

# Female and Visible Minority Representation on Agencies, Boards, and Commissions in Ontario

by Julia Loach

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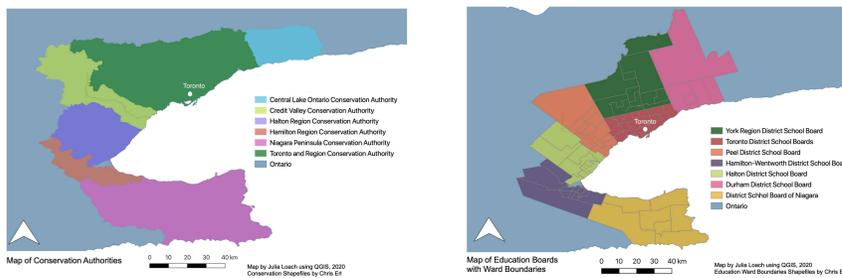
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## INTRODUCTION

This research investigates the representation of women and visible minorities on Agencies, Boards, and Commissions in Ontario, Canada. These Agencies, Boards, and Commissions, or ABCs, are special purpose bodies at the municipal level with a range of duties and considerable powers.

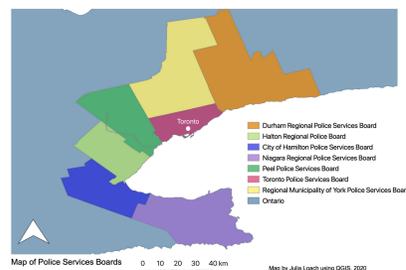
Previous scholarship focused only on gender and visible minority representation at the Municipal, Provincial, and Federal government levels. Previous work, furthermore, has not investigated the differences between ABCs that use of the appointment method and ABCs that directly elect their members.

This study examines representation on these boards with particular attention to the role of the boards' method of selection. To investigate these boards, I compiled a data set of 205 board members from conservation, education, and police boards in Ontario's 'Golden Horseshoe' region for statistical analysis.



Map 1: Map of Conservation Boards in the Study

Map 2: Map of Education Boards in the Study



Map 3: Map of Police Boards in the Study

## DATA AND METHODOLOGY

I compiled a dataset by coding members of the conservation, education, and police boards in Ontario by gender, visible minority, LGBTQIA+ status, municipality, position, and method of selection. I based the coding on publicly available information on boards' websites, other publications, and media sources.

I paired information on board members with data from the 2016 Census corresponding to the geographic constituency they represent. These variables account for population size, density, age, education, income, housing, and visible minority populations. I used Centroid Analysis through QGIS in order to determine which census tracts to include in each board member's area of jurisdiction.

- The selected ABCs, in sum, are composed of only 17% visible minorities and 42% females
- Education boards, which are also comprised of directly elected officials, show higher rates of both representation types. Police boards and especially conservation boards show trends of less of both representation types.
- Only 6% of board leaders are visible minorities.
- There is a higher average and median of visible minority populations in the areas of jurisdiction of visible minority board members than within the areas of board members that are not visible minorities.

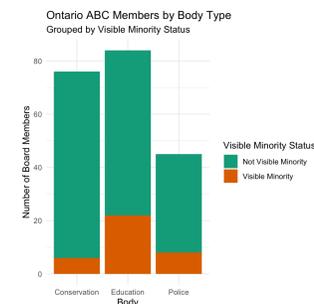


Figure 1: Board Members by Body Type and Visible Minority Status

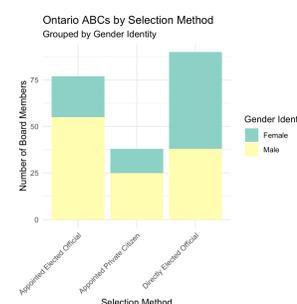


Figure 2: Board Members by Selection Method and Gender Identity

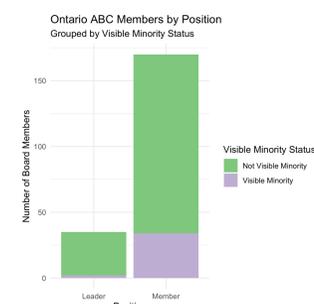


Figure 3: Board Members by Position and Visible Minority Status

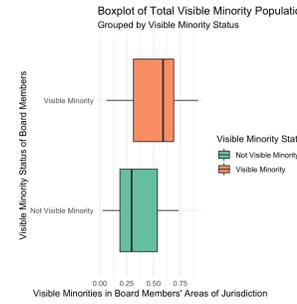


Figure 4: Distribution of Visible Minority Population by Board Members' Visible Minority Status

## RESULTS

Variable Compared to Visible Minority Status	Results	Chi-square	P value
Body	9.24(2)	9.24(2)	0.01
Election Method	5.76(2)	5.76(2)	0.05
Position	4.09(1)	4.09(1)	0.04
Gender	1.02(1)	1.02(1)	0.31

Table 1: Visible Minority Status Chi-Square Results

Variable Compared to	Results	Chi-square	P value
Body	19.74(2)	19.74(2)	0.01
Election Method	15.78(2)	15.78(2)	0.00
Position	0.96(1)	0.96(1)	0.01
Visible Minority Status	1.02(1)	1.02(1)	0.31

Table 2: Gender Chi-Square Results

Board Member: Non-Visible Minority = 0, Visible Minority = 1	Model I	Model II
Variables:		
Conservation Board Member	1.000(Base)	1.000(Base)
Education Board Member	3.392(1.855)**	4.087(2.124)***
Police Board Member	3.360(2.073)**	3.574(2.180)**
Leader	1.000(Base)	1.000(Base)
Member	5.553(4.959)*	4.324(3.518)*
Male Board Members	1.000(Base)	
Female Board Members	1.220(0.533)	
Median After-Tax Income	1.000(0.000)	
Proportion of Population Below 14 Years	0.001(0.000)*	
Proportion of Population Above 65 Years	0.001(0.000)	
Proportion of Population with a University Certificate or Diploma or Above	0.005(0.019)	
Total Visible Minorities	1.255(1.566)***	1.466(1.836)***
Proportion of Population that are Renters	0.000(0.000)*	
Constant	2.374	0.003***
Sample Size	205	205
Pseudo R-squared	0.22	0.21

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1, values are odds-ratios, parenthesis are standard errors

Table 3: Selected Visible Minority Status Logistic Regression Models

Board Member: Male = 0, Female = 1	Model I	Model II
Variables:		
Appointed/Elected Official	1.000(Base)	1.000(Base)
Appointed/Private Citizen	1.301(0.561)	1.310(0.552)
Directly Elected Official	3.960(1.415)***	3.421(1.130)***
Leader	1.000(Base)	
Member	0.773(0.312)	
Non-Visible Minority Board Members	1.000(Base)	
Visible Minority Board Members	1.226(0.537)	
Median After-Tax Income	1.000(0.000)	
Proportion of Population Below 14 Years	1.083(1.337)	
Proportion of Population Above 65 Years	0.010(0.076)	
Proportion of Population with a University Certificate or Diploma or Above	4.429(10.667)	
Total Visible Minorities	0.777(0.745)	
Proportion of Population that are Renters	3.702(1.549)	
Constant	0.056	0.426***
Sample Size	205	205
Pseudo R-squared	0.08	0.07

Table 4: Selected Gender Identity Logistic Regression Models

- Body type and election method are the most statistically significant variables in both chi-square analyses, showing relationships to both the amount of visible minority board members and female board members.
- Logistic regression shows that education board members are more likely visible minorities. Directly elected boards members, also education board members, are more likely to be female.
- Board members whose areas of jurisdiction have larger visible minority populations are more likely to be visible minorities themselves.
- Board leaders are less likely to be visible minorities. Results are, generally, as predicted.

## RESEARCH AIMS AND QUESTIONS

The limited existing literature on ABCs points to arguments over whether or not ABCs should be used given their corrupt histories, especially in regard to the sacrifice of democracy that comes with the use of the appointment method.<sup>1</sup> This literature does not relate these questions of appointment to questions of boards' compositions. Literature on local government representation finds party affiliation to be a driving influence, which is not applicable to non-partisan ABCs.<sup>2</sup> I aim to address these limitations in the following research questions:

- How are ABCs composed in regard to gender?
- How are ABCs composed in regard to visible minorities?
- How do the boards' selection methods play into their composition, and what does this indicate in regard to the appointment method's subsequent sacrifice of democracy?

## STATISTICAL ANALYSIS

- Chi-square analysis: shows which board composition variables have statistically significant relationships.
- Logistic regression: the odds-ratios of the logistic regression models show if a board member is more likely to be female rather than male, or a visible minority rather than not a visible minority, based on a change in the independent variables (Eq.1).<sup>3</sup>

$$\ln(Odds) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_i X_i \quad \text{Eq. 1}$$

## DISCUSSION AND CONCLUSION

Education boards, which are directly elected, are more diverse in regard to both gender and visible minorities. The whiteness of conservation boards and police boards in particular deserve more attention and further investigation as these results bring into question whether the sacrifice of democracy of the appointment method is worth the efficiency.

The whiteness of the leadership of boards also warrants further investigation. Boards members are, however, somewhat representative of their populations, but by no means perfectly.

Further investigation, with a larger scale, of geographic influence, board-type specific findings, and queer board members could be useful, given the limitations of the smaller scale.

References: [1] Lucas, J. (2013). *Hidden in Plain View: Local Agencies, Boards, and Commissions in Canada*. [2] Spicer, Z., McGregor, M., & Alcantara, C. (2017). Political opportunity structures and the representation of women and visible minorities in municipal elections. *Electoral Studies*, 48, 10-18. [3] Midi, H., Sarkar, S. K., & Rana, S. (2010). Collinearity diagnostics of binary logistic regression model. *Journal of Interdisciplinary Mathematics*, 13(3), 253-267.