

# An MRP Model for the 2019 Canadian Election with Imputation of Missing Votes

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The supporting code and data for this report are available at this Git repository: -redacted-

## Keywords

MRP, multilevel, logistic, regression, poststratification, 2019, election, imputation, census, survey, Canadian

## Introduction

The Canadian Election Study is a regular study on “Canadians’ political behaviour and attitudes” (Stephenson et al. 2020) that has been a rich source of data on political affiliations across demographics since 1965. However, many respondents choose not to answer questions about who they vote for or respond that they spoiled their vote<sup>1</sup> altogether, leading to missing data in statistical models to predict the popular vote. The goal of this report is to impute the missing data and include it in a multinomial logistical regression model with poststratification using Canadian census data to obtain the log-odd-ratios of winning the election for each party if everybody had voted.

## Methodology (Data and Model)

## Results

## Discussion

## References

Stephenson, Laura B, Allison Harell, Daniel Rubenson, and Peter John Loewen. 2020. “2019 Canadian Election Study.” *Harvard Dataverse*. <https://doi.org/10.7910/DVN/DUS88V>.

## Appendix

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<sup>1</sup>A spoiled vote is a vote marked as invalid for various reasons, such as improperly filling out a ballot