# Western University Scholarship@Western

Western Urban and Local Governance Working Papers

2021

# The Urban-Rural Divide in Canadian Federal Elections, 1896–2019 (Preprint)

Dave Armstrong

Jack Lucas

Zack Taylor

Follow this and additional works at: https://ir.lib.uwo.ca/urban

Part of the Canadian History Commons, Models and Methods Commons, Political History Commons, Public Affairs Commons, and the Urban Studies Commons

# The Urban-Rural Divide in Canadian Federal Elections, 1896–2019

David A. Armstrong II, Western University Jack Lucas, University of Calgary Zack Taylor, Western University

**Abstract:** Using a new measure of urbanity for every federal electoral district in Canada from 1896 to the present, this article describes the long-term development of the urban-rural in Canadian federal electoral politics. We focus on three questions: (1) *when* the urban-rural divide has existed in Canada, identifying three main periods – the 1920s, the 1960s, and 1993–present – in which the urban-rural cleavage has been especially important in federal elections (2) *where* the urban-rural divide has existed, finding that in the postwar period the urban-rural cleavage is a pan-Canadian phenomenon; and (3) *how well* urbanity predicts district-level election outcomes. We argue that the urban-rural divide is important for understanding election outcomes during several periods of Canadian political development, and never more so than in recent decades. We conclude by discussing the implications of our findings for research on urban-rural cleavages, Canadian electoral politics, and Canadian political development.

Acknowledgements: The authors are grateful to the following research assistants for their work on different aspects of this project: Moira Benedict, Tyler Girard, Christopher Hewitt, Amanda Miknev, and Kandys Paterson.

# The Urban-Rural Divide in Canadian Federal Elections, 1896–2019

# 1. Introduction

No one was surprised on October 21, 2019, after the polls had closed in Canada's 43<sup>rd</sup> federal election, at the news that Gudie Hutchings, incumbent Liberal MP in the district of Long Range Mountains, Newfoundland, had been safely re-elected to office. Western Newfoundland was a Liberal stronghold in the days of Joey Smallwood, and it remains a Liberal stronghold today. But one thing about Hutchings' victory *was* unusual, something that made the re-elected MP stand out clearly from most of her Liberal colleagues: her riding was rural. Unlike in earlier decades, when many Liberals were elected in rural districts, the 2019 Liberal caucus was thoroughly urban, its members drawn by the dozen from Canada's biggest cities. By land area, fully 84 per cent of ridings won by the Liberals in 2019 could fit comfortably within the borders of Hutchings' Switzerland-sized constituency. Liberal support in western Newfoundland may have changed little over the decades, but the Liberal Party to which it remained so loyal had been profoundly transformed.

This urban-rural divide in recent Canadian elections is hardly unique. In the United States, electoral polarization between urban and rural areas is clearer than ever, so much so that Rodden (2019: 106) has described recent American elections as "battles between a party that represents the downtown core and inner suburbs...and a party that represents the sprawling exurbs and rural periphery of such cities." In Britain, many have noted the divide between a firmly "remain" metropolitan London and the Brexit-friendly English countryside. Similar patterns are visible on election maps in countries as diverse as France, Switzerland, and Hungary – tiny urban concentrations of party support dotted across the landscape, marooned in a vast

ocean of rural political opposition (Rodrígues-Pose, 2018). In many advanced democracies, electoral division between urban and rural areas is among the most striking features of contemporary politics.

In Canada, despite evidence of a clear divide in recent elections, the urban-rural cleavage has been sorely neglected by political scientists. In part, this is simply because Canadian scholars' attention has been elsewhere, focused on the religious, linguistic, and regional cleavages that animate so much of Canadian political development. It may also originate in a lack of consistent data with which to observe the evolution of the urban-rural divide over time. Whatever the cause, we currently know almost nothing about the historical development, political-geographic dynamics, or predictive power of the urban-rural cleavage in the long-term history of Canadian electoral politics.

In this article, we initiate a new research agenda on the development of the urban-rural cleavage in Canadian federal elections. Using a new measure of the urban or rural character of every federal electoral district in Canadian history, we focus on three aspects key to any analysis of durable electoral cleavages. First, we explain *when* the urban-rural electoral cleavage has existed in Canada, identifying three periods in which it is especially pronounced: the 1920s, the 1960s, and 2004–present. We argue that a durable urban-rural cleavage among the major parties emerged in the early 1960s, re-invigorated in 1993, and deepened after the Conservative Party's consolidation in 2003. Second, we outline *where* this divide has been present in Canada. Despite some regional variation, we show that the postwar urban-rural cleavage is pan-Canadian in scope. Finally, we assess the *importance* of the urban or rural character of districts for understanding the elections that take place within them. This analysis clarifies the periods in

which urbanity predicts district-level election outcomes. We find that the urban-rural cleavage has been more important in recent elections than at any point in Canada's history.

Our results lay the groundwork for future research on the causes and consequences of the urban-rural cleavage in Canadian elections. However, this article also introduces several important new findings in its own right. We provide new evidence that the political upheavals of the Diefenbaker era produced a durable urban-rural cleavage between the major political parties for the first time in Canadian history. This shift must be understood, we argue, as a crucial element of the federal party system transformation that occurred during the 1950s and 1960s. We also show that it is the Liberal Party, not the New Democratic Party, that enjoys a consistent urban advantage in federal elections; indeed, it is the Liberal Party that benefits most from an increasingly urban Parliament in an increasingly urban Canada. This Liberal urban advantage may help explain why a party whose national support has gradually declined has nevertheless managed to remain dominant in the late twentieth and early twenty-first centuries. We conclude by discussing how future research can build on our findings to explore urban representation in federal political institutions and policy, understand the relationship between the urban-rural electoral cleavage and public opinion, and explain how the political controversies and party strategies of the 1950s and 1960s forged a durable urban-rural cleavage whose size and importance has grown steadily larger over the past six decades.

# 2. The Urban-Rural Divide in Canadian Elections

Electoral divides between urban and rural districts have been a subject of growing attention among political scientists in recent years. This is especially true in the United States, where electoral geography manifests in a stark pattern: oceans of rural Republican red punctuated by urban islands of Democratic blue. In an extended treatment of this divide's

historical development, Rodden (2019) traces the roots of urban Democratic support to the early manufacturing era and New Deal, while also pointing to the party's more recent strength among urban knowledge workers. Similarly, Ogorzalek (2018) explores the New Deal–era emergence of an urban-rural cleavage in American voting behaviour and congressional coalitions, and its consequences for postwar federal politics and policy. Several excellent studies employ diverse methodological approaches to explain how urban and rural contexts affect political attitudes, behaviour, and social identities in the contemporary United States (Cramer, 2016; Gimpel et al., 2020). Explicitly or implicitly, these recent studies trace a lineage to foundational research in comparative politics and political sociology that recognized the urban-rural distinction as a formative national political cleavage (Lipset and Rokkan, 1967; Weber, 1958).

In Canada, despite a rich research tradition on agrarian political movements (e.g., Lipset, 1950), attention to long-term urban-rural divides has been limited. In general, existing research falls into two main genres. The first comprises studies of specific elections or time periods, which mention urban-rural cleavages as part of a larger narrative of an election outcome. These "passing mentions" were common in the 1960s, a period in which, as we will see below, the urban-rural cleavage re-emerged as an important feature of Canadian electoral politics. Many observers in the 1960s noticed this divide, though their interpretation of its sources and significance varied considerably (Alford, 1964; Irvine, 1964; Meisel, 1962; Regenstreif, 1965). Political scientists' attention to urban-rural cleavages faded in Canada through the 1970s and 1980s, as public and scholarly attention turned to regional and linguistic cleavages. By the 1990s, however, interest had re-emerged, especially in the work of Richard Johnston, who consistently emphasized the role of the urban-rural cleavage – particularly agrarian revolt – in Canadian political development (Johnston et al., 1992; Johnston, 2017). Flanagan's (2007, 2009)

accounts of the origin and legacies of the Reform, Canadian Alliance, and Conservative Parties also emphasize the importance of urban-rural division in Canadian politics. While important and valuable, these treatments are exceptions to the general pattern. Most Canadian political science research, even if it acknowledges urban-rural variation in party support, pays little attention to the evolution, size, or importance of this variation for more general understanding of Canadian elections and political development. Even if this minimal attention proves to have been appropriate – that is, even if the urban-rural cleavage is not very important in Canada relative to other countries – this choice can only be adjudicated with systematic empirical evidence. As we will see, the relative absence of attention to urban-rural electoral divisions in Canadian elections becomes increasingly difficult to defend as we move through the postwar era up to the present.

The second genre investigates variation in policy attitudes and political representation in urban and rural areas. For example, McGrane, Berdahl, and Bell (2017) explore variation in policy preferences among urban, suburban, and rural Canadians, as do Cutler and Jenkins (2000: 385), who argue that the urban-rural cleavage in political attitudes "does exist but it is neither as wide or as deep as is often suggested". Sayers (2013) investigates the role of urban-rural differences in cabinet selection, arguing that "city ministers" are common in recent cabinets even when controlling for other relevant differences between urban and rural MPs. And in a series of articles that is perhaps closest in spirit to the questions we pursue here, Walks (2004a, 2004b) examines spatial divides in political attitudes and representation, focusing primarily on the distinction between the core and postwar suburban zones of large metropolitan areas.

All of these studies offer valuable treatments of urban-rural polarization in specific contexts, and we make use of this work when interpreting our own findings below. Missing, however, are two essential ingredients for any systematic study of the urban-rural divide. First,

attention to the measurement challenges involved in analyzing urban-rural cleavages – how to measure a district's "urbanity" in a way that enables long-term comparative research – has been almost totally absent in Canadian research. As we will see, this absence is partly excused by the underdevelopment of methodological concerns in other countries. Second, and relatedly, we currently know little about the *long-term* history of urban-rural electoral division in Canada. Past work has offered clues as to where and when we might look, for example, periods of agrarian political mobilization, but we currently lack clear answers to the questions that animate this article: *when* and *where* has the urban-rural cleavage been present in Canadian politics, and *how important* is it for understanding district-level outcomes in Canadian federal elections.

We will undertake more detailed analysis of specific periods in Canadian political development in the future. In this article, however, we focus on the big picture: urban-rural variation in support for major national political parties. While we discuss several minor parties, we acknowledge that they receive limited treatment here. Urban-rural divides in support for these smaller parties in specific time periods – urban labour parties, prairie progressives, the Green Party, and so on – deserve serious attention, and our data and measures are well suited to, and lay the groundwork for, these more specific analyses.

## 3. Measuring the Urban-Rural Divide

Some political scientists have included urban/rural indicators in models of Canadian federal election outcomes and voting behaviour. Unfortunately, however, the theoretical and methodological issues involved in measuring the "urbanity" of an electoral district have been seriously neglected. To understand our own measurement approach, we begin by surveying the three major strategies that political scientists have employed to measure an electoral district's urban or rural character. A first approach, which we call "threshold" measures, defines a population threshold above which a community is considered "urban." Some American studies define urban communities as those with populations above 500,000 (Gamm and Kousser, 2013; Sauerzopf and Swanstrom, 1999). While effective as a rough proxy for urbanity in short-run analyses, fixed thresholds are inappropriate for longer-term research because the threshold of meaningful urbanization has changed dramatically over time; in Canada, a threshold of 50,000 would exclude all but the very largest cities in the 19th century, but would include places whose "urbanity" is questionable today.

A valuable improvement is to define a *dynamic* threshold that increases as a country grows. For example, Lieberman (2009) and Ogorzalek (2018) define American cities as places with at least 0.1% (one-thousandth) of the national population at each decennial census. This produces a rolling list of American cities with good face validity, allowing them to investigate urban-rural politics over the long term in a manner that is sensitive to evolving baseline levels of urbanization.

A second, "metropolitan" family of approaches defines urban and rural districts in relation to metropolitan areas as defined by statistics agencies. These distinguish urban cores, suburbs, and more distant rural areas on the basis of commuting patterns (USDA, 2020). Several American studies use this metropolitan approach (Scala and Johnson, 2017; Wolman and Marckini, 1998), and recent Canadian analyses of urban-rural and urban-suburban divides also depend on a metropolitan conceptualization (Cutler and Jenkins, 2000; McGrane, Berdahl, and Bell, 2017; Walks, 2004a, 2004b). While this approach may be useful for cross-sectional research, it breaks down over longer time periods because the methods used by statistics agencies to define metropolitan areas have changed over time, as has the scale of labour and

housing markets in relation to changing housing and transportation costs and the economic base. Changes to municipal boundaries through amalgamations and annexations also complicate making distinctions between core, suburban, and rural zones on the basis of territorial jurisdiction.

A third family of approaches might be called "indicator" measures. Here researchers choose a particular indicator of a district's urban or rural character, the most common of which is population density. This approach has yielded strong work in the United States, both historical (Rodden, 2019) and contemporary (Gimpel et al., 2020). In Canada, it is employed effectively in Sayers' (2013) study of cabinet selection, which includes multiple indicators of district urbanity. Once again, however, the choice of indicators is rarely explicitly theorized, and many studies rely on data and indicators that are unavailable over longer spans of time.

Each of these approaches has yielded useful findings on urban-rural electoral divisions. At present, however, district urbanity measures suffer from three important weaknesses. First, measures of district urbanity remain undertheorized. With very few exceptions (Ogorzalek, 2018; Sayers, 2013; Nemerever and Rogers, 2021), researchers spend little time explaining *why* a measurement strategy is preferable or *how* a measure may reliably capture the urban or rural character of districts. Second, with the exception of the dynamic threshold, researchers have not developed measures that enable systematic analysis over long timespans, during which the scale and socio-economic and physical character of urbanization has changed considerably. These weaknesses prevent conventional metropolitan and indicator approaches from being employed in long-term research. Finally, as is common in political science more generally, every study of which we are aware has assumed that a district's urban or rural character can be measured without error. In other political science subfields, such as democratization, methodologists have

demonstrated that this false precision can have serious consequences for inference (Treier and Jackman, 2008). There is every reason to believe that this is equally true of the urban-rural divide.

# 4. A New Long-Term Measure of District Urbanity

Given these weaknesses, we believe that political scientists have much to gain from adopting a measure of district urbanity that is theoretically grounded, enables long-term analysis, and explicitly acknowledges the uncertainty involved in measuring complex social phenomena. We therefore have three priorities for our own measure of district urbanity in Canada. The first is to build a measure that recognizes the *latent* quality of a district's urban or rural character. As urbanity is a multidimensional construct, a measure of district urbanity that incorporates multiple indicators is likely to generate a more theoretically satisfying and empirically valid summary of electoral districts.

Our second priority is to enable long-term analysis, which requires both theoretical and practical sensitivity. Theoretically, we must be aware that the meaning and importance of a particular measure as an indicator of urbanity might change over time. The most obvious example is population size, whose meaning will evolve as a country's population grows. Another is the economic base; earlier in history, urbanity may be strongly associated with manufacturing employment, while today services may be more important. More practically, we must be sensitive to the availability of consistent data across a long timespan. The earlier the era considered, the less likely that demographic and other data will have been consistently collected. In our study, this required not only careful selection of indicator variables, but also major new data collection efforts.

Finally, we believe that the study of the urban-rural cleavage requires explicit acknowledgement that its measurement necessarily involves uncertainty. As we will explain below, our measurement model allows us not only to better understand the uncertainty in our measure, but also to propagate this uncertainty through subsequent analyses, producing more robust findings. Following important work in other domains, including democratization (Treier and Jackman, 2008) and political ideology (Hare et al., 2015), we conceptualize urbanity as a latent variable and employ Bayesian estimation to measure it with uncertainty.

#### 4.1 Indicators of District Urbanity in Canada

The precise definition of an "urban" place is a subject of ongoing – and probably irreconcilable – discussion and debate. Nevertheless, many researchers implicitly or explicitly draw from foundational work in sociology, economics, geography, and urban history in emphasizing five central features of "urban" places: *size, institutionalization, density, economic activity*, and *social heterogeneity* (see Deuskar, 2015). In our measure, we begin by linking the *size* and *institutionalization* of urban settlements to produce a dynamic threshold indicator of urbanity. While the population size of a federal electoral district is not itself a useful measure of its urbanity, the proportion of its population living within large incorporated municipalities is. As the meaning of "large" varies over time, we follow Lieberman and Ogorzalek by adopting a dynamic threshold approach. A "large" municipality is defined as containing at least 0.1% of the national population at each census. Using paper and digital census volumes, we first compiled a list of every incorporated municipality whose population surpasses this threshold in each decennial census between 1871 to 2011. We then used paper and digital census records to record the proportion of each district's population residing within these large municipalities.

Our dynamic threshold indicator implicitly recognizes a second important feature of Canadian urban development: *institutionalization*. As demands for urban services multiply as rural crossroads expand into more substantial settlements, increasingly sophisticated local government institutions are established to meet them. A key indicator of this process is municipal incorporation, which brings with it democratic representative institutions, local taxation, and the fiscal and administrative capacity to provide services and infrastructure (Bloomfield, Bloomfield, and McCaskell, 1983; Wallis, 1994). Our dynamic threshold indicator thus includes only incorporated municipalities. The resulting indicator, which we have calculated for all districts from 1867 to the present, ranges from 0 (no one in the district resides in a large incorporated municipality) to 1 (everyone in the district resides in one).

Our third characteristic is *density*. Cities are defined by the concentration of human activity and the intensity of the built environment. We capture these aspects as population density and the proportion of the housing stock composed of apartments. To measure a district's density, we require both the district population (the numerator) and its land area (the denominator). Both of these values are readily available in digital form beginning with the 1987 representation order (RO). For earlier years, we transcribed district population counts from printed census volumes from the first national census in 1871 to 1986. To calculate consistent district land areas, we created a spatial dataset of district boundaries spanning the 13 ROs from 1892 to 2013.<sup>1</sup> We then calculated each district's land area (excluding water features) and population density. To capture the intensity of the built environment, we also extracted housing

<sup>&</sup>lt;sup>1</sup> Digital shapefiles are available for the 1987–2013 ROs. For the 1892–1976 ROs, we created digital boundary files from digital maps generously provided by cartographer J.P. Kirby and validated them against paper atlases and sheet maps. Prior to 1892, maps are not available, and must be reconstructed entirely from statutory descriptions (see Winearls, 1972). We are at work on this time-intensive task.

stock information from the census – apartments as a proportion of total dwellings – which is available for all but one decennial census since 1961.

Our fourth characteristic of urbanity is *economic activity*. Urbanization as a historical process is related to industrialization (Scott 1986). Urban places are therefore distinguished by their industrial and occupational profile, as it is in cities that value is added to natural resources through manufacturing and wealth is generated through producer services, while rural hinterlands are defined by primary-sector economic activities: farming, fishing and trapping, forestry, and other forms of natural resource extraction (ILO, 2018; Strange, 2016). While rural labour has historically been directed toward primary resource extraction – farming, fishing and trapping, mining, and forestry – urbanites toil in the secondary and tertiary sectors of the economy. We operationalize this aspect of urbanity as the proportion of the labour force working in non-primary industry occupations.

Our final characteristic is *social heterogeneity*. Sociologists have long viewed social heterogeneity as a defining feature of urban life, permitting encounter, conflict, and cooperation across groups (Wirth, 1938; Simmel, 1964). To capture this aspect of district urbanity, we prioritized census variables that have been measured consistently and comparably over time: religious denomination (1951–present) and visible minority status (1996–present).<sup>2</sup> As society has become more secular – 4.3 per cent of Canadians reported as atheists in the 1971 census, compared to 23.8 per cent in 2011 – race has become a more salient marker of diversity as immigration has transformed the Canadian population, and particularly in large metropolitan

<sup>&</sup>lt;sup>2</sup> We chose these over the census's ethnic origin or country of birth variables for two reasons. First, the categories vary considerably from one census to the next, making cross-time comparability impossible. Second, the census has in some years enabled respondents to select more than one ethnic origin, which creates the methodological problem of how to handle a wide range of response combinations.

areas. According to the 2016 census, 41 districts are majority non-white, and 84 per cent of visible minority Canadians live in the 120 ridings that correspond to the greater Toronto, Montréal, and Vancouver metropolitan regions (Taylor, 2021). We calculate a fractionalization index for each, indicating the relative heterogeneity of the population.

#### \*\*\* INSERT TABLE 1 HERE

Historical census data come from several sources. Blake (1984) aggregated district-level socio-demographic data for selected elections between 1908 and 1968 and Statistics Canada has disseminated selected census data at the electoral district scale since 1991 (RO 1987). However, Blake's datasets did not include all variables and documentation for all years required to construct our measure. To fill this gap, we assembled data from Statistics Canada's basic summary tabulation series for enumeration areas, the smallest geographic unit for which census data were disseminated between 1961 and 1996, and aggregated these data to federal electoral districts.<sup>3</sup>

The result of these data collection efforts, which we summarize in Table 1, is a comprehensive new dataset on each of the more than 4,000 federal electoral districts in Canada's post-Confederation history. Drawing on diverse research traditions, these indicators capture multiple distinct but correlated dimensions of urbanization and urban life.<sup>4</sup> While we will extend this dataset in future work, it is the most comprehensive aggregate data series on Canadian federal electoral districts ever constructed.

<sup>&</sup>lt;sup>3</sup> See the supplementary material for detailed information on the specific sources by census year.

<sup>&</sup>lt;sup>4</sup> See the supplementary material for the correlation among the indicators and their relationship with the latent variable for each RO.

Indicator	Measure	<b>ROs Covered</b>	Ν
Size and Institutionalization	% of district population in incorporated municipalities meeting dynamic population threshold	1867-present	4,057
Density			
– Population density	Population per square km (log)	1892–present	3,463
- Built environment	Apartments as % of housing stock	1952, 1976-present	1,789
Economic activity	Non-primary occupations as % of labour force	1947–present	2,285
Social heterogeneity			
– Religious diversity	Religious fractionalization index	1947–present	2,312
- Racial diversity	Racial fractionalization index	1996–present	949

# Table 1: Summary of Indicators

#### 4.2 Advantages of a Multiple-Indicator Measure of Urbanity

Our multiple-indicator approach to district urbanity, which conceptualizes the urbanity of an electoral district as a latent quality indicated by size, institutionalization, density, economic activity, and social heterogeneity, has both theoretical and empirical advantages over a singleindicator approach. Theoretically, as we have noted above, we draw on diverse disciplinary traditions of conceptualizing urbanity. Rather than insist that a single tradition captures the "true" meaning of urbanity, we believe a measure that incorporates each of these traditions brings greater theoretical richness to political science research on the urban-rural cleavage.

Empirically, the multiple-indicator approach also has the advantage of higher validity and lower measurement error, allowing each indicator to compensate for other indicators' weaknesses across space and time. A density-only measure, for instance, performs well for most urban districts, but falters when a district's population is mostly urban but also includes a large, lightly populated surrounding rural area – a common feature of many Canadian districts, especially in the first half of the twentieth century. In these circumstances, our dynamic threshold indicator helps to compensate for measurement error in the density indicator by recognizing the unevenness of human settlement. Similarly, our dynamic threshold indicator may itself falter in cases when a *municipality* is relatively small but is nestled within a recognizably urban region – such as the municipality of Westmount on the Island of Montréal – but this circumstance causes no trouble for the density, diversity, or economic indicators.<sup>5</sup> Each indicator thus helps to compensate for "edge cases" that would trouble a single-indicator approach.

<sup>&</sup>lt;sup>5</sup> We are grateful to Andrew Sancton for suggesting Westmount as an example.

As our indicators are related to one another, each capturing a distinct dimension of urbanity, our measure is *not* likely to generate markedly different results from those we might achieve from a single-indicator approach; indeed, in the online supplementary material, we show that the results of our main analysis below are substantively identical when using a density-only measure.<sup>6</sup> That said, measurement exercises like the one we undertake here have intrinsic value. Not only do they generate a new variable but they also reveal theoretical complexity and nuance. Measuring urbanity this way allows us to draw from the empirical strengths of multiple empirical indicators, and acknowledge the uncertainty involved in measuring such a complex socio-spatial phenomenon. Even more, it allows us to provide rigorous, empirical corroboration for a long and theoretically rich, interdisciplinary body of scholarship.

#### 4.3 Measuring Urbanity

We have argued that district urbanity is an unobserved latent variable whose presence is indicated by five core features: population size, institutionalization, density, economic base, and social heterogeneity. To measure this latent quantity, we employ the following Bayesian factor analysis model:<sup>7</sup>

$$y_{ikt} = \beta_{kt}\xi_{it} + \epsilon_{ikt}$$

Here, *i* refers to each electoral district for each of the *k* indicators in each of the *t* representation orders, and  $\xi$  is a latent measure of each district's urban or rural character. Additionally, for all indicators with the exception of the dynamic threshold, we allow the effect of  $\beta_k$  to vary by representation order according to a random walk process -  $\beta_{kt} \sim N(\beta_{kt-1}, 10)$ . We set  $\beta_{1t} = 1$ 

<sup>&</sup>lt;sup>6</sup> In our robustness test using a density-only model, we also provide additional evidence to support our latent measurement approach over a simpler density-only measure of district urbanity.

<sup>&</sup>lt;sup>7</sup> We exclude districts prior to RO 1892 because we have just one indicator, the dynamic threshold, for this period.

for the dynamic population threshold variable for all representation orders, ensuring that higher values of the latent variable indicate higher levels of urbanity. To fix the centre of the latent distribution, we set the electoral district with median values on all indicator variables to zero. We provide more information on the model, including detail on implementation and convergence, in the online supplementary material.

#### \*\*\* INSERT TABLE 2 HERE \*\*\*

Our measurement model allows us to construct an urbanity measure that satisfies the criteria outlined above: it is built on a theoretically defensible, multiple-indicator conceptualization of urbanity; it enables systematic long-term comparison; and it produces a measure which includes not only a point estimate for each district, but also a distribution of plausible urbanity scores. The uncertainty in our urbanity measure depends, appropriately, on the availability of the indicator variables; thus, uncertainty is higher in the earlier period, when fewer indicators are available.

To provide a basic validity check on the results of our measurement model, Table 2 describes characteristic electoral districts at five points in the urbanity distribution. The minimum end of the distribution contains extremely large and sparsely populated northern districts, such as Churchill River, a district that in 2003 encompassed the entire northern portion of the Manitoba. At the 25<sup>th</sup> percentile, districts remain mostly rural, but typically contain one or more small towns within their boundaries, such as the Ontario cottage country district of Parry Sound–Muskoka in 1952. Some settlements may fall below the dynamic population threshold or be unincorporated. At the median, we find geographically large districts containing larger towns

Percentile	Examples
Minimum	<ul> <li>Yukon, 1924: Entirety of Yukon Territory</li> <li>Churchill River, 2003: Entire northern portion of Manitoba, from Lake Winnipeg to the northern border</li> </ul>
25 <sup>th</sup> Percentile	<ul> <li>Parry Sound–Muskoka, 1952: Large district in Ontario "cottage country" containing several small towns</li> <li>Avalon, 2013: Most of Newfoundland's Avalon Peninsula, excluding St. John's but including Town of Carbonear</li> </ul>
Median	<ul> <li>Drummond, 1966: Central Québec district containing Drummondville</li> <li>Niagara West, 2013: Ontario district containing small towns such as Grimsby and Pelham and a small portion of St. Catharines</li> </ul>
75 <sup>th</sup> Percentile	<ul><li>Victoria, 1933: Medium-sized city of Victoria, BC</li><li>Calgary North, 1976: Northern portion of city of Calgary</li></ul>
Maximum	<ul><li>Cartier, 1933: Compact district in the core of Montréal</li><li>Toronto Centre, 2013: Compact district in the core of Toronto</li></ul>

 Table 2: Representative Sample of Districts, by Urbanity Percentile

(such as Drummondville in 1966) or small portions of cities (such as Niagara West in 2003). At the 75<sup>th</sup> percentile, districts have become recognizably urban, encompassing medium-sized cities such as Victoria, British Columbia or the outlying portions of larger cities like Calgary, Alberta. Finally, at the upper end of the distribution, we find compact districts in the cores of Canada's largest cities. Overall, this continuum from large rural districts through to compact urban districts suggests that our measure successfully captures differences in district urbanity over time and across geographic space. We provide additional detail on the urbanity measure, including overall distributions for each Representation Order, in the online supplementary material.

#### 4.4 Assessing the Urban-Rural Divide

Having constructed our measure of district urbanity for each federal electoral district in Canada, the final step was to join the urbanity measure with federal election results. We use a publicly available database of federal elections containing district-level results for every federal election in Canadian history.<sup>8</sup> Manually adding our unique federal electoral district identifier codes to the election results dataset enabled us to merge our district urbanity measure with district-level election results.<sup>9</sup>

To assess the relationship between party vote share and district urbanity, we fit separate linear models for each major party and election, regressing district-level vote share on district urbanity; these models include region fixed effects to account for differing overall levels of

<sup>&</sup>lt;sup>8</sup> The database is currently available from Semra Sevi, who added a hand-coded ID for federal candidates to an election results dataset previously distributed by the Government of Canada. See Sevi, Arel-Bundock, and Blais (2019). We updated the dataset to include the 2019 election results.

<sup>&</sup>lt;sup>9</sup> An important byproduct of our dataset construction process is the creation of a uniform system of identification codes for federal electoral districts. These enable the linkage of election results data to census data, and of both to boundary shapefiles, enabling spatial analysis and mapping. More detail is available in the online supplementary material.

urbanization across Canadian regions. We use Monte Carlo integration to propagate uncertainty in our district urbanity measure through these regression estimates, allowing for more robust estimates of the relationship between urbanity and electoral outcomes (Treier and Jackman, 2008).<sup>10</sup>

To assess the relative importance of the urban-rural cleavage across time, we fit two multinomial logistic regression models for each election, with the winning party in each district as our dependent variable: a "base" model containing regional dummies, and an "urbanity" model adding the district urbanity measure. We then compare the models to assess the improvement in model fit provided by district urbanity. In these models, we account for uncertainty in the urbanity variable by fitting each of the multinomial logit models for 1,000 distinct draws from the posterior distribution of our measurement model. This allows us to assess the improvement in model fit across 1,000 plausible urbanity values for each district at each election.

# 5. Results

#### 5.1 When Do We See the Urban-Rural Divide in Canada?

Figure 1 summarizes the relationship between district urbanity and party vote share for six major political parties from the 1896 election (the first held under the 1892 RO) to 2019. Each point in the figure represents a single election; points above the dotted horizontal line indicate a positive relationship between district urbanity and vote share ("urban advantage") and points below the dotted horizontal line indicate a negative relationship ("rural advantage"). Shaded areas represent 95% confidence regions. As noted above, these estimates are drawn from

<sup>&</sup>lt;sup>10</sup> The regions are British Columbia, Prairies, Ontario, Quebec, and Atlantic Canada. We provide more detail on the Monte Carlo integration procedure in the supplementary material.

models that include region fixed effects to account for differing levels of urbanization in Canadian regions. The estimates thus capture an estimate of the expected within-region difference in vote share associated with variation in district urbanity. The results in Figure 2 can be interpreted as the expected change in a party's vote share associated with a one-unit shift in district urbanity; this measure ranges from a minimum value of -1.5 to a maximum value of +1.5, and a one-unit shift can most easily be interpreted as the expected change in vote share associated with a shift from a median district to a 75<sup>th</sup> percentile district in Table 2.

While there is much to absorb in Figure 1, we focus on a few general highlights. The earliest evidence for an urban-rural divide in support for the major parties emerges in the wartime election of 1917. It persists through the emergence and decline of the Progressive Party in the 1920s before disappearing. After this brief interwar divide, a null pattern persists until 1962, when the Liberal Party develops an enduring and substantively large urban advantage over the Conservative Party. After a particularly dramatic surge in urban support in Pierre Trudeau's first election as liberal Leader in 1968, the Liberal Party's urban advantage has grown steadily from the early 1970s to the present. By 2019, a one-unit shift in a district's urbanity score is associated with an increase of more than eight percentage points in Liberal Party vote share. This is an extraordinary gap between the Liberal Party's expected performance in rural districts and its performance in cities.

The Conservative Party's trajectory after 1962 is somewhat more complex than that of the Liberals, with increases and decreases in rural advantage associated with changes in party leadership and more general patterns of Conservative boom and bust. The Progressive Conservative Party enjoyed a clear rural advantage in the late Diefenbaker years, which faded during the Stanfield and Clark leadership periods. The rural advantage then returned in the

1980s, reflecting Brian Mulroney's success in Québec's nationalist rural ridings. The rural advantage disappeared again during the PC Party's lean years in the 1990s, as the new Reform Party, Canadian Alliance, and Bloc Québécois stole a substantial portion of its rural base. When the Canadian Alliance and Progressive Conservative parties merged before the 2004 election, the rural advantage reappeared in dramatic fashion, and has remained very large ever since. Notice also that the trajectory of the Reform / Alliance party from 1988 to 2000 – which is included in the top plot in Figure 1 – provides the path that connects the Progressive Conservatives of the 1980s to the Conservative Party of the new millennium. In its rural advantage, at least, the figure testifies to the truth of Flanagan's (2009: x) remark that "the Conservative Party is the legitimate heir of Reform."

The results in the bottom plot of Figure 1, which summarize the CCF/NDP trajectory, are equally interesting. For the party's first quarter century, the wide shaded orange region, consistently overlapping the dotted zero line, tells a story of a party whose support was drawn from both urban working-class districts and more rural agrarian and resource hinterlands. The CCF's struggle to break out of this pattern ultimately led to the New Democratic Party, which sought to project a new image of a more modern – and urban – labour party (Young 1969). At first, this strategy was successful, as the NDP picked up a substantial urban vote share advantage in the 1962 election, its first under the new moniker, and retained that advantage for more than a decade. By 1974, however, the party's urban advantage disappeared, never to return.

#### \*\*\* INSERT FIGURE 1 HERE \*\*\*

#### \*\*\* INSERT FIGURE 2 HERE \*\*\*



## Figure 1: Urban/Rural Vote Share Advantages, By Party

Caption: Relationship between district vote share and district urbanity for each party and election. Positive values indicate urban advantage; negative values indicate rural advantage. Each coefficient is drawn from a district party-year regression model. Shaded areas represent 95% confidence regions.



# Figure 2: Urban/Rural Vote Share Advantages, by Party and Region

Caption: Relationship between district vote share and district urbanity for each party and election in each region. Each coefficient is drawn from a district party-year-region regression model. Shaded areas represent 95% confidence regions.

#### 5.2 Where Do We See the Urban-Rural Divide in Canada?

To explore the regional trajectories of the urban-rural divide in Canada, Figure 2 repeats the analysis in Figure 1, but does so within five Canadian regions. The large size of the confidence regions in some parts of the county and time periods means that we must proceed with caution when interpreting these sub-sample results. Nevertheless, the figure reveals several important and interesting patterns. First, and perhaps most importantly, the figure suggests that the Liberal Party's increasing urban support from the early 1960s to the present is a pan-Canadian phenomenon. The timing of the Liberal Party's consolidation of an urban advantage varies by region – in Atlantic Canada, for instance, the Liberal Party actually enjoyed a *rural* advantage until quite recently – but the overall trajectory in each region is steadily upward. Outside Atlantic Canada, the Liberal Party has been favoured in urban districts for several decades.

Once again, the story for the Conservative Party is more complex, volatile, and regionalized.<sup>11</sup> The regional breakdown clarifies the source of the urban-rural divide that briefly emerged in the 1917 election: the effect is most dramatic in Québec, where Conservative support among Anglo-Montréalers was sufficient to secure the party's only Québec riding. The Conservative Party's rural surge in Ontario, the Prairie provinces, and Québec during the Diefenbaker years is also visible in the figure, as is Mulroney's base of support in rural Québec in the 1980s. Despite localized volatility, the regional Conservative Party results display an overall downward tendency since the end of the Second World War, with an especially sharp drop in the early 2000s.

<sup>&</sup>lt;sup>11</sup> Note that this analysis does not include the Reform/Canadian Alliance Party.

As for the NDP, our results suggest that the overall lack of an urban or rural advantage for the CCF/NDP in Figure 1 above is not a function of different bases of support in different regions; large shaded regions and coefficients close to the zero line are particularly noticeable in British Columbia, the Prairies, and Ontario. Only in Atlantic Canada does the NDP enjoy a clear urban advantage, owing to its strength as an urban labour party in cities such as St. John's and Halifax. In Québec, the NDP's urban advantage through much of the 20th century is a function of its more general weakness in that province; the party was surely happy to see this "advantage" disappear in 2011 with Jack Layton's breakthrough in many rural Québec ridings.

#### 5.3 How Important is the Urban-Rural Divide?

Thus far we have surveyed the long-term trajectories of urban and rural support for major parties. But how important is district urbanity for understanding which parties win or lose? Figure 3 provides a preliminary answer to this question, summarizing the improvement in model fit provided by the district urbanity variable when added to a model containing nothing but regional intercepts. We construct this figure by carrying out multinomial logistic regression models of the winning party in each district for each general election. Then, we calculate the expected Proportional Reduction in Error (ePRE) described by Herron (1999). Consider the two models:  $M_R$  and  $M_{R+U}$ , the regional dummy and regional dummy plus urbanity models, respectively. From these two models, we then calculate the predicted probability for each of the *j* categories of the dependent variable:  $p_j^{(R)}$  and  $p_j^{(R+U)}$ . We can then calculate the probability that *y* takes on its observed value  $p_{[y_i]}^{(R)}$  and  $p_{[y_i]}^{(R+U), 12}$  We then calculate the ePRE as

<sup>12</sup> To be clear,  $p_{[y_i]}^{(R)}$  and  $p_{[y_i]}^{(R+U)}$  are vectors of length *n* of predicted probabilities. If  $y_i = 1$ , then  $p_{[y_i]}^{(R)} = p_1^{(R)}$ .

$$ePRE = \frac{1}{n} \sum_{i} \frac{p_{[y_i]}^{(R+U)} - p_{[y_i]}^{(R)}}{1 - p_{[y_i]}^{(R)}}$$

The y-axis values in the figure give the extent to which predicted probabilities that *y* takes on its observed value increase as a function of adding urbanity to the model. The figure can be interpreted as follows: if the shaded region is entirely above the horizontal dotted line, we can be confident that we are looking at an election in which a district's urbanity improves the predictive capacity of the model. Small values, like those indicated between the main periods of urban importance, indicate periods where the change in predicted probabilities is statistically different from zero, but substantively very small.

#### \*\*\* INSERT FIGURE 3 HERE \*\*\*

The results in Figure 3 add additional richness and context to our discussion above. The patterns in the figure suggest that, when we broaden our focus from major national parties to the larger array of parties elected to Canada's Parliament, the urban-rural divide has been especially important for understanding election outcomes in three distinct periods. The first period, from 1917 to 1926, covers the rise and fall of interwar agrarian political activism, with an additional surge in 1935 due to Social Credit's popularity in rural Canada. This urban-rural divide is at its peak during the period of the Progressive Party's success and its initial reabsorption into the Liberal Party in the early-to-mid-1920s.

The second period, as we have discussed above, represents the second half of the Diefenbaker era, beginning in 1962, when both the Liberal Party and the NDP enjoyed an urban advantage and the Conservative Party performed especially well in rural districts. This second





Caption: Improvement in model fit in a model with district urbanity and region indicators when compared with a model containing region indicators alone. Gray shaded regions represent 95% probability regions.

period peaked quickly in 1963 and then declined gradually to the end of the 1970s – a decline that is generated by the disappearance of Social Credit, the diminishing urban advantage of the NDP, and the less rural character of Conservative support during the Robert Stanfield and Joe Clark years.

The third period, which begins in 1993 and continues up to today, follows the opposite trajectory. The period begins with the Reform and Bloc Québécois breakthroughs in 1993, and then surges upward with the consolidation of the Conservative Party prior to the 2004 election, after which the significance of the urban-rural divide has dramatically increased. With the exception of 2011 (in which the importance of the urbanity variable is moderated by two factors, the New Democratic Party's temporary sweep of rural Québec and Conservative success in Ontario's suburban regions and smaller cities), the urban-rural divide has over the past 15 years been more valuable for understanding Canadian election outcomes than in any other period in Canadian history.<sup>13</sup>

# 6. Discussion

The urban-rural divide, long recognized by comparative scholars as one of the core cleavages of modern democratic politics, is playing an increasingly important role in Canadian federal elections. Using novel data on Canadian federal electoral districts from 1867 to the present, we have developed a new measure of district urbanity for each of Canada's federal electoral districts, which we employ in this article to assess the long-term development of urbanrural cleavages in Canadian federal election outcomes. In general, our analysis points to the rise and fall of urban-rural divides over three distinct periods: a wave of agrarian politics and urban

<sup>&</sup>lt;sup>13</sup> Comparing expected PRE values, we find that values for both the 2015 and 2019 elections are higher than previous peaks (1921 and 1968) more than 99.9% of the time; our data thus strongly suggest that district urbanity is more important for district-level outcomes today than at any point since 1896.

labour activism in the immediate aftermath of the First World War; a period of substantial electoral reconfiguration in the second half of the Diefenbaker era; and, most recently, a sharp increase in the urban-rural divide following the consolidation of the Conservative Party in 2004.

Several lessons - and many new questions - emerge from our results. For the moment, we wish to emphasize three particularly important findings for scholars of Canadian federal electoral politics. The first is the significance of the Diefenbaker era in general, and the elections of the early 1960s in particular, in setting a foundation for a postwar urban-rural cleavage that has persisted up to the present day. Political scientists in the early 1960s noticed the emerging urban-rural divide in the elections they were studying, and occasionally speculated on how durable that divide would be in future elections (Alford, 1964; Irvine, 1964; Meisel, 1962; Regenstreif, 1965). The answer, from a distance of nearly sixty years, is that the cleavage has proved to be very durable indeed: the Liberal Party has enjoyed a significant advantage in urban districts in every general election since 1962, and while Conservative rural support has been more variable, the urban-rural vote share divide between the two major parties has consistently been large and significant. Scholars of Canadian political development already recognize the importance of the Diefenbaker era in shaping the character of future Canadian federal elections (Johnston, 2017). The emergence of a durable urban-rural divide in this period must be recognized as a crucial dimension of this important reconfiguration.

Why did the elections of the early 1960s prove to be so important for the emergence of a persistent urban-rural cleavage? We hope to provide a more detailed answer to this question in future research; however, a preliminary survey of existing scholarship suggests that both "push" and "pull" factors were involved. On one side, Prime Minister Diefenbaker's identity as a small-town Prairie lawyer, and his bitter criticism of business and media elites in Canada's big cities,

may have pushed professionals and wealthy voters in urban areas away from their traditional loyalties (Regenstreif, 1965). At the same time, a profound transformation inside the Liberal Party, in which a set of highly educated urban professionals came to play a leading role both as strategists and political candidates, appears to have increased the Liberal Party's appeal in the urban context (Meisel, 1964; Regenstreif, 1965). These sociological shifts, combined with more immediate concerns among middle-class and wealthy voters about the Diefenbaker government's fiscal prudence, may help to explain the dramatic emergence of the urban-rural divide in the early 1960s. If correct, this explanation resembles arguments by Rodden (2019) regarding the urbanization of postwar support for the Democratic Party, which he links to rise of urban, well-educated "knowledge workers" with fiscally conservative and socially progressive attitudes.

A second important lesson we draw from our results in this article, which is closely related to the first, is that it is the *Liberal* Party that has consistently enjoyed an urban advantage in the post-war period. This seems to us a crucially important but overlooked aspect of the Liberal Party's dominance of the federal electoral landscape in the 20th century. As Richard Johnston has astutely noted, each time the Liberal Party returned to power after a period of Conservative government, it returned weaker than it had been before (Johnston et al., 1992). Given this secular decline, how is it that the Liberal Party has continued to dominate federal electoral politics? The answer is undeniably complex, and involves the national question, party divisions on the ideological right, and other factors, but our findings suggest that the Liberal Party's steady urban advantage after 1962 is an important ingredient in Liberal success.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> To be sure, constitutional protections for small provinces, coupled with large permitted variance in federal electoral district populations, mean that urban areas have been underrepresented in the Canadian Parliament. This disadvantages parties with urban support, such as the Liberals. Our argument, however, is that the Liberals benefit from their status as an increasingly urban party in an increasingly urban legislature – even if the benefit is not as large as it would be in the absence of structural under-representation.

#### \*\*\* INSERT FIGURE 4 HERE \*\*\*

To appreciate this point, consider the trend in Figure 4, which plots the distribution of district urbanity scores at each representation order from 1952 to present (the gray density regions) as well as the average urbanity of the Canadian Parliament (the vertical black lines). The steady rightward shift of the vertical black lines tells a story of an increasingly urban legislature, and the increasing density at the rightward end of the distributions, combined with the emptying out of the leftward portion of the distributions, illustrates the increasing weight of urban districts in Parliament's overall composition. Enhanced urban representation is not simply the result of urbanization as a generalized national process. It is also produced by periodic parliamentary redistributions, which have allocated new seats almost entirely to growing urban areas, and large metropolitan centres in particular. It may be no accident that the urbanization of parliamentary representation appears to have increased since Canada adopted independent electoral boundary commissions in the late 1960s. While variation in the population size of districts has favoured rural districts and small provinces, a party with a strong and growing vote share advantage in urban districts is in a strong position to win elections.

Our findings also shed light on the regional basis of the historical development of the New Democratic Party and its precursor. Today, the NDP is sometimes viewed as an urban party – the party of the latte and laptop crowd in city cores – that has lost touch with (rural) farmers and resource workers and (urban) organized labour that comprised its original coalition. Our analysis shows, however, that the NDP has not possessed a statistically significant advantage one way or the other nationally since the 1970s, and that this is true everywhere except Atlantic

Figure 4: District Urbanity, 1952–2019



*Caption: Distribution of district urbanity at each representation order (RO) from 1952 to the present. Vertical black lines within the distributions mark average district urbanity at each RO.* 

Canada, where the NDP has become a distinctly urban party. In light of Canada's single member plurality electoral system, the New Democratic Party appears to face a double disadvantage: not only is its support relatively diffuse *across* Canadian regions, it is also relatively diffuse across urban and rural ridings *within* regions, with support as likely in remote resource communities as in the heart of major cities.

Finally, and perhaps most obviously, our findings offer clear evidence that Canadians are currently experiencing the most profound urban-rural divide in support for the major political parties in the country's history. In no prior era has district urbanity been more clearly associated with election outcomes, nor has it ever been more firmly entrenched in the competition between the country's two historical governing parties, the Liberals and the Conservatives. The gap in party support between urban and rural districts is among the most important features of the contemporary Canadian political landscape.

## 7. Conclusion

Our purpose in this article has been to provide a descriptive foundation for a new research agenda on the role of urban-rural divides in the long-term development of Canadian federal electoral politics. By building a theoretically grounded measure of the urbanity of federal electoral districts spanning the entirety of post-Confederation history, we offer a novel historical portrait of the urban-rural divide in Canadian elections. We see substantial opportunity for future research to clarify and explain the findings outlined in this article.

Above all, political scientists should extend our big-picture findings by undertaking more focused studies of specific periods of Canadian political development, to better understand how and why urban-rural cleavages emerge and recede in Canadian federal politics. In the 1960s, for instance, did the urban-rural divide first emerge in party caucuses, reflecting a "caucus-first"

process recently described in another context by Godbout (2020), or do we see it first emerge in public attitudes and preferences, to which political parties then responded? For example, each of the three spikes in urbanity's importance to election outcomes correspond to periods of rapid urban growth and rising urban housing prices.<sup>15</sup> In-depth quantitative and qualitative studies of the 1950–70 and 1990–2010 periods have the potential to enrich both our empirical and theoretical understanding of the development of political cleavages and political institutions in Canada.

We must also investigate the representational consequences of the urban-rural divide in Canadian political institutions. For instance, our long-term measure of district urbanity enables an extension of Sayers' (2013) "city ministers" hypothesis to the full sweep of Canadian federal politics, reinvigorating earlier investigations of geographical representation in cabinet (Bakvis 1988). It will also allow us to assess the electoral consequences of widely differing levels of "voting strength" for urban and rural residents in Canada due to variation in district population, as well as how the adoption of non-partisan boundary commissions has shaped the representation of urban areas in Canada's Parliament.

Further, our analysis enables investigation of the policy effects of the urbanization of representation in national institutions. If the relative urbanity of party caucuses and cabinets is consequential to Canadian political life, it should be detectable in political discourse and policy agendas. Employing our district urbanity indicator in analyses of policy documents, party platforms, and parliamentary speech may unlock new understandings of the linkage between representation and governing agendas.

<sup>&</sup>lt;sup>15</sup> We are grateful to an anonymous reviewer for highlighting the latter fact.

Finally, our analysis opens the door to investigation of other, interacting processes, such as the political salience of suburbanism. It is common in Canada and elsewhere to portray suburbanites as swing voters whose alliance with urban and rural blocs determines elections (Ibbitson, 2021). Walks (2013) usefully casts suburbanism as a way of life that is independent of the spaces with which it is often identified; that is, "suburban" lifestyles may be found in locations with both urban and rural objective characteristics. Further analysis would illuminate the political implications of the changing relationship between signifiers of suburbanity – homeownership and automobile dependency, for example – and the urban-rural continuum.

# 8. References

- Alford, Robert R. 1964. "The Social Bases of Political Cleavage in 1962." In *Papers on the 1962 Election*, edited by John Meisel, 203–34. Toronto: University of Toronto Press.
- Bakvis, Herman. 1988. "Regional Ministers, National Policies and the Administrative State in Canada: The Regional Dimension in Cabinet Decision-Making, 1980–1984." *Canadian Journal of Political Science* 21 (3):539–567.
- Blake, Donald E. Canadian Census and Election Data, 1908–1968. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research [distributor], 2011-08-11. https://doi.org/10.3886/ICPSR00039.v2
- Bloomfield, Elizabeth, Gerald Bloomfield, and Peter McCaskell. 1983. Urban Growth and Local Services: The Development of Ontario Municipalities to 1981. Guelph, ON: Dept. of Geography, University of Guelph.
- CCRI. n.d. "Table: Population by census subdivisions, 1871–1951." http://web5.uottawa.ca/ccri/CCRI-portal-static/CCRI-portal-staticenglish/index.php@option=com\_content&task=view&id=632&itemid=223.htm

Cramer, Katherine J. 2016. The Politics of Resentment. Chicago: University of Chicago Press.

- Cutler, Fred, and Richard W. Jenkins. 2002. "Where One Lives and What One Thinks: Implications of the rural-urban cleavage for Canadian federalism." In *Canada: The state* of the federation 2001, edited by H.Telford and H. Lazar, 367-390. Montreal: McGill-Queen's University Press.
- Deuskar, Chandan. 2015. "What Does 'Urban' Mean?" Sustainable Cities. Blog. Washington, D.C.: World Bank. Last updated 2 June 2015.

https://blogs.worldbank.org/sustainablecities/what-does-urban-mean

Flanagan, Thomas. 2007. Harper's Team. Montreal: McGill-Queen's University Press.

. 2009. *Waiting for the Wave*. 2nd ed. Montreal: McGill-Queen's University Press.

- Gimpel, James G., Nathan Lovin, Bryant Moy, and Andrew Reeves. 2020. "The Urban-Rural Gulf in American Political Behavior." *Political Behavior* 42 (4): 1343–68. https://doi.org/10.1007/s1110 9-020-09601-w
- Godbout, Jean-François. 2020. Lost on Division: Party Unity in the Canadian Parliament. Toronto: University of Toronto Press.
- Hare, Christopher, David A Armstrong II, Ryan Bakker, Royce Carroll, Keith T Poole, Ryan
  Bakker, Royce Carroll, and Keith T Poole. 2015. "Perceptions Using Bayesian AldrichMcKelvey Scaling to Study Citizens' Ideological Preferences and Perceptions."
  American Journal of Political Science 59 (3): 759–74.
- Herron, M. 1999. "Postestimation Uncertainty in Limited Dependent Variable Models." *Political Analysis* 8 (1): 83–98.
- Ibbitson, John. 2021. "Erin O'Toole's Conservatives target suburban voters in election platform of thoughtful populism." *Globe and Mail*, 16 Aug.

- ILO. 2018. "Rural-Urban Labour Statistics (Room Document 3)." 20th International Conference of Labour Statisticians, Geneva. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms\_636038.pdf.
- Irvine, W. P. 1964. "An Analysis of Voting Shifts in Quebec." In *Papers on the 1962 Election*, edited by John Meisel, 129–43. Toronto: University of Toronto Press.
- Johnston, Richard. 2017. The Canadian Party System: An Analytic History. Vancouver: UBC Press.
- Johnston, Richard, André Blais, Henry E. Brady, and Jean Crête. 1992. *Letting the People Decide: Dynamics of a Canadian Election*. Montreal: McGill-Queen's University Press.
- Lieberman, Robert C. 2009. "The City and Exceptionalism in American Political Development."In *The City in American Political Development*, edited by Richardson Dilworth, 17–43.New York: Routledge.
- Lipset, Seymour Martin. 1950. Agrarian Socialism. Berkeley, CA: University of California Press.
- Lipset, Seymour Martin, and Stein Rokkan. 1967. "Cleavage Structures, Party Systems, and Voter Alignments: An Introduction." In *Party Systems and Voter Alignments: Cross-National Perspectives*, edited by Seymour Martin Lipset and Stein Rokkan, 1–64. New York, NY: Free Press.
- McGrane, David, Loleen Berdahl, and Scott Bell. 2017. "Moving beyond the urban/rural cleavage: Measuring values and policy preferences across residential zones in Canada." *Journal of Urban Affairs* 39 (1): 17–39. https://doi.org/10.1111/juaf.12294.
- Meisel, John. 1962. *The Canadian General Election of 1957*. Toronto: University of Toronto Press.

- ———. 1964. "An Analysis of the National Results." In *Papers on the 1962 Election*, edited by John Meisel, 272–88. Toronto: University of Toronto Press.
- Nemerever, Zoe, and Melissa Rogers. 2021. "Measuring the Rural Continuum in Political Science." *Political Analysis*, first view. doi: https://doi.org/10.1017/pan.2020.47
- Ogorzalek, Thomas. 2018. The Cities on the Hill: How Urban Institutions Tranform National Politics. Oxford: Oxford University Press.

Regenstreif, Peter. 1965. The Diefenbaker Interlude. Don Mills: Longmans.

- Rodden, Jonathan A. 2019. *Why Cities Lose: The Deep Roots of the Urban-Rural Political Divide*. New York: Basic Books.
- Rodríguez-Pose, Andrés. 2018. "The revenge of the places that don't matter (and what to do about it)." *Cambridge Journal of Regions, Economy and Society* 11 (1):189–209. doi: https://doi.org/10.1093/cjres/rsx024.

Sauerzopf, Richard, and Todd Swanstrom. 1999. "The urban electorate in presidential elections, 1920–1996." Urban Affairs Review 35 (1): 72–91.

https://doi.org/10.1177/10780879922184293.

- Sayers, Anthony M. 2013. "City Ministers: The Local Politics of Cabinet Selection." In *Parties, Elections, and the Future of Canadian Politics*, 94–118. Vancouver: UBC Press.
- Scala, Dante J., and Kenneth M. Johnson. 2017. "Political Polarization along the Rural-Urban Continuum? The Geography of the Presidential Vote, 2000–2016." *Annals of the American Academy of Political and Social Science* 672 (1): 162–84. https://doi.org/10.1177/0002716217712696.
- Scott, Allen J. 1986. "Industrialization and Urbanization: A Geographical Agenda." *Annals of the Association of American Geographers* 76 (1):25-37.

- Sevi, Semra, Vincent Arel-Bundock, and André Blais. 2019. "Do Women Get Fewer Votes?" *Canadian Journal of Political Science* 52 (1): 201–10.
- Simmel, Georg. "The Metropolis and Mental Life." In *The Sociology of Georg Simmel*, edited by Kurt H. Wolff. New York, NY: Free Press, 1964 [1903].
- Strange, William C. 2016. "Urban Agglomeration." In *The New Palgrave Dictionary of Economics*, 1-5. London: Palgrave Macmillan UK.
- Taylor, Zack. 2021. "The Political Geography of Immigration: Party Competition for Immigrants' Votes in Canada, 1997–2019." *American Review of Canadian Studies* 51 (1): 18–40.
- Treier, Shawn, and Simon Jackman. 2008. "Democracy as a latent variable." *American Journal of Political Science* 52 (1): 201–17. https://doi.org/10.1111/j.1540-5907.2007.00308.x.
- USDA. 2020. "Rural-Urban Continuum Codes." Washington, DC: Economic Research Services, Department of Agriculture. https://www.ers.usda.gov/data-products/rural-urbancontinuum-codes.aspx
- Walks, R. Alan. 2004a. "Place of residence, party preferences, and political attitudes in Canadian cities and suburbs." *Journal of Urban Affairs* 26 (3): 269–95. https://doi.org/10.1111/j.0735-2166.2004.00200.x.
- ———. 2004b. "Suburbanization, the vote, and changes in federal and provincial political representation and influence between inner cities and suburbs in large Canadian urban regions, 1945-1999." Urban Affairs Review 39 (4): 411–40.

https://doi.org/10.1177/1078087403260787.

——. 2013. "Suburbanism as a Way of Life, Slight Return." Urban Studies 50(8): 1471–1488.

Wallis, Allan D. 1994. "The Third Wave: Current Trends in Regional Governance." National Civic Review 83 (Summer/Fall):290–310.

Weber, Max. 1958. The City. Glencoe, IL: Free Press.

Winearls, Joan. 1972. "Federal Electoral Maps of Canada 1867–1970." Cartographica: The International Journal for Geographic Information and Geovisualization 9 (1):1-24. doi: 10.3138/U700-1579-12K7-3207.

Wirth, Louis. 1938. "Urbanism as a Way of Life." American Journal of Sociology 44(1): 1–24.

- Wolman, Harold, and Lisa Marckini. 1998. "Changes in central-city representation and influence in Congress since the 1960s." Urban Affairs Review 34 (2): 291–312. https://doi.org/10.1177/107808749803400205.
- Young, Walter D. 1969. *The Anatomy of a Party: The National CCF, 1932–61*. Toronto: University of Toronto Press.

# Supplementary Material

# Indicators and Federal Electoral Districts: Additional Detail

As noted in the main text, our measurement model incorporates six indicators of urbanity. Here we provide additional detail on our sources for each indicator.

- Dynamic threshold. For the 1871–1951 period, we retrieved population counts and incorporation status for census subdivisions from aggregate tables digitized by the Canadian Century Research Infrastructure. To compute the proportion of these municipalities' populations in each electoral district, we used district population breakdown tables in each decennial census volume. For later years we assembled data from decennial census data products available through the University of Toronto's Canadian Census Analyzer facility and Map and Data Library.
- Population density: FED populations were manually from paper census records for 1871-1976. To calculate each district's land area, the contemporary inland and coastal water features as defined in 2016 Census cartographic hydrologic boundary files was subtracted from the federal electoral district shapes, which contain generalized coastlines and omit lakes and rivers, after which the net land area was calculated using ArcGIS software.
- Apartments as a proportion of total dwellings. This variable is available in census records from 1961 onward. However, while the census included a housing type variable in 1971, the raw source data file required for our analysis could not be processed due to the absence of the required record layout file.
- Racial diversity. This variable is calculated from census data (see below for more detail) using the following racial fractionalization index:  $1 \sum_{i=1}^{N} s_i^2$ , where s represents each census racial group and i is each electoral district.
- Religious diversity. This variable is calculated from the Blake dataset for the 1951 census and from official census records for subsequent censuses (see below for more detail). We calculate religious diversity as a religious fractionalization index in the same manner as racial diversity above.

More generally, our sources for census-based indicators are as follows: data on religion and occupation for RO 1947 (Census 1951) are from Blake (1984). Data for religion, occupation, and housing stock for RO 1952 (Census 1961), RO 1966 (Census 1971), RO 1976 (Census 1981) are aggregated from the basic summary tabulation files available from the University of Toronto's Map and Data Library (https://mdl.library.utoronto.ca/collections/numeric-data/census-canada). All subsequent data are downloaded from the University of Toronto's Canadian Census Analyzer facility: RO 1987 (Census 1991), RO 1996 (Census 1996), RO 2003 (2006), and RO 2013 (Census 2016).

As we discussed in the main text, we have also created a uniform system of identification codes for each federal electoral district from 1867-2019. This ID code follows the logic of Statistics Canada's federal electoral district code, which is available starting in RO 1987 – a two digit province code, followed by a three-digit district code – to which we appended the four-digit RO year as a prefix. We constructed similar codes for the 1867–1976 ROs. From RO 1933 to RO 1976, we adopted standard numbering systems for electoral districts found in the redistribution statute or official atlases. In RO 1924 and earlier, we numbered districts based on their alphabetical order. We also corrected the inconsistent coding of the territories in different ROs and accounted for the creation of new provinces.

Table 1 and figure 1 provide quantitative and visual summaries of each of the indicator variables in the district urbanity measurement model.



Figure 1: Distribution of Indicator Variables, by Representation Order

id	N	mean	sd	min	max
Apartment Dwellers 1952	263	0.22	0.23	0.01	0.96
Apartment Dwellers 1976	282	0.23	0.19	0.01	0.88
Apartment Dwellers 1987	295	0.25	0.21	0.01	0.96
Apartment Dwellers 1996	302	0.25	0.20	0.02	0.95
Apartment Dwellers 2003	309	0.25	0.20	0.02	0.96
Apartment Dwellers 2013	338	0.26	0.21	0.02	0.97
Density 1892	207	602.78	2295.70	0.04	18343.37
Density 1902	228	703.18	2697.63	0.06	20245.23
Density 1914	230	989.93	3506.05	0.02	28865.48
Density 1924	241	1204.72	3962.18	0.01	34696.80
Density 1933	2/3	1356 72	3070 91	0.01	32608 70
Density 1955	245	1486 41	3960 42	0.01	28896.67
Density 1952	263	1400.41 1478.96	3721.67	0.01	27173.35
Density 1966	264	1482.73	3201 40	0.01	22732.69
Density 1976	282	1254.99	2389.96	0.01	16336.32
	005	1004.99	1075 00	0.01	10951.04
Density 1987	295	1094.88	1879.80	0.01	10351.94 11971.77
Density 1990	200	1100.21	1090.01	0.01	113/1.//
Density 2003	338	1203.24	1900.00 2186 14	0.01	16041.81
Dynamic Threshold 1892	207	0.16	2100.14	0.02	10941.81
	201	0.10	0.01	0.00	1.00
Dynamic Threshold 1903	228	0.18	0.32	0.00	1.00
Dynamic Threshold 1914	230	0.22	0.35	0.00	1.00
Dynamic Threshold 1924	241	0.26	0.38	0.00	1.00
Dynamic Threshold 1933	243	0.29	0.40	0.00	1.00
Dynamic Threshold 1947	260	0.32	0.40	0.00	1.00
Dynamic Threshold 1952	263	0.34	0.40	0.00	1.00
Dynamic Threshold 1966	264	0.44	0.42	0.00	1.00
Dynamic Threshold 1976	282	0.54	0.42	0.00	1.00
Dynamic Threshold 1987	295	0.54	0.43	0.00	1.00
Dynamic Threshold 1996	303	0.59	0.42	0.00	1.00
Dynamic Threshold 2003	309	0.63	0.40	0.00	1.00
Dynamic Threshold 2013	338	0.66	0.40	0.00	1.00
Non-Primary Occupation 1947	232	0.69	0.24	0.21	1.00
Non-Primary Occupation 1952	263	0.82	0.17	0.35	1.00
Non-Primary Occupation 1966	264	0.90	0.11	0.52	1.00
Non-Primary Occupation 1976	282	0.93	0.08	0.61	1.00
Non-Primary Occupation 1987	295	0.94	0.06	0.65	1.00
Non-Primary Occupation 1996	302	0.95	0.06	0.64	1.00
Non-Primary Occupation 2003	309	0.96	0.05	0.67	1.00
Non-Primary Occupation 2013	338	0.98	0.02	0.88	1.00
Pagial Divergity 1006	200	0.16	0.10	0.00	0.78
Racial Diversity 2003	302	0.10	0.19	0.00	0.78
Racial Diversity 2003	228	0.22	0.25	0.01	0.01
Religious Diversity 1947	259	0.30	0.20	0.00	0.05
Religious Diversity 1952	263	0.36	0.18	0.00	0.68
		0.44	0.00	0.01	0.50
Religious Diversity 1966	264	0.44	0.20	0.01	0.72
Religious Diversity 1970	282	0.44	0.20	0.03	0.73
Religious Diversity 1987	290 200	0.49	0.20	0.05	0.70 0.76
Religious Diversity 2003	302 300	0.03	0.19	0.00	0.70
Tenglous Diversity 2009	505	0.00	0.10	0.10	0.10
Religious Diversity 2013	338	0.57	0.15	0.11	0.76

Table 1: Summary Statistics for Indicator Variables

# Measurement Model and Analysis

We use a Bayesian factor analysis model to measure district urbanity. To improve model fit, we use the log of racial diversity and apartment dwellings, and transform non-primary occupation using a Box-Cox transformation. Figure 2 summarizes the correlations among these six indicators.



Figure 2: Correlations Among Urbanity Indicator Variables

We implement our model in JAGS, drawing 5,000 posterior samples from each of two chains following a burn-in period of 10,000 iterations. Post-estimation quantities (such as r-hat values and effective number of samples) provide good evidence of convergence.

Figure 3 summarizes the relationship between each indicator and the latent variable at each Representation Order.

We use Monte Carlo integration to propagate uncertainty in the urbanity measure through our subsequent party vote share analyses. We first select a random subset of 1,000 posterior draws from the measurement model; each of these draws captures a vector of plausible district urbanity scores. We then regress party vote share on district urbanity (with region fixed effects) 1,000 times, using a distinct vector of urbanity values in each iteration. We take a random draw from the posterior distribution of  $\beta_{urbanity}$  for each of the 1,000 models; more specifically, we draw from the multivariate normal distribution of the model and record our draw for  $\beta urbanity$  in each iteration. Summarizing the median and 95% probability bounds of this distribution of 1,000 draws provides our estimate of the relationship between urbanity and party vote share, incorporating uncertainty in the latent variable.

We repeat this procedure for each party in the analysis (Conservative, Liberal, CCF/NDP, and Reform/Alliance) at each election to produce the results summarized in Figure 1 in the main text. We then repeat the procedure within each of the five regions to produce the results in Figure 2.



Figure 3: Relationship Between Indicators and Urbanity Measure

ro	Ν	mean	$\operatorname{sd}$	min	max
1892	207	-0.49	0.67	-1.52	1.58
1903	223	-0.47	0.69	-1.46	1.55
1914	230	-0.38	0.74	-1.63	1.61
1924	241	-0.31	0.80	-1.71	1.61
1933	243	-0.23	0.83	-1.68	1.59
1947 1952 1966 1976 1987 1996	259 263 264 282 295 302	-0.41 -0.28 -0.01 0.15 0.21 0.22	0.75 0.82 0.88 0.90 0.90 0.89	-1.67 -1.65 -1.36 -1.36 -1.31 -1.66	$1.32 \\ 1.28 \\ 1.37 \\ 1.46 \\ 1.51 \\ 1.53$
2003	308	0.35	0.86	-1.51	1.54
2013	338	0.51	0.82	-1.23	1.66

Table 2: Summary Statistics for Urbanity Measure

# **Urbanity Measure: Summary Statistics**

Table 2 and figure 4 provide quantitative and visual summaries of our district urbanity measure at each Representation Order.



Figure 4: Distribution of Latent Variable, by Representation Order

# **Robustness: Density Indicator**

To demonstrate that our results are not driven by the varying presence of particular indicators in the measurement model, figure 5 summarizes our vote share models in the main text using population density rather than our latent measure as the independent variable of interest. The results are substantively identical to those reported in the main text.

While our overall results are substantively identical using the density indicator, we re-emphasize our argument in the main text that there are several advantages to our latent urbanity approach. For example, when we compare multinomial logit models using log density versus our latent measure, AIC comparisons strongly favour the urban latent measure 9 times out of 36 and favour the log density model zero times out of 36. A Clarke Test on the two models suggests that the latent urbanity model is statistically better than the log density model for 15 of 36 general elections and the log density model is better in just 4 of 36 years. Thus, while the overall trends look similar, we have good reason to believe that our latent measure leads to a reduction in measurement error and an improvement in model fit over a more basic population density measure.





CCF / NDP



Figure 5: Party Vote Share Analysis with District Population Density