

# Indian Election Polling Adjustments Codebook

This codebook provides a summary of the adjustments made to Indian Election Polling data. It outlines the steps and formulas applied to adjust seat projections based on various factors.

## Step 1: Skew Adjustment

- Calculate the skew adjustment for each party using the Predicted Skew Numbers.
- Subtract the skew adjustment from the original seat projections.
- Skew Adjustment Formula:  $Skew\ Adjustment = Predicted\ Skew\ Number \times (Original\ Seat\ Projections)$   
Skew Adjustment = Predicted Skew Number × (Original Seat Projections)

## Step 2: Weight Calculation

- Calculate weights for each poll based on the following factors:
  - Sample Size Weight
  - Time Weight
  - Multiple Polls Weight
  - Margin of Error Weight
  - Pollster Reliability Weight
  - Projected Skew Weight
- Weight Calculation Formula:
  - $Weight = (Sample\ Size\ Weight) + (Time\ Weight) + (Multiple\ Polls\ Weight) + (Margin\ of\ Error\ Weight) + (Pollster\ Reliability\ Weight) + (Projected\ Skew\ Weight)$

## Step 3: Apply Weights to Adjusted Polls

- Multiply each adjusted poll result by its corresponding weight.
- Apply the weights to adjust the adjusted seat projections.
- Adjusted Poll Formula:  $Adjusted\ Poll = Adjusted\ Seat\ Projections \times Weight$   
Adjusted Poll = Adjusted Seat Projections × Weight

## Step 4: Aggregate Adjusted Polls

- Calculate the weighted average of all adjusted polls.
- Aggregate the adjusted polls to calculate the final adjusted seat projections.
- Aggregate Formula:  $Final\ Adjusted\ Seat\ Projections = \frac{\sum (Adjusted\ Poll)}{\sum (Weight)}$   
Final Adjusted Seat Projections =  $\frac{\sum (Adjusted\ Poll)}{\sum (Weight)}$

## Step 5: Normalize Adjusted Seat Projections

- Normalize the adjusted seat projections so that they sum up to 543 (total number of seats).
- Normalize Formula:
  - $Normalized\ Seat\ Projections = Adjusted\ Seat\ Projections \times \frac{543}{\sum (Adjusted\ Seat\ Projections)}$   
Normalized Seat Projections = Adjusted Seat Projections ×  $\frac{543}{\sum (Adjusted\ Seat\ Projections)}$

## Step 6: Validate Adjusted Projections

- Ensure that the final normalized seat projections add up to 543.
- Validate that the "Others" seat projection does not deviate by more than 10 from its original value.

## Test Data

- Test the adjustment process using sample data and validate the results.
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