last valid mid price, remove the constituent, or suspend publishing values of the affected index until trading of the affected underlying constituent is restored.

7.5 Battleground State Universe Changes

Changes to the Battleground State Universe are governed by the AIC. Adjacent will provide at least 30 calendar days' public notice before an addition or removal from a Battleground State Universe becomes effective. Such a notice will include affected states, rationale, and an effective date. The AIC may conduct interim reviews outside the annual review cycle and may implement changes on shorter notice where necessary to protect index integrity.

8. Governance

8.1 Index Sponsor and Calculation Agent

Adjacent Markets, Inc. takes on Index Sponsor and Calculation Agent roles and responsibilities for RED Battleground. Outcomes and decisions around calculations, screening, maintenance, and operations are performed by Adjacent.

8.2 Adjacent Index Committee

The AIC is responsible for overseeing this methodology, how it is interpreted, how it is maintained, necessary corrections, and other governance considerations. The AIC is governed by the [AIC Charter](#).

Routine implementation of this methodology does not require separate methodology change approvals.

8.3 Meeting Schedule

The AIC meets at least quarterly. Further, the AIC has additional meetings and written consents on an as-needed basis when it comes to methodology-related considerations.

AIC reviews may be initiated for the following:

- Material methodology changes
- Battleground State Universe additions or removals
- Market classification issues or questions
- Data quality issues
- Corrections or restatements
- Market disruptions
- Complaints
- Major election events
- Other circumstances that may affect index integrity

8.4 Methodology Changes

Any methodology changes are governed by the [Adjacent Index Methodology Change Policy](#). Material changes generally require the following:

- Written proposal
- Impact analysis
- AIC approval
- Appropriate stakeholder consultation
- Advance notice where required
- Publication of updated methodology documentation

Non-material clarifications or administrative updates may be approved and reported to the AIC at the next regularly scheduled meeting.

8.5 Conflicts of Interest

The AIC is responsible for ensuring that methodology decisions are made on the grounds of index integrity. Decisions should never, under any circumstances, be based on the economic interests of Adjacent Markets or products that reference RED Battleground.

9. Risk Factors and Limitations

9.1 Battleground State Definition Risk

The Battleground State Universe is currently fixed. It may be updated by the AIC over time. With a fixed Battleground State Universe comes stability; however, it may lag changes in electorally competitive states.

9.2 Category Availability Risk

RED Battleground is geographically constrained. Some index categories may at times have too few eligible constituents. Constituent thresholds are intended to reduce heavy dependence on one or two markets, but may in turn remove categories from the composite index calculation from time to time.

9.3 Presidential State Winner Listing Risk

Kalshi may not list Presidential state winner markets until closer to a Presidential election. The Presidential state winner category is excluded from the composite calculation until at least five eligible constituents are available. When this happens, its category weight is redistributed across the remaining active category indices.

9.4 House District Representation Risk

The House category is included in the composite calculation because it provides more breadth when capturing political sentiment. However, it should not be interpreted as a pure statewide signal.

9.5 Kalshi Listing Dependency

In the event Kalshi does not list sufficient eligible markets in one or more RED Battleground categories, those categories may not be included in the composite index calculation.

9.6 Liquidity and Bid/Ask Spread Risk

Mid prices can be noisy in thin markets. There may be some underlying RED Battleground constituents that are thinly traded and have wide bid/ask spreads. Considerations around price quality treatment described in Section 6.5 are intended to help reduce this risk, but they do not eliminate it.

9.7 Backtesting Limitations

Backtesting of RED Battleground across multiple election cycles is limited as a consequence of limited historical data.

9.8 Regulatory Risk

Political event contracts are subject to regulatory risk (i.e., changes in law, regulation, enforcement, etc).

10. Changelog

Version	Date	Changes
1.1	July 14, 2026	Material methodology change. Updated Section 6.5 Outlier Quotes so the outlier hold applies only when the exchange reports no trading volume in the preceding 24 hours AND no executed trade for the market appears in Adjacent's collected trade record in the preceding 24 hours. The 25-point distance continues to be measured against the exchange-reported last trade price. A market can re-enter when trading activity resumes on either signal.
1.0 (no version change)	July 4, 2026	Non-substantive documentation correction. Clarified Volume score uses lifetime/cumulative trading volume; no calculation methodology or historical values changed.
1.0	July 2026	Initial publication. Methodology established for RED Battleground Index. Establishes Battleground State Universe, category structure, constituent thresholds, weighting framework, and governance treatment.

11. Approvals

Role	Name	Signature	Date
Chief Executive Officer			
Chief Operating Officer			

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