Contents

[1. Overview of Box-Whisker Chart](#_Toc171935718)

[2. 2021: Highest Number of Outliers](#_Toc171935719)

[3. Years with Minimal Outliers](#_Toc171935720)

[4. Wide Inter-Quartile Ranges](#_Toc171935721)

[5. Outliers Above Upper Quartile](#_Toc171935722)

[6. Vote Count Distribution](#_Toc171935723)

[7. Lower Quartile Vote Count](#_Toc171935724)

[Conclusion](#_Toc171935725)

## 1. Overview of Box-Whisker Chart

The Box-Whisker chart provides a visual representation of the distribution of vote counts for each election year, highlighting the presence and extent of outliers.

## 2. 2021: Highest Number of Outliers

* **Number of Outliers**: 151
* **Cause**: A significant number of candidates contested in 2021 compared to other years. Many received votes between 600 and 9000.
* **Analysis**:
  + Generally, outliers are undesirable, indicating anomalies or errors. However, in this context, the outliers signify that several candidates received an exceptionally high number of votes, indicating winners.
  + These outliers represent a substantial vote difference between winners and many non-potential candidates who also contested this election.

## 3. Years with Minimal Outliers

* **Years**: 1967, 1957, 1972
* **Number of Outliers**: 3, 5, and 6 respectively
* **Analysis**: The small number of outliers suggests that only a few candidates received one-sided votes in these years.

## 4. Wide Inter-Quartile Ranges

* **Years**: 2011, 2001, 2006
* **Analysis**:
  + The wide inter-quartile ranges indicate that many potential candidates contested these elections.
  + These elections were highly competitive, with many constituencies experiencing tight and neck-to-neck races.

## 5. Outliers Above Upper Quartile

* **Observation**: None of the outliers fall below the lower quartile; all are above the upper quartile.
* **Analysis**: Every candidate, including those who received NOTA (None of the Above) votes, got at least 200 votes.

## 6. Vote Count Distribution

* **Observation**: All inter-quartile ranges are below the 25k vote count.
* **Analysis**: 75% of the candidates received fewer than 25,000 votes.

## 7. Lower Quartile Vote Count

* **Observation**: The lower quartile is below the 5k vote count.
* **Analysis**: Around 50% of candidates did not receive more than 5,000 votes.

## Conclusion

The analysis of the Box-Whisker chart for vote counts across different election years reveals insights into the competitiveness and candidate distribution for each year. The 2021 election stands out for its high number of outliers, indicating a significant vote disparity between winners and non-potential candidates. Other years show varied patterns of competitiveness, with some years having a tight race and others exhibiting minimal outliers due to one-sided votes. Overall, the majority of candidates receive fewer than 25,000 votes, with half receiving fewer than 5,000 votes.