Do Municipal Voters Punish Partisan Candidates? Evidence from a Newly Partisan Municipal Election*

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Abstract

While political parties structure competition in national elections, many municipal systems operate without party cues, often reflecting widespread public opposition to local partisanship. It is unclear, however, whether municipal voters would actually punish candidates for affiliating with political parties if given the opportunity. We study this question using Calgary's 2025 municipal election — the first held after provincial legislation imposed formal parties on a historically nonpartisan system. Drawing on two large surveys fielded before and during the election, each embedding an identical conjoint experiment, we combine causal forest estimation of heterogeneous treatment effects with observational vote choice models to trace the party affiliation penalty from experimental estimates through to real electoral behavior. We find that voters impose a meaningful penalty on partisan candidates that grows rather than fades over time. This penalty is highly uneven: it is concentrated among citizens with strong anti-partisan attitudes and those who hold negative views of the provincial governing party that introduced the reform, suggesting that reactions to municipal parties reflect a mix of sincere anti-partisan commitments — the stronger channel — and conditional responses to the government responsible for the change. Experimentally estimated propensities to punish partisan candidates predict actual vote choice, confirming that anti-partisan sentiment shaped real electoral outcomes. These findings indicate that opposition to municipal parties reflects genuine normative commitments to independent local governance — commitments strong enough to resist accommodation under real electoral conditions — and help explain why nonpartisan equilibria prove so difficult to dislodge.

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1 Introduction

While political party labels are central to election outcomes and voting decisions in national elections, many municipal electoral systems operate with weak or absent party cues. Recent research has found that municipal voters in these weakly partisan settings express little appetite for municipal political parties (McGregor et al., 2024), even though party labels could substantially reduce informational demands for voters (Schaffner, Streb and Wright, 2007). However, because most party systems evolve slowly and emerge endogenously from local political environments, measuring the sincerity of these anti-partisan preferences—and the extent to which municipal voters in non-partisan or weakly partisan systems would *actually* punish candidates for taking up party affiliations—is a challenge. We know that many citizens in non-partisan municipal settings express a preference for non-partisanship, but we do not know if those citizens would maintain this position even if informative political party labels were present in their local environments.

The 2025 municipal election in Calgary, Canada, offers a rare opportunity to study how voters respond when political party labels are introduced into a longstanding non-partisan setting. In Calgary's case, political parties did not evolve organically from the local context but were introduced by provincial legislation, creating a quasi-natural experiment in the consequences of municipal political parties for anti-partisan sentiment and municipal voting. This unusual institutional reform allows us to probe how strongly ordinary citizens actually oppose municipal political parties, the extent to which their preferences are conditional on the government responsible for introducing the parties, and how much they are willing to act on their anti-partisan preferences when "push comes to shove" in municipal voting.

Here, we draw on two identical conjoint experiments fielded in large, representative surveys of Calgarians: one in early 2025 (N=800), before municipal political parties became widely known, and another in September 2025 (N=2,000), during the municipal election. By randomizing party affiliation among hypothetical candidates in the experiment, we estimate whether voters punish candidates who run under party labels, and by comparing the two conjoint experiments, we measure whether this penalty changed as parties gained visibility in the local political environment. We then use causal forests, a machine learning technique designed to measure treatment effect heterogeneity, to understand *who* punishes candidates for adopting a party label rather than running as an independent. Finally, we apply these results to actual voting behaviour in Calgary, exploring the extent to which citizens' behaviour in the experimental setting predicts their voting decisions in the 2025 municipal election.

We find that, on average, citizens in a traditionally non-partisan environment apply a modest penalty to those who choose to affiliate with a political party. This penalty did not fade—indeed, if anything, it grew—as voters became more aware of the presence of political parties in their municipal election. While the average penalty for party affiliation is modest, our causal forest estimator reveals much larger penalties among distinct subsets of voters—especially those with strong anti-partisan views and those with strong negative affect toward the governing provincial party. Applying these results to Calgarians' voting behaviour, we find that anti-partisan sentiment was strong enough to meaningfully shape citizens' voting decisions, and that the heterogeneity of this effect meant that some candidates suffered more than others from a party affiliation. Overall, we find that citizens' preferences are strongly predicted by "principled" anti-partisanship—a sincere preference for independent rather than partisan local politics—but are also strongly conditional on citizens' attitudes toward the government responsible for introducing the changes. These findings reinforce past research on the conditionality of local preferences related to institutional and democratic reform, and also help clarify why, despite often severe informational deficits, local electoral candidates hesitate to form municipal parties in historically non-partisan or weakly partisan systems.

2 Political Parties and Local Elections

While E.E. Schattschneider (1942) famously wrote that modern democracy is unthinkable save in terms of parties, contemporary *municipal* democracy without parties is not only thinkable but also very much present in several advanced democracies. In the United States, well over half of local elections have been nonpartisan for decades (Adrian, 1959; Bonneau and Cann, 2015; Crawford, 2018). In Europe, where proportional electoral systems necessitate *some* form of partisan organization, the presence of major national parties in local elections have been declining in many countries (Gendźwiłł, 2012; Otjes, 2018; Vampa, 2016), and in European municipal settings that do not require political parties, such as directly elected mayors, the presence of Independent candidates has been on the rise (Gamalerio, 2020). In Canada, non-partisan local politics have been especially pervasive; two northern territories, most big cities, and nearly all remaining municipalities in Canada hold elections that are not just nonpartisan in the formal American sense (no party labels on the ballot) but are also nonpartisan in the deeper sense that many elected candidates have no party affiliation and local voters regularly know nothing about the party affiliation of local candidates (Bherer and Breux, 2012; Lucas, 2022; McGregor et al., 2024; Sabin, 2026). Anti-partisanship has a particularly long history in the province of Al-

berta, where party politics dominated by central Canadian elites have been viewed with more suspicion (Wiseman, 2011).

These non-partisan trends are supported by pervasive anti-partisan sentiment among both mass publics and local elites in many municipal settings. Independent and localist candidates appeal to voters who are dissatisfied with national parties and for whom place-based, technocratic, or non-ideological "solutions" are appealing (Bherer and Breux, 2012; Wallman Lundåsen and Erlingsson, 2023), a rhetorical technique that can be traced back to the early development of local democracy in many countries (Bonneau and Cann, 2015; Copus, 2004). Local elites and mass publics increasingly abhor what they see as a tendency for partisan politicians to orient themselves toward national or regional party priorities (and careers), rather than local publics (Åberg and Ahlberger, 2015; Copus, 2004; Crawford, 2022; Gendźwiłł, 2012; McGregor et al., 2024). In Canada, this manifests in a highly truncated party system, with different organizations contesting elections in different parts of the country and high levels of variation in party support across districts (Pruysers, Sayers and Czarnecki, 2020; Thorlakson, 2018). This strong anti-partisan sentiment may help to explain why local political entrepreneurs—who might benefit from forming local parties or slates by adding valuable information to local elections (Schleicher, 2007) and weakening incumbency advantage (Schaffner, Streb and Wright, 2001; Kirkland and Coppock, 2018)—choose not to depart from the status quo.

Despite these institutional and attitudinal trends, the absence of *political parties* hardly guarantees the absence of *partisanship* in local politics. Partisanship explains much less about voting behaviour in non-partisan elections (Conevska et al., 2025; Schaffner, Streb and Wright, 2001); in non-partisan settings, other factors, such as ethnicity and candidate experience, become more prominent (Kirkland and Coppock, 2018; Schleicher, 2007). Even so, the ideological underpinnings of national party competition are present in many municipal policy debates, making partisan cues useful for local vote choice (Lucas, 2022; Lucas, McGregor and Bridgman, 2023; Lucas, 2024; Reuse, 2024; Tausanovitch and Warshaw, 2014). Indeed, municipal voters tend to think about municipal political competition in partisan coalitional terms (Lucas and McGregor, 2020) and are happy to make use of partisan cues when those cues are available (Baldwin, 2026).

Figure 1 provides a simple illustration of mass and elite partisan divides on seven municipal policy issues. In Panel A, we display average levels of support for seven municipal policy statements among municipal politicians across Canada who identify with three major federal political parties; the figure reveals strong and significant divides on all issues, especially between the parties of the left (NDP and Liberal) and the right (Conser-

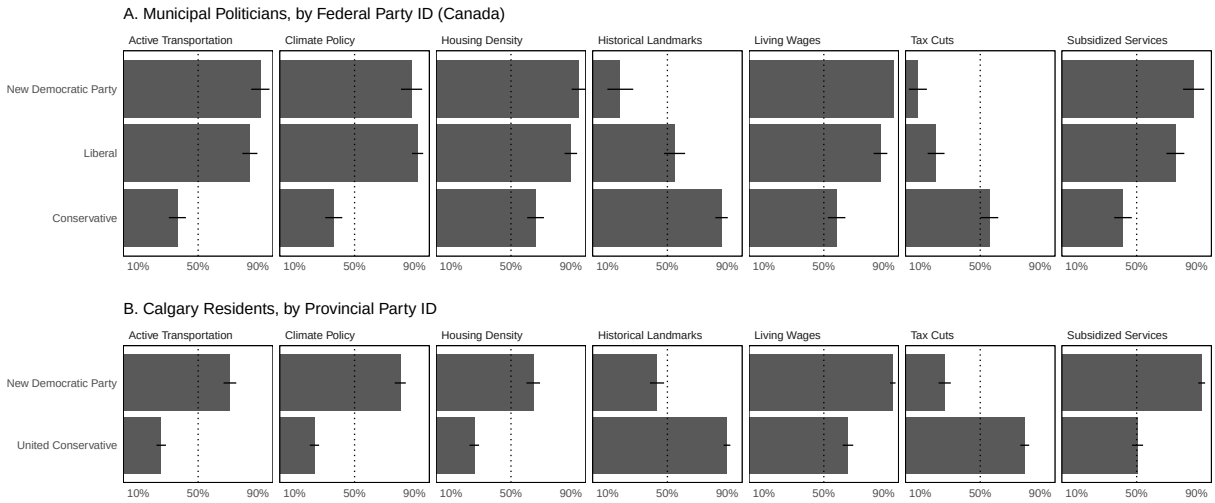

Figure 1: **Partisan Divides on Municipal Policy Issues.** Illustration of partisan differences on seven municipal policy issues. Bars are mean support for each statement; whiskers are 95% confidence intervals. Panel A: Canadian municipal politicians across Canada, by federal party identification. Panel B: Calgary residents, by provincial party identification. Full question wording in Supplementary Material (SM1).

vative).[1] Then, in Panel B, we show divides on the same seven questions, this time among ordinary citizens in Calgary, our case city. Once again, the partisan divides are apparent across all seven questions. Whether we measure federal or provincial partisanship, and whether we focus on political elites or the mass public, partisan divides on municipal policy are persistent and clear. If citizens *knew* the partisanship of their municipal political candidates, this would seem to provide important, relevant, and readily interpretable information (Lucas, 2022). This is consistent with the broader literature on anti-partyism in Canada, which suggests negative feelings about parties often drive behaviour (Caruana, McGregor and Stephenson, 2015) and that incumbent parties are the most likely targets of this negative sentiment (Gidengil et al., 2001).

Despite the potential for partisan cues to be highly informative for local voters, most residents are strongly opposed to the introduction of formally partisan local elections. This apparent contradiction has led some to speculate about the possibility of multiple equilibria in local politics (McGregor et al., 2024); perhaps municipal residents oppose the idea of local parties, but if political parties *were* to suddenly appear in their local political environment, they would adapt to the new partisan environment with little complaint. In other words, citizens may see the appeal of municipal non-partisanship when they live

[1]These responses are drawn from the Canadian Municipal Barometer's annual survey of municipal politicians. See `https://www.cmb-bmc.ca`.

in a non-partisan setting, but would *also* see the benefit of municipal partisanship if they happened to find themselves living in this alternative partisan equilibrium. In Canada, evidence for this sort of status quo bias (Arceneaux and Nicholson, 2024) may be found in the fact that, in the few cities that do feature municipal party politics, few politicians or citizens seek to eliminate them (Armstrong and Lucas, 2024; Breux and Couture, 2025).

More generally, research on institutional and democratic reform suggests two processes through which citizens form preferences about changes to their political system. On one hand, attitudes may be *principled*: citizens may hold stable, value-based commitments to particular institutional arrangements — in this case, non-partisan local governance — that persist regardless of context (Bol, 2016). On this *principled opposition* hypothesis, citizens with strong anti-partisan attitudes should punish candidates who affiliate with political parties, regardless of what else they know about those candidates.

A second possibility — which we call the *conditional attitudes* hypothesis — is that support or opposition to institutional reform is primarily driven by citizens' attitudes toward the political actors responsible for the reform (Breton, Lucas and Taylor, 2022) or by citizens' general attitudes about the current political landscape (Jankowski, Juen and Tepe, 2022; Otjes, 2018). On this hypothesis, anti-partisan behaviour in a municipal election is less an expression of a principled commitment to "apolitical" local government (Bherer and Breux, 2012), "localism" in municipal politics (Aars and Ringkjob, 2005), or municipal "non-ideology" (Lucas, McGregor and Bridgman, 2023), but is instead largely a downstream consequence of leader or party affect: if a citizen likes the government responsible for introducing the reform, they like the reform itself, and vice versa (Breton, Lucas and Taylor, 2022).

3 Institutional Reform in Calgary, Canada

In Canada's federal system, constitutional authority over municipal government rests with the provinces. While municipal governments generally enjoy considerable autonomy in prescribed areas of policy jurisdiction, and democratically elected local politicians carry significant democratic legitimacy, municipalities nevertheless remain legislative "creatures" of their provincial governments. Most of the time, provincial legislatures devote little of their constrained agenda to municipal governance, enacting reforms only after consultation with local governments. Occasionally, however, provinces choose to impose significant institutional changes — including municipal amalgamations and alterations to local democratic institutions — without meaningful consultation and even over the stated objections of those affected (Sancton, 2026).

Table 1: **Hypotheses and Observable Implications**

Hypothesis	Logic	Observable Implications
Principled opposition	Citizens in non-partisan settings hold a stable normative commitment to non-partisan local governance and oppose parties *as such*.	• Party affiliation effect is negative and especially strong among citizens with strong anti-partisan attitudes • Negative party affiliation effect is predicted by negative affect toward provincial partisan politics *generally* (both UCP and NDP)
Conditional attitudes	Opposition to municipal parties is conditional on support for the provincial government that introduced the reform, not by opposition to parties per se.	• Party affiliation effect is negative and especially strong among citizens with negative views of the UCP government • Negative party affiliation effect is predicted by negative UCP affect specifically, not negative partisan affect broadly

Calgary's experience with municipal political parties is an instance of this type of unexpected provincial intervention. In April 2024, the Government of Alberta introduced Bill 20 (*Municipal Affairs Statutes Amendment Act, 2024*), which amended the province's *Local Authorities Election Act* (LAEA) to create an explicit legal framework for municipal political parties and slates of candidates. The government framed the reform as a transparency and accountability measure, arguing that party-like behavior — coordinated slates, shared campaign infrastructure, informal endorsement networks — already existed in municipal elections and ought to be brought under a regulated framework rather than left to operate informally. In legislative debate, Municipal Affairs Minister Ric McIver argued that when campaign organizations function like political parties, they should be recognized and regulated as such. The government's official communications emphasized that the legislation would give voters "a stronger voice at the ballot box" by making the organizational affiliations behind candidates visible and subject to disclosure requirements.[2]

Municipal councils pushed back against the provincial government's reforms. Umbrella organizations Alberta Municipalities (ABMunis) and the Rural Municipalities of Alberta (RMA) both argued that the push to introduce party politics into local elections would make municipal government more polarized, less community-focused, and more vulnerable to provincial interference. ABMunis emphasized that most Albertans did not want partisan municipal elections and warned that the change would import unnecessary conflict into local governance rather than improve accountability or participation

[2]See especially Province of Alberta Hansard, April 25, 2024 and May 22, 2024.

(Alberta Municipalities, 2024), while the RMA argued that Bill 20, combined with party-based local politics, would centralize power in Edmonton, intensify ideological conflict, and undermine municipal autonomy by making it easier for the province to override by-laws or remove councillors (Rural Municipalities of Alberta, 2024). Opposition from rural politicians was particularly notable, given the United Conservative Party's overwhelming strength in non-urban constituencies.

Under the new legislation, political parties and slates were permitted in Alberta's two largest cities, Calgary and Edmonton. Registered parties were required to gather 1,000 supporter signatures, nominate candidates who, if elected, would constitute more than one-third of the local council, appoint governance and financial officers, and comply with new contribution limits and financial disclosure rules. The legislation explicitly prohibited affiliation with any provincial or federal political party, and barred provincial and federal parties from donating to municipal parties. The legislative framework was designed to produce a distinctly local party system, insulated from the provincial and federal partisan organizations that structure competition at other levels of government.

Crucially, the introduction of municipal parties in Calgary did not emerge from demand within the city's political community. Calgary has a longstanding tradition of non-partisan municipal politics, and the reform was widely understood as a provincial imposition rather than a locally desired innovation.[3] Bill 20 was part of a broader package of changes to municipal election administration — including provisions on recall, third-party advertising, and council governance — many of which were contested by municipal politicians and observers. The exogenous character of the reform is what makes Calgary's 2025 election analytically valuable: because parties were introduced from outside the local political system, rather than arising from conditions in which local actors had already judged partisan competition to be viable, the case approximates a quasi-natural experiment in the effects of municipal party labels on voter behavior.

In Calgary, three parties ultimately registered and fielded candidates in the October 2025 election: Communities First, a party launched by four sitting city councillors; The Calgary Party, a centrist but progressive-leaning party that ran candidates in thirteen of fourteen wards; and A Better Calgary Party, which positioned itself as a conservative alternative to the progressive excesses of Calgary city council. Alongside these partisan candidates, a majority of council candidates — roughly sixty percent — ran as independents, and the mayoral race was won narrowly by independent candidate Jeromy Farkas

[3] A poll by Janet Brown Opinion Research, a highly reputable firm in Alberta, found that 68% of Albertans preferred independent municipal candidates. See https://www.abmunis.ca/news/municipal-political-parties-laea-review.

over Communities First's Sonya Sharp. On council, Communities First elected four members, The Calgary Party and A Better Calgary one each, and independents won the remaining eight seats. Municipal political parties thus played a visible and consequential role in the election, structuring candidate recruitment, campaign organization, and ballot presentation, but they did so in a context where many voters and candidates continued to embrace the city's non-partisan tradition.

4 Data and Methods

Our analysis is based on data from two large surveys of the general public. The first survey was fielded in the cities of Calgary and Edmonton many months before Calgary's municipal election (March 24, 2025 to May 1, 2025), with recruitment by Léger Research from an existing online panel. Of the 1,609 individuals who completed this survey, 805 were residents of Calgary. The second survey was fielded during the municipal election period in Calgary and, to maximize sample size, involved two distinct recruitment modes: 743 Calgarians recruited from the Léger Research online panel, and an additional 1,465 Calgarians recruited from targeted online web advertisements by a firm (EveryAnswer) specializing in geographically targeted survey recruitment.[4] Taken together, these surveys are among the largest single-city public opinion datasets yet collected. We provide additional information on these surveys, including full question wording and descriptive statistics for all variables, in the Supplementary Material (SM9).

4.1 Experimental Design

To measure the effect of candidate partisanship on citizen support, we designed a paired conjoint experiment in which we randomly vary characteristics of realistic but hypothetical municipal election candidates and measure the effects of these characteristics on respondents' support for each candidate. We presented respondents with a table describing two hypothetical candidates whose characteristics were randomly assigned from the list outlined in Table 2. These characteristics capture information that is commonly available to voters in Canadian municipal elections. Respondents then answered three questions: the candidate who they would choose if they had to select one of the two; their likelihood of selecting the first candidate (0-10 scale); and their likelihood of selecting the second

[4]EveryAnswer uses targeted web-based advertising platforms to recruit respondents from specific geographies. This approach is very effective for survey recruitment in Canada, especially when targeting specific geographies for which insufficient respondents exist in pre-existing online panels.

candidate(0-10 scale). We used these responses to construct two outcome variables: *vote choice*, a binary measure capturing if a candidate was selected (1) or not (0); and *candidate support*, a continuous 0-10 measure of the respondent's support for the candidate. Respondents each completed three pairs of hypothetical candidates, and the presentation order of the attributes in Table 2 was randomized at the respondent level.

Table 2: Conjoint Experiment: Attributes and Levels

Attribute	**Levels**
Age	25, 45, 65
Gender	Man, Woman
Ideology	Left, Centre, Right
Party	Running as an Independent; Running with a municipal political party
Position	Not on council; Member of council
Race	Chinese, South Asian, White

To measure our treatment effect of interest — the effect of party affiliation on a candidate's level of support — we estimate the average marginal component effect (AMCE) of candidate partisanship on support using a standard OLS model,

$$y_{ij} = \alpha + \beta_{\text{party}}\, x_{ij}^{\text{party}} + \sum_{k=1}^{K} \gamma_k z_{ijk} + \varepsilon_{ij} \tag{1}$$

where y_{ij} is the outcome variable (vote choice or candidate support) for respondent i and conjoint character j, β_{party} is the effect of the hypothetical candidate's partisan status on respondents' support for the candidate, and z_{ijk} indexes the remaining randomized candidate attributes, which are included in the model to improve precision of the β_{party} estimate. In keeping with standard practice in conjoint analysis, we cluster standard errors by respondent i in all analyses (Hainmueller, Hopkins and Yamamoto, 2014). While we also report marginal means in the supplementary material (following Leeper, Hobolt and Tilley, 2020), the AMCE is the appropriate primary estimand for our research question, since we are interested in the effect of switching from independent to partisan status on expected vote share (Bansak et al., 2023) rather than the absolute level of support associated with each attribute value.

4.2 Effect Heterogeneity

The β_{party} parameter in model 1 captures the average marginal component effect (AMCE) of a candidate's independent versus partisan status — the "party affiliation effect." How-

ever, as we explained earlier, we are especially interested in heterogeneity in this party affiliation effect: variation in *who* punishes (or rewards) local candidates for affiliating with a political party. To capture this heterogeneity, we employ a causal forest estimator, a machine-learning method designed for estimating heterogeneous treatment effects (Wager and Athey, 2018; Zheng and Yin, 2023). This approach, which has recently been employed in several survey-experimental studies (Fuller, De La Cerda and Rametta, 2026; Rehill, 2025) allows us to recover conditional average treatment effects (CATEs) of candidate partisanship as a function of observed candidate- and respondent-level characteristics. In this framework, our outcome variables (vote choice and candidate support) and treatment variable (candidate partisanship) are unchanged. What differs from the linear models above is how heterogeneity is modeled. Rather than specifying a limited set of pre-chosen interaction terms, the causal forest allows the effect of candidate partisanship to vary flexibly across the covariate space. The estimator builds an ensemble of decision trees that recursively partition respondents and candidate profiles into subgroups, estimating separate treatment effects within each subgroup (Wager and Athey, 2018). This approach allows us to move beyond exploratory interaction models — which are necessarily selective — and instead provide a more systematic characterization of how party affiliation effects vary across the electorate.

Table 3: Moderator Variables Included in Causal Forest

Variable	Description / Question Wording
General Sentiment about Municipal Parties	
Anti-Party Sentiment	Additive index of anti-partisan and (reverse-coded) pro-partisan sentiment questions.
Anti-Party 1	Municipal candidates should continue to run as independents, because political parties put their own interests ahead of the interests of their constituents.
Anti-Party 2	Municipal candidates should continue to run as independents, because independent candidates can take their own positions, rather than simply adopting the positions of their parties.
Anti-Party 3	I would prefer to base my decisions on the characteristics of local candidates, rather than the political party they belong to.
Pro-Party 1	Municipal candidates should run as members of parties, because political parties are better at getting things done than independent councillors.
Pro-Party 2	Political parties in municipal elections make it easier to know where candidates stand in terms of their 'left', 'centre', or 'right' position on the ideological spectrum.
Pro-Party 3	Most people who run for municipal office are affiliated with political parties, so voters might as well know about these party affiliations when making decisions about who to support
Conditional Attitudes	
UCP Thermometer	Party feeling thermometer (United Conservative Party). 0 = Really Dislike, 10 = Really Like
NDP Thermometer	Party feeling thermometer (New Democratic Party). 0 = Really Dislike, 10 = Really Like
Other Respondent-Level Moderators	
Ideological Self-Placement	In politics people sometimes talk of left and right. Where would you place yourself on a scale from 0 to 10, where 0 means left and 10 means right?
Age	Year of birth converted to age
Gender	Respondent gender identity
Educational Attainment	Respondent level of educational attainment
Candidate-Level Moderators	
Candidate Age	Hypothetical candidate age from conjoint (25, 45, 65)
Candidate Ideology	Hypothetical candidate ideology (left, centre, right)
Candidate Position	Hypothetical candidate position (not incumbent, incumbent)
Candidate Race	Hypothetical candidate race (Chinese, South Asian, White)
Candidate Gender	Hypothetical candidate gender (man, woman)

Our causal forest model includes a number of potential effect moderators, each of which is described in Table 3. Following our discussion above, we focus particular attention on *anti-partisan sentiment* and *government-conditional* attitudes. To measure anti-partisan sentiment, we construct an additive index from six questions previously used in

Canadian research on municipal partisanship (McGregor et al., 2024), three of which express "pro-independent" arguments and three of which express "pro-party" arguments. We recode these items and then create an overall "anti-partisan" index ranging from zero (strong support for partisan politics) to 18 (strong opposition to partisan politics).[5] We expect that CATEs will be large and negative among respondents with high scores on the anti-partisan index, indicating a stronger negative party affiliation effect.

To measure *government-conditional* reform attitudes, we focus primarily on respondents' feelings toward the two major parties in provincial politics — the level of government responsible for introducing party politics into Calgary's 2025 municipal election. We measure these feelings with standard 0-10 party affect thermometers, where zero indicates strong negative affect, and ten indicates strong positive affect, toward each party. If attitudes toward municipal political parties are conditional on Calgarians' attitudes toward the political party — the United Conservative Party (UCP) — which introduced political parties, we would expect to see more strongly negative party affiliation effects among those who dislike the UCP and/or those who like the opposition New Democratic Party (NDP).

While *anti-partisan* and *government-conditional* attitudes capture our main research interests, a major strength of the causal forest estimator is the opportunity to include a larger set of variables than would be feasible in a standard approach. We therefore include respondents' ideological self-placement, not only because it may serve as a proxy for conditionality but also because ideological self-placement has been found to be related to more general preferences about the non-ideological character of municipal politics (Lucas, 2023). We also include respondents' age, gender, and educational attainment, along with each of the additional randomly-assigned candidate characteristics from the original conjoint (age, ideology, incumbency, race, and gender). This approach allows us to take a richly intersectional perspective on effect heterogeneity (Block, Golder and Golder, 2023), capturing variation in the party affiliation effect across diverse combinations of attitudinal and demographic characteristics.

In a final step, we examine whether the experimentally estimated "party affiliation effects" identified in the conjoint analysis help explain patterns of support in Calgary's actual municipal election. This analysis departs from the experimental framework in two respects. First, the outcome is no longer support for hypothetical candidates but respondents' reported support for real mayoral and council candidates in Calgary. Second, the key explanatory variable is no longer an experimentally assigned treatment but each respondent's estimated propensity to punish partisan candidates, drawn from the causal

[5] Cronbach's $\alpha = 0.8$

forest model. Because this analysis relies on a different set of variables and introduces additional variables — most notably measures of ideological distance and retrospective evaluations — we provide more information on the data and model for this analysis when we turn to the election-specific test in Section 7.

5 The "Party Affiliation" Effect

We begin with Figure 2, which summarizes the effect of candidate partisanship on vote support in both the Spring 2025 and Fall 2025 survey experiments. In both cases, coefficients are average marginal component effects for candidate partisan status (β_{party}) drawn from the model in equation 1 above; full tables for this model are available in the Supplementary Material (SM2). In a hypothetical vote choice setting, these effects can be interpreted as the expected difference in a candidate's vote share associated with a switch from independent to partisan affiliation (Bansak et al., 2023).

We note two important findings from these results. First, and most obviously, when the coefficients are statistically significant, they are *negative*, indicating that the party affiliation effect is indeed a "punishment" effect. In the September survey, we find that being a partisan candidate reduces a candidate's expected vote share by more than five percentage points and reduces overall support by about one-quarter of one point on the 0-10 candidate support scale. Second, it is not the case that respondents became more tolerant of political parties as the election drew nearer and respondents became more familiar with the parties that were running in their municipal election. Instead, if anything, the negative party affiliation effect grew *larger* as the election approached.[6] Exposure to municipal political parties may have amplified, and certainly did not reduce, general anti-partisan sentiment among the Calgary public.

6 Heterogeneity in the Party Affiliation Effect

While the results in Figure 2 suggest that respondents *do* tend to punish municipal political candidates for choosing to run with political parties, we have good reason to expect that the party affiliation effect varies considerably among citizens. We therefore turn now to the results of our causal forest model. Figure 3 summarizes several key results from this model; we focus in this figure on results for the continuous "party support" variable

[6]Interaction tests indicate that the difference between the two "vote choice" coefficients is statistically significant ($p<0.01$), but the difference between the two "candidate support" coefficients is not ($p=0.113$). In both cases, however, the data are not consistent with a decrease in the punishment effect. See SM2.

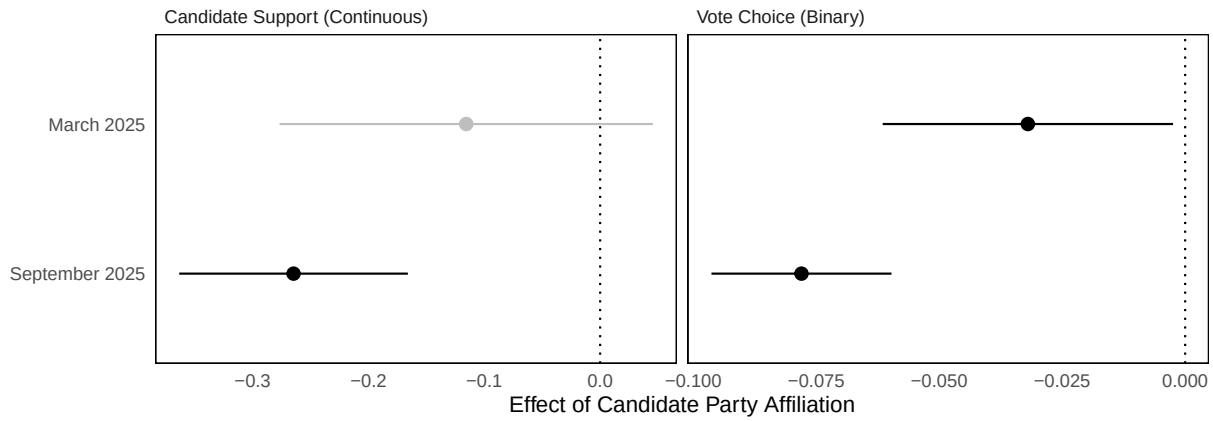

Figure 2: **Effect of Candidate Partisanship.** Average marginal component effect of candidate partisanship on support in March 2025 and September 2025 experiments. Binary vote choice variable in left panel, and continuous candidate support variable in right panel.

and report (substantively identical) results for the alternative outcome variable, binary vote choice, in the Supplementary Material (SM5). In Panel A, we plot the distribution of Conditional Average Treatment Effects (CATEs) for all survey respondents. In Panel B, we summarize this heterogeneity using partial dependence plots, which project the estimated CATEs onto individual respondent characteristics. Each partial dependence plot shows the average predicted treatment effect among respondents at different values of the moderator, averaging over the joint distribution of all other covariates in the data.[7] These plots therefore provide an interpretable, low-dimensional summary of how treatment effect heterogeneity aligns with anti-partisan sentiment, partisan affect, and age. We focus on anti-partisan sentiment, UCP affect, and NDP affect because these are the three variables most closely related to the observable implications of our hypotheses (see Table 1); we provide full information on variable importance and further interaction importance measures (Friedman's H) in the Supplementary Material (SM4).[8]

The results in Figure 3 demonstrate that the party affiliation effect does vary substantially among our respondents. In Panel A, we observe CATEs ranging from a minimum of -3.1 to a maximum of 1.8. This suggests that, among our respondents, the effect of the party affiliation variable in the conjoint ranges from a reduction of 3.1 points on the 0-10

[7] In the Supplementary Material (SM6), we replicate these interaction terms using OLS models and, following Leeper, Hobolt and Tilley (2020), provide marginal means by subgroups.

[8] Variable importance tests indicate that the three variables most strongly related to effect heterogeneity are anti-partisan sentiment, UCP affect, and age (for the continuous outcome) and anti-partisan sentiment, UCP affect, and NDP affect (for the binary outcome). In the case of age, the CATE increases with age, from a modest negative effect among younger respondents to a quite large negative effect of about 0.5 points among older respondents. See the Supplementary Material (SM4) for more information.

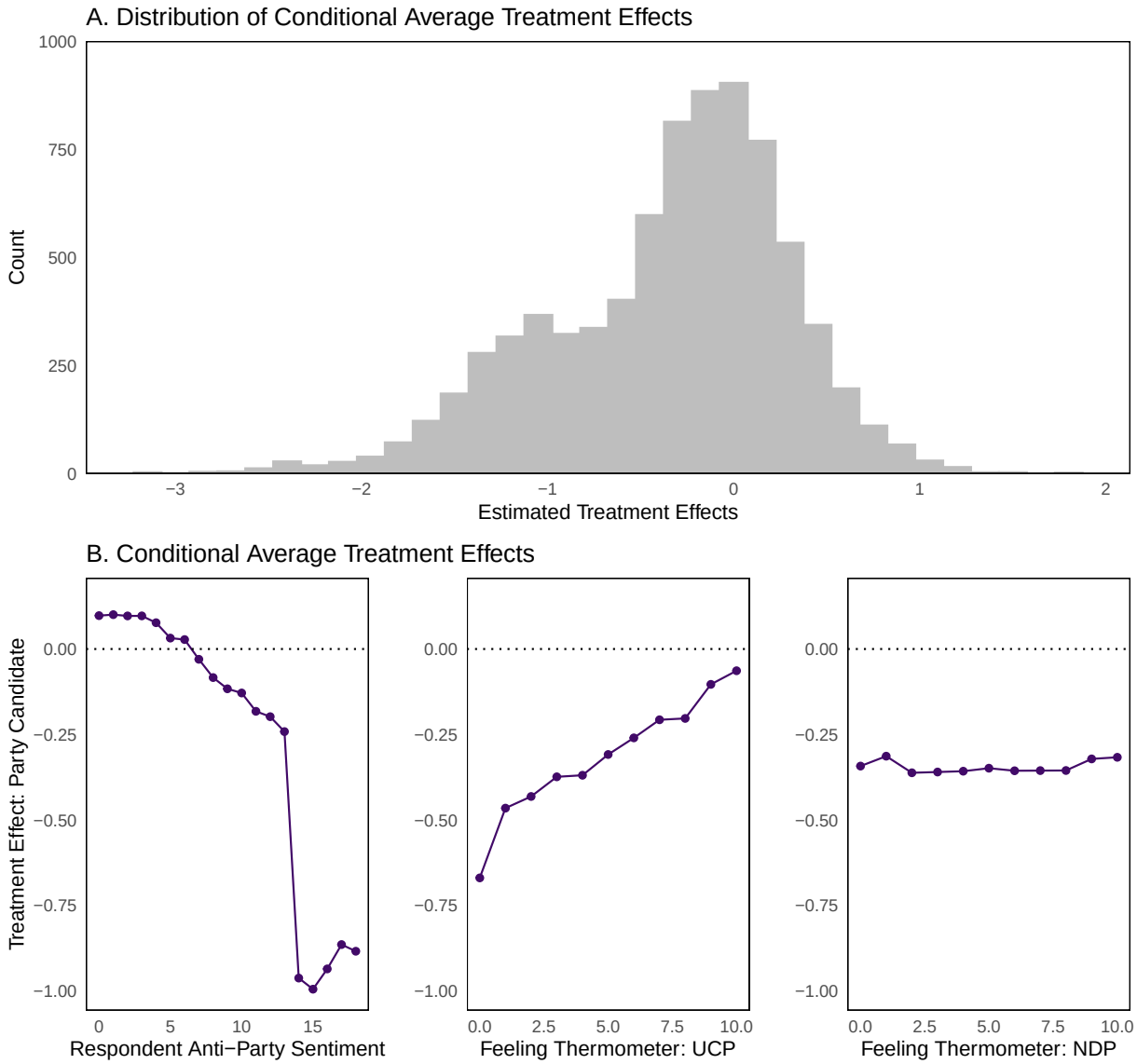

Figure 3: **Treatment Effect Heterogeneity.** Panel A: Distribution of Conditional Average Treatment Effects across all respondents. Panel B: Conditional Average Treatment Effects across anti-partisan sentiment scale (left panel), UCP feeling thermometer (middle panel), and NDP feeling thermometer (right panel). Note: positive values indicate positive effect of party treatment on candidate support; negative values indicate negative effect of party treatment on candidate support.

scale to an *increase* of 1.8 points on the same scale — both of which are substantively large and important effects. This distribution confirms the intuition that some constituents strongly punish candidates for running as members of political parties (the left tail of the distribution), many punish partisan candidates very little (the central mass of the distribution), and some even *reward* candidates for running as members of parties. Moreover,

these groups are large enough to be substantively important: nearly 20% of the sample has CATEs below negative one (-1), reflecting very large punishment effects.

In Panel B, we see clear evidence that variation in the party affiliation effect is predicted by observable characteristics of our respondents. Importantly, the two variables identified inductively by the model as the most important predictors of Conditional Average Treatment Effects — anti-partisan sentiment and UCP feeling thermometer — capture the two dimensions of citizen attitudes toward municipal partisanship that we described earlier. For anti-partisan sentiment, Figure 3 suggests that the CATE of candidate party is positive at low values of anti-partisan sentiment but plummets downward toward -1 as we reach high levels of anti-partisan sentiment. Those who respond to our municipal party support questions with strong anti-partisan views act consistently with those views in the conjoint experiment, punishing partisan candidates with lower levels of support.

Panel B also confirms that the CATE of candidate partisanship also varies strongly with respondents' attitudes toward the United Conservative Party (UCP). Readers should note that this partial dependence plot summarizes the relationship between UCP affect and the estimated treatment effect averaging over the observed distribution of all other respondent and candidate characteristics included in the causal forest, including respondent ideology and demographics. Respondents who strongly dislike the United Conservative Party exhibit very large negative party affiliation effects; these effects rise slowly as feeling toward the UCP grows more positive, nearly reaching zero among those who feel very warmly toward the UCP. In other words, attitudes toward *municipal* political parties appear to be strongly conditioned on citizens' attitudes toward the *provincial* political party that introduced the measure — a clear example of the "conditional preferences" phenomenon described earlier.

The New Democratic Party (NDP) feeling thermometer tells a contrasting story. Panel B shows that the partial dependence plot for NDP affect is essentially flat: the estimated CATE of party affiliation varies little across the range of feelings toward the NDP.[9] This asymmetry between UCP and NDP affect is theoretically important. If opposition to municipal parties reflected a general rejection of partisan politics, we would expect negative affect toward *both* provincial parties to predict larger punishment effects. Instead, the punishment appears to be driven specifically by hostility toward the UCP — the governing party that introduced municipal party legislation — rather than by a generalized antipathy toward provincial parties. This pattern provides support for the government-

[9]Best linear projection estimates reported in the Supplementary Material confirm this pattern, showing that NDP affect is not a statistically significant predictor of the party affiliation CATE in either the full model ($\beta = 0.012$, $p = 0.623$) or a reduced model including only the three partisan moderators ($\beta = 0.035$, $p = 0.146$).

conditional hypothesis and complicates the pure principled account. Variable importance scores from the causal forest indicate, however, that anti-partisan sentiment is the stronger of the two channels, accounting for roughly twice the share of treatment effect heterogeneity as UCP affect (see SM4). Standardized linear interaction models confirm this pattern: a one-standard-deviation increase in anti-partisan sentiment amplifies the party penalty by roughly twice as much as a one-standard-deviation decrease in UCP affect, and the anti-partisan interaction is statistically significant across both outcome specifications while the UCP interaction reaches significance only for continuous candidate support (see SM6).

7 Municipal Parties and Municipal Election Outcomes

Thus far, we have established that local residents in Calgary do punish hypothetical candidates who choose to affiliate with municipal political parties, and that this effect varies substantially in relation to observable characteristics of those residents — most notably their general attitudes toward municipal partisanship and their feeling toward the provincial government party. However, these findings are drawn entirely from the somewhat artificial setting of a conjoint experiment involving hypothetical municipal election candidates. In this section, we explore the implications of the findings for voters in Calgary's *actual* partisan election in 2025. We do so for two reasons. First, if we find evidence that the CATEs measured by our causal forest model predict citizens' actual voting patterns in the election, this strongly strengthens the external validity of the effect heterogeneity procedure: it demonstrates that the propensity to punish partisan candidates measured in the conjoint experiment predict *actual* support or opposition for partisan candidates in real-world elections (Hainmueller, Hangartner and Yamamoto, 2015). Second, testing the implications of our experiment in citizens' observed voting decisions helps to clarify how much their anti-partisan sentiment actually mattered for the election, and the candidates who may have suffered as a consequence.

To model the relationship between vote support and candidate partisanship in Calgary, we fit the following model:

$$
\begin{aligned}
y_{ijw} &= \alpha + \beta_1 \,\text{Party}_j + \beta_2 \,\text{IdeolDist}_{ij} + \beta_3 \,\text{CATE}_i \\
&\quad + \beta_4 \left(\text{Party}_j \times \text{IdeolDist}_{ij}\right) + \beta_5 \left(\text{Party}_j \times \text{CATE}_i\right) + \beta_6 \left(\text{IdeolDist}_{ij} \times \text{CATE}_i\right) \\
&\quad + \beta_7 \left(\text{Party}_j \times \text{IdeolDist}_{ij} \times \text{CATE}_i\right) \\
&\quad + \gamma_1 \,\text{Incumbent}_j + \gamma_2 \,\text{Retro}_{ij} + \gamma_3 \left(\text{Incumbent}_j \times \text{Retro}_{ij}\right) \\
&\quad + \alpha_w + \varepsilon_{ijw}.
\end{aligned} \tag{2}
$$

where y_{ijw} denotes respondent i's support for candidate j in ward w; Party_j is an indicator for whether the candidate runs under a partisan label; IdeolDist_{ij} captures ideological distance between the respondent and the candidate[10]; CATE_i is the respondent-specific estimated party affiliation effect obtained from the causal forest; Incumbent_j indicates candidate incumbency; Retro_{ij} measures retrospective performance evaluations; α_w denotes ward fixed effects; and ε_{ijw} is an error term. Standard errors are clustered at the respondent level. The coefficient of interest, β_7, captures how the effect of candidate partisanship varies jointly with ideological distance and respondents' estimated propensity to punish partisan candidates. We emphasize that our party affiliation variable, CATE_i, is the predicted conditional average treatment effect for each respondent drawn from the causal forest model. This variable exploits the flexibility of the causal forest estimator to capture rich heterogeneity in the treatment effect of candidate partisanship as a function of respondents' observed characteristics.

While the results from model 2 reveal several interesting features of voting behaviour in Calgary's municipal election—including a strong general effect of ideological proximity on vote choice (Lucas, 2024) and clear evidence of retrospective voting in the case of incumbent candidates (Lucas and McGregor, 2021)—we provide the full table of results in the Supplementary Material (SM8) and focus here on the main relationships of interest. This result is visualized in Figure 4, which plots the marginal effect of candidate partisanship on support for the candidate across varying levels of ideological proximity (the horizontal axis) and levels of anti-partisan sentiment (the two colours). Positive values in this figure can thus be interpreted as a "party reward" effect—an *increased* probability

[10]To measure ideological distance, we rely on respondents' ideological self-placements and their ideological placement of mayoral and council candidates on the same scale. Our survey included ideological placements of three "anchor" individuals: the Canadian Prime Minister, the Canadian Leader of the Opposition, and the Premier of Alberta. To place respondent's ideological self-placements and candidate placements on a consistent scale, we used a Bayesian Aldrich-McKelvey scaling procedure (Armstrong II et al., 2015), and then calculated ideological distance scores using these rescaled scores. We provide a full breakdown of candidates' ideological placements, as well as the Bayesian Aldrich-McKelvey procedure, in the Supplementary Material (SM7).

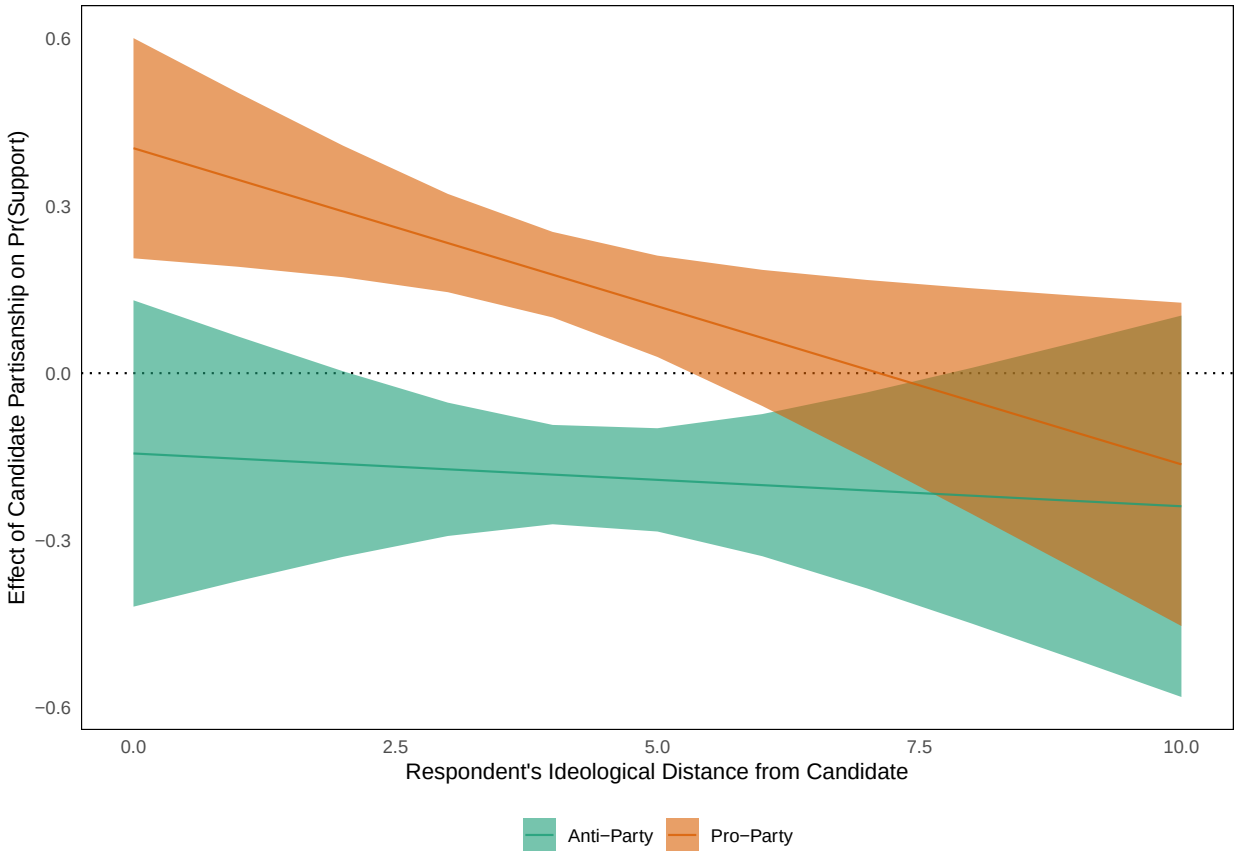

Figure 4: **Party Affiliation Effects, by Party Sentiment and Ideological Distance.** Party affiliation effects (vertical axis) in actual voting decisions among survey respondents, by respondents' ideological distance from candidates (horizontal axis) and general support for political parties (green vs. orange).

of voting for the partisan candidate over other candidates—and negative values can be interpreted as a "party punishment" effect.

Figure 4 reveals meaningful heterogeneity in how Calgarians weighted candidate partisanship in the 2025 municipal election. Among respondents with strongly negative CATEs — those whose conjoint responses indicated a propensity to penalize partisan candidates — the party affiliation effect on actual vote choice is negative across the full range of ideological distance. Pro-party respondents show a strikingly different pattern: the partisanship effect is positive at low levels of ideological distance and declines toward zero as distance increases, suggesting that party cues function as a tiebreaker among ideologically proximate candidates but carry little weight otherwise. Although the three-way interaction term is not statistically significant (see SM8), the divergence between the two groups at the ideologically proximate end of the scale is consistent with our theoretical

expectations. Thus, not only do respondents' preferences for non-partisan representation translate into a lower propensity to choose hypothetical party candidates in the context of a survey experiment, they are also associated with a lower likelihood of voting for actual partisan municipal politicians.

8 Discussion and Conclusion

The patterns we have documented in Calgary's 2025 election — a party punishment effect that grew rather than faded, concentrated among citizens with stable anti-partisan values and compounded by hostility toward the government that introduced the reform — point toward several broader contributions to the study of local party politics, municipal voting behaviour, and institutional reform.

First, and most directly, our results demonstrate that anti-partisan sentiment in non-partisan municipal settings is not merely "cheap talk." When confronted with party labels on their municipal ballot, Calgarians imposed a modest but meaningful penalty on partisan candidates in our conjoint experiment, and this penalty did not fade as the election approached and parties became more visible —- if anything, it grew. This finding weighs against the multiple equilibria interpretation suggested by earlier work (McGregor et al., 2024), which proposed that citizens may oppose municipal parties because they are accustomed to non-partisan elections and would adapt quickly once parties appeared. In Calgary, exposure to actual municipal parties over the course of 2025 did not produce accommodation or habituation. Instead, the arrival of parties appears to have *reinforced* anti-partisan preferences among much of the electorate. Our evidence suggests that the transition from a non-partisan to a partisan municipal equilibrium —- if such a transition is possible —- does not happen quickly or painlessly. To the extent that the municipal public grows accustomed to, and even prefers, municipal party politics, this process takes considerable time.

Second, our causal forest analysis reveals that the average party affiliation penalty masks substantial heterogeneity, and that this heterogeneity is well explained by the two attitudinal dimensions we identified in our theoretical framework. Consistent with the principled anti-partisanship hypothesis, citizens who scored highly on our anti-partisan sentiment index imposed substantially larger penalties on partisan candidates in the conjoint experiment. These citizens hold a genuine normative commitment to independent local politics. At the same time, consistent with the conditional attitudes hypothesis, the party affiliation penalty was also strongly predicted by respondents' feelings toward the United Conservative Party. Citizens who dislike the UCP —- the provincial govern-

ment responsible for introducing municipal parties —- punished partisan candidates far more heavily than those who felt warmly toward the governing party. Both principled and conditional attitudes thus contribute independently to the punishment effect, though standardized comparisons indicate that anti-partisan sentiment is the more powerful of the two channels (see SM6), reinforcing a broader finding in research on institutional reform: responses to changes in democratic arrangements reflect a mix of stable values and context-dependent evaluations of the political actors who introduce those changes (Bol, 2016; Breton, Lucas and Taylor, 2022)

Third, and importantly, our experimental findings carry over into actual voting behavior in Calgary's 2025 election. Respondent-level propensities to punish partisan candidates estimated by the causal forest predicted patterns of real vote choice, demonstrating that anti-partisan sentiment was not confined to the hypothetical setting of the conjoint but shaped how Calgarians actually voted. The results from the vote choice model revealed an interesting asymmetry: citizens with strongly anti-partisan propensities punished partisan candidates across the board, even when those candidates were ideologically proximate, whereas citizens with pro-partisan propensities rewarded partisan candidates only when those candidates also shared their ideological perspective. Anti-partisanship, in other words, operated as a broad heuristic that led voters to discount partisan candidates regardless of fit, while pro-partisan sentiment functioned more conditionally, amplifying support only where ideological alignment was already present.

In the Calgary setting, these findings had practical implications for candidates' electoral prospects. Because the party affiliation penalty was especially strong among citizens with negative affect toward the UCP, partisan candidates whose natural electoral constituency overlapped most heavily with the anti-UCP population faced a compounding disadvantage. The Calgary Party —- a more progressive, urbanist party whose policy platform on housing, transit, and provincial overreach appealed to more left-leaning Calgarians —- was positioned to attract precisely the voters who were most inclined to punish candidates for carrying a party label. For these voters, the party cue may have signaled association with a provincial reform (and political party) they opposed, even when the party's substantive positions were broadly congenial. The ironic result was that the candidates most likely to share their supporters' opposition to the provincial government's reform agenda were also the candidates likely to be punished for participating in the institutional framework that reform created. Communities First, whose base skewed more conservative and thus overlapped less with the intensely anti-UCP segment of the electorate, may have faced a smaller version of this conditional penalty.

Our findings also have implications the politics of institutional reform. The strong role

of government-conditional attitudes in shaping citizens' responses to municipal parties implies that reforms introduced by a single partisan actor —- particularly a provincial government acting without local consultation —- risk triggering opposition that is only partly about the substance of the reform itself. Citizens who dislike the provincial government may reject the institutional change not because they have considered its merits, but because the reform is contaminated by its association with the government in power. This dynamic creates a case for pursuing important institutional reforms through broader, cross-partisan coalitions —- not only because broad coalitions on foundational institutional reforms are normatively desirable in a democratic process, but also because they may be instrumentally necessary to avoid the conditional punishment effects we document here. If the sincere goal of introducing municipal political parties is to improve transparency, reduce informational deficits, and strengthen local democratic competition, then the effectiveness of that reform depends in part on whether citizens can evaluate it on its merits rather than through the lens of provincial partisan affect.

More broadly, our findings speak to a longstanding debate in political behaviour about whether citizens hold genuine preferences regarding the institutional arrangements through which they are governed. A skeptical reading of public opinion research suggests that what looks like principled commitment to democratic forms is often epiphenomenal — reducible to party or leader support (Breton, Lucas and Taylor, 2022), strategic self-interest (Bowler and Donovan, 2013), or simple status quo bias (Arceneaux and Nicholson, 2024) rather than stable normative conviction. Our evidence weighs against the most skeptical version of this view, without fully dismissing it. The heterogeneity we documented is organized along two distinct dimensions — one anchored in stable values about how local democracy ought to work, the other in context-dependent evaluations of the political actors responsible for change —- and both contribute independently to the punishment effect. Crucially, however, the principled dimension appears to be the stronger and more consistent of the two: anti-partisan sentiment produces larger treatment effect heterogeneity, a steeper and more uniform response across the full range of the scale, and effects that do not depend on the identity of the reforming government. This pattern suggests that at least some citizens carry genuine normative commitments to particular forms of democratic politics —- commitments that are strong enough to shape behavior under electoral conditions in which something is actually at stake. While the conditional dimension is also real, and politically consequential, it seems to rest atop a foundation of principled preferences that cannot be explained away as mere partisan reaction.

Our findings also have implications for how scholars understand the stability of non-

partisan political systems. The puzzle of nonpartisan persistence has typically been approached from the supply side: Schleicher (2007) and others have argued that legal and institutional barriers prevent local political entrepreneurs from forming parties even when doing so might be informationally valuable. Our evidence adds a demand-side complement to this account. Voters in a traditionally nonpartisan setting do not simply tolerate the absence of party labels as an informational deficit to be corrected; many of them actively prefer it, and are willing to act on that preference when party labels appear (Crawford, 2022; McGregor et al., 2024). Combined with supply-side barriers, this demand-side resistance helps explain why nonpartisan equilibria are so difficult to dislodge, and why —— in the rare cases where parties are introduced exogenously —— the transition is neither quick nor smooth. It also raises a question that Calgary's ongoing experience is unusually well positioned to answer: under what conditions, if any, does principled anti-partisanship erode? Generational replacement, sustained exposure to parties that perform well, and the gradual normalization of partisan competition are all plausible mechanisms, but so is entrenchment. Whether nonpartisan systems that acquire parties tend toward a new stable equilibrium or toward persistent instability remains, we think, an important open question in the comparative study of local democratic institutions.

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Supplementary Material: Do Municipal Voters Punish Partisan Candidates? Evidence from a Newly Partisan Municipal Election

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March 11, 2026

Contents

SM.1 Partisan Divides on Policy: Question Wording

Full question wording for the illustrative examples in the main text (Figure 1) for both the politician survey and the Calgary election period survey, is listed below. Response options on all items were *strongly disagree*, *somewhat disagree*, *somewhat agree*, *strongly agree*, and *don't know/no opinion*. For purposes of the illustrative figure, response options were converted to binary disagree/agree scale, with no opinion responses excluded.

- Living wages: Municipalities should require that all municipal contractors pay their employees a living wage, even if it means increased costs for the municipality.
- Climate policy: Municipalities should play a strong role in reducing the effects of climate change, even if it means sacrificing revenues and/or expending financial resources.
- Low Taxes: Municipalities should prioritize keeping taxes low, even if it means low-income residents have access to fewer social services.
- Active transportation: Municipalities should make their roads accessible to active transportation (walking, cycling) even if it means sacrificing driving lanes and/or parking.
- Housing density: Municipalities should encourage increased housing density in established neighbourhoods, even if some local residents object.
- Subsidized services: Municipalities should provide subsidized programs to low-income residents, even if doing so comes at the expense of businesses and/or wealthy residents.
- Historical landmarks Municipalities should keep historic street names, statues, and other heritage landmarks, even if some of the historical individuals being commemorated were prejudiced or racist.

SM.2 Conjoint Experiments: Additional Results

Table SM.1 reports the full coefficient estimates from the OLS models summarized in the main text (Figure 2). Each model estimates the average marginal component effect of candidate attributes on voter support, with standard errors clustered by respondent. We report results separately for the March 2025 and September 2025 survey waves, and for both the binary vote choice outcome and the continuous candidate support outcome (0–10 scale). The party affiliation coefficient (β_{party}), which captures the effect of running with a municipal political party rather than as an independent, is the treatment effect of primary interest.

Table SM.1: Conjoint Analysis Results: Basic Models

	Vote Choice (Binary)			Candidate Support (Continuous)		
Variable	Overall	March	September	Overall	March	September
Intercept	0.538 (0.012)***	0.517 (0.022)***	0.547 (0.013)***	5.453 (0.122)***	4.870 (0.135)***	4.972 (0.078)***
Candidate Age (Base = 25)						
Candidate Age (45)	0.069 (0.009)***	0.070 (0.018)***	0.067 (0.011)***	0.226 (0.052)***	0.368 (0.100)***	0.169 (0.061)**
Candidate Age (65)	0.001 (0.009)	0.007 (0.018)	-0.002 (0.011)	0.013 (0.052)	0.177 (0.095)+	-0.053 (0.062)
Candidate Ideology (Base = Centre)						
Candidate Ideology (Left)	-0.147 (0.010)***	-0.118 (0.019)***	-0.158 (0.011)***	-0.774 (0.059)***	-0.524 (0.115)***	-0.869 (0.068)***
Candidate Ideology (Right)	-0.101 (0.010)***	-0.125 (0.019)***	-0.093 (0.012)***	-0.563 (0.060)***	-0.616 (0.121)***	-0.545 (0.069)***
Candidate Partisanship and Ideology						
Candidate Party Affiliation (Party)	-0.065 (0.008)***	-0.032 (0.015)*	-0.078 (0.009)***	-0.224 (0.043)***	-0.116 (0.082)	-0.265 (0.050)***
Candidate Incumbency (Incumbent)	0.041 (0.008)***	0.041 (0.015)**	0.041 (0.009)***	0.103 (0.041)*	0.104 (0.083)	0.104 (0.048)*
Candidate Race (Base = Chinese)						
Candidate Race (South Asian)	-0.018 (0.009)+	-0.020 (0.018)	-0.016 (0.011)	-0.085 (0.050)+	-0.128 (0.099)	-0.067 (0.058)
Candidate Race (White)	0.044 (0.009)***	0.033 (0.018)+	0.049 (0.011)***	0.342 (0.051)***	0.359 (0.100)***	0.341 (0.059)***
Candidate Gender (Base = Man)						
Candidate Gender (Woman)	0.046 (0.007)***	0.056 (0.014)***	0.042 (0.009)***	0.037 (0.041)	0.186 (0.081)*	-0.019 (0.047)
Experiment (Base = March 2025)						
Experiment (September 2025)	0.000 (0.001)			-0.295 (0.059)***		
Num.Obs.	17852	4830	13022	17990	4830	13160
Std.Errors	by: ResponseId	by: ResponseId	by: ResponseId	by: ResponseId	by: ResponseId	by: ResponseId

Figure SM.1 reports estimated marginal means for each attribute level across both survey waves. While the AMCEs reported in the main text capture the causal effect of switching between attribute levels, marginal means provide a complementary perspective by showing the average level of support associated with each attribute value, averaging over the distribution of all other attributes in the design. The results confirm the patterns described in the main text: partisan candidates receive lower marginal support than independents, and this gap is larger in the September wave than in March.

Table SM.2 reports results from an interaction model testing whether the party affiliation penalty differs between the March and September 2025 survey waves. The model includes a main effect for candidate party affiliation, a main effect for survey wave (September 2025 as the indicator), and their interaction. The main effect for party affiliation in this

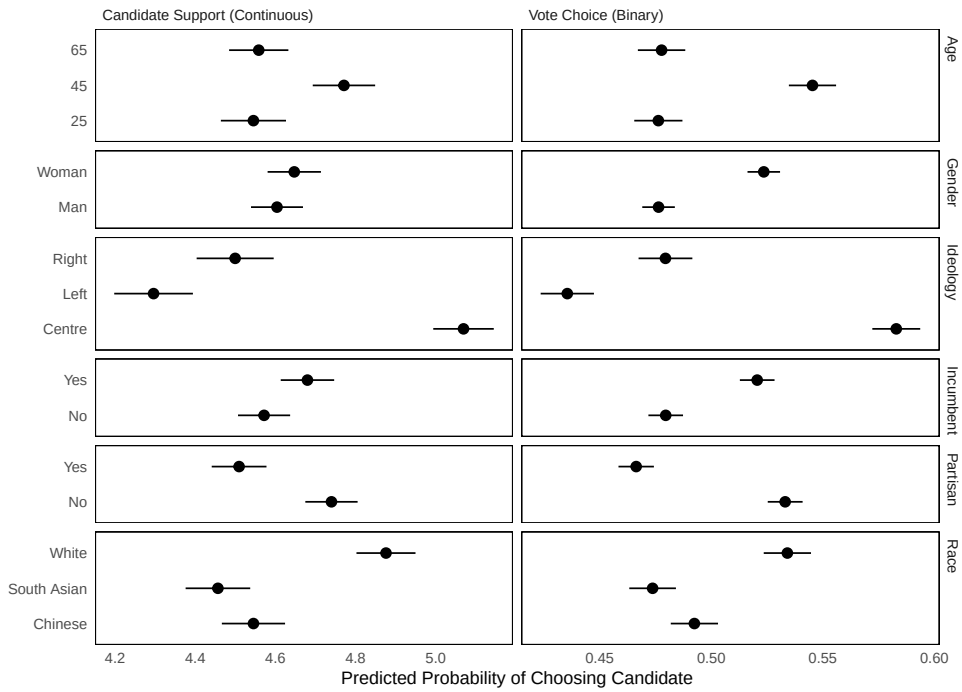

Figure SM.1: **Marginal Means.** Estimated marginal means for each conjoint attribute level, by survey wave. Points indicate the average predicted level of support for profiles containing each attribute value, averaging over the joint distribution of all other attributes.

model captures the penalty in the baseline (March) wave, where it is positive and statistically significant in the binary specification (0.10, $p < 0.001$) but small and insignificant in the continuous specification (0.04, $p > 0.1$), consistent with the near-zero March estimates reported in Figure 2 of the main text. The interaction term between party affiliation and survey wave is negative in both specifications (-0.09 for binary vote choice, $p < 0.001$; -0.15 for continuous candidate support, $p > 0.1$), indicating that the party affiliation penalty grew between March and September. The binary interaction is statistically significant; the continuous interaction falls short of conventional significance thresholds, though its direction is consistent. Together, these results support the conclusion in the main text that exposure to municipal political parties over the course of 2025 did not produce accommodation or habituation among Calgary voters — if anything, it reinforced anti-partisan preferences.

Table SM.2: Conjoint Analysis Results: Differences over Time

Variable	Binary	Continuous
Intercept	0.50 (0.02)***	5.32 (0.15)***
Candidate Age (45)	0.07 (0.01)***	0.23 (0.05)***
Candidate Age (65)	0.00 (0.01)	0.01 (0.05)
Candidate Ideology (Left)	-0.15 (0.01)***	-0.77 (0.06)***
Candidate Ideology (Right)	-0.10 (0.01)***	-0.56 (0.06)***
Candidate Party Affiliation (Party)	0.01 (0.03)	0.04 (0.17)
Experiment (September 2025)	0.02 (0.01)**	-0.22 (0.07)**
Candidate Incumbency (Incumbent)	0.04 (0.01)***	0.10 (0.04)*
Candidate Race (South Asian)	-0.02 (0.01)+	-0.08 (0.05)+
Candidate Race (White)	0.04 (0.01)***	0.34 (0.05)***
Candidate Gender (Woman)	0.05 (0.01)***	0.04 (0.04)
Party Affiliation * Experiment	-0.05 (0.02)**	-0.15 (0.10)
Num.Obs.	17852	17990
Std.Errors	by: ResponseId	by: ResponseId

SM.3 Conjoint Robustness Tests

We conduct three standard robustness tests recommended by Hainmueller, Hopkins and Yamamoto (2014) to assess the internal validity of the conjoint experiment: tests for carryover effects, task order effects, and profile order effects. Because the near-zero treatment effects in these diagnostic models produce extremely precise null estimates, clustered standard errors by respondent proved unstable; we therefore report results from OLS models with conventional (non-clustered) standard errors throughout this section.

Carryover effects. A potential concern with repeated conjoint tasks is that attributes from one task may influence responses to the next. To test for this, we regress both outcome variables all lagged candidate attributes from the selected profile in the previous task (excluding the first task in each respondent's sequence, which has no prior profile). Table SM.3 reports the individual coefficients. To test joint significance, we conduct an F-test of the null hypothesis that all lagged attribute coefficients are jointly equal to zero. For the binary vote choice outcome, the F-statistic is essentially zero ($F = 0.00$, $p = 1.00$), and for the continuous candidate support outcome, the F-statistic is similarly insignificant ($F = 1.20$, $p = 0.29$). There is no evidence of carryover effects in either specification.

Table SM.3: Robustness Test: Carry-Over Effects

Variable	Binary	Continuous
Intercept	0.500 (0.014)***	4.603 (0.078)***
Lag: Age (45)	-0.000 (0.011)	-0.077 (0.060)
Lag: Age (65)	-0.000 (0.012)	-0.141 (0.063)*
Lag: Ideology (Left)	-0.000 (0.011)	-0.007 (0.061)
Lag: Ideology (Right)	-0.000 (0.011)	0.075 (0.060)
Lag: Party affiliated	0.000 (0.009)	0.022 (0.050)
Lag: Incumbent	0.000 (0.009)	0.046 (0.050)
Lag: Race (South Asian)	0.000 (0.012)	0.079 (0.062)
Lag: Race (White)	0.000 (0.011)	0.049 (0.060)
Lag: Gender (Woman)	0.000 (0.009)	0.041 (0.050)
Num.Obs.	11782	11777

Task order effects. If respondent fatigue or learning alters responses over the course of the conjoint exercise, we would expect systematic variation in outcomes across tasks. To test for this, we regress the outcome on the task number (i.e., the number of the paired

conjoint task in the respondent's sequence). As shown in Table SM.4, the task order coefficient is negligible and far from statistical significance in both the binary ($b = -0.000$, SE $= 0.005$) and continuous ($b = 0.007$, SE $= 0.025$) specifications.

Table SM.4: Robustness Test: Task Order Effects

Variable	Binary	Continuous
Intercept	0.500 (0.010)***	4.612 (0.053)***
task	-0.000 (0.005)	0.007 (0.025)
Num.Obs.	17852	17990

Profile order effects. Finally, we test whether respondents systematically favour the first or second profile displayed in each conjoint task. Table SM.5 reports results from a regression of the outcome on an indicator for the second profile (Character B). The coefficient is small and not statistically significant in both the binary ($b = 0.008$, SE $= 0.007$) and continuous ($b = -0.065$, SE $= 0.041$) specifications, indicating no evidence of profile order bias.

Table SM.5: Robustness Test: Profile Order Effects

Variable	Binary	Continuous
Intercept	0.488 (0.012)***	4.723 (0.064)***
Profile Order (Character B)	0.008 (0.007)	-0.065 (0.041)
Num.Obs.	17852	17990

SM.4 Causal Forest: Additional Detail

This section provides additional diagnostics and results from the causal forest model of treatment effect heterogeneity described in the main text. We first report variable importance scores for the continuous candidate support outcome (Figure SM.2) and the binary vote choice outcome (Figure SM.3). Variable importance measures the share of splits in the causal forest that involve each covariate, providing an indication of which variables are most strongly associated with heterogeneity in the party affiliation effect. In both models, anti-partisan sentiment and the UCP feeling thermometer emerge as the most important predictors of treatment effect heterogeneity, consistent with the partial dependence plots reported in the main text.

We then report best linear projection (BLP) estimates, which provide a parametric summary of how estimated CATEs covary with observed characteristics. The BLP regresses the causal forest's estimated treatment effects on the covariates included in the model, offering an alternative approach to the nonparametric partial dependence plots provided in the main text. Table SM.6 reports the full model with all covariates; Table SM.7 reports a reduced model including only the three theoretically motivated moderators: anti-partisan sentiment, UCP feeling thermometer, and NDP feeling thermometer. Consistent with the main results, anti-partisan sentiment and UCP affect are the strongest and most statistically significant predictors of the party affiliation CATE, while NDP affect is not statistically significant — supporting the conclusion that opposition to municipal parties is driven primarily by attitudes toward the governing UCP rather than by negative affect toward provincial partisan politics in general.

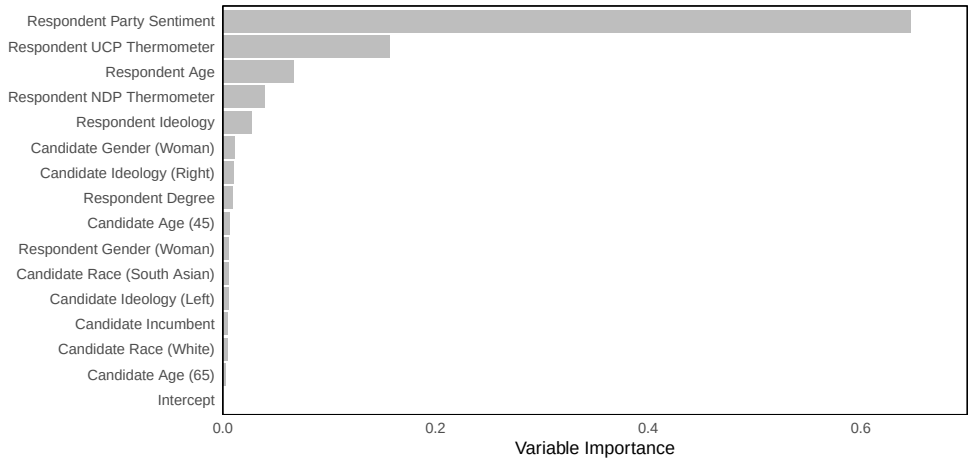

Figure SM.2: **Variable Importance.** Variable importance scores from causal forest model of candidate support. Larger bars indicate increased effect heterogeneity associated with the variable.

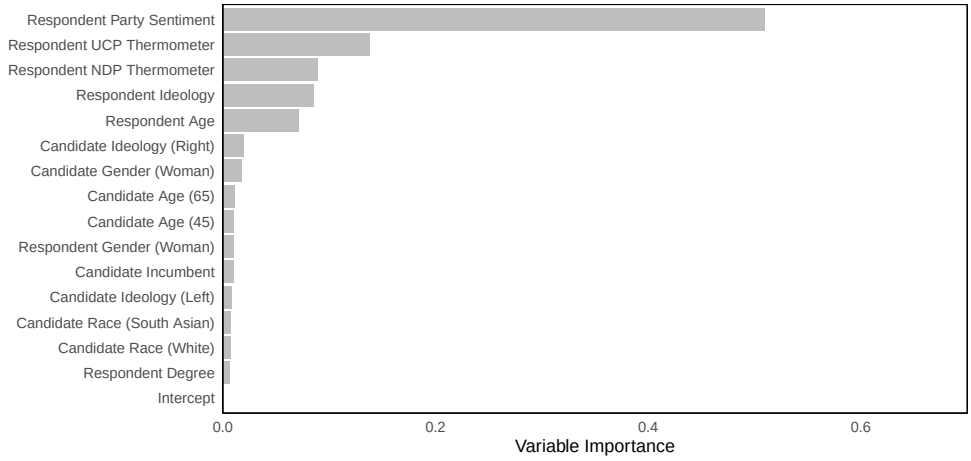

Figure SM.3: **Variable Importance.** Variable importance scores from causal forest model of vote choice. Larger bars indicate increased effect heterogeneity associated with the variable.

Table SM.6: **Best Linear Projection of CATEs: Full Model.** Estimates from a best linear projection (BLP) of conditional average treatment effects from the causal forest onto all covariates. The dependent variable is the CATE of party affiliation on continuous candidate support (0–10 scale). Positive coefficients indicate that higher values of the covariate are associated with a more positive party affiliation effect; negative coefficients indicate a more negative party affiliation effect.

	Estimate	Std. Error	t	p
Candidate attributes				
Age (45)	−0.006	(0.133)	−0.05	0.962
Age (65)	−0.051	(0.133)	−0.38	0.702
Ideology (Left)	0.205	(0.132)	1.55	0.122
Ideology (Right)	0.251	(0.133)	1.89	0.059
Incumbent	0.073	(0.108)	0.68	0.499
Race (South Asian)	0.129	(0.134)	0.96	0.335
Race (White)	0.060	(0.132)	0.46	0.647
Gender (Woman)	−0.059	(0.108)	−0.54	0.589
Respondent attributes				
Ideology (L–R)	−0.070	(0.035)	−1.98	0.047
Anti-partisan sentiment	−0.094	(0.018)	−5.25	< 0.001
Age	−0.008	(0.003)	−2.36	0.018
University degree	−0.048	(0.112)	−0.43	0.670
Gender (Woman)	−0.020	(0.111)	−0.18	0.859
NDP thermometer	0.012	(0.025)	0.49	0.623
UCP thermometer	0.105	(0.027)	3.86	< 0.001
Intercept	0.794	(0.413)	1.92	0.055

Table SM.7: **Best Linear Projection of CATEs: Key Moderators.** Estimates from a best linear projection (BLP) of conditional average treatment effects onto the three moderators of theoretical interest: anti-partisan sentiment, UCP feeling thermometer, and NDP feeling thermometer.

	Estimate	Std. Error	t	p
Anti-partisan sentiment	−0.096	(0.018)	−5.38	< 0.001
UCP thermometer	0.081	(0.023)	3.47	< 0.001
NDP thermometer	0.035	(0.024)	1.45	0.146
Intercept	0.198	(0.293)	0.68	0.499

SM.5 Causal Forest: Binary Vote Choice Variable

The main text reports causal forest results using the continuous candidate support variable (0–10 scale) as the outcome. Here we replicate the analysis using the binary forced-choice vote outcome as an alternative dependent variable. Figure SM.4 displays the distribution of CATEs (Panel A) and partial dependence plots for the three key moderators (Panel B). The results are substantively identical to those reported in the main text: the distribution of CATEs spans a wide range from negative to positive, and the strongest predictors of treatment effect heterogeneity are anti-partisan sentiment and UCP affect. The consistency of results across both outcome measures provides additional confidence that the patterns of heterogeneity are not an artefact of the choice of outcome variable.

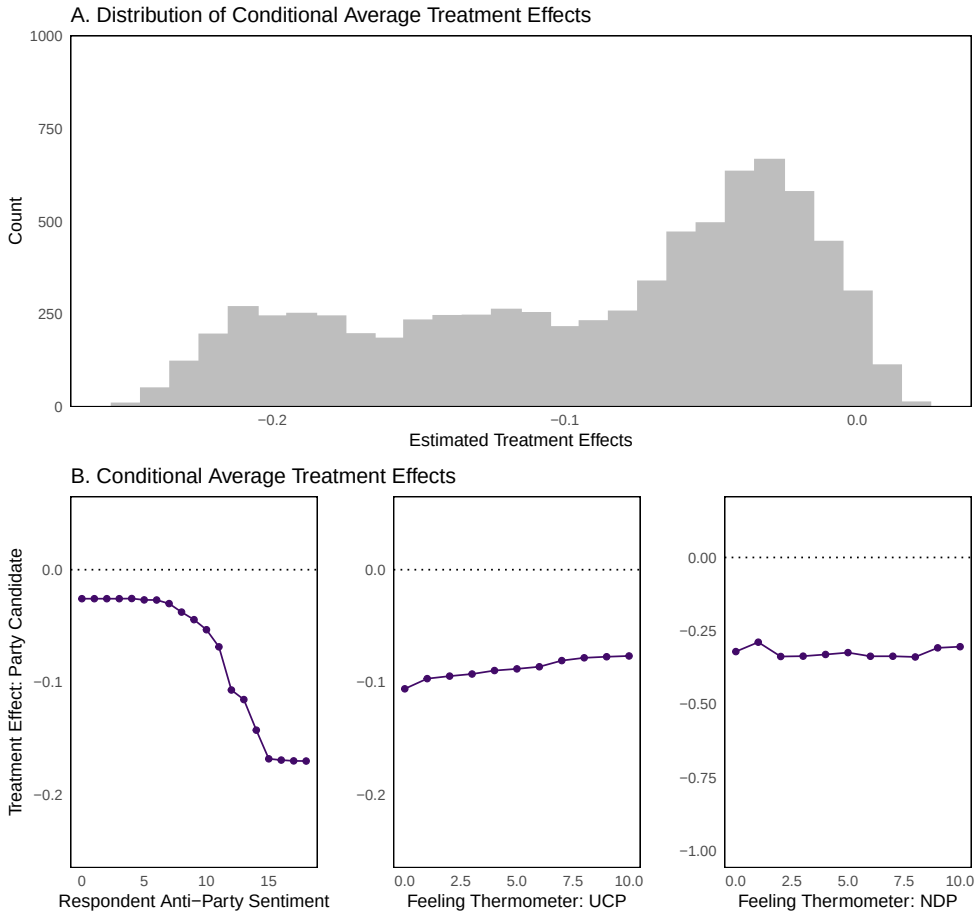

Figure SM.4: **Treatment Effect Heterogeneity (Binary Vote Choice).** Panel A: Distribution of Conditional Average Treatment Effects across all respondents. Panel B: Conditional Average Treatment Effects across anti-partisan sentiment scale (left panel), UCP feeling thermometer (middle panel), and NDP feeling thermometer (right panel).

SM.6 Treatment Effect Heterogeneity: Linear Interaction Models

As a complement to the causal forest estimates reported in the main text, we estimate linear interaction models that allow the party affiliation effect to vary with three key moderators: anti-partisan sentiment, UCP feeling thermometer, and NDP feeling thermometer. These models also include all candidate attributes from the conjoint design. Table SM.8 reports the full results for both the binary vote choice and continuous candidate support outcomes.

Table SM.8: Conjoint Interaction Models: Moderators of the Party Affiliation Effect

Variable	Binary	Continuous
Intercept	0.481 (0.034)***	3.484 (0.281)***
Party Affiliation	0.077 (0.059)	0.180 (0.364)
Anti-Party Sentiment	0.010 (0.002)***	0.055 (0.016)***
NDP Thermometer	0.001 (0.003)	0.152 (0.025)***
UCP Thermometer	-0.002 (0.002)	0.099 (0.024)***
Candidate Age (45)	0.054 (0.014)***	0.208 (0.078)**
Candidate Age (65)	-0.009 (0.014)	-0.032 (0.080)
Candidate Ideology (Left)	-0.168 (0.014)***	-1.019 (0.090)***
Candidate Ideology (Right)	-0.109 (0.015)***	-0.741 (0.092)***
Candidate Incumbency (Incumbent)	0.023 (0.012)*	0.093 (0.062)
Candidate Race (South Asian)	-0.014 (0.013)	-0.087 (0.075)
Candidate Race (White)	0.054 (0.014)***	0.350 (0.077)***
Candidate Gender (Woman)	0.046 (0.011)***	0.040 (0.061)
Party Affiliation × Anti-Party Sentiment	-0.019 (0.004)***	-0.099 (0.021)***
Party Affiliation × NDP Thermometer	0.000 (0.005)	0.041 (0.029)
Party Affiliation × UCP Thermometer	0.007 (0.005)	0.078 (0.029)**
Num.Obs.	7908	7963
Std.Errors	by: ResponseId	by: ResponseId

Figure SM.5 displays predicted marginal means from these interaction models, plotting predicted support for partisan and independent candidates across the range of each moderator. The results are consistent with the causal forest findings: the gap between partisan and independent candidates widens as anti-partisan sentiment increases and as UCP affect decreases, while NDP affect has little moderating influence.

To compare the relative strength of the two moderating channels, Table SM.9 reports

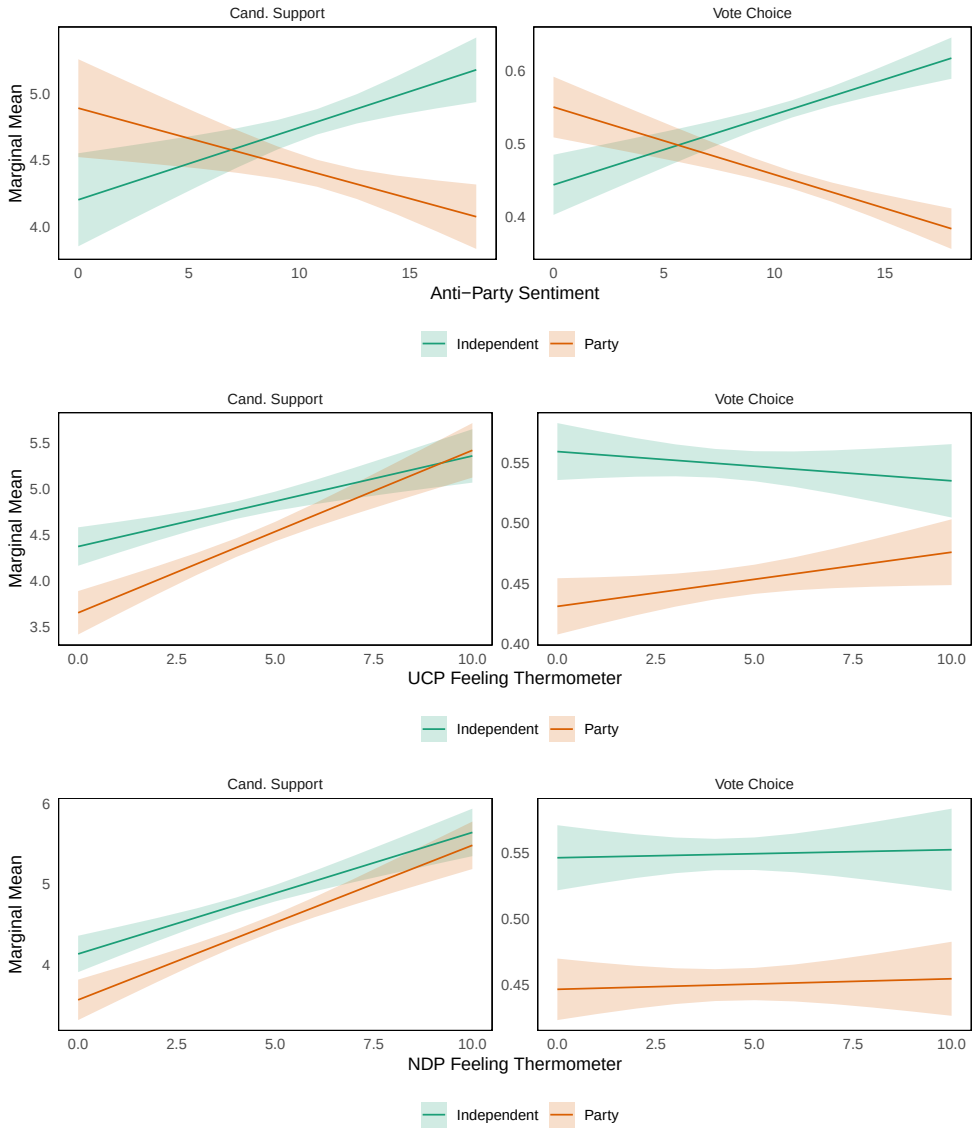

Figure SM.5: **Marginal Means by Moderator.** Predicted support for partisan and independent candidates across levels of anti-partisan sentiment (top), UCP feeling thermometer (middle), and NDP feeling thermometer (bottom), from linear interaction models. Shaded bands are 95% confidence intervals.

results from the same interaction model with all three moderators standardized (mean zero, unit standard deviation), allowing direct comparison of interaction magnitudes. The interaction between party affiliation and standardized anti-partisan sentiment is large and statistically significant in both the binary ($b = -0.077$, SE $= 0.015$) and continuous ($b = -0.405$, SE $= 0.087$) specifications. The corresponding interaction with UCP affect is smaller in magnitude and reaches statistical significance only in the continuous specification ($b = 0.278$, SE $= 0.103$). The NDP interaction is negligible in both. These results

indicate that principled anti-partisan sentiment is the primary driver of heterogeneity in the party affiliation penalty, with government-conditional attitudes playing a real but secondary role.

Table SM.9: Standardized Interaction Models: Relative Strength of Moderators

Variable	Binary	Continuous
Intercept	0.569 (0.017)***	5.100 (0.101)***
Party Affiliation	-0.080 (0.012)***	-0.297 (0.070)***
Anti-Party Sentiment (std.)	0.039 (0.008)***	0.225 (0.064)***
NDP Thermometer (std.)	0.002 (0.008)	0.489 (0.079)***
UCP Thermometer (std.)	-0.009 (0.009)	0.354 (0.084)***
Candidate Age (45)	0.054 (0.014)***	0.208 (0.078)**
Candidate Age (65)	-0.009 (0.014)	-0.032 (0.080)
Candidate Ideology (Left)	-0.168 (0.014)***	-1.019 (0.090)***
Candidate Ideology (Right)	-0.109 (0.015)***	-0.741 (0.092)***
Candidate Incumbency (Incumbent)	0.023 (0.012)*	0.093 (0.062)
Candidate Race (South Asian)	-0.014 (0.013)	-0.087 (0.075)
Candidate Race (White)	0.054 (0.014)***	0.350 (0.077)***
Candidate Gender (Woman)	0.046 (0.011)***	0.040 (0.061)
Party Affiliation × Anti-Party Sentiment (std.)	-0.077 (0.015)***	-0.405 (0.087)***
Party Affiliation × NDP Thermometer (std.)	0.001 (0.015)	0.132 (0.093)
Party Affiliation × UCP Thermometer (std.)	0.025 (0.017)	0.278 (0.103)**
Num.Obs.	7908	7963
Std.Errors	by: ResponseId	by: ResponseId

SM.7 Respondent and Candidate Ideological Positions

When respondents place themselves and political candidates on a left-right ideological scale, they do not all use the scale in the same way. These individual differences in scale use — known as differential item functioning (DIF) — mean that raw placements are not directly comparable across respondents. To address this, we use Bayesian Aldrich-McKelvey (BAM) scaling (Armstrong II et al., 2015), a method that recovers comparable ideological positions for both respondents and stimuli by estimating respondent-specific distortion parameters (shift and stretch) that map each respondent's subjective scale use onto a common ideological dimension.

The procedure works by leveraging "anchor" stimuli — political figures whose placements are observed from many respondents and whose relative positions are assumed to be fixed across the population. In our survey, respondents placed themselves, municipal candidates in their ward, and three anchor figures — Prime Minister Mark Carney, Conservative Leader Pierre Poilievre, and Alberta Premier Danielle Smith — on the same ideological scale. The BAM model uses variation in how respondents place the shared anchors to estimate each respondent's individual scale distortion, and then applies the inverse of that distortion to recover corrected self-placements and candidate placements on a common scale. We estimated the model using the `hbamr` package in R, with four chains of 4,000 iterations each (2,000 warmup), retaining respondents who provided at least three valid placements with at least two unique values. The resulting estimates, displayed in Figure SM.6, are used to calculate the ideological distance between each respondent and the candidates in their ward. For observers of Calgary's 2025 election and electoral politics in general, the ideological placements have strong face validity, with more left-wing candidates clearly on the left (e.g. David Barrett, Kourtney Penner) and more right-wing candidates clearly on the right (e.g. Dan McLean, Sonya Sharp).

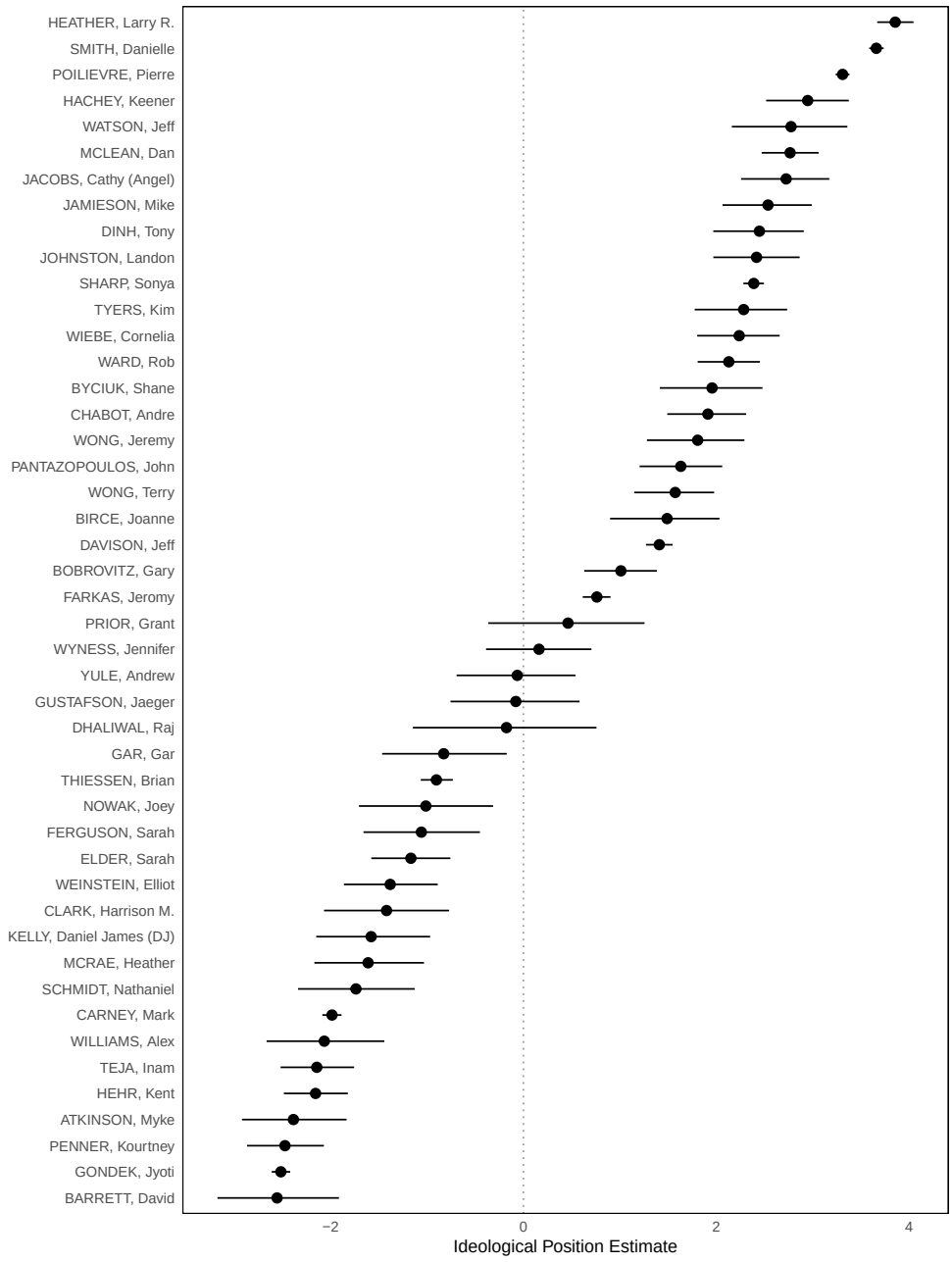

Figure SM.6: **Candidate Ideological Positions.** Ideological position of candidate and anchor individuals after Bayesian Aldrich-McKelvey rescaling.

SM.8 Vote Choice Model: Full Table

Table SM.10 reports the full coefficient estimates from the vote choice model described in the main text (Equation 2). This model estimates the effect of candidate party affiliation on respondents' reported support for real candidates in Calgary's 2025 municipal election, allowing the effect to vary with ideological distance between the respondent and the candidate and with the respondent's estimated propensity to punish partisan candidates (CATE from the causal forest). The model also includes controls for candidate incumbency, retrospective economic evaluations (and their interaction), and ward fixed effects. Standard errors are clustered at the respondent level. The three-way interaction (Party $\times$ IdeolDist $\times$ CATE) is the coefficient of primary interest; its marginal effects are visualized in the main text.

Table SM.10: Vote Choice Analysis: Full Model

Variable	(1)
Candidate Partisan	-0.144 (0.140)
Ideological Distance	-0.019 (0.012)
CATE	-0.079 (0.072)
Incumbent	0.206 (0.039)***
Retrospective	-0.009 (0.004)+
Incumbent*Retrospective	0.066 (0.030)*
Candidate Partisan*Ideological Distance	-0.009 (0.030)
Candidate Partisan*CATE	0.548 (0.227)*
Ideological Distance*CATE	-0.011 (0.019)
Candidate Partisan*Ideological Distance*CATE	-0.047 (0.051)
Num.Obs.	2362
Std.Errors	by: Respondent

SM.9 Codebook

This section documents all variables used in the analysis. For each variable we report the variable name used in the analysis code, a description, the original question wording (where applicable), the coding scheme, and the frequency distribution in the analysis sample. Conjoint candidate attributes are uniformly randomized and are reported without frequency counts.

SM.9.1 Conjoint Candidate Attributes

cand_age — Candidate age

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
25	25 years old	–
45	45 years old	–
65	65 years old	–

cand_ideology — Candidate ideology

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
left	Left	–
centre	Centre	–
right	Right	–

cand_partisan — Candidate party affiliation (treatment variable)

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
0	Running as an Independent	–
1	Running with a municipal political party	–

cand_incumbent — Candidate incumbency status

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
0	Not on Council	–
1	Member of Council	–

cand_race — Candidate race/ethnicity

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
chinese	Chinese	–
southasian	South Asian	–
white	White	–

cand_gender — Candidate gender

Randomized candidate attribute in conjoint experiment.

Value	Value Label	N
0	Man	–
1	Woman	–

SM.9.2 Outcome Variables

vote_choice — Conjoint vote choice (binary)

If you had to choose between Candidate A and Candidate B, which candidate would you vote for? Recoded: 1 = chosen candidate, 0 = unchosen candidate.

Value	Value Label	N
0	Candidate not chosen	–
1	Candidate chosen	–

vote_cont — Conjoint candidate support (continuous)

How likely would you be to vote for [Candidate A/B] if they were running in your ward? Scale: 0 (No Chance) to 10 (Certain to Support).

Value	Value Label	N
Missing		251
	Range: 0–10; Mean: 4.6; SD: 2.7	12997

SM.9.3 Respondent-Level Moderators (Causal Forest)

resp_partysentiment — Anti-partisan sentiment index

Additive index of six items (three anti-party, three reverse-coded pro-party items), rescaled by subtracting 6 so that higher values indicate stronger anti-partisan sentiment. Component items: (1) "Municipal candidates should continue to run as independents, because political parties put their own interests ahead of the interests of their constituents." (2) "Municipal candidates should continue to run as independents, because independent candidates can take their own positions, rather than simply adopting the positions of their parties." (3) "I would prefer to base my decisions on the characteristics of local candidates, rather than the political party they belong to." (4, reverse-coded) "Municipal candidates should run as members of parties, because political parties are better at getting things done than independent councillors." (5, reverse-coded) "Political parties in municipal elections make it easier to know where candidates stand in terms of their 'left', 'centre', or 'right' position on the ideological spectrum." (6, reverse-coded) "Most people who run for municipal office are affiliated with political parties, so voters might as well know about these party affiliations when making decisions about who to support." Each item: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree. Don't know / No opinion coded as missing.

Value	Value Label	N
Missing		647
	Range: 0–18; Mean: 10.8; SD: 3.7	1561

resp_thermUCP — UCP feeling thermometer

How do you feel about the provincial political parties below? Set the slider to a number from 0 to 10, where 0 means you really dislike the party and 10 means you really like the party. United Conservative Party.

Value	Value Label	N
Missing		443
0	0	410
1	1	250
2	2	84
3	3	71
4	4	63
5	5	138
6	6	151
7	7	163
8	8	176
9	9	73
10	10	186

resp_thermNDP — NDP feeling thermometer

How do you feel about the provincial political parties below? Set the slider to a number from 0 to 10, where 0 means you really dislike the party and 10 means you really like the party. Alberta New Democratic Party.

Value	Value Label	N
Missing		534
0	0	296
1	1	235
2	2	88
3	3	94
4	4	101
5	5	195
6	6	155
7	7	211
8	8	143
9	9	46
10	10	110

resp_ideology — Ideological self-placement

In politics people sometimes talk of left and right. Where would you place yourself on a scale from 0 to 10, where 0 means left and 10 means right? Don't know coded as missing.

Value	Value Label	N
Missing		291
0	Left	82
1	1	28
2	2	116
3	3	185
4	4	203
5	5	406
6	6	237
7	7	230
8	8	200
9	9	70
10	Right	160

resp_age — Respondent age

In what year were you born? Recoded to age (2025 minus birth year).

Value	Value Label	N
Missing		2
	Range: 18–113; Mean: 48.4; SD: 16.1	2206

resp_gender — Respondent gender

How would you describe your gender? Recoded: 0 = Man, 1 = Woman. Non-binary and other responses coded as 0.

Value	Value Label	N
0	Man	946
1	Woman	1262

resp_degree — University degree

What is the highest level of education that you have completed? Recoded: 0 = No university degree (high school, some postsecondary, apprenticeship, college diploma), 1 = University degree (bachelor's, master's, professional degree or doctorate).

Value	Value Label	N
0	No university degree	1272
1	University degree	936

SM.9.4 Vote Choice Analysis Variables

cand_party — Candidate party affiliation (vote choice analysis)

Whether the real candidate in the 2025 Calgary municipal election ran under a registered municipal party label. Coded from official candidate records.

Value	Value Label	N
0	Independent	–
1	Party-affiliated candidate	–

ideol_dist — Ideological distance (BAM-scaled)

Absolute difference between the respondent's Bayesian Aldrich-McKelvey (BAM) rescaled ideological self-placement and the BAM-rescaled ideological position of each candidate. Higher values indicate greater ideological distance.

Value	Value Label	N
	Continuous; computed from BAM scaling procedure.	–

cate — Conditional average treatment effect (from causal forest)

Respondent-specific estimated effect of candidate party affiliation on candidate support, predicted from the causal forest model. Rescaled to 0–1 range for the vote choice analysis.

Value	Value Label	N
	Continuous; estimated from causal forest.	–

retro — Retrospective evaluations (additive index)

Sum of two retrospective items: (1) "Over the past year has the economy in Calgary gotten better, gotten worse, or stayed about the same?" (Better = 1, Same = 0, Worse = –1). (2) "Over the past year has your personal financial situation gotten better, gotten worse, or stayed about the same?" (Better = 1, Same = 0, Worse = –1). Range: –2 to 2.

Value	Value Label	N
Missing		262
-2	Both worse	397
-1	One worse, one same	1130
0	Both same / mixed	267
1	One better, one same	110
2	Both better	42

experiment — Survey wave indicator

Indicator for which survey wave the conjoint observation comes from.

Value	Value Label	N
1	March 2025 (Survey 1)	805
2	September 2025 (Survey 2)	2208

SM.9.5 Municipal Policy Issue Variables (Figure 1)

issue_livingwage — Living wages

Municipalities should require that all municipal contractors pay their employees a living wage, even if it means increased costs for the municipality. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		315
1	Strongly Disagree	153
2	Somewhat Disagree	212
3	Somewhat Agree	792
4	Strongly Agree	736

issue_climatechange — Climate policy

Municipalities should play a strong role in reducing the effects of climate change, even if it means sacrificing revenues and/or expending financial resources. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		284
1	Strongly Disagree	536
2	Somewhat Disagree	413
3	Somewhat Agree	635
4	Strongly Agree	340

issue_socialservices — Low taxes vs. social services

Municipalities should prioritize keeping taxes low, even if it means low-income residents have access to fewer social services. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		276
1	Strongly Disagree	266
2	Somewhat Disagree	594
3	Somewhat Agree	621
4	Strongly Agree	451

issue_activetrans — Active transportation

Municipalities should make their roads accessible to active transportation (walking, cycling) even if it means sacrificing driving lanes and/or parking. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		263
1	Strongly Disagree	483
2	Somewhat Disagree	548
3	Somewhat Agree	534
4	Strongly Agree	380

issue_density — Housing density

Municipalities should encourage increased housing density in established neighbourhoods, even if some local residents object. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		293
1	Strongly Disagree	663
2	Somewhat Disagree	443
3	Somewhat Agree	496
4	Strongly Agree	313

issue_subsidies — Subsidized services

Municipalities should provide subsidized programs to low-income residents, even if doing so comes at the expense of businesses and/or wealthy residents. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		273
1	Strongly Disagree	234
2	Somewhat Disagree	331
3	Somewhat Agree	744
4	Strongly Agree	626

issue_landmarks — Historical landmarks

Municipalities should keep historic street names, statues, and other heritage landmarks, even if some of the historical individuals being commemorated were prejudiced or racist. Response options: Strongly Disagree (1), Somewhat Disagree (2), Somewhat Agree (3), Strongly Agree (4), Don't know / No opinion (–99).

Value	Value Label	N
Missing		321
1	Strongly Disagree	265
2	Somewhat Disagree	311
3	Somewhat Agree	520
4	Strongly Agree	791

References

Armstrong II, David A., Ryan Bakker, Royce Carroll and Keith T. Poole. 2015. "Using Bayesian Aldrich-McKelvey Scaling to Study Citizens' Ideological Preferences and Perceptions." *American Journal of Political Science* 59(3):759–774.

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