Appendix

Working the Crowd: Election Forecasting, Sophistication,
and Diversity in Canadian Federal and Provincial Elections

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Contents

A. Data

A.1. Election Results

The necessary data to determine district-level election outcomes were gathered from the sources below.

– **2011–2014 Ontario general elections.** District-level results were retrieved from Elections Ontario.

– **2011–2019 Canadian federal elections.** District-level results were retrieved from Elections Canada.

– **2022 Quebec general election.** District-level results were retrieved from Élections Québec.

Table A1. General Overview of the Election Outcomes

Election	Needed for majority	Outcome
Ontario 2011	54/107 seats	**Liberal minority.** The Liberal Party was re-elected for a third consecutive time but lost its majority in the Legislative Assembly by winning only 53 seats with 37.55 per cent of the popular vote. The Conservatives came in second with 37 seats and 35.35 per cent of the vote.
Ontario 2014	54/107 seats	**Liberal majority.** The Liberal Party was re-elected for a fourth consecutive time regaining a majority in the Legislative Assembly by winning 58 seats with 38.67 per cent of the popular vote. The Conservatives came in second with 28 seats and 31.23 per cent of the vote.
Canada 2011	155/308 seats	**Conservative majority.** The Conservative Party was re-elected for a third consecutive time by winning 166 seats in the House of Commons with 39.62 per cent of the popular vote, allowing it to form a majority government. For the first time in its history, the New Democratic Party formed the Official Opposition with 103 and 30.63 per cent of the vote, while the Liberal Party only managed to win 34 seats.
Canada 2015	184/338 seats	**Liberal majority.** The Liberal Party defeated the incumbent Conservative Party by winning 184 seats in the House of Commons with 39.47 per cent of the popular vote, allowing it to form a majority government. The Conservatives came in second with 99 seats and 31.89 per cent of the vote.
Canada 2019	157/338 seats	**Liberal minority.** The Liberal Party was reelected but lost its majority in the House of Commons by winning 157 seats with 33.12 per cent of the popular vote. The Conservatives won more votes than the Liberal Party (34.34 per cent) but got less seats (i.e., 121).
Quebec 2022	63/125 seats	**CAQ majority.** The Coalition Avenir Quebec (CAQ) formed a majority government for the second consecutive time by winning 90 seats with 40.98 per cent of the popular vote. The Liberals came in second with 21 seats and 14.37 per cent of the vote.

A.2. Surveys

A.2.1 Canadian Election Study

Data, survey materials, and codebooks for the 2019 Canadian Election Study were retrieved from the Consortium on Electoral Democracy (C-Dem) Dataverse.

- 2019 Canadian Election Study Phone Survey

  - Link to survey: https://doi.org/10.7910/DVN/8RHLG1
  - Performed September 10 – October 20, 2019
  - Sample: 4,021 respondents

- 2019 Canadian Election Study Internet Survey

  - Link to survey: https://doi.org/10.7910/DVN/DUS88V
  - Performed on September 13 – October 21, 2019
  - Sample: 37,822 respondents

A.2.2 Datagotchi

The Datagotchi data for the 2022 Quebec general election[1] are currently not publicly available, but a data access request can be sent at info@datagotchi.com.

- Link to survey: https://datagotchi.com/
- Performed September 6 – October 2, 2022
- Sample: 65,544 respondents

A.2.3 Ipsos Canada Election Surveys

Data, survey materials, and codebooks were retrieved from the Ipsos Canada Election Surveys Dataverse.

- 2011 Canada General Election Invitation Survey

  - Link to survey: https://doi.org/10.5683/SP/VR1HZJ
  - Performed April 28 – May 2, 2011
  - Sample: 50,433 respondents

- 2011 Canada General Election Exit Survey

  - Link to survey: https://doi.org/10.5683/SP/BQRT4U
  - Performed on May 2, 2011
  - Sample: 39,261 respondents

- 2015 Canada General Election Exit Survey

  - Link to survey: https://doi.org/10.5683/SP/O5LRS7
  - Performed October 19, 2015
  - Sample: 12,137 respondents

- 2011 Ontario General Election Invitation Survey

  - Link to survey: https://doi.org/10.5683/SP/RMFEL2
  - Performed October 3–6, 2011
  - Sample: 15,304 respondents

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[1]Datagotchi is not a traditional election survey. It is an app primarily used to predict citizens' vote intention through various lifestyle questions. Because of the nature of the survey, respondents were presented with the following statement at the end of the questionnaire: "To ensure the scientific quality of our analyses, please indicate whether you were answering thinking of yourself or by having someone else in mind." This allowed to filter out, at least partially, respondents who used the app to run simulations.

- 2011 Ontario General Election Exit Survey

    - Link to survey: https://doi.org/10.5683/SP/GDIUDI
    - Performed October 6, 2011
    - Sample: 8,893 respondents

- 2014 Ontario General Election Exit Survey

    - Link to survey: https://doi.org/10.5683/SP/26DYKB
    - Performed June 12, 2014
    - Sample: 8,208 respondents

A.2.4 Local Parliament Project

The Local Parliament Project 2015 Canadian Election Survey data can be found on the Harvard Dataverse.

- Link to survey: https://doi.org/10.7910/DVN/DACHKP
- Pre-election wave: Performed August 26 – October 18, 2015
- Post-election wave: Performed November 4 – November 23, 2015
- Pre-election sample: 37,380 respondents
- Post-election sample: 11,699 respondents

B. Variables

B.1. Dependent Variable

B.1.1 District-Level Forecasts

Individual forecasting ability is coded 1 if the respondent identified the correct election outcome in his or her district and 0 otherwise. Respondents' district-level expectations were recorded by the following questions:

– [CES] *2019 Canadian federal election.* (Phone Survey) In your own local riding, which party has the best chance of winning? The Liberal Party (1), the Conservative Party (2), the NDP (3), the Bloc Québécois (4), the Green Party (5), the People's Party (6), Other (7). (Internet Survey) For each of the parties below, how likely is each party to win the seat in your own local riding? The Liberal Party (1), the Conservative Party (2), the NDP (3), the Bloc Québécois (4), the Green Party (5), the People's Party (6).

– [Datagotchi] *2022 Quebec general election.* In your opinion, which party has the best odds of winning in your riding? Coalition Avenir Québec (1), Parti Québécois (2), Parti Libéral du Québec (3), Québec Solidaire (4), Parti Conservateur du Québec (5), another party (6).

– [Ipsos] *2011 Canadian federal election.* If you had to bet $1000.00 of your own money, which party's candidate do you think will win in your riding during this election? The Conservative candidate (1), the Liberal candidate (2), the New Democratic Party (NDP) candidate (3), the Bloc Québécois candidate [Quebec only] (4), the Green Party candidate (5), the candidate of another party (6)? Don't know/Not sure (7), Refused (8).

– [Ipsos] *2015 Canadian federal election.* If you had to bet $1000.00 of your own money, which party's candidate do you think will win in your riding during this election? The Conservative candidate (1), the Liberal candidate (2), the New Democratic Party (NDP) candidate (3), the Bloc Québécois candidate [Quebec only] (4), the candidate of another party (5)? Don't know/refused/Not stated (6).

– [Ipsos] *2011 Ontario general election.* If you had to bet $1000.00 of your own money, which party's candidate do you think will win in your riding during this election? The Progressive Conservative candidate (1), the Liberal candidate (2), the NDP candidate (3), the candidate of another party (4)? Don't know (5), Not specified (6).

– [Ipsos] *2014 Ontario general election.* If you had to bet $1000.00 of your own money, which party's candidate do you think will win in your riding during this election? The Progressive Conservative candidate (1), the Liberal candidate (2), the NDP candidate (3), the candidate of another party (4)? Don't know (5).

– [LPP] *2015 Canadian federal election.* Thinking now about where you live, how likely is each party to win your constituency? (Also known as your riding or district.) Liberal? Conservative? NDP? Bloc Québécois [Quebec only]? Green? 0 to 100 scale. Labels: 0 "No chance at all of winning your constituency"; 100 "Absolutely certain to win your constituency".

B.2. Independent Variables

B.2.1 Age

Age is a binary variable coded 0 for respondents less than 55 years old and 1 for respondents 55 and over. With the exception of the 2014 Ontario General Election Exit Survey, in which respondents were grouped in six age categories: 18–24 (1), 25–34 (2), 35–44 (3), 45–54 (4), 55–64 (5), 65 and over (6), all surveys originally measured respondents' age in years.

B.2.2 Boundary Changes

Boundary changes is a binary variable coded 0 for unchanged district boundaries and 1 for reviewed district boundaries. The 2015 Canadian federal election was the first federal election held following the electoral redistribution of 2012 (2013 Representation Order). The number of seats in the House of Commons increased from 308 to 338. A list of unchanged districts from the previous Representation Order can be found here.

B.2.3 Household Income

Respondents' household income was recorded by the following questions:

– [CES] *2019 Canadian federal election.* (Phone Survey) Could you please tell me your total household income before taxes for the year 2018 to the nearest thousand dollars, including income from all sources? We don't need the exact amount; does your household income fall into one of these broad categories? No income (1), $1 to $30,000 (2), $30,000 to $60,000 (3), $60,001 to $90,000 (4), $90,001 to $110,000 (5), $110,001 to $150,000 (6), $150,001 to $200,000 (7), More than $200,000 (8), refused (-8), don't know (-9). (Internet Survey) What was your total household income, before taxes, for the year 2018? Be sure to include income from all sources, to the nearest thousand dollars. We don't need the exact amount; does your household income fall into one of these broad categories? No income (1), $1 to $30,000 (2), $30,001 to $60,000 (3), $60,001 to $90,000 (4), $90,001 to $110,000 (5), $110,001 to $150,000 (6), $150,001 to $200,000 (7), more than $200,000 (8), don't know/prefer not to answer (9).

– [Datagotchi] *2022 Quebec general election.* Please indicate your annual household income before taxes. Less than $5,000 (1), $5,000-$9,999 (2), $10,000-$14,999 (3), $15,000-$19,999 (4), $20,000-$24,999 (5), $25,000-$29,999 (6), $30,000-$34,999 (7), $35,000-$39,999 (8), $40,000-$44,999 (9), $45,000-$49,999 (10), $50,000-$54,999 (11), $55,000-$59,999 (12), $60,000-$64,999 (13), $65,000-$69,999 (14), $70,000-$74,999 (15), $75,000-$79,999 (16), $80,000-$89,999 (17), $90,000-$99,999 (18), $100,000-$124,999 (19), $125,000-$149,999 (20), $150,000-$199,999 (21), $200,000-$249,999 (22), $250,000 or more (23), prefer not to answer (24).

– [Ipsos] *2011 Canadian federal election.* Please indicate your annual household income before taxes. Less than $5,000 (1), $5,000-$9,999 (2), under $10,000 (3), $10,000-$14,999 (4), $15,000-$19,999 (5), $20,000-$24,999 (6), $25,000-$29,999 (7), $30,000-$34,999 (8), $35,000-$39,999 (9), $40,000-$44,999 (10), $45,000-$49,999 (11), $50,000-$54,999 (12), $45,000-$54,999 (13), $55,000-$59,999 (14), $60,000-$64,999 (15), $65,000-$69,999 (16), $60,000-$69,999 (17), $70,000-$74,999 (18), $75,000-$79,999 (19), $70,000-$79,999 (20), $80,000-$84,999 (21), $85,000-$89,999 (22), $80,000-$99,999 (23), $90,000-$94,999 (24), $95,000-$99,999 (25), $100,000-$119,999 (26), $100,000-$124,999 (27), $120,000-$149,999 (28), $125,000-$149,999 (29), $150,000 or more (30), don't know/refused (31).

– [Ipsos] *2015 Canadian federal election.* Please indicate your annual household income before taxes. Less than $5,000 (1), $5,000-$9,999 (2), $10,000-$14,999 (3), $15,000-$19,999 (4), $20,000-$24,999 (5), $25,000-$29,999 (6), $30,000-$34,999 (7), $35,000-$39,999 (8), $40,000-$44,999, (9) $45,000-$49,999 (10), $50,000-$54,999 (11), $55,000-$59,999 (12), $60,000-$64,999 (13), $65,000-$69,999 (14), $70,000-$74,999 (15), $75,000-$79,999 (16), $80,000-$89,999 (17), $90,000-$99,999 (18), $100,000-$124,999 (19), $125,000-$149,999 (20), $150,000-$199,999 (21), $200,000-$249,999 (22), $250,000 or more (23), prefer not to answer (24).

– [Ipsos] *2011 Ontario general election.* Please indicate your annual household income before taxes. Under $10,000 (1), $10,000-$14,999 (2), $15,000-$19,999 (3), $20,000-$24,999 (4), $25,000-$29,999 (5), $30,000-$34,999 (6), $35,000-$39,999 (7), $40,000-$44,999 (8), $45,000-$49,999 (9), $50,000-$54,999 (10), $45,000-$54,999 (11), $55,000-$59,999 (12), $60,000-$64,999 (13), $65,000-$69,999 (14), $60,000-$69,999 (15), $70,000-$74,999 (16), $75,000-$79,999 (17), $70,000-$79,999 (18), $80,000-$84,999 (19), $85,000-$89,999 (20), $80,000-$99,999 (21), $90,000-$94,999 (22), $95,000-$99,999 (23), $100,000-$119,999 (24), $100,000-$124,999 (25), $120,000-$149,999 (26) $125,000-$149,999 (27), $150,000 or more (28), refused (29).

– [Ipsos] *2014 Ontario general election.* Less than \$5,000 (1), \$5,000-\$9,999 (2), under \$10,000 (3), \$10,000-\$14,999 (4), \$15,000-\$19,999 (5), \$20,000-\$24,999 (6), \$25,000-\$29,999 (7), \$30,000-\$34,999 (8), \$35,000-\$39,999 (9), \$40,000-\$44,999 (10), \$45,000-\$49,999 (11), \$50,000-\$54,999 (12), \$45,000-\$54,999 (13), \$55,000-\$59,999 (14), \$60,000-\$64,999 (15), \$65,000-\$69,999 (16), \$60,000-\$69,999 (17), \$70,000-\$74,999 (18), \$75,000-\$79,999 (19), \$70,000-\$79,999 (20), \$80,000-\$84,999 (21), \$85,000-\$89,999 (22), \$80,000-\$99,999 (23), \$90,000-\$94,999 (24), \$95,000-\$99,999 (25), \$100,000-\$119,999 (26), \$100,000-\$124,999 (27), \$120,000-\$149,999 (28), \$125,000-\$149,999 (29), \$150,000 or more (30), don't know/refused (31).

– [LPP] *2015 Canadian federal election.* What was your total household income last year? Less than \$20,000 (1), \$20,000 to \$39,999 (2), \$40,000 to \$59,999 (3), \$60,000 to \$79,999 (4), \$80,000 to \$99,999 (5), \$100,000 to \$119,999 (6), \$120,000 to \$149,999 (7), \$150,000 to \$199,999 (9), \$200,000 or more (10), don't know (8).

B.2.4 Party Identification

Party identification is used to construct an indicator of wishful thinking that ranges from 1 to 5 depending on which party the respondents identify with (i.e., no party, a losing party, or a winning party) and how strongly (i.e., not very strong, fairly strong, or very strong) they identify to that party. The party identification scale is coded as follows: strong loser party identification (1), moderate loser party identification (2), no party identification (3), moderate winner party identification (4), and strong winner party identification (5).

– [CES] *2019 Canadian federal election.* (Phone Survey) In federal politics, do you usually think of yourself as a Liberal, Conservative, NDP, Bloc Québécois, Green Party, or none of these? Liberal (Grits) (1), Conservatives (Tory, PCs, Conservative Party of Canada) (2), NDP (New Democratic Party, New Democrats, NDPers) (3), Bloc Québécois (BQ, PQ, Bloc, Parti Québécois) [Quebec only] (4), Green Party (Greens) (5), People's Party (6), Other (7), None of these (8), Refused (-8), Don't know (-9). [If identify with party] How strongly [party] do you feel? Very strongly (1), Fairly strongly (2), Not very strongly (3), Refused (-8), Don't know (-9). (Internet Survey) In federal politics, do you usually think of yourself as a: Liberal (1), Conservative (2), NDP (3), Bloc Québécois [Quebec only] (4), Green (5), People's Party (6), Another party (7), None of these (8), Don't know/Prefer not to answer (9)? [If identify with party] How strongly [party] do you feel? Very strongly (1), Fairly strongly (2), Not very strongly (3), Don't know/Prefer not to answer (4).

– [LPP] *2015 Canadian federal election.* In federal politics, do you usually think of yourself as a: Liberal (1), Conservative (2), New Democrat (3), Bloc Québécois (4), Green (5), None of these (6), Don't know (7)? [If identify with party] How strongly [party] do you feel? Very strongly (1), Fairly strongly (2), Not very strongly (3), Don't know (4).

B.2.5 Party Preference

The party preference of respondents was determined using their reported vote or vote intention. Respondents who voted for the winning candidate in their district were coded 1 and 0 otherwise. Respondents' reported vote/vote intention was recorded by the following questions:

– [CES] *2019 Canadian federal election.* (Phone Survey) [If certain or likely to vote] Which party do you think you will vote for? [If already voted] Which party did you vote for? [If unlikely to vote] If you decide to vote, which party do you think you will vote for? Liberal (Grits) (1), Conservatives (Tory, PCs, Conservative Party of Canada) (2), NDP (New Democratic Party, New Democrats, NDPers) (3), Bloc Québécois (BQ, PQ, Bloc, Parti Québécois) [Quebec only] (4), Green Party (Greens) (5), People's Party (6), Other (7), Will not vote (8), None of these (9), Will spoil ballot (10), Refused (-8), Don't know/undecided (-9). [If don't know] Is there a party you are leaning towards? Liberal (Grits) (1), Conservatives (Tory, PCs, Conservative Party of Canada) (2), NDP (New Democratic Party, New Democrats, NDPers) (3), Bloc Québécois (BQ, PQ, Bloc, Parti Québécois) [Quebec only] (4), Green Party (Greens) (5), People's Party (6), Other (7), Will not vote (8), None of these (9), Will spoil ballot (10), Don't know (-9). (Internet Survey) [If certain or likely to vote] Which party do you think

you will vote for? [If unlikely to vote] If you decide to vote, which party do you think you will vote for? [If already voted] For which party did you vote? Liberal Party (1), Conservative Party (2), NDP (3), Bloc Québécois [Quebec only] (4), Green Party (5), People's Party (6), Another party (7), Don't know/Prefer not to answer (9). [If don't know/Prefer not to answer] Is there a party you are leaning towards? Liberal Party (1), Conservative Party (2), NDP (3), Bloc Québécois [Quebec only] (4), Green Party (5), People's Party (6), Another party (7), I do not intend to vote (8), Don't know/Prefer not to answer (9).

– [Datagotchi] *2022 Quebec general election.* According to our analysis,[2] the party you intend to vote for is: [party]. Is it accurate? Yes! (1), Not really... (2). [If "not really"] You are one of a kind! Help us improve this tool by selecting the party you intend to vote for. Coalition Avenir Québec (1), Parti Québécois (2), Parti Libéral du Québec (3), Québec Solidaire (4), the Parti Conservateur du Québec (5), Other (6), I will not vote (7).[3]

– [Ipsos–Invitation] *2011 Canadian federal election.* [Vote intention] Thinking of how you feel right now, if the upcoming federal election were held tomorrow, which of the following parties' candidates would you, yourself, be most likely to support? The Conservative Party (1), the Liberal Party (2), the New Democratic Party (NDP) (3), the Bloc Québécois (BQ) [Quebec only] (4), the Green Party (5), or some other party (6)? Would not vote/None/Would spoil ballot (7), Don't know/Not sure (8). [If "Don't know/Not sure"] Well, which party would you say you are leaning towards? The Conservative Party (1), the Liberal Party (2), the New Democratic Party (NDP) (3), the Bloc Québécois (BQ) [Quebec only] (4), the Green Party (5), or some other party (6)? Would not vote/None/Would spoil ballot (7), Don't know/Not sure (8).

– [Ipsos–Exit] *2011 Canadian federal election.* Which candidate did you vote for today? Was it your local... Conservative Party candidate (1), Liberal Party candidate (2), New Democratic Party (NDP) candidate (3), Bloc Québécois candidate [Quebec only] (4), Green Party candidate (5), a candidate from another party/Independent (6)? Spoiled ballot (7), Don't know/Refused (8).

– [Ipsos–Exit] *2015 Canadian federal election.* Which candidate did you vote for today? Was it your local... Conservative Party candidate (1), Liberal Party candidate (2), New Democratic Party (NDP) candidate (3), Bloc Québécois candidate [Quebec only] (4), Green Party candidate (5), a candidate from another party/Independent (6)? Spoiled ballot (7), Don't know/Refused (8), Not stated (9).

– [Ipsos–Invitation] *2011 Ontario general election.* [If already voted] Which candidate did you vote for today? Was it your local... Progressive Conservative Party candidate (1), Liberal Party candidate (2), New Democratic Party (NDP) candidate (3), Green Party candidate (4), a candidate from another party/Independent (5)? Spoiled ballot (6), Don't know/Refused (7). [Vote intention] Thinking of how you feel right now, if a provincial election were held tomorrow, which of the following parties' candidates would you, yourself, be most likely to support? The Ontario Progressive Conservative Party (PC), led by Tim Hudak (1), the Ontario Liberal Party, led by Dalton McGuinty (2), the Ontario New Democratic Party (NDP), led by Andrea Horwath (3), the Green Party (4), other (5)? Would not vote/None/Would spoil ballot (6), Don't know/Not sure (7), Refused (8). [If "Would not vote" or "Don't know/Not sure"] Well, which party would you say you would lean towards? The Ontario Progressive Conservative Party (PC), led by Tim Hudak (1), the Ontario Liberal Party, led by Dalton McGuinty (2), the Ontario New Democratic Party (NDP), led by Andrea Horwath (3), the Green Party (4), other (5)? Would not vote/None/Would spoil ballot (6), Don't know/Not sure (7), Refused (8).

– [Ipsos–Exit] *2011 Ontario general election.* Which candidate did you vote for? Was it your local... Progressive Conservative Party candidate (1), Liberal Party candidate (2), New Democratic Party (NDP) candidate (3), Green Party candidate (4), a candidate from another party/Independent (5)? Spoiled ballot (6), Don't know/Refused (7), Not specified (8).

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[2]Respondents' vote intention was first predicted by the app based on their answers to various lifestyle questions.

[3]Respondents who answered "not really" could then choose the party they intended to vote for, but did not have the possibility to choose the party that was incorrectly predicted by the app. For example, if the app predicted that the respondent would vote for the Coalition Avenir Québec and the respondent flagged this answer as wrong, they could not indicate the Coalition Avenir Québec as the party they intended to vote for afterwards.

– [Ipsos–Exit] *2014 Ontario general election.* Which candidate did you vote for? Was it your local... Progressive Conservative Party candidate (1), Liberal Party candidate (2), New Democratic Party (NDP) candidate (3), a candidate from another party/Independent (4)? Spoiled ballot (5), Don't know/Refused (6).

– [LPP] *2015 Canadian federal election.* [If already voted] For which party did you vote? The Liberal Party (1), the Conservative Party, (2) the New Democratic Party (3), the Bloc Québécois [Quebec only] (4), the Green Party (5), Prefer not to say (6). [Vote intention] The Liberal Party (1), the Conservative Party (2), the New Democratic Party (3) the Bloc Québécois [Quebec only] (4), the Green Party (5), Undecided (6), Don't know (7).

B.2.6 Political Interest

Respondents' political interest was measured on a 0–10 scale. Both general political interest and election interest were measured in the 2019 CES, while only general political interest was measured in the 2015 LPP. For CES data, the election interest item was favoured over the general interest item.

– [CES] (Phone Survey) Using a scale from 0 to 10, where 0 means no interest at all and 10 means a great deal of interest, how interested are you in this federal election? (Internet Survey) How interested are you in this federal election? Set the slider to a number from 0 to 10, where 0 means no interest at all, and 10 means a great deal of interest.

– [LPP] Some people are very interested in politics and pay a lot of attention to it. How about you? On a scale of 0-10, where 0 means you are not interested at all in politics and 10 means you are very interested, how interested are you?

B.2.7 Response Date

Number of days between interview date and election day.

B.2.8 Sex

Sex is a binary variable coded 0 for female respondents and 1 for male respondents.

B.2.9 University Degree

University degree is a binary variable coded 0 for respondents without a university degree and 1 for respondents with a university degree (bachelor or higher). Respondents' level of education was recorded by the following questions:
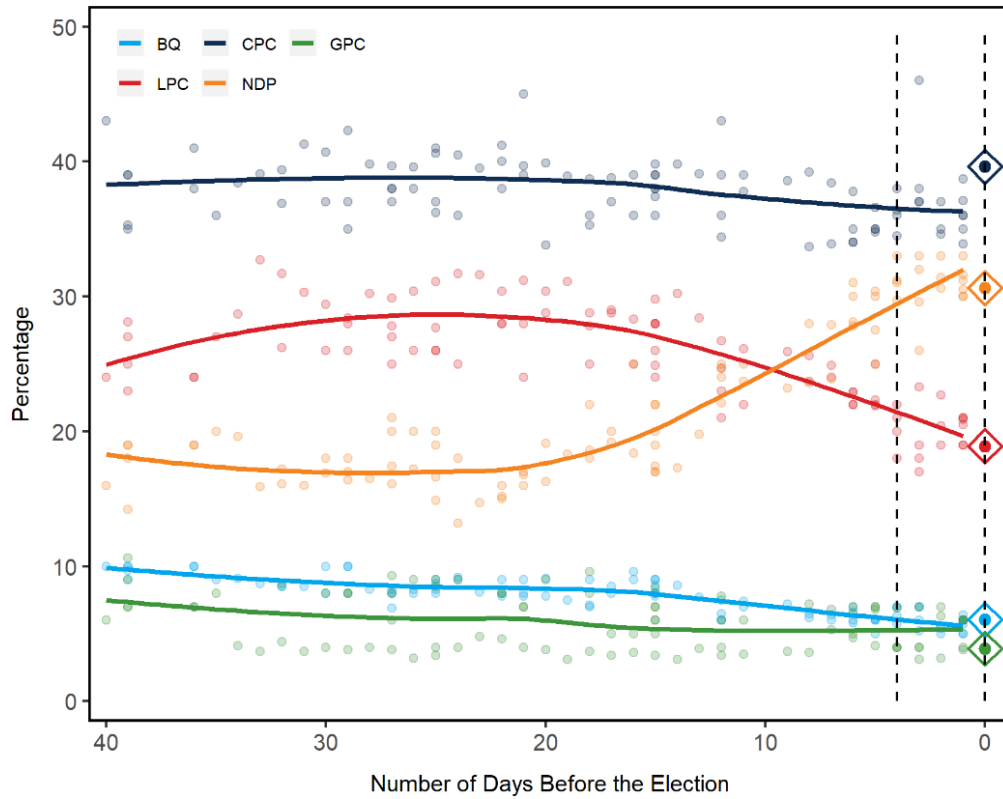
– [CES] *2019 Canadian federal election.* What is the highest level of education that you have completed? No schooling (1), Some elementary school (2), Completed elementary school (3), Some secondary/High school (4), Completed secondary/High school (5), Some technical, community college, CEGEP, College Classique (6), Completed technical, community college, CEGEP, College Classique (7), Some university (8), Bachelor's degree (9), Master's degree (10), Professional degree or doctorate (11), Refused (-8), Don't know/Prefer not to answer (-9/12).

– [Datagotchi] *2022 Quebec general election.* What is the highest level of education that you have completed? No schooling/Primary school/High school (1), Collège, CEGEP or Collège classique (2), Bachelor/Master's/Doctorate (3)?

– [Ipsos] *2011 Canadian federal election.* What is the highest degree or level of school you have completed? Primary school or less (1), Some high school (2), High school (3), Some Community College/CEGEP/Trade School (4), Community College/CEGEP/Trade School (5), Some university (6), University undergraduate degree (7), University graduate degree (8)? Not specified (9).

– [Ipsos] *2015 Canadian federal election.* What is the highest degree or level of school you have completed? Primary school or less (1), Some high school (2), High school (3), Some Community College/CEGEP/Trade School (4), Community College/CEGEP/Trade School (5), Some university (6), University undergraduate degree (7), University graduate degree (8)?

– [Ipsos] *2011 Ontario general election.* What is the highest degree or level of school you have completed? Primary school or less (1), Some high school (2), High school (3), Some Community College/CEGEP/Trade School (4), Community College/CEGEP/Trade School (5), Some university (6), University undergraduate degree (7), University graduate degree (8)? Don't know/Refused (9).

– [Ipsos] *2014 Ontario general election.*[4] What is the highest degree or level of school you have completed? Primary school or less (1), Some high school (2), High school (3), Some Community College/CEGEP/Trade School (4), Community College/CEGEP/Trade School (5), Some university (6), University undergraduate degree (7), University graduate degree (8)?

– [LPP] *2015 Canadian federal election.* What is your highest level of education? Some high school (1), High school diploma (2), College or technical degree (3) Some university (4), Bachelor's degree (5), Master's degree (6), Professional degree (7), Doctorate (8)?

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[4]The education variable in the 2014 Ontario General Election Exit Survey dataset is condensed into four categories: less than high school (1), high school (2), some postsecondary education (3), university graduate (4).
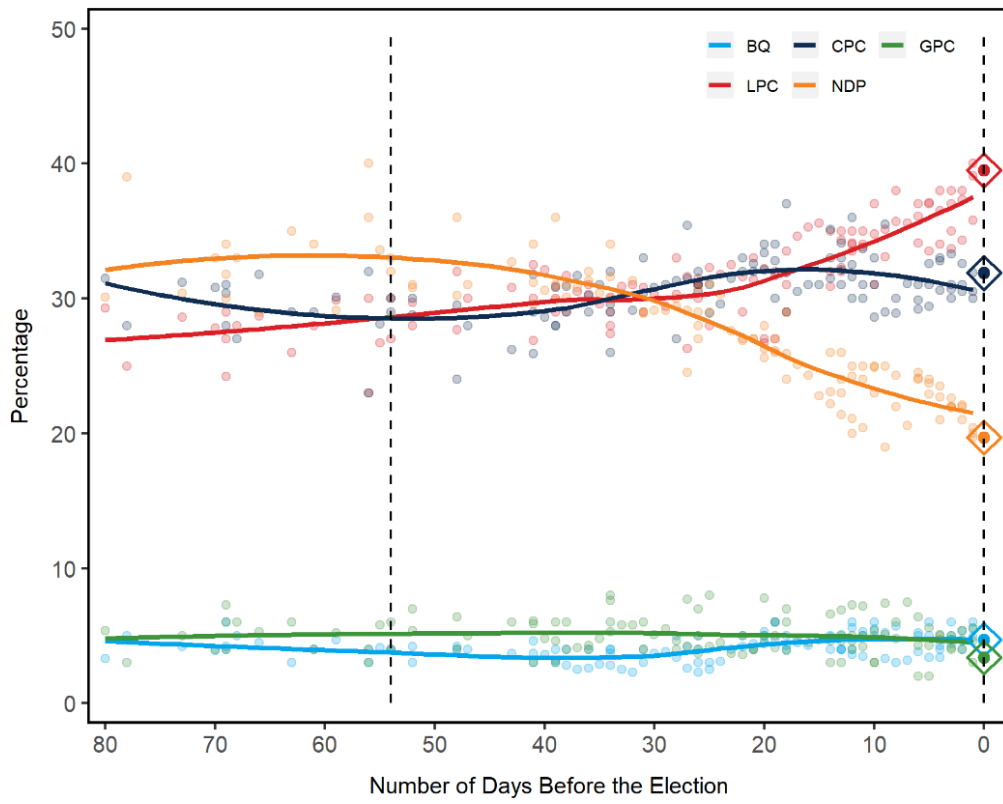
C. Vote Intentions
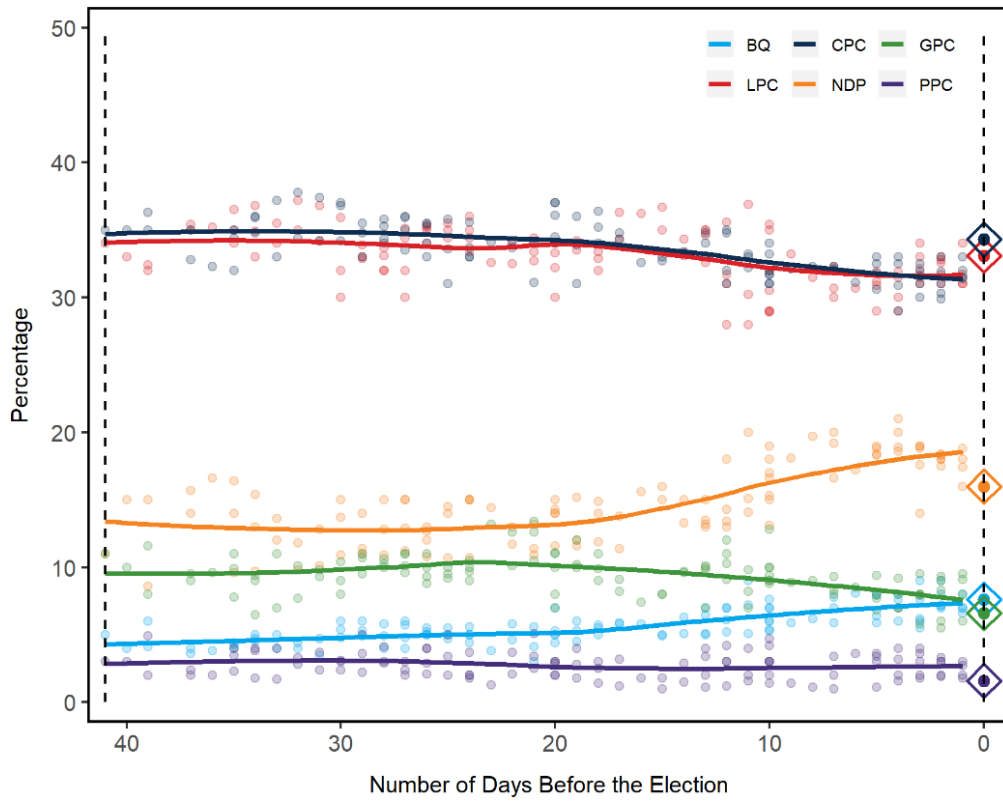
Figure C1. Voting Intention, 2011 Canadian Federal Election

Figure C2. Voting Intention, 2015 Canadian Federal Election

Figure C3. Voting Intention, 2019 Canadian Federal Election

Figure C4. Voting Intention, 2011 Ontario General Election
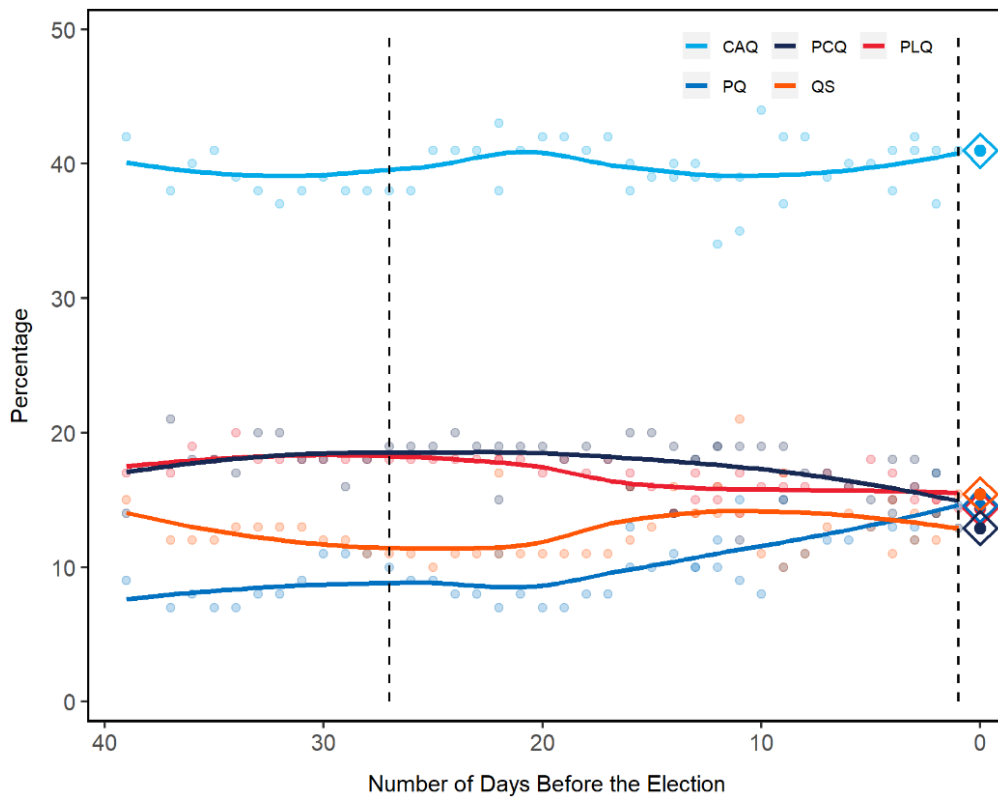
Figure C5. Voting Intention, 2014 Ontario General Election

Note. Data from the 2014 Ontario general election Wikipedia web page.
The dotted line shows the survey interview period (exit poll only).

Figure C6. Voting Intention, 2022 Quebec General Election
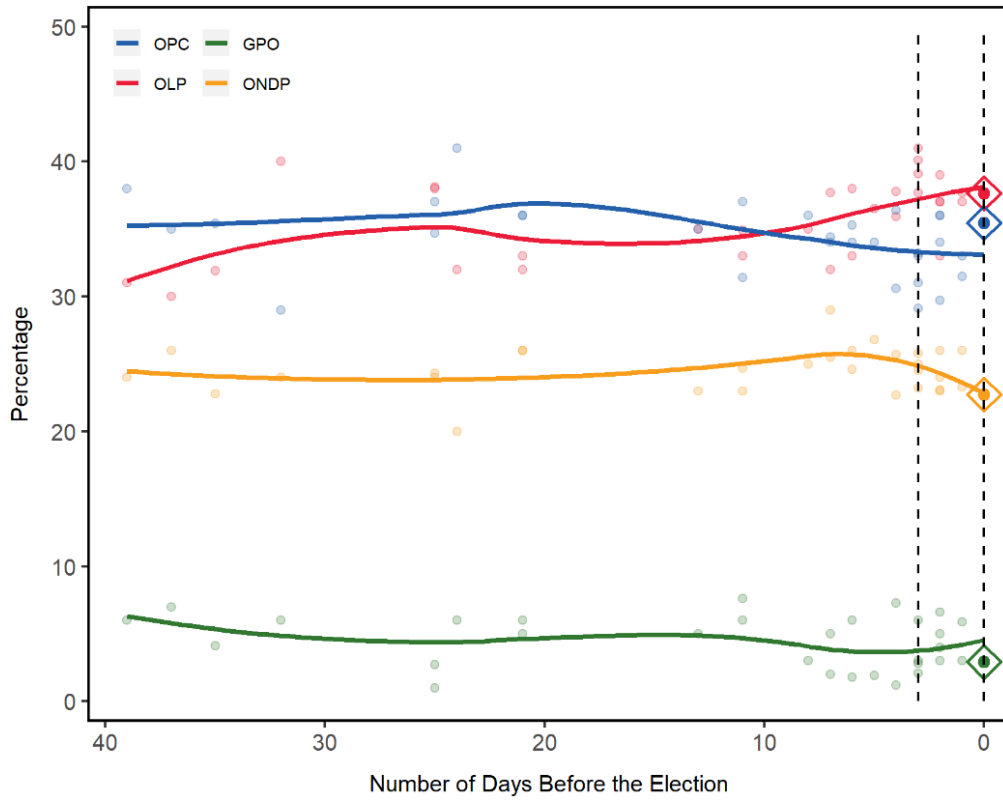
Note. Data from the 2022 Quebec general election Wikipedia web page.
The dotted lines show the survey interview period.

D. Forecasts Among Losers and Winners

As mentioned in the paper, there is a clear association between preferences and expectations. Therefore, individuals on the winning side tend to provide more accurate forecasts than those on the losing side as many of them are favourably biased toward the winning candidate or party. This can be seen in Figure D1: the more people intend to vote for the winner in a district, the greater the percentage of correct forecasts within that district. Note that the correlation between the two variables is weakest in the 2022 Quebec election (and would be even weaker if outliers were removed).

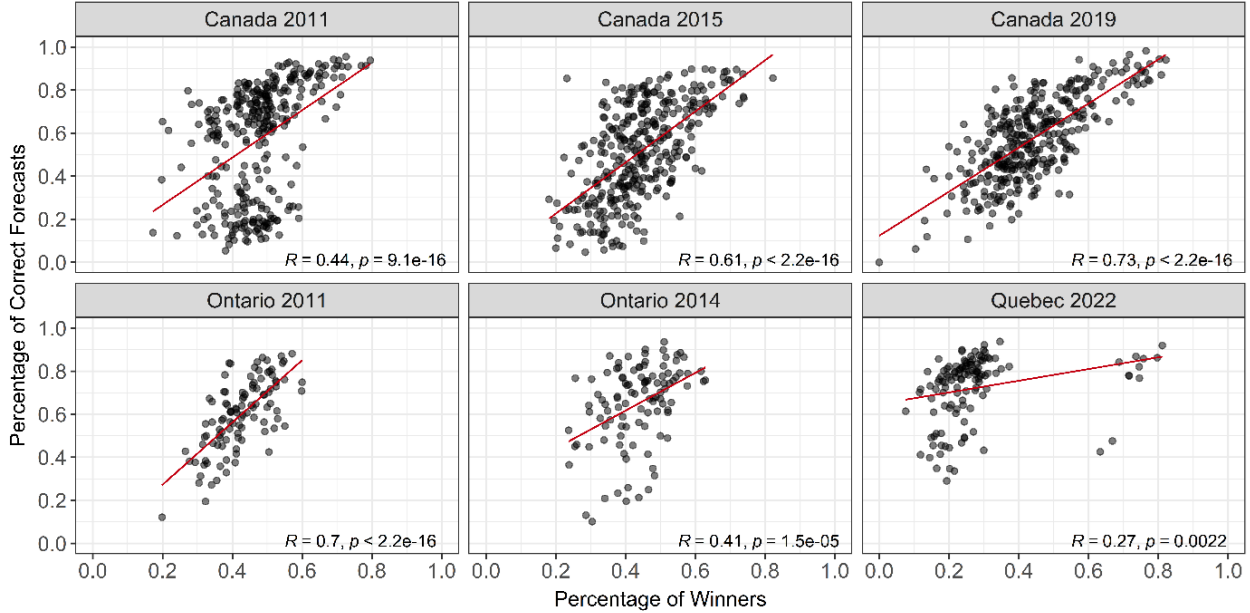Figure D1. Scatterplot of Percentage of Correct Forecasts Within District vs Percentage of Winners

Figure D2 shows the distribution of respondents according to their loser/winner status within districts for each election. The large difference in the shape of the distribution for the 2022 Quebec election compared to the other elections is due to the considerable over-representation of Québec Solidaire supporters in the Datagotchi sample (i.e., they represent almost 50 percent of the sample, but only 15.4 of voters in the 2022 election). Although the over-representation of QS voters could be seen as a problem, for the purpose of our study, it is in fact an interesting feature. The patterns observed in other elections (in terms of sample sizes, aggregation, and regression results) are also present in the case of the 2022 Quebec election despite the greater percentage of "losers" in that election across and within districts. This might translate the fact that the outcome of the last general election in Quebec was seen by many as highly predictable (with the CAQ largely dominating vote intention polls throughout the campaign). Therefore, even those who supported a losing candidate could hardly ignore the CAQ's significant lead, which also explains the relatively low correlation observed in Figure D1.

Although winners do not represent a majority of respondents in most districts, they tend to be a plurality. In almost 72 percent of the district elections covered by our study (i.e., 944 out of 1,318), a plurality of respondents intended to vote for the winning party (see Table D1). Since the accuracy of group forecasts is assessed using a plurality rule, the high number of correctly predicted districts in the aggregate casts a new light on our results. It might be that group forecasts outperform individual ones since those favourably biased toward the winner usually form the largest subgroup within districts or that the increase in accuracy produced by random draws of successively larger sample sizes is mainly driven by the partisan biases of winners.

If we look at respondents on the losing side separately, we generally find much lower rates of success at the individual level, but also at the aggregate level, although there is a positive and substantial gap between individual- and district-level forecasts. This is shown in Figure D3. In only two elections (i.e., Ontario

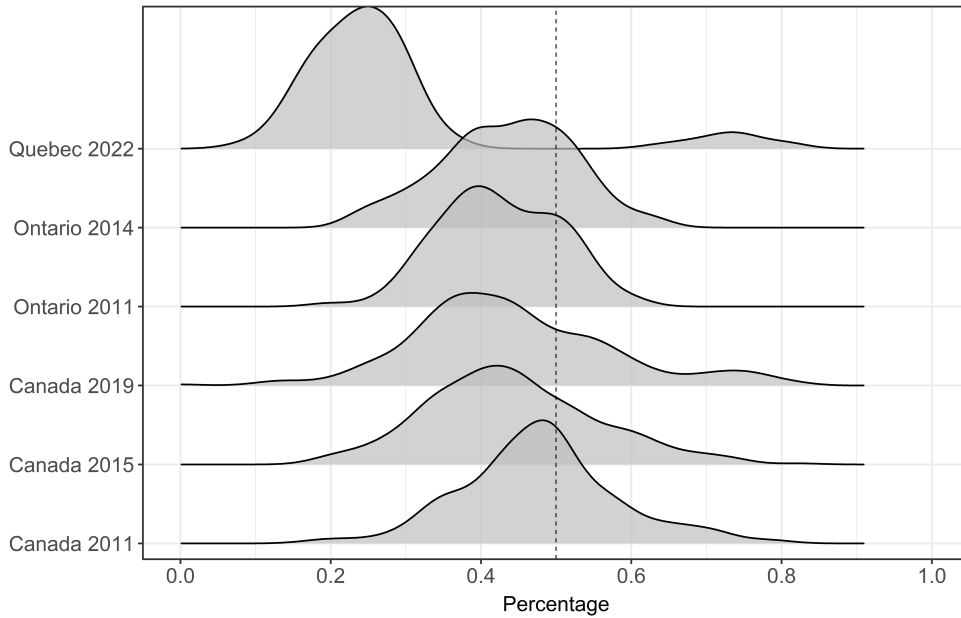Figure D2. Distribution of the Percentage of Winners Within Districts According to Vote Intention

Table D1. Percentage of Districts With a Plurality of Winners

Election	Plurality of Winners (%)
Canada 2011	84.74
Canada 2015	72.54
Canada 2019	78.11
Ontario 2011	73.58
Ontario 2014	80.19
Quebec 2022	10.40
All	71.62

Note. Excluding districts in which there is a tie in the percentage of respondents supporting the winning candidate and the percentage of respondents supporting a losing candidate.

2014 and Quebec 2022) do a majority of respondents (who intended to vote for one of the losing candidates) correctly predicted the outcome in their district. Once expectations are aggregated, more than half of district races are correctly predicted in all cases, with the exception of the 2015 federal election (where only 47.2 percent of district-level outcomes were correctly predicted). Figure D4 shows the accuracy of forecasts made by respondents on the winning side only. The success rate is much higher at the individual level (sometimes nearing or even reaching 100 percent), but also at the aggregate level, than it is for losers. One could say that the partisan biases of winners are needed to partially "compensate" for the partisan biases of losers.

We also provide results from random draws of successively larger sample sizes within districts among all respondents, losers only, and winners only in Figure D5. Since we draw respondents' electoral expectations from districts with at least 60 respondents, we pooled all elections together as the threshold of 60 respondents led to a considerable reduction in the number of available district races in some elections when only losers or winners were selected. Although there is a clear difference between the aggregated forecasts of losers and winners, we nonetheless observe clear improvements in collective accuracy as within-district samples increase in size in both groups. As for the entire sample, the rate of improvement considerably weakens passed approximately 10–15 respondents in both groups.

Figure D3. Accuracy of Individual- and District-Level Forecasts, Losers Only
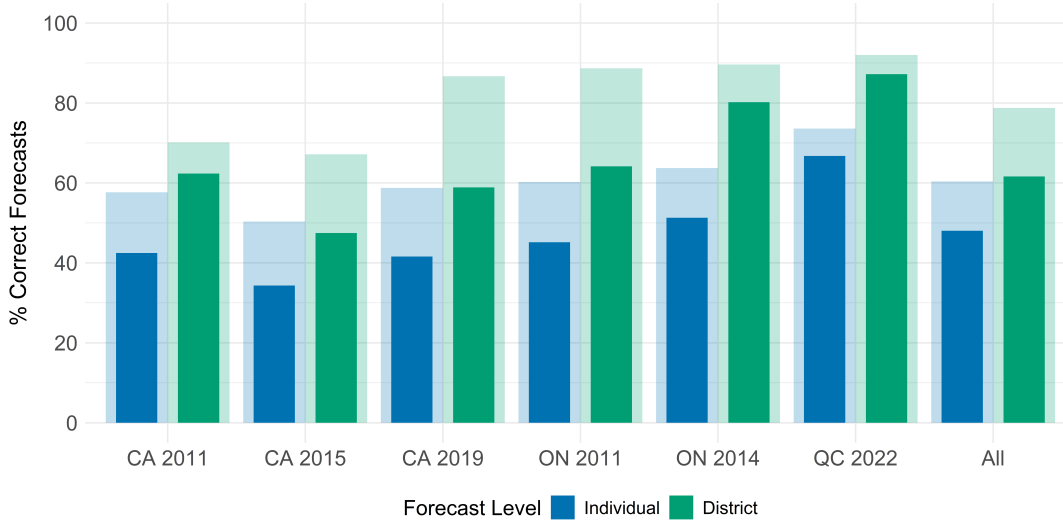
Note. Semi-transparent bars display the percentage of correct forecasts for the entire sample (i.e., respondents on the winning and losing sides), while solid bars show the results for respondents on the losing side only (i.e., for district-level forecasts, only the expectations of losers were used).

Figure D4. Accuracy of Individual- and District-Level Forecasts, Winners Only
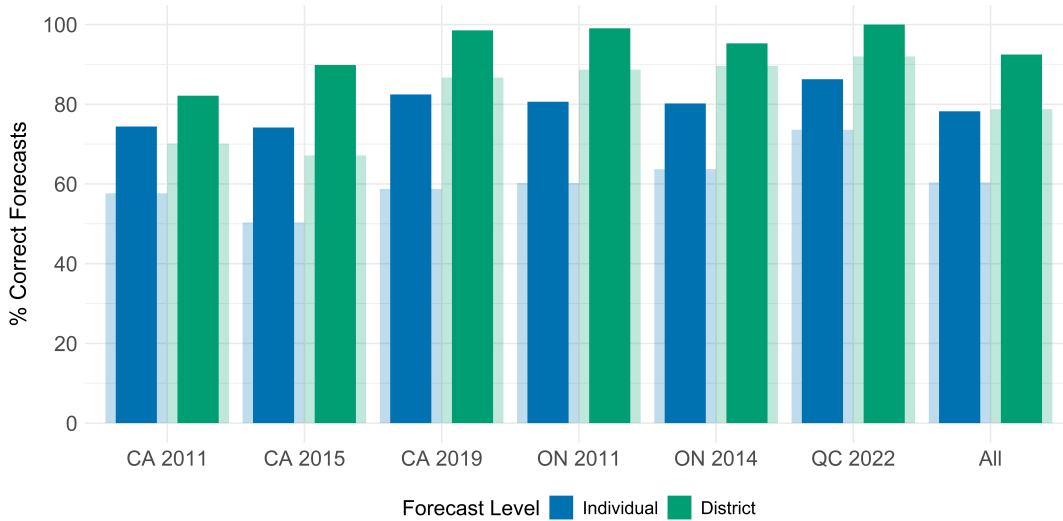
Note. Semi-transparent bars display the percentage of correct forecasts for the entire sample (i.e., respondents on the winning and losing sides), while solid bars show the results for respondents on the winning side only (i.e., for district-level forecasts, only the expectations of winners were used).

Figure D5. Percentage of Correctly Predicted Districts at Varying Sample Sizes
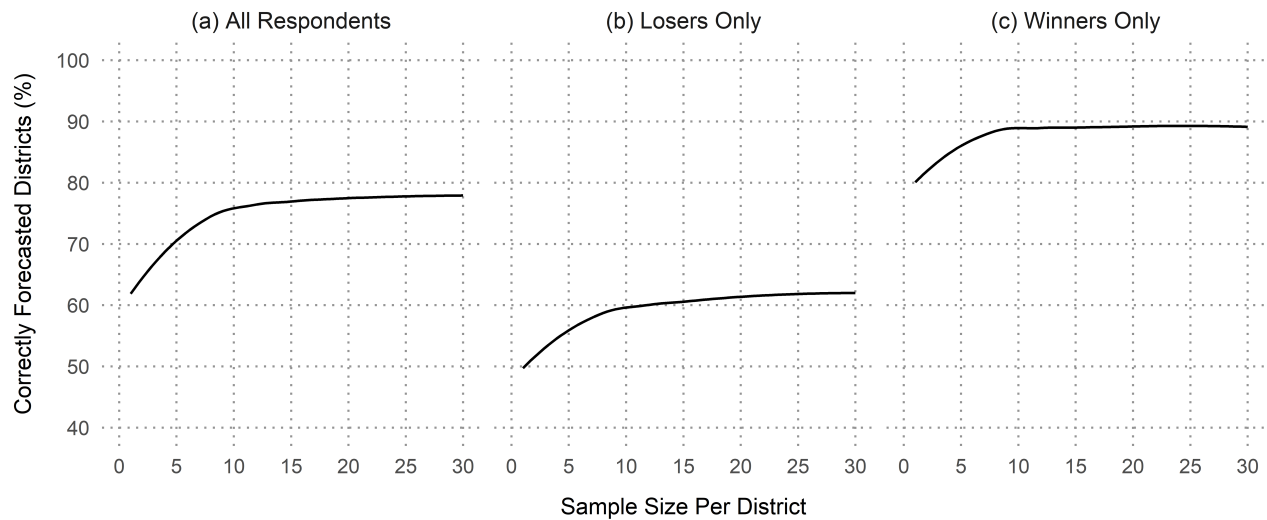
Notes. The aggregation of respondents' expectations is based on data from 1,177 districts for all respondents, 646 districts for losers, and 488 districts for winners. Loser/winner status is based on respondents' vote intention.

E.   Error Measures: sMAPE and MALE

The symmetric mean absolute percentage error (sMAPE) can be defined as follows[5]:

$$sMAPE = \frac{100}{n} \sum_{i=1}^{n} \frac{|y_i - \hat{y}_i|}{|y_i| + |\hat{y}_i|} \tag{1}$$

where y_i is the observed value, $\hat{y}_i$ is the forecasted value, and n is the number of cases.

This measure has the advantage of being able to deal with forecasted are actual values equal to 0 (which can lead other measures to break down). However, the sMAPE slightly overestimates negative percentage errors, while it slightly underestimates positive percentage errors. Furthermore, when the forecasted or actual value is 0, the sMAPE will always be equal to the upper-limit of error (i.e., 100), which means that a one-seat forecast when the actual number of seats is 0 will produce a larger error than a one-seat error if the actual number of seats is greater than 0.

The log error or natural logarithm of the accuracy ratio (i.e., the ratio between the forecasted and observed values) has been described as a superior alternative to the sMAPE and other metrics since it weighs underestimates and overestimates equally (Tofallis, 2015), although it cannot deal with 0 values as $ln(0)$ is undefined. The mean absolute log error (MALE) can be defined as follows:

$$MALE = \frac{1}{n} \sum_{i=1}^{n} |ln(\frac{\hat{y}_i}{y_i})| \tag{2}$$

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[5]To ease interpretation, we use a slightly modified version of the original equation that ensures that the sMAPE value will always be between 0% and 100% (rather than between 0% and 200%).

F. District Diversity

The decision to measure diversity among survey respondents rather than the entire electorate or population of a district was motivated by the fact that diversity is conceptualized as a property of the group of forecasters rather than that of their immediate environment (furthermore, some diversity characteristics—such as diversity in response dates or in political interest—could only be measured using data from the survey samples). However, diversity can also be measured as a property of the district rather than as a property of the respondents. Therefore, we collected the appropriate data from the censuses closest to each election in order to measure sociological diversity within each constituency (for the 2022 Quebec general election, we used the semi-custom profiles of electoral districts distributed by Elections Quebec). Using census data gave us the opportunity to add additional indicators of sociological diversity, namely the unemployment rate and the percentage of immigrants and visible minorities within a district. These measures were added to the multilevel random effects logistic regression models as level-2 variables. The results are presented in Table F1 below. As can be seen, there are no clear pattern regarding the influence of diversity (when measured as a property of respondents' social environment).

Table F1. Predictors of Forecasting Accuracy in District-Level Elections at the Individual Level

	I. Vote & Education						II. PID & Interest	
	CA 11	CA 15	CA 19	ON 11	ON 14	QC 22	CA 15	CA 19
Partisan preference								
Voted for winner	1.89***	2.17***	2.09***	1.76***	2.02***	1.72***		
Party ID								
Loser PID (R)								
No PID							0.64	0.08
Winner PID							2.59***	1.19***
Sophistication								
University degree	0.33***	0.34**	0.44***	0.39***	0.37*	0.68***	0.24**	0.29***
High interest							0.84	0.23
Sociodemographics								
Male	0.25***	0.14***	0.10**	0.15***	0.08	0.13***	−0.29***	0.10**
55 years and over	0.11***	0.11***	0.40***	0.22***	−0.05	0.24***	0.24**	0.39***
High income	0.09***	0.17***	0.15***	0.16***	0.28***	0.03	0.31***	0.15***
Interaction								
Vote × University	−0.33***	−0.16	−0.46***	−0.47**	−0.72**	−0.57***		
No PID × Interest							0.34	0.98***
Winner PID × Interest							−0.09	0.77***
Informational diversity								
Vote choice	−0.86**	−0.75	0.82*	−0.55	0.64	0.00		
Education	0.33	−0.28	0.65	−0.37	0.89	−0.14	0.47	0.89
Political interest							0.20	0.24
Response date		−1.29***	1.48			0.48	−0.44	0.64
Sociological diversity								
Sex	−0.20	−0.21	0.38	−0.57	1.17*	−0.01	−0.78	0.49
Age	0.16	0.74	0.29	−1.30*	−0.33	0.20	2.02	0.40
Income	−0.95***	−0.29	0.05	0.97*	0.60	−0.70*	−1.46	0.15
Labour	0.06	−0.16	−0.31	−1.47**	1.38	−0.13	0.15	−0.54**
Immigrants	0.44	2.83***	−0.81*	0.68	−1.08	0.29	2.85*	−0.74*
Visible minorities	−0.32	−1.90***	0.37	−0.58	0.23	0.18	−2.10	0.53
Task difficulty								
Margin of victory (z)	0.30***	0.53***	0.66***	0.50***	0.36***	0.52***	0.60***	0.56***
Reelected	1.99***		0.77***	0.74***	1.23***	0.57***		0.70***
Boundary changes		−0.10					−0.20	
Response date (z)		−0.20***	−0.08***			−0.03**	−0.15***	−0.06***
Intercept	−0.62	0.46	−3.24***	1.22	−4.02*	0.04	−1.74	−1.90***
Random effects								
Intercept	0.36	1.34	0.42	0.27	0.85	0.17	15.01	1.10
Vote choice	0.43	2.15	0.56	0.71	2.61	0.66		
No PID							53.62	1.00
Winner PID							39.23	1.63
University degree	0.40	3.37	0.10	0.33	1.19	0.42		
High interest							31.40	1.86
Vote × University	0.64	6.56	0.59	1.73	3.65	0.85		
No PID × Interest							114.07	1.03
Winner PID × Interest							78.88	2.60
Sample size								
Observations	86,264	27,073	21,711	23,993	6,867	47,919	22,434	23,241
Districts	308	334[a]	338	105[b]	106[c]	123	334[a]	338

Notes. DV: Individual-level forecasting accuracy (0 = incorrect, 1 = correct). Multilevel random effects logistic regression models. Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. (a) No observations for Churchill—Keewatinook Aski, Nunavut, Western Arctic (Northwest Territories), and Yukon. (b) No observations for Timiskaming-Cochrane and Timmins–James Bay. (c) No observations for Timiskaming-Cochrane. Regression analyses adjusted for age, sex, education, and household income. Weights were computed using the Public Use Microdata Files (PUMFs) of the 2011 National Household Survey (Statistics Canada, 2014) for the 2011 Canadian federal election and the 2011 Ontario general election; the 2016 Canadian Census (Statistics Canada, 2022) for the 2015 Canadian federal election and the 2014 Ontario general election; and the 2021 Canadian Census (Statistics Canada, 2023) for the 2019 Canadian federal election and the 2022 Quebec general election. R = reference category.

G. List of Districts

2011 Canadian Federal Election

2003 Representation Order

10001. Avalon
10002. Bonavista - Gander - Grand Falls - Windsor
10003. Humber - St. Barbe - Baie Verte
10004. Labrador
10005. Random - Burin - St. George's
10006. St. John's East
10007. St. John's South - Mount Pearl
11001. Cardigan
11002. Charlottetown
11003. Egmont
11004. Malpeque
12001. Cape Breton - Canso
12002. Central Nova
12003. Dartmouth - Cole Harbour
12004. Halifax
12005. Halifax West
12006. Kings - Hants
12007. Cumberland - Colchester - Musquodoboit Valley
12008. Sackville - Eastern Shore
12009. South Shore - St. Margaret's
12010. Sydney - Victoria
12011. West Nova
13001. Acadie - Bathurst
13002. Beausejour
13003. Fredericton
13004. Fundy Royal
13005. Madawaska - Restigouche
13006. Miramichi
13007. Moncton - Riverview - Dieppe
13008. New Brunswick Southwest
13009. Saint John
13010. Tobique - Mactaquac
24001. Abitibi - Temiscamingue
24002. Ahuntsic
24003. Alfred-Pellan
24004. Argenteuil - Papineau - Mirabel
24005. Beauce
24006. Beauharnois - Salaberry
24007. Beauport - Limoilou
24008. Berthier - Maskinonge
24009. Bourassa
24010. Brome - Missisquoi
24011. Brossard - La Prairie
24012. Chambly - Borduas
24013. Charlesbourg - Haute-Saint-Charles
24014. Montmorency - Charlevoix - Haute-Cote-Nord
24015. Chateauguay - Saint-Constant
24016. Chicoutimi - Le Fjord
24017. Compton - Stanstead
24018. Drummond
24019. Gaspesie - Iles-de-la-Madeleine
24020. Gatineau
24021. Hochelaga
24022. Honore-Mercier
24023. Hull - Aylmer
24024. Jeanne-Le Ber
24025. Joliette
24026. Jonquiere - Alma
24027. Lac-Saint-Louis
24028. La Pointe-de-l'Ile
24029. LaSalle - Emard

24030. Laurentides - Labelle
24031. Laurier - Sainte-Marie
24032. Laval
24033. Laval - Les Iles
24034. Levis - Bellechasse
24035. Longueuil - Pierre-Boucher
24036. Lotbiniere - Chutes-de-la-Chaudiere
24037. Louis-Hebert
24038. Louis-Saint-Laurent
24039. Manicouagan
24040. Marc-Aurele-Fortin
24041. Haute-Gaspesie - La Mitis - Matane - Matapedia
24042. Megantic - L'Erable
24043. Montcalm
24044. Mount Royal
24045. Notre-Dame-de-Grace - Lachine
24046. Abitibi - Baie-James - Nunavik - Eeyou
24047. Outremont
24048. Papineau
24049. Pierrefonds - Dollard
24050. Pontiac
24051. Portneuf - Jacques-Cartier
24052. Quebec
24053. Repentigny
24054. Bas-Richelieu - Nicolet - Becancour
24055. Richmond - Arthabaska
24056. Rimouski-Neigette - Temiscouata - Les Basques
24057. Riviere-des-Mille-Iles
24058. Montmagny - L'Islet - Kamouraska - Riviere-du-Loup
24059. Riviere-du-Nord
24060. Roberval - Lac-Saint-Jean
24061. Rosemont - La Petite-Patrie
24062. Saint-Bruno - Saint-Hubert
24063. Saint-Hyacinthe - Bagot
24064. Saint-Jean
24065. Saint-Lambert
24066. Saint-Laurent - Cartierville
24067. Saint-Leonard - Saint-Michel
24068. Saint-Maurice - Champlain
24069. Shefford
24070. Sherbrooke
24071. Terrebonne - Blainville
24072. Trois-Rivieres
24073. Vaudreuil-Soulanges
24074. Vercheres - Les Patriotes
24075. Westmount - Ville-Marie
35001. Ajax - Pickering
35002. Algoma - Manitoulin - Kapuskasing
35003. Ancaster - Dundas - Flamborough - Westdale
35004. Barrie
35005. Beaches - East York
35006. Bramalea - Gore - Malton
35007. Brampton - Springdale
35008. Brampton West
35009. Brant
35010. Burlington
35011. Cambridge
35012. Carleton - Mississippi Mills
35013. Chatham-Kent - Essex
35014. Durham
35015. Davenport
35016. Don Valley East
35017. Don Valley West

35018. Dufferin - Caledon
35019. Eglinton - Lawrence
35020. Elgin - Middlesex - London
35021. Essex
35022. Etobicoke Centre
35023. Etobicoke - Lakeshore
35024. Etobicoke North
35025. Glengarry - Prescott - Russell
35026. Bruce - Grey - Owen Sound
35027. Guelph
35028. Haldimand - Norfolk
35029. Haliburton - Kawartha Lakes - Brock
35030. Halton
35031. Hamilton Centre
35032. Hamilton East - Stoney Creek
35033. Hamilton Mountain
35034. Huron - Bruce
35035. Kenora
35036. Kingston and the Islands
35037. Kitchener Centre
35038. Kitchener - Conestoga
35039. Kitchener - Waterloo
35040. Lanark - Frontenac - Lennox and Addington
35041. Leeds - Grenville
35042. London - Fanshawe
35043. London North Centre
35044. London West
35045. Markham - Unionville
35046. Lambton - Kent - Middlesex
35047. Mississauga - Brampton South
35048. Mississauga East - Cooksville
35049. Mississauga - Erindale
35050. Mississauga South
35051. Mississauga - Streetsville
35052. Nepean - Carleton
35053. Newmarket - Aurora
35054. Niagara Falls
35055. Niagara West - Glanbrook
35056. Nickel Belt
35057. Nipissing - Timiskaming
35058. Northumberland - Quinte West
35059. Oak Ridges - Markham
35060. Oakville
35061. Oshawa
35062. Ottawa Centre
35063. Ottawa - Orleans
35064. Ottawa South
35065. Ottawa - Vanier
35066. Ottawa West - Nepean
35067. Oxford
35068. Parkdale - High Park
35069. Parry Sound - Muskoka
35070. Perth - Wellington
35071. Peterborough
35072. Pickering - Scarborough East
35073. Prince Edward - Hastings
35074. Renfrew - Nipissing - Pembroke
35075. Richmond Hill
35076. St. Catharines
35077. St. Paul's
35078. Sarnia - Lambton
35079. Sault Ste. Marie
35080. Scarborough - Agincourt
35081. Scarborough Centre
35082. Scarborough - Guildwood
35083. Scarborough - Rouge River
35084. Scarborough Southwest
35085. Simcoe - Grey
35086. Simcoe North

35087. Stormont - Dundas - South Glengarry
35088. Sudbury
35089. Thornhill
35090. Thunder Bay - Rainy River
35091. Thunder Bay - Superior North
35092. Timmins - James Bay
35093. Toronto Centre
35094. Toronto - Danforth
35095. Trinity - Spadina
35096. Vaughan
35097. Welland
35098. Wellington - Halton Hills
35099. Whitby - Oshawa
35100. Willowdale
35101. Windsor - Tecumseh
35102. Windsor West
35103. York Centre
35104. York - Simcoe
35105. York South - Weston
35106. York West
46001. Brandon - Souris
46002. Charleswood - St. James - Assiniboia
46003. Churchill
46004. Dauphin - Swan River - Marquette
46005. Elmwood - Transcona
46006. Kildonan - St. Paul
46007. Portage - Lisgar
46008. Provencher
46009. Saint Boniface
46010. Selkirk - Interlake
46011. Winnipeg Centre
46012. Winnipeg North
46013. Winnipeg South
46014. Winnipeg South Centre
47001. Battlefords - Lloydminster
47002. Blackstrap
47003. Desnethe - Missinippi - Churchill River
47004. Cypress Hills - Grasslands
47005. Palliser
47006. Prince Albert
47007. Regina - Lumsden - Lake Centre
47008. Regina - Qu'Appelle
47009. Saskatoon - Humboldt
47010. Saskatoon - Rosetown - Biggar
47011. Saskatoon - Wanuskewin
47012. Souris - Moose Mountain
47013. Wascana
47014. Yorkton - Melville
48001. Fort McMurray - Athabasca
48002. Calgary East
48003. Calgary Centre-North
48004. Calgary Northeast
48005. Calgary - Nose Hill
48006. Calgary Centre
48007. Calgary Southeast
48008. Calgary Southwest
48009. Calgary West
48010. Crowfoot
48011. Edmonton - Mill Woods - Beaumont
48012. Edmonton Centre
48013. Edmonton East
48014. Edmonton - Leduc
48015. Edmonton - St. Albert
48016. Edmonton - Sherwood Park
48017. Edmonton - Spruce Grove
48018. Edmonton - Strathcona
48019. Lethbridge
48020. Macleod
48021. Medicine Hat
48022. Peace River
48023. Red Deer
48024. Vegreville - Wainwright

48025. Westlock - St. Paul
48026. Wetaskiwin
48027. Wild Rose
48028. Yellowhead
59001. Abbotsford
59002. Burnaby - Douglas
59003. Burnaby - New Westminster
59004. Cariboo - Prince George
59005. Chilliwack - Fraser Canyon
59006. Delta - Richmond East
59007. Pitt Meadows - Maple Ridge - Mission
59008. Esquimalt - Juan de Fuca
59009. Fleetwood - Port Kells
59010. Kamloops - Thompson - Cariboo
59011. Kelowna - Lake Country
59012. Kootenay - Columbia
59013. Langley
59014. Nanaimo - Alberni
59015. Nanaimo - Cowichan
59016. Newton - North Delta
59017. New Westminster - Coquitlam
59018. Okanagan - Shuswap

59019. North Vancouver
59020. Okanagan - Coquihalla
59021. Port Moody - Westwood - Port Coquitlam
59022. Prince George - Peace River
59023. Richmond
59024. Saanich - Gulf Islands
59025. Skeena - Bulkley Valley
59026. British Columbia Southern Interior
59027. South Surrey - White Rock - Cloverdale
59028. Surrey North
59029. Vancouver Centre
59030. Vancouver East
59031. Vancouver Island North
59032. Vancouver Kingsway
59033. Vancouver Quadra
59034. Vancouver South
59035. Victoria
59036. West Vancouver - Sunshine Coast - Sea to Sky Country
60001. Yukon
61001. Western Arctic
62001. Nunavut

2015–2019 Canadian Federal Elections

2013 Representation Order

*Unchanged federal electoral districts from the 2003 Representation Order to the 2013 Representation Order

10001. Avalon
10002. Bonavista - Burin - Trinity
10003. Coast of Bays - Central - Notre Dame
10004. Labrador*
10005. Long Range Mountains
10006. St. John's East
10007. St. John's South - Mount Pearl
11001. Cardigan*
11002. Charlottetown*
11003. Egmont*
11004. Malpeque*
12001. Cape Breton - Canso
12002. Central Nova
12003. Cumberland - Colchester
12004. Dartmouth - Cole Harbour
12005. Halifax
12006. Halifax West
12007. Kings - Hants*
12008. Sackville - Preston - Chezzetcook
12009. South Shore - St. Margarets
12010. Sydney - Victoria*
12011. West Nova*
13001. Acadie - Bathurst
13002. Beauséjour
13003. Fredericton
13004. Fundy Royal
13005. Madawaska - Restigouche
13006. Miramichi - Grand Lake
13007. Moncton - Riverview - Dieppe
13008. New Brunswick Southwest
13009. Saint John - Rothesay
13010. Tobique - Mactaquac
24001. Abitibi - Baie-James - Nunavik - Eeyou
24002. Abitibi - Témiscamingue
24003. Ahuntsic-Cartierville
24004. Alfred-Pellan
24005. Argenteuil - La Petite-Nation
24006. Avignon - La Mitis - Matane - Matapédia

24007. Beauce
24008. Beauport - Limoilou
24009. Bécancour - Nicolet - Saurel*
24010. Bellechasse - Les Etchemins - Lévis
24011. Beloeil - Chambly
24012. Berthier - Maskinongé
24013. Thérèse-De Blainville
24014. Pierre-Boucher - Les Patriotes - Verchères
24015. Bourassa
24016. Brome - Missisquoi
24017. Brossard - Saint-Lambert
24018. Rimouski-Neigette - Témiscouata - Les Basques*
24019. Charlesbourg - Haute-Saint-Charles
24020. Beauport - Côte-de-Beaupré - Île d'Orléans - Charlev
24021. Châteauguay - Lacolle
24022. Chicoutimi - Le Fjord
24023. Compton - Stanstead
24024. Dorval - Lachine - LaSalle
24025. Drummond*
24026. Gaspésie - Les Îles-de-la-Madeleine
24027. Gatineau
24028. Hochelaga
24029. Honoré-Mercier
24030. Hull - Aylmer
24031. Joliette
24032. Jonquière
24033. La Pointe-de-l'Île
24034. La Prairie
24035. Lac-Saint-Jean
24036. Lac-Saint-Louis
24037. LaSalle - Émard - Verdun
24038. Laurentides - Labelle*
24039. Laurier - Sainte-Marie
24040. Laval - Les Îles
24041. Longueuil - Charles-LeMoyne
24042. Lévis - Lotbinière
24043. Longueuil - Saint-Hubert
24044. Louis-Hébert
24045. Louis-Saint-Laurent
24046. Manicouagan

24047. Mégantic - L'Érable
24048. Mirabel
24049. Montarville
24050. Montcalm
24051. Montmagny - L'Islet - Kamouraska - Rivière-du-Loup*
24052. Mont-Royal
24053. Notre-Dame-de-Grâce - Westmount
24054. Outremont
24055. Papineau
24056. Pierrefonds - Dollard*
24057. Pontiac
24058. Portneuf - Jacques-Cartier*
24059. Québec
24060. Repentigny
24061. Richmond - Arthabaska
24062. Rivière-des-Mille-Îles
24063. Rivière-du-Nord
24064. Rosemont - La Petite-Patrie
24065. Marc-Aurèle-Fortin
24066. Saint-Hyacinthe - Bagot*
24067. Saint-Jean*
24068. Saint-Laurent
24069. Saint-Léonard - Saint-Michel
24070. Saint-Maurice - Champlain
24071. Salaberry - Suroît
24072. Shefford
24073. Sherbrooke
24074. Vaudreuil - Soulanges
24075. Terrebonne
24076. Trois-Rivières
24077. Ville-Marie - Le Sud-Ouest - Île-des-Soeurs
24078. Vimy
35001. Ajax
35002. Algoma - Manitoulin - Kapuskasing
35003. Aurora - Oak Ridges - Richmond Hill
35004. Barrie - Innisfil
35005. Barrie - Springwater - Oro-Medonte
35006. Bay of Quinte
35007. Beaches - East York*
35008. Brampton Centre
35009. Brampton East
35010. Brampton North
35011. Brampton South
35012. Brampton West
35013. Brantford - Brant
35014. Bruce - Grey - Owen Sound*
35015. Burlington
35016. Cambridge
35017. Chatham-Kent - Leamington
35018. Davenport*
35019. Don Valley East
35020. Don Valley North
35021. Don Valley West
35022. Dufferin - Caledon*
35023. Durham
35024. Eglinton - Lawrence*
35025. Elgin - Middlesex - London
35026. Essex
35027. Etobicoke Centre
35028. Etobicoke - Lakeshore
35029. Etobicoke North
35030. Flamborough - Glanbrook
35031. Glengarry - Prescott - Russell
35032. Guelph*
35033. Haldimand - Norfolk
35034. Haliburton - Kawartha Lakes - Brock
35035. Hamilton Centre
35036. Hamilton East - Stoney Creek

35037. Hamilton Mountain
35038. Hamilton West - Ancaster - Dundas
35039. Hastings - Lennox and Addington
35040. Huron - Bruce*
35041. Kanata - Carleton
35042. Kenora
35043. King - Vaughan
35044. Kingston and the Islands
35045. Kitchener Centre
35046. Kitchener - Conestoga
35047. Kitchener South - Hespeler
35048. Lambton - Kent - Middlesex
35049. Lanark - Frontenac - Kingston
35050. Leeds - Grenville - Thousand Islands and Rideau Lake*
35051. London - Fanshawe
35052. London North Centre
35053. London West
35054. Markham - Stouffville
35055. Markham - Thornhill
35056. Markham - Unionville
35057. Milton
35058. Mississauga Centre
35059. Mississauga East - Cooksville
35060. Mississauga - Erin Mills
35061. Mississauga - Lakeshore
35062. Mississauga - Malton
35063. Mississauga - Streetsville
35064. Nepean
35065. Newmarket - Aurora
35066. Niagara Centre
35067. Niagara Falls*
35068. Niagara West
35069. Nickel Belt
35070. Nipissing - Timiskaming
35071. Northumberland - Peterborough South
35072. Oakville*
35073. Oakville North - Burlington
35074. Oshawa
35075. Ottawa Centre
35076. Orléans
35077. Ottawa South
35078. Ottawa - Vanier
35079. Ottawa West - Nepean
35080. Oxford
35081. Parkdale - High Park*
35082. Parry Sound - Muskoka*
35083. Perth - Wellington*
35084. Peterborough - Kawartha
35085. Pickering - Uxbridge
35086. Renfrew - Nipissing - Pembroke*
35087. Richmond Hill
35088. Carleton
35089. St. Catharines
35090. Toronto - St. Paul's
35091. Sarnia - Lambton*
35092. Sault Ste. Marie
35093. Scarborough - Agincourt
35094. Scarborough Centre
35095. Scarborough - Guildwood
35096. Scarborough North
35097. Scarborough - Rouge Park
35098. Scarborough Southwest
35099. Simcoe - Grey
35100. Simcoe North
35101. Spadina - Fort York
35102. Stormont - Dundas - South Glengarry*
35103. Sudbury
35104. Thornhill
35105. Thunder Bay - Rainy River
35106. Thunder Bay - Superior North
35107. Timmins - James Bay

35108. Toronto Centre
35109. Toronto - Danforth*
35110. University - Rosedale
35111. Vaughan - Woodbridge
35112. Waterloo
35113. Wellington - Halton Hills*
35114. Whitby
35115. Willowdale
35116. Windsor - Tecumseh
35117. Windsor West
35118. York Centre
35119. York - Simcoe
35120. York South - Weston*
35121. Humber River - Black Creek*
46001. Brandon - Souris
46002. Charleswood - St. James - Assiniboia - Headingley*
46003. Churchill - Keewatinook Aski
46004. Dauphin - Swan River - Neepawa
46005. Elmwood - Transcona
46006. Kildonan - St. Paul
46007. Portage - Lisgar
46008. Provencher
46009. Saint Boniface - Saint Vital
46010. Selkirk - Interlake - Eastman
46011. Winnipeg Centre*
46012. Winnipeg North
46013. Winnipeg South
46014. Winnipeg South Centre
47001. Battlefords - Lloydminster
47002. Cypress Hills - Grasslands
47003. Desnethé - Missinippi - Churchill River
47004. Carlton Trail - Eagle Creek
47005. Moose Jaw - Lake Centre - Lanigan
47006. Prince Albert
47007. Regina - Lewvan
47008. Regina - Qu'Appelle
47009. Regina - Wascana
47010. Saskatoon - Grasswood
47011. Saskatoon - University
47012. Saskatoon West
47013. Souris - Moose Mountain
47014. Yorkton - Melville
48001. Banff - Airdrie
48002. Btxtle River - Crowfoot
48003. Bow River
48004. Calgary Centre
48005. Calgary Confederation
48006. Calgary Forest Lawn
48007. Calgary Heritage
48008. Calgary Midnapore
48009. Calgary Nose Hill
48010. Calgary Rocky Ridge
48011. Calgary Shepard
48012. Calgary Signal Hill
48013. Calgary Skyview
48014. Edmonton Centre
48015. Edmonton Griesbach
48016. Edmonton Manning
48017. Edmonton Mill Woods
48018. Edmonton Riverbend
48019. Edmonton Strathcona
48020. Edmonton West

48021. Edmonton - Wetaskiwin
48022. Foothills
48023. Fort McMurray - Cold Lake
48024. Grande Prairie - Mackenzie
48025. Lakeland
48026. Lethbridge
48027. Medicine Hat - Cardston - Warner
48028. Peace River - Westlock
48029. Red Deer - Mountain View
48030. Red Deer - Lacombe
48031. St. Albert - Edmonton
48032. Sherwood Park - Fort Saskatchewan
48033. Sturgeon River - Parkland
48034. Yellowhead
59001. Abbotsford
59002. Burnaby North - Seymour
59003. Burnaby South
59004. Cariboo - Prince George
59005. Central Okanagan - Similkameen - Nicola
59006. Chilliwack - Hope
59007. Cloverdale - Langley City
59008. Coquitlam - Port Coquitlam
59009. Courtenay - Alberni
59010. Cowichan - Malahat - Langford
59011. Delta
59012. Fleetwood - Port Kells
59013. Kamloops - Thompson - Cariboo
59014. Kelowna - Lake Country
59015. Kootenay - Columbia
59016. Langley - Aldergrove
59017. Mission - Matsqui - Fraser Canyon
59018. Nanaimo - Ladysmith
59019. New Westminster - Burnaby
59020. North Okanagan - Shuswap
59021. North Vancouver
59022. Pitt Meadows - Maple Ridge
59023. Port Moody - Coquitlam
59024. Prince George - Peace River - Northern Rockies
59025. Richmond Centre
59026. Esquimalt - Saanich - Sooke
59027. Saanich - Gulf Islands
59028. Skeena - Bulkley Valley
59029. South Okanagan - West Kootenay
59030. South Surrey - White Rock
59031. Steveston - Richmond East
59032. Surrey Centre
59033. Surrey - Newton
59034. Vancouver Centre
59035. Vancouver East*
59036. Vancouver Granville
59037. North Island - Powell River
59038. Vancouver Kingsway
59039. Vancouver Quadra
59040. Vancouver South
59041. Victoria*
59042. West Vancouver - Sunshine Coast - Sea to Sky Country
60001. Yukon*
61001. Western Arctic*
62001. Nunavut*

2011–2014 Ontario General Elections

35001. Ajax - Pickering
35002. Algoma - Manitoulin - Kapuskasing
35003. Ancaster - Dundas - Flamborough - Westdale
35004. Barrie
35005. Beaches - East York
35006. Bramalea - Gore - Malton
35007. Brampton - Springdale
35008. Brampton West
35009. Brant
35010. Burlington
35011. Cambridge
35012. Carleton - Mississippi Mills
35013. Chatham-Kent - Essex
35014. Durham
35015. Davenport
35016. Don Valley East
35017. Don Valley West
35018. Dufferin - Caledon
35019. Eglinton - Lawrence
35020. Elgin - Middlesex - London
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35024. Etobicoke North
35025. Glengarry - Prescott - Russell
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35027. Guelph
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35033. Hamilton Mountain
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35044. London West
35045. Markham - Unionville
35046. Lambton - Kent - Middlesex
35047. Mississauga - Brampton South
35048. Mississauga East - Cooksville
35049. Mississauga - Erindale
35050. Mississauga South
35051. Mississauga - Streetsville
35052. Nepean - Carleton
35053. Newmarket - Aurora
35054. Niagara Falls
35055. Niagara West - Glanbrook
35056. Nickel Belt
35057. Nipissing - Timiskaming
35058. Northumberland - Quinte West
35059. Oak Ridges - Markham
35060. Oakville
35061. Oshawa
35062. Ottawa Centre
35063. Ottawa - Orleans
35064. Ottawa South
35065. Ottawa - Vanier
35066. Ottawa West - Nepean
35067. Oxford
35068. Parkdale - High Park
35069. Parry Sound - Muskoka
35070. Perth - Wellington
35071. Peterborough
35072. Pickering - Scarborough East
35073. Prince Edward - Hastings
35074. Renfrew - Nipissing - Pembroke
35075. Richmond Hill
35076. St. Catharines
35077. St. Paul's
35078. Sarnia - Lambton
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35081. Scarborough Centre
35082. Scarborough - Guildwood
35083. Scarborough - Rouge River
35084. Scarborough Southwest
35085. Simcoe - Grey
35086. Simcoe North
35087. Stormont - Dundas - South Glengarry
35088. Sudbury
35089. Thornhill
35090. Thunder Bay - Rainy River
35091. Thunder Bay - Superior North
35092. Timmins - James Bay
35093. Toronto Centre
35094. Toronto - Danforth
35095. Trinity - Spadina
35096. Vaughan
35097. Welland
35098. Wellington - Halton Hills
35099. Whitby - Oshawa
35100. Willowdale
35101. Windsor - Tecumseh
35102. Windsor West
35103. York Centre
35104. York - Simcoe
35105. York South - Weston
35106. York West

2022 Quebec General Election

104. Megantic
110. Saint-Francois
116. Sherbrooke
120. Orford
126. Johnson
132. Richmond
138. Drummond-Bois-Francs
144. Arthabaska
150. Nicolet-Becancour
204. Brome-Missisquoi
206. Granby
210. Iberville
212. Saint-Jean
216. Huntingdon
218. Beauharnois
220. Soulanges

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