Urban Regimes and Election Finance: The Impact of Campaign Contributions on Electoral Outcomes

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BA, Simon Fraser University, 2013

Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Urban Studies

in the
Urban Studies Program
Faculty of Arts and Social Sciences

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Abstract

The tenets of urban regime and growth machine theories suppose that corporate elites have an outsized influence over the municipal decisions making process. Clarence Stone and Harvey Molotch state that relationships between the business community and policy makers exist to advance economic development, creating an informal arrangement that has a significant impact on the evolution of cities. However, neither Stone nor Molotch explain how the power and influence of the business elite is exercised on the ground. This thesis looks at the role campaign contributions play in electoral outcomes and examines the following question: what impact does money have on electoral success in municipal politics and who benefits from the current campaign finance paradigm? Using quantitative analysis of data culled from financial disclosure documents from the 2014 civic elections in Metro Vancouver, this thesis is able determine that campaign contributions and spending have a significant impact on electoral success. Funds have been categorized into donor groupings, making it possible to determine which types of contributors, be they individuals, labour groups, developers or corporate interests, have the best outcomes for the candidates they support. Key findings: Regression analysis shows that both campaign contributions and campaign spending have a significant impact on vote totals, particularly in the early stages. For example, the first \$1,000 in spending or donations corresponds with the highest increase in the number of ballots cast for a given candidate, while the impact money has on vote totals decreases as contributions and donations increase. The thesis also examines the role incumbency plays in electoral success and demonstrates how corporate regimes use their financial resources to influence policy makers and electoral outcomes.

Keywords: Urban regimes; growth machines; campaign finance; municipal politics; planning and development;

Dedication

To Saskia, Mabel and Rupert.

Acknowledgements

I am grateful for the insights and guidance provided by my senior supervisor, Dr. Anthony Perl, who was instrumental in giving direction throughout the writing and researching process. His help has allowed me to be successful in the program and with my M.Urb work. I am also thankful to the many instructors I have had the opportunity to work with during my time in the Simon Fraser University Urban Studies program, including Dr. Peter Hall, Dr. Mark Pickup, Dr. Patrick Smith, Dr. Matt Hern, Dr. Tiffany Muller Myrdahl, Dr. Karen Ferguson and supervisor Dr. Meg Holden. I also want to thank my wife, Saskia Morgan, whose support has been essential to the completion of this work.

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List of Acronyms

LGETF Local Government Elections Task Force

LCFA Local Campaign Finance Act

LCA Local Government Act
OMB Ontario Municipal Board

Chapter 1. Introduction

1.1. Research Question

The tenets of urban regime and growth machine theories suppose that a corporate elite oversees the municipal decision-making process to bolster economic development and serve their own financial interests (Molotch 1976, Stone 1989). The informal arrangements between the business community and policy makers has a significant impact on the development of cities and leads to actions that often run counter to the will of residents. However, while theorists like Clarence Stone and Harvey Molotch argue that corporate interests have some degree of control over planning and development, they do not outline how this influence is exercised in practice. This thesis looks at the role that campaign contributions play in bringing voters to the polls and whether donations are a tool used by elites to maintain their influence over policy decisions. The central question is: What impact do campaign donations and spending have on electoral success in municipal politics and who benefits from the current campaign finance paradigm?

Using data culled from financial disclosure forms collected following the 2014 civic election in Metro Vancouver, regression analysis was conducted to improve our understanding of the relationship between campaign donations, campaign spending and vote totals. Metro Vancouver is a partnership made up of 21 municipalities, an electoral area and the Tsawwassen First Nation, with a total population of close to 2.4 million people. The municipalities range in size from the largest — Vancouver — with a population of 640,915, to the smallest — Belcarra — with 690 residents. The region is expected to experience significant ongoing growth in the coming decades, with close to one million people forecasted to move into the area by 2041 (Metro Vancouver 2010).

Civic election campaigns are not low-cost affairs and many columnists and media outlets have criticized the corrupting influence money has over local politics (Jackson

2016, Mackin 2015). The 2014 municipal elections in Metro Vancouver saw a record number of donations, with millions being spent across the region on campaigns and getout-the-vote efforts (Lupick 2015). Municipalities are tasked with a myriad responsibilities, from rezoning land and subdividing property to signing union contracts with employees and hiring city managers. Many of the entities that fund the candidates on their way to power benefit financially from council decisions. The nature of municipal government puts special emphasis on real estate development. In Metro Vancouver, companies like Bosa Properties and the Beedie Group have the most to gain — or lose — from land-use decisions that allow for the re-designation and subdivision of property. Not surprisingly, the development industry is also the largest contributor in the dataset used for this research, with donations from development and development-related companies making up 31.6 per cent of the \$9.5 million in total donations and 57.7 per cent of all corporate contributions.

The conflict of interest — real or perceived — between donors and policy makers risk undermining the municipal system. Residents begin to feel that they have no input on the decision-making process, which can lead to a belief that their elected officials seek to only serve their financial contributors. Statistical analysis outlined in Chapter 4 of this thesis shows that Metro Vancouver residents are right to be concerned. Regression models demonstrate the significant and positive impact campaign contributions and campaign spending have on vote totals, making funding a key component to electoral success. With incumbent candidates receiving the bulk of the campaign contributions, it is easy to see how elites maintain influence over policy makers. In the 2014 race, 82.8 per cent of incumbents were re-elected, indicating that once mayors and councillors who adhere to the pro-growth agenda are in place, they are incredibly difficult to dislodge, a factor that is significant to the urban regime and growth machine theories. If there is a corporate elite overseeing municipal decision making, as Stone and Molotch suggest, money is one of the most important elements in preserving control over the civic power structure.

1.2. Money in Politics

Larger Metro Vancouver municipalities, like the City of Vancouver and the City of Surrey, are not the only communities with expensive municipal elections, according to the dataset used for this research. Generous sums were also spent in mid-sized suburbs like Coquitlam, Maple Ridge and the Township of Langley. In Delta, for example, the council candidate who raised the least while still managing to win a seat took in \$15,493 in contributions for her campaign. The successfully elected council candidate who received the most donations in that race raised \$42,720. For a community the size of Delta, which has a population of 99,863 people, these sums can create a high bar for entry into the political arena, requiring candidates to raise and spend tens of thousands of dollars to ensure their campaigns are viable.

Historically, oversight of the financial disclosure process in civic elections in British Columbia has been conducted by staff in each individual municipality, leading to rule interpretations — particularly around the issue of disclosure — that differed from city to city. During the 2008 election, for example, I found that some municipalities posted all campaign documents on their city websites, while others would only allow the forms to be viewed in person at the clerk's office at city hall. Vetting the documents also appeared to be problematic. Analysis that I conducted of those forms from that time show that many are rife with uncorrected errors, containing everything from simple arithmetic mistakes and misspelled company names to unaccounted for dollar amounts and expense totals that do not align with donation totals.

Perhaps not surprisingly, a series of finance irregularities during the 2008 campaign highlighted the lack of enforcement and oversight over the disclosure process (Barrett 2010). This led to the creation of the Local Government Election Task Force (LGETF), whose chair described the current system as the "Wild West", and went about proposing changes to the civic election process and closing the gaps and loopholes that existed in the *Local Government Act* (LGA) and the *Local Campaign Financing Act* (LCFA, LGETF Terms of Reference 2010). Some of these changes are still coming into effect today, including spending limits, which will be in place in time for the 2018 election. However, for the purposes of this research, the most important changes occurred prior to

2014 and relate to the handling of financial disclosure documents. Unlike past campaigns, all candidate forms are now collected by Elections BC, which means today there is a province-wide standard for disclosure and transparency. With the 2014 financial disclosure documents brought under the purview of one provincial organization, researchers now have a consistent and accessible source of data that can be measured and analyzed. The changes allow for the in-depth research and exploration of the relationship between money and municipal electoral success, which will be outlined in detail in the following chapters.

Chapter 2. Literature Review

2.1. Overview

The role elites play in municipal policy-making is a long debated topic in urban affairs. Harvey Molotch's quintessential work "The City as a Growth Machine: Toward a Political Economy of Place" argues that "the political and economic essence of virtually any given locality, in the present American context, is growth" (Molotch 1976, 310). The business community and landowner interests push these policies to enhance economic development and draw more people into the municipality, with the goal of increasing real estate values and expanding the consumer population. Decisions ranging from where a bus stop should be located to freeway construction and expansion are all made to enhance a community's ability to compete for growth (Molotch 1976).

If Molotch's work explains why elites seek to influence municipal policy, Stone's Regime Politics: Governing Atlanta, 1945-1986 demonstrates how it occurs. While the definition of a regime has transformed in the three decades since Stone's groundbreaking work was published, the basic tenets still apply in most North American cities today. Stone defines a regime as "the informal arrangements that surround and complement the formal workings of governmental authority" (Stone 1989, 3). He describes an unofficial compact between business elites and city hall, without which governance in Atlanta would have been less effective. As Michael Jones-Correa and Diane Wong explain, "regimes, in Stone's view, are a necessary response to the need for concerted, enduring political action" (Jones-Correa & Wong 2015, 161). These regimes are often united to enable growth and increase economic development in a city.

2.2. The Politics of Growth Machines

Many of Stone's assertions overlap with the growth machine concept. While a major goal of economic development is to increase land values, growth benefits businesses and local institutions in a variety of other ways. Colleges and universities, for example, rely on a growing population to increase enrolment and justify expansion

(Molotch 1976), while the service industry may see growth as a way of increasing its pool of potential customers. Another example is the media, which Molotch argues often acts as a booster for pro-growth initiatives because their financial status "tends to be wed to the size of the locality" (Molotch 1976, 315). Because these corporate entities and public institutions benefit from economic development and population expansion, they tend to become allies in the push for pro-growth policies. The author notes that while sports franchises, festivals and city-sponsored events may entertain residents, they are merely tools to unite the community behind expansionist economic development programs. Even organizations and corporate entities that are not directly tied to a given city may lend support to pro-growth initiatives as an adherent to what Molotch describes as a pro-growth ideology (Molotch 314-315).

The desire for growth provides the key operative motivation toward consensus for members of politically mobilized local elites, however split they might be on other issues, and that common interest in growth is the overriding commonality among important people in a given locale — at least insofar as they have any important local goals at all. Further, this growth imperative is the most important constraint upon available options for local initiatives in social and economic reform. It is thus that I argue that the very essence of a locality is its operation as a growth machine (Molotch 1976, 310).

The political class tasked with overseeing the growth machine generally works in lockstep with the corporate elites (Molotch 1976). In fact, elected officials tend to be members of, or closely associated with, the business community, and generally bring an economic development focus to their role. Molotch states those that do not come from a corporate background are encouraged to back pro-growth policies in exchange for campaign support and financial contributions. "Certain moral zealots and 'concerned citizens' go into politics to right symbolic wrongs; but the money and other supports which make them viable as politicians is usually non-symbolic" (Molotch 1976, 318). That does not stop politicians from basing their campaigns on these "symbolic issues." Political platforms tend to highlight matters like the environment, social problems and distributive issues, however once elected the focus quickly returns to what Molotch refers to as the "land business" (Molotch 1976, 318). While most people who get involved in the civic process do so with the best intentions, success requires some level of support from elite interests with vast financial resources. As a result, city councils do not statistically reflect

the local population in terms of race, gender and social class and the policies enacted at the council table generally reflect this imbalance (Molotch 1976, 318).

2.3. Regime Politics in Atlanta

Insights into how corporate elites dominate municipal policy-making are outlined in detail in Stone's Regime Politics, where he analyses a four-decade, post-war period in Atlanta. While the municipal government was democratically elected with a council that closely reflected the changing racial demographics of the city during this time, it did little to alter the hold that the business community had over planning and development. In Regime Politics in Geography, Katherine B. Hankins explains that despite Atlantans electing a pro-social justice mayor in the 1970s, the city's policy agenda continued unchanged, with an emphasis on growth-machine initiatives that entailed increasing the city's economic competitiveness and attracting new investment. In some cases, the regime steered city decisions in a direction that favoured greater economic development, while in other cases policies deemed problematic to the elite were halted altogether (Hankins 2015). For example, when a proposal came forward to locate a piggyback commercial freight exchange in a historic neighbourhood of Atlanta, citizens were outraged (Stone 1989). The facility involved dramatically increasing truck and rail traffic in a vibrant area populated by a significant number of residents. A No Intown Piggyback (NIP) community organization was launched and formidable opposition led the mayor to eventually veto the project. However, after fierce lobbying, legal action and a threat to move the freight exchange to another municipality, Atlanta's regime prevailed and the project was eventually allowed to go forward (Stone 1989). A similar situation occurred around the construction of the Carter Library, which included a new highway through another historic area of the city. The Coalition Against Unnecessary Thoroughfares in Older Neighbourhoods (CAUTION) formed to oppose the Presidential Parkway, and while some concessions were made, the four-lane roadway was eventually built (Stone 1989).

Stone believes these neighborhood movements were unsuccessful because they sprang up around specific issues and were unable to mobilize pressure over long periods of time. Even progressive changes like the implementation of civil rights, which Atlanta adopted more quickly and successfully than many of its southern municipal counterparts,

required the support of the urban regime. Stone argues that corporate elites may not have agreed with desegregation, but the regime adopted a moderate approach on the issue after it saw the potential economic problems that could arise if Atlanta was painted with a similar brush as other racial hotbeds in the American south. "As members of a biracial governing coalition, business leaders learned to link their desire for economic prosperity with abandonment of die-hard segregation" (Stone 1989, 160). These compromises among members of the elite at key points in the city's history made it possible for the regime to endure longer than any neighbourhood movement ever could.

Most people are motivated by issues that directly affect their lives or their immediate neighbourhood, a behavioural tendency Stone said made it difficult for community groups to oppose the regime. He writes that in Atlanta, many people did not have the time or ability to fully understand the step-by-step changes that were taking place around them. "As occurs piece by piece, the process gathers momentum and takes on the appearance of inevitability. Eventually... area solidarity is broken by the fragmented and staged impact of development" (Stone 1989, 124). This is an issue with which many Metro Vancouver residents can likely relate. Development decisions can take years to implement, starting out as lines on a map or changes to a neighbourhood plan long before shovels hit the ground. Without an ability to put the incremental decisions into the larger context, Stone writes that residents can feel like they have been steamrolled by the process. "Only when development moves closer do they act to defend their neighbourhood, unless they too have come to view the process as inevitable" (Stone 1989, 124). Stone notes that developers often take a short-term view of community planning. They generally operate outside of the cities where they work and do not necessarily share the same concerns around development projects as residents.

The findings outlined in *Regime Politics* still apply today and continue to play an important role in explaining coalitions between politicians and business elites at the municipal level (Mossberger & Stoker 2001). In "Regime Theory and Urban Politics" from *Theories of Urban Politics* (Judge et al. 1995), Stoker states that the archetype has evolved to include more abstract notions of community power, which should not be seen merely as a way of getting one actor "to do something they would not otherwise do. In a complex society, the crucial act of power is the capacity to provide leadership and a mode

of operation that enables significant tasks to be done. This is the power of social production" (Judge et al. 1995, 69). Stone acknowledges that the world has changed since his work was published in 1989. In *Reflections on Regime Politics: From Governing Coalition to Urban Political Order* (Stone 2015) he updated some of his thoughts on the subject, noting that "governing has become more diffuse and fragmented" (Stone 2015, 109) than during the period covered by his book. The added complexity means there are more agendas at work, which has made it difficult to analyze city decisions through the lens of an all-encompassing regime. Instead, Stone states that today he prefers to look at the regimes as a "political order" that is a "cluster of evolving relationships anchored in the city and extending into an intergovernmental dimension" (Stone 2015, 109). According to Stone, refining the definition of regime as a more multi-tiered entity allows for greater comparison across time and cities.

2.4. Regime Politics in Metro Vancouver

Evidence of informal arrangements between the business community and councils can be found in most major municipalities in Metro Vancouver. Seventeen chambers of commerce and boards of trade operate throughout the region, while at the neighbourhood level 21 business improvement associations exist in the City of Vancouver alone. These entities allow the business community to forge relationships with local politicians through various networking events. In Metro Vancouver, the regime also works at the regional level, demonstrating the multi-tiered aspects of modern informal arrangements described by Stone's updated definition of regimes. Personal bonds are an important aspect of regime maintenance. Often, chambers of commerce and boards of trade give permanence to the business elite in a community, providing a base of support that is particularly helpful when a given corporation is not headquartered in the community in which they hope to pursue their project or initiative (Stone 1989, 171). These cross-boundary relationships demonstrate the importance of a shared pro-growth ideology described by Molotch.

While many elite interests are involved in Metro Vancouver's political order, the development industry has perhaps the most to gain through land use decisions. If cities and councils are motivated by growth, developers appear happy to accommodate, forging relationships with policy makers that are often reinforced with campaign contributions. As

will be shown in the analysis chapter, developers make up a significant percentage of the overall campaign donations in Metro Vancouver. These contributions correspond with increased vote totals and improved electoral outcomes, giving the real estate industry considerable sway over elected council members. Donors can further increase their influence by highlighting the job growth and economic spinoffs that come with large construction projects, which increase the tax base and bring new businesses into the locality.

There are even more direct tradeoffs between civic governments and the real estate development industry, like development cost charges, which are provinciallymandated funds that are required to be paid by the company undertaking a development to the city for new sidewalks, roads and utility improvements related to a given development (Local Government Act, Vancouver Charter). In many cases, developers will go beyond what is required by provincial law, offering up money to municipalities for everything from trail improvements and park upgrades to new community centres and recreation facilities in the form of community amenity contributions. Developers are often able to placate community organizations, giving a percentage of their units for affordable/rental housing or building space for childcare facilities and community centres. Stone said these public-private partnership arrangements can be problematic because they often enhance development capital (Stone 1989). As cities become more reliant on corporate interests for amenities like parks and recreation facilities that are appreciated by their residents, developers have a stronger bargaining position when putting their projects forward. For example, a developer may offer funds for the improvement of a nearby park or green space in exchange for more density and a higher number of units of market housing. These kinds of investments can help increase the overall profits of a development project while making them politically difficult for a council to oppose. The developer can again benefit by using the upgraded park as a selling feature when bringing their condo units to market.

A cozy relationship between the corporate interests and councils can also increase the propensity for unsustainable growth. In *Funding City Politics: Municipal Campaign Funding and Property Development in the Greater Toronto Area*, Robert MacDermid explains that because the development of land is profitable for both the developers and

city hall, it incentivizes sprawl (MacDermid 2009). He states that this can lead directly to unsustainable expansion, with its environmental degradation and high transportation costs. MacDermid also tries to draw parallels between development support and council decisions. His investigation of Vaughn, Ontario, where he analyzed votes on development variances, official community plan amendments and property division, found that a majority of decisions that benefited the development industry were unanimously approved by councillors with financial support from developers (MacDermid 2009). While this thesis does not attempt to replicate MacDermid's work, the steps he has made in his analysis of Vaughn could be an avenue for future research in Metro Vancouver.

Understanding why a politician has voted a certain way on an issue or policy is a complicated task and research on the subject is limited at the municipal level. However, studies at the federal level have been conducted to better understand the relationship between campaign donations and the voting behaviour of legislators. Chappell (1982) found that while much of the research suggests some kind of quid pro quo between donors and policy makers, "votes are often decided on the basis of personal ideology" (Chappell 1982, 83). He suggests that donors tend to gravitate toward candidates that already share a similar political philosophy rather than using their contributions as a way of influencing a politician's behaviour.

A larger body of evidence, however, suggests that contributors expect a return on their donations. Comparing campaign donations with congressional voting records in the United States, Stratmann (1995) asserts that five of seven votes he analyzed on agricultural price supports and quotas taken in the House of Representatives in 1981 and 1985 would have failed had it not been for campaign contributions from farming interests. The timing of the donation was also a factor. "Contributions that are given at approximately the same time as the vote have a larger impact on congressional voting behaviour than contributions that the legislator received to win the last popular election. Thus, it appears the contract between a PAC and a legislator required an immediate and higher payoff than a payoff conditional on the recipient's election success" (Stratmann 1995, 127).

Snyder (1990) takes Stratmann's conclusion one step further, suggesting that candidates actively vie for the assistance of donors and compete for contributions,

referring to the exchange as "a simple asset market" (Snyder 1990, 1195). He notes that most studies approach the question of campaign contributions and political favours from the perspective of a donor interest looking to curry favour with policy makers. Snyder's study is taken from the viewpoint of the candidate, who he suggests needs the contributors to increase their chances of electoral success. "Candidates for elective offices, in turn, desire the contributions to help them win office. Successful candidates are able to supply the benefits demanded by the 'investor-contributors'" (Snyder 1990, 1195). The transactional approach, which is supported by the findings of Ben-Zion and Eytan (1974), is an example of the issues that can arise when politicians become reliant on special interests to maintain their positions.

2.5. Money and Influence

The methods by which pro-growth business interests exercise their influence over councils goes beyond building and paying for community amenities. As the data analysis section of this thesis will show, corporate entities in Metro Vancouver are directly linked to the politicians that oversee city hall through political campaign contributions. In *Money and Machine Politics: An Analysis of Corporate and Labor Contributions in Chicago City Council Elections,* Timothy Krebs states that contributors are careful about which candidates they choose to support (Krebs 2005). Strategic contributor theory, as described by Krebs, suggests that donors "seek to maximize the return on their contributions to avoid wasting money" (Krebs 2005, 48). He breaks down the two most important factors that go into a donor's decision to contribute to a candidate's campaign: "the ability to win an election and the ability to move or influence the political process" (Krebs 2005, 50). In *Explaining Corporate and Labour Contributions in Urban Elections*, Krebs adds that a great deal of effort goes into finding candidates that are receptive to a donor's interests (Krebs 2004).

As the data analysis in this thesis shows, close to \$9.5 million was donated to candidates seeking office in the 2014 Metro Vancouver civic election. Of that total, more than \$5.2 million came from corporate contributors, while unions and labour groups offered up less than \$1 million. The rest of the total came from individual donors and the candidates themselves. If the tenets of strategic contributor theory are correct, that means

that a number of office seekers in Metro Vancouver in 2014 were seen by donors as candidates that could win and would be responsive to the interests of their financial supporters. The concept of strategic contributor theory ties directly to the incumbency advantage discussed in the next section.

2.6. The Incumbency Advantage

Contributors looking to "maximize" their donations, which Krebs states means picking a candidate that can win a council seat (2005), do not need a crystal ball when deciding whom to support. As this thesis and several other studies show, incumbents seeking re-election have a significant advantage at the polls, a fact that can help donors narrow down the list of candidates they wish to back financially. Kendall and Rekkas (2012) compiled a dataset of every Canadian federal election since Confederation and found that 79.3 per cent of sitting Members of Parliament run in the next election and 77.3 per cent are re-elected. A similar study examining elections to the United States House of Representatives between 1946 and 1998 found that the incumbent party wins in 90 per cent of the cases and there is an 80 per cent chance of an incumbent running for re-election and winning (Lee 2008).

While there is a dearth of academic research on the subject of campaign contributions and electoral success in municipal elections, several important studies have examined the relationship at higher levels of government. Scarrow (2007) states that many countries have struggled with systems that "have the scandalous whiff of quid pro quo" (Scarrow 2007, 193), but drawing direct lines from fundraising and campaign spending to positive voting outcomes has been difficult due to the numerous factors that can influence voting behaviour. Still, some trends are beginning to emerge. For example, Scarrow found the impact spending has on vote totals diminishes as more money is brought into a campaign. She also notes that challengers appear to benefit from higher spending far more than their incumbent counterparts (2007). Benoit and Marsh (2006) concur with Scarrow's assessment, noting that incumbents may be unable to increase their name recognition in a district where they are already known quantities. They outline a European study, which found that one Euro equated to 0.37 votes for a challenger but only 0.24 votes for an incumbent (Benoit and Marsh 2006). Citing the juice analogy first put forward

by Denver and Hands (1997), they write that "incumbents have little left to squeeze since they did well (enough to win) in the previous contest, while challengers typically start with a full, unpressed fruit from which more juice can be extracted with the same level of squeeze" (Benoit and Marsh 2006, 876).

Still, the candidate who spends the most on their campaign tends to receive the highest number of votes. Benoit and Marsh (2006) found that the office seeker with the highest fundraising levels won their race 93 per cent of the time in the U.S. House of Representatives and 67 per cent of the time in the U.S. Senate. While the authors maintain that there is a difference in effectiveness for spending depending on whether a candidate is an incumbent or a challenger, spending has a strong, positive relationship with electoral success. Even when one considers the possibility that money has a greater benefit for challengers, Benoit and Marsh acknowledge the benefits of incumbency. The resources that come with office are a significant benefit, the authors argue, allowing the office holder to dispense favours and use their position to bolster their electability. "The conclusion is clear: Incumbency helps one get elected, not only because incumbents receive more votes, regardless of spending... but also because of the resources that are mobilized and expended that come from the perquisites of office" (Benoit and Marsh 2006, 884).

In the academic literature, the reasoning offered for the incumbency advantage is far from unanimous. Scarrow notes that incumbents may be able to take advantage of early fundraising opportunities, allowing them to build up significant war chests long before the campaign begins. This can deter strong challenges from taking on the incumbent (Scarrow 2007). However, she also writes that the fundraising ability of a challenger depends on their "perceived likelihood of success, meaning that campaign spending is a reflection of popularity, not just a cause of it" (Scarrow 2007, 199). Lee (2008) and Erikson (1971) argue that candidates running for re-election have proven that they have appeal among the voters. "If what makes them successful is somewhat persistent over time, they should be expected to be somewhat more successful when running for re-election" (Lee 2008, 683). Erikson counters the assertions of academics like Benoit and Marsh, who believe the benefits of office allow incumbents to retain their positions. He notes that while there are many factors at play in an election campaign, a candidate's ability to win office

in the first place likely means they have the political skills necessary to win office in a reelection battle.

Although being an incumbent may increase a candidate's share of the vote, it is the candidates with the greatest electoral appeal who have the best chance of becoming incumbents. This is especially true in the most competitive districts. Whereas a usually safe constituency does not normally require an outstanding vote getter, the candidate who consistently wins in a district that is normally competitive may often owe his victories to the fact that he is a stronger candidate than his opponents. In such a case it would be a strong vote appeal that causes the candidate's incumbency status rather than the other way around. (Erikson 1971, 396).

Incumbency has its advantages at the local level as well. In Metro Vancouver in 2014, for example, 82.8 per cent of incumbents were successfully re-elected, or 106 of the 128 candidates. Not surprisingly, these 128 candidates received an average of three times the campaign contributions as their non-incumbent counterparts. While Metro Vancouver's incumbent re-election success rate is particularly high, an incumbency advantage is not unique to the Lower Mainland. In James B. Jamieson's 1966 study of 13 counties and 128 cities in Southern California, more than 67 per cent of the 252 incumbents successfully held their offices (Jamieson 1966). Another more recent study conducted in the Greater Toronto Area by Joseph Kushner, David Siegel and Hannah Stanwick found that while numbers varied by the size of the community, candidates seeking re-election did better than those hoping to gain office for the first time (Kushner, Siegel & Stanwick 1997). In small municipalities, the authors found that 74.7 per cent of incumbents won re-election in 1982, a number that grew to 77.8 per cent in 1988 and 79.2 per cent in 1994. In medium-size municipalities, 81.5 per cent of incumbents won reelection in 1982, increasing to 84.1 per cent in 1988 before dropping to 78 per cent in 1994. The largest cities saw the highest percentage, stated the authors, who found that 89.1 per cent won re-election in 1982, rising to 92.4 per cent in 1988 before dropping to 83.4 per cent in 1994.

Kushner, Siegel and Stanwick explain the variation in incumbency success rates depending on the size of the community by noting the costs associated with running a campaign in a large city as opposed to a smaller suburb. Breaking through a dense media market in a more populated municipality is expensive, creating a barrier for candidates

seeking office for the first time. Without the support of a political party or a strong network of donors, gaining traction with voters in a city the size of Toronto or Vancouver is almost impossible. Further complicating the process is the fact that these larger cities tend to be more multicultural. "Campaign literature must be prepared in several languages and canvassers must be prepared to deal with voters speaking a variety of languages" (Kushner, Siegel & Stanwick 1997, 543).

Much like Metro Vancouver, incumbents in Ontario have an advantage when it comes to raising money. Stanwick writes in *A Megamayor for All People? Voting Behaviours and Electoral Success in the 1997 Toronto Municipal Election* that during Toronto's first megacity election, those who held office prior to the 1997 amalgamation raised considerably more than newcomers to the process (Stanwick 2000). For example, Mel Lastman, who was the mayor of North York before running for the top job in the new municipality, raised and spent \$1 million, attracting numerous supporters that gave the \$2,500 maximum contribution under the election rules in Ontario. Meanwhile Barbara Hall, who was the mayor of the old municipality of Toronto, also raised \$1 million. "In contrast, the next highest candidate chose to report total contributions of \$3,500, and most of the remaining candidates filed statutory disclosure to the effect that neither contributions nor expenses exceeded \$10,000. Clearly, the incumbents had an immeasurable advantage with respect to campaign financing" (Stanwick 2000, 559).

Kushner, Siegel and Stanwick acknowledge that not all candidates get into a civic race to win, noting in their research the prevalence of unserious, even "frivolous" candidates. This is an issue that will be discussed further during the methodology and analysis sections of this thesis. Unlike the provincial and federal levels of government, where the party system is often able to root out those who have no chance of raising money or garnering votes, the threshold for getting a name on the ballot is considerably lower at the municipal level. In British Columbia, for example, two signatures and some appropriately filled out paper work is all that is necessary to run, a low barrier that allows access to candidates with no intention of seriously campaigning. Kushner, Siegel and Stanwick state that the ease of entry could mean that the incumbent advantage may not be as great as the study shows. "To the extent that non-serious candidates are included in the analysis, the low success rates of non-incumbents are somewhat overstated. A

capable, experienced non-incumbent candidate would have a greater likelihood of success than the numbers indicate. Nonetheless, it is clearly difficult for even a serious candidate to supplant an incumbent" (Kushner, Siegel & Stanwick 1997, 543).

2.7. Conceptual Framework

The campaign finance system is the nexus point between the regime and the civic political order. Metro Vancouver is not immune to regime politics and the growth-machine ideology and this thesis examines the link between the donor class and the politicians that benefit from their contributions. With disclosure documents, it is possible to determine what interests are at play during a civic campaign and which financial backers are represented at the council table. Molotch and Stone outline important parameters that apply to municipalities in the Lower Mainland and the region. The theories put forward by these authors provide a conceptual framework that has helped guide the research conducted in this thesis. To date, the role that municipal election campaign finance has played in the establishment and maintenance of regimes and the propagation of growth-machine concepts has been an overlooked subject, particularly in Canadian urban research, and there is a dearth of literature on the subject. The findings outlined in the following chapters reveal a detailed understanding of the relationship between campaign contributions and vote totals and will add to our overall knowledge of corporate influence over municipal policy decisions.

Chapter 3. Methodology

3.1. Data Collection and Organization

The research conducted in this thesis relies primarily on quantitative data gathered from financial disclosure forms submitted by each of the candidates that participated in the 2014 municipal elections across Metro Vancouver. Of the 454 candidates that filled out statements, five candidates withdrew before voting day and three mayoral candidates ran unopposed. Without a vote total to compare against spending and fundraising, these eight office seekers were removed from the dataset. The disclosure forms are filled out by each council, mayoral, school board and parks board candidate and/or their financial agent and released to the public three months after voting day. The process is overseen by Elections BC. This information was used to create a dataset listing the name of each candidate, their city, the office that they sought (for the purposes of this research the focus is on the mayoral and council positions) and whether they were successfully elected, followed by the campaign donations from the 1,431 contributors that supported candidates in 2014. Donations included in the financial disclosures are categorized into six groups: individuals, corporations, unincorporated business/commercial organizations, trade unions, non-profit organizations and other identifiable contributors (Local Election Campaign Financing Act 2016). For the purposes of this research, subcategories of these larger groupings have been created. For example, by analyzing each report it is possible to identify entries showing candidates who contributed to their own campaigns, which was used to create the self-funded category. Subsets were created for corporate contributions, subdividing the category into development, development related, property owners, other corporations and unknown businesses.

As stated above, Metro Vancouver is a geographic area made up of 21 municipalities, an electoral area district and a First Nation territory. However, the dataset used in this report has removed the rows for Electoral Area A (population 13,035) and Tsawwassen First Nation (population 720) due to the fact the election process in these two jurisdictions are unique. For example, Electoral Area A does not have a mayor and council, instead electing regional representatives directly to the Metro Vancouver board. Tsawwassen First Nation also has its own council and elections, which are run separately

from the rest of the region. With these two jurisdictions removed, the city variable for the dataset contains 21 separate values consisting of Anmore, Belcarra, Bowen Island, Burnaby, Coquitlam, Delta, Langley City, Langley Township, Lions Bay, Maple Ridge, New Westminster, the City of North Vancouver, the district of North Vancouver, Pitt Meadows, Port Coquitlam, Port Moody, Richmond, Surrey, Vancouver, West Vancouver and White Rock.

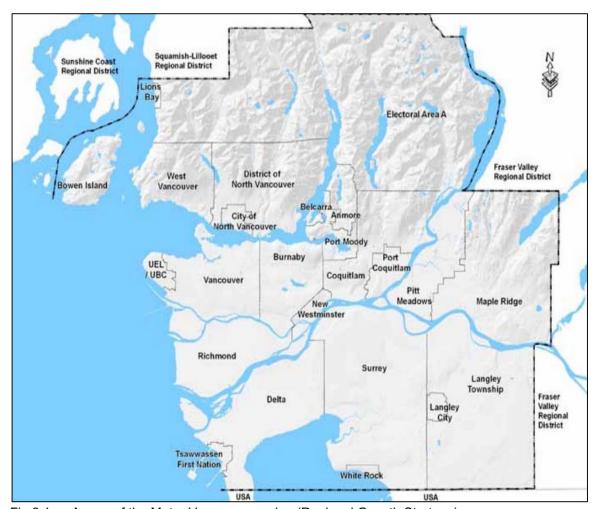


Fig 3.1 — A map of the Metro Vancouver region (Regional Growth Strategy).

3.2. Methodological Literature

Campaign finance is an established field of study within urban affairs and the research undertaken here recognizes the foundational work done in similar studies previously conducted in other parts of North America. In Campaign Finance in Municipal

Elections: Evidence from Three Cities, Brian Adams and Renee Van Vechten compare San Francisco, Seattle and Los Angeles to determine how much money is needed to mount a viable campaign in each city (Adams & Van Vechten 2004). Similar to the work conducted in this report, Adams and Van Vechten break down campaign contributions into corporate, union and individual categories and compare the donation totals to voting outcomes over the course of a series of elections in the early 2000s. Adams' work on this subject is bolstered by other articles he has published, including Financing Local Elections: The Impact of Institutions on Electoral Outcomes (Adams 2011) and Suburban Money in Central City Elections: The Geographic Distribution of Campaign Contributions (Adams 2006), which have provided important insights for this research on Metro Vancouver's campaign finance system.

Adams and Van Vechten's study establishes several important precedents that have been incorporated into the methodology of this study. The authors use a ratio of total number of votes to total campaign funds spent and employ statistical analyses, which have been used in this research on Metro Vancouver and will be explained further in the statistical methods section later in this chapter. Their findings showed that Los Angeles was the most expensive city for a candidate seeking office, while Seattle was the least. Like the conclusions outlined in Chapter 4 of this thesis, the authors found that the electoral victors in their studies tended to be the most prolific fundraisers. Incumbency was also a strong predictor of electoral success in Adams and Van Vechten's results.

The methodology employed in this thesis was further influenced by research conducted on Atlanta and St. Louis by Arnold Fleischmann and Lana Stein. While the data is older — the study was carried out in the 1990s — the authors paid particular attention to the development industry in their work (Fleischmann & Stein 1998). The analysis was also careful to separate mayoral and council candidates for comparison, an important consideration that has been accounted for in the statistical analysis of the Metro Vancouver dataset. While mayors only have a single vote on council, the cost of their campaigns are considerably higher than those of city councillors. Total donations to a mayor have the potential to skew the data and, where appropriate, efforts have been made to separate the two office types in this thesis.

Parameters for identifying viable candidates in the Metro Vancouver analysis have also been borrowed from past research. Adams and Ronnee Schreiber write in *Gender, Campaign Finance and Electoral Success in Municipal Elections* (Adams & Schreiber 2011) that studies at the state and federal level in the United States tend to examine party-backed candidates. Affiliation with either the Republican or Democratic tickets lends instant viability to an office seeker, which is unseen at the civic level, where independents are more common. The lower barriers to ballot access in municipal campaigns lead to large numbers of candidates that run without raising money or even campaigning. "These individuals pose a problem for the study of campaign finance because their numbers randomly fluctuate from one race to another and can significantly influence averages, medians, and correlations" (Adams & Schreiber 2011, 86). Candidates with no hope of winning run for a variety of reasons, including everything from vanity to raising awareness regarding a certain issue. "Others lack enough knowledge of local elections to realize how slim their chances really are, or may have succeeded in deluding themselves that they have a real chance of success" (Adams & Schreiber 2011, 86).

Whatever a candidate's reason for running, Adams and Schreiber have put forth a candidate viability threshold that has been applied to some aspects of the Metro Vancouver analysis in this thesis. To be considered credible, a candidate must be able to raise \$1,000 in an electoral district with a population of less than 50,000, \$5,000 in a district with a population of between 50,000 and 500,000 and \$10,000 in a district that is larger than 500,000 people (Adams & Schreiber 2011). These parameters are applied during the regression analysis portion of this thesis. However, while the Adams and Schreiber threshold provides a starting point and an important academic precedent, there are some limitations that should be acknowledged. First, the standard is strict when applied to Metro Vancouver, with only 283 (62.3 per cent) candidates meeting the criteria. Of the 163 candidates removed from the dataset when the specifications are applied, 12 were elected, indicating a high bar for inclusion when candidates that win office are deemed unviable. Second, the jurisdictions in Metro Vancouver have a range of population sizes, with 11 of the 22 cities falling below the 50,000-population mark, with some cities having as little as a few thousand residents. The Adams and Schreiber threshold may create a standard that is too onerous for municipalities like Anmore, with 2,092 residents, or Bowen Island, with 3,402 residents. For comparison purposes, a second and more lenient framework for viability has been applied in analysis outlined in the following chapter. This thesis will conduct the same regression analysis done for the Adams and Schreiber dataset on every candidate that raised more than one dollar and spent more than one dollar during the course of the 2014 campaign. Even with this low barrier for inclusion, 44 candidates were unable to meet the parameters, of which five were successfully elected.

3.3. Defining Developers

As previously noted, the Metro Vancouver dataset breaks down corporate donations into five categories: developers, development related, property owners, general corporations and unknown businesses. While defining most of the other categories is straightforward (union includes labour groups; individual includes all individual donations and self-funded includes donations from the candidates), the detailed breakdown of the corporate variable requires some explanation. Robert MacDermid defines real estate development and development-related corporations as any corporate entity that calls itself a developer, has applications before municipal and regional councils or is identified as a developer on their website, mentions in the media or through home warranty programs (MacDermid 2009). Development-related entities refer to companies that do not necessarily participate in actual land assembly, but generate revenue through construction, sales, marketing or any other ancillary activities (MacDermid 2009). Breaking down the corporate category into subsets gives the analysis more depth and provides some understanding of which aspects of the regime have the most success, as defined by Krebs, at getting their supported candidates elected.

In the Metro Vancouver dataset, each of the 1,431 companies that donated in 2014 were examined to determine whether they met MacDermid's criteria. Links to company websites, city staff reports and media mentions are provided for each corporation listed in the spreadsheet to provide a basis for its designation. In some cases, a company's name had the words "real estate development" in its title, for example Tassong Real Estate Development Corporation or Onni Developments. In other cases, further inquiry was required, with searches of municipal websites and corporate directories utilized to help identify which companies fell under which category. Several adjustments to MacDermid's criteria were necessary. Because development corporations often use subsidiaries for

each project, numerous companies were run by the same proprietors out of the same office. For example, Dells Holdings is an entity that has no website and cannot be found in any search of municipal databases. However, the company shares an address with well-known development entity Bosa Properties and the proprietors of Dells Holdings are Dale and Colin Bosa. Similarly, Burke Mountain Limited Partnership has the same address and proprietors as Wesbild Holdings, another development company. While there is no way to directly verify that these entities meet MacDermid's definition, their relationships to well-known developers means their donations have been classified under the development category.

Including development-related entities in the dataset acknowledges the role some industries play in real estate development without taking part in actual land assembly and subdivision. There are a whole host of industries that are involved in and benefit from property development, from planning approval consultants and real estate lawyers to trades people and construction companies. Differentiating between real estate development and development-related corporations created several issues when organizing the dataset. First, the line between homebuilders and real estate developers is blurry. There are several examples where an entity may have begun as a contractor but eventually incorporated land assembly into their business. In some cases, the types of entities were difficult to distinguish, however in instances where a construction company noted that they also took part in development activities, the corporation was listed as a developer in the dataset. Similar complications occurred in some of the other aspects of development-related industries. In the legal profession, for example, lawyers were classified as development related when they specifically advertised real estate-related aspects of their practice. Investment corporations with land holdings and mortgage lenders were also classified as development related.

Despite the efforts made to identify each of the 1,431 corporate entities, 98 are listed in the dataset as "unknown." Numbered companies were particularly difficult to classify. While some of the addresses led to known businesses — for example, 0828607 B.C. Ltd. is the Burrard Public House and 0908206 B.C. Ltd. is Urban Era Builders — many were linked to residential homes or PO Boxes with no other information to enable identification. Even some named companies were difficult to identify and categorize, for

example Harmonix, LLW Holdings and BRS Associates. It is possible that these entities were misspelled by the candidates in the financial disclosure forms or in the transferring of the information from the forms to the dataset. It should be noted that while it may not be possible to categorize these 98 unknown companies into the various corporate subsets, for example development or development related, they still make up the overall corporate category as they were listed as businesses in the campaign disclosure forms.

3.4. Political Parties

British Columbia is unique in Canada in that it allows elector organizations and political parties to organize candidates at the municipal level. These organizations operate to varying degrees across the Lower Mainland, from entrenched parties like Vision Vancouver and the Non-Partisan Association in Vancouver to more loosely based groups like the Citizens Association in Coquitlam and the Independent Voters Association in Delta. These parties run candidates alongside independent office seekers, complicating the methodology used in the analysis of this report, as donations to the elector organizations cannot be tied to individual candidates for comparison purposes. For example, Burnaby Mayor Derek Corrigan and Vancouver Mayor Gregor Robertson filed individual financial disclosure forms that showed they both raised and spent \$0 in the 2014 campaign. However, the elector organizations that these candidates belong to raised and spent hundreds of thousands — even millions — of dollars to secure seats for member candidates.

How can donations to elector organizations be broken down so that individuals running under a party banner can be compared with the mostly unaffiliated candidates? In the analysis contained in this report, each donation to a political party is divided among the candidates running under that party's banner. To account for the fact that mayoral candidates tend to spend and raise more than council candidates, office seekers in the running for a mayoral seat were allocated twice as much as their council colleagues. This two-to-one ratio is supported by the findings of the Special Committee on Local Elections Expense Limits, which suggested that on average, mayors require twice as much as their council colleagues to mount viable campaigns (*Report of the Special Committee on Local Elections Expense Limits*, 2015). That means, for example, that the \$26,000 Rennie

Marketing Systems donated to Vision Vancouver in 2014 was divided 16 ways in the dataset. Each council and parks board candidate was allocated \$1,625 for their share of the donation, while the mayoral candidate was allocated \$3,250. Breaking down these various donations allows council and mayoral candidates associated with elector organizations to be easily compared to unaffiliated office seekers.

There are other academic precedents for averaging contributions among a group of candidates. In research by Kevin Grier and Michael Munger, the mean was found for all political action committee contributions in the 1978, 1980 and 1982 United States House and Senate races (Grier & Munger 1986). With this information, the authors uncovered how campaign contributions, as well as variables like chamber of commerce support, labour support and party support impacted a candidate's electability. David Samuels also used averages of contributions to candidates by industry sectors, showing the various interests represented in each donation (Samuels 2001). For example, for every dollar a presidential candidate received, 31.1 cents came from finance, 22.1 cents came from construction, 17.2 cents came from heavy industry with the rest spread between the agro-industry, media and other sectors. Similar breakdowns are made for the governor's race, the senate and federal deputies (Samuels 2001).

3.5. Statistical Analysis

Statistical analysis methods utilized in this report will show which candidates receive the most campaign contributions and how those funds impact their chances of electoral success. Analysis of means methods were employed to determine which groups within the dataset are statistically different from the overall averages. This type of analysis can reveal whether there are associations between categorical variables, such as whether a candidate is an incumbent, and interval variables, like how much money a candidate raised or how many votes they received. Mean comparison, for example, will show whether incumbent candidates are more likely to outraise and outspend their non-incumbent counterparts, information that is crucial to understanding the larger argument of how regimes maintain their hold on civic power.

Chi-squared testing, which can uncover potential statistically significant relationships between categorical variables, was also utilized in the analysis of this thesis. With this method, it is possible to determine whether a categorical variable, like a candidate's party status, correlates with another categorical variable, like whether a candidate was successfully elected. Each test comes with a p-value, which if lower than 0.05 means there is a statistically significant relationship. Chi-squared testing and mean comparison was conducted on the region and on quantile groupings of municipalities by population size. This follows the analysis of Kushner, Siegel and Stanwick, noted in the literature review, which found that the benefits of incumbency were different in smaller communities compared to larger communities (Kushner, Siegel & Stanwick 1997).

To improve our understanding of the impact money has on electoral success, regression analysis was conducted comparing the fundraising and spending amounts to the vote total variable. The models outlined in Chapter 4 used vote totals as the dependent variable and fundraising/spending totals as the independent variable, producing an equation that can be utilized to make future predictions about how much candidates need to receive a certain number of votes. The incumbent variable was included in a multiple regression model to determine what role, if any, experience at the council table plays in electoral success.

3.6. Data Analysis and Urban Regimes

The methodology outlined in this chapter provides a foundation for the analysis conducted in the following section. It shows the statistical methods employed and the academic precedents from which they are derived. Using linear regression and multiple regression models, it is possible to demonstrate the significant impact that campaign donations and campaign spending have on electoral success. As the results show, the connection between funding and vote totals is compelling, while the role incumbency plays in the process is paramount to understanding how regimes are maintained. The statistical analysis contained in the following chapter goes to the heart of the concepts put forward by Molotch and Stone and demonstrates how corporate elites perpetuate their influence over policy makers.

Chapter 4. Analysis

4.1. Introduction

The analysis in this chapter begins with an overview of the campaign finance dataset from the 2014 Metro Vancouver civic election. The effects of campaign spending and contributions on vote totals were estimated using regression analysis. Fundraising totals for incumbent and non-incumbent candidates are examined and compared in depth, demonstrating how it is possible for elected officials to become entrenched in their positions once they achieve office. The incumbent advantage is an important component of the larger question of how regimes maintain their informal relationships with the municipal power structure. Finally, a geographic breakdown of which communities see the highest amounts of contributions and campaign spending during the election period is included in this chapter, while an examination of some of the key donors shows most campaign contributions are concentrated among a handful of entities.

4.1.1. Overview: The Metro Vancouver Dataset

The grand total for all donations to the 446 candidates seeking office across Metro Vancouver in 2014 was \$9,445,424, which is \$3.81 for every resident in the region. Table 4.1 shows total donations by city compared to population along with the number of candidates seeking office in each municipality. The mean for total contributions varied depending on the city, with an overall Metro Vancouver average of \$21,099 and a median of \$6,210. Belcarra represented the low end of the spectrum with a mean donation total of \$352. per candidate and a median of \$230, while Vancouver represented the higher end with a mean contribution of \$59,423 and a median of \$9,886.

Figure 4.1 shows how the \$9,445,424 Metro Vancouver donation total breaks down by the major donor categories, with \$5,246,936 coming from corporate contributions, \$1,785,161 coming from individual contributions, \$1,427,167 from self-funded contributions and \$929,975 coming from union contributions. The average donation size also varies by grouping. For example, 296 of the 446 candidates received contributions from the individual category for an average total of \$6,084, another 347 candidates

donated to their own campaigns for an average total of \$4,123, while 135 candidates received labour support, with each receiving an average of \$6,888 from the union category. Corporations, with a donation total of \$5,246,936, supported 245 candidates for an average contribution total of \$21,603. Clearly, business interests have a large financial stake in the outcome of municipal elections when compared to the other donor categories.

Table 4.1 — Total Donations by City Compared to Population Listed in Order of Contribution Size

City	Population	Total	# of Candidates
Belcarra	644	\$2,814	8
Lions Bay	1,318	\$15,161	13
Bowen Island	3,402	\$30,735	14
Anmore	2,092	\$31,769	10
Langley (City)	25,081	\$91,227	16
Pitt Meadows	17,736	\$92,863	13
West Vancouver (District)	42,694	\$117,051	14
North Vancouver (District)	84,412	\$122,615	14
White Rock	19,339	\$133,980	19
Port Coquitlam	56,342	\$149,717	15
Port Moody	32,975	\$228,023	16
Maple Ridge	76,052	\$250,101	31
New Westminster	65,976	\$274,035	25
Delta	99,863	\$311,831	13
North Vancouver (City)	48,196	\$327,860	21
Burnaby	223,218	\$358,487	24
Langley (Township)	104,177	\$447,140	25
Coquitlam	126,456	\$512,579	20
Richmond	190,473	\$817,340	34
Surrey	468,251	\$1,624,158	42
Vancouver	603,502	\$3,505,938	59
Metro Vancouver	2,292,199	\$9,445,424	446

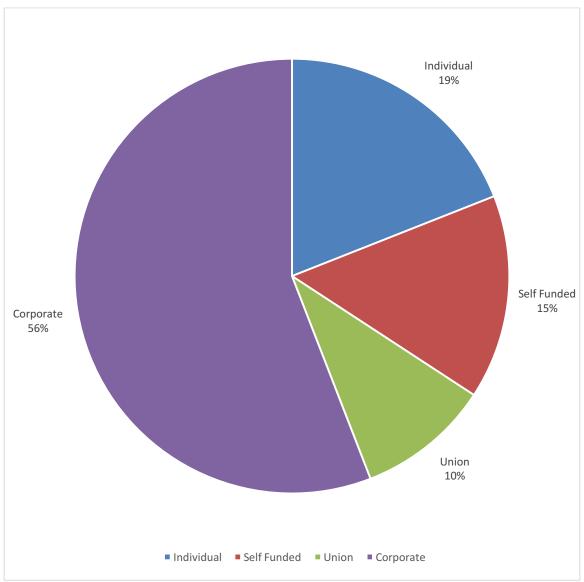


Figure 4.1 — Total donations by funding category

Figure 4.2 shows that close to half (46 per cent) of all corporate donations came from the real estate development industry. When this total is divided among the 164 candidates that received support from this donor category, the average works out to a total developer contribution mean of \$14,754 per development-funded office seeker. Another 10 per cent of all corporate donations came from contributors listed in the development-related category, which supported 150 candidates, who each received an average of \$3,753 from this subset. Among general businesses — corporate entities not involved in

either development, development-related or property assembly — 221 candidates received support for an average contribution total of \$8,017.

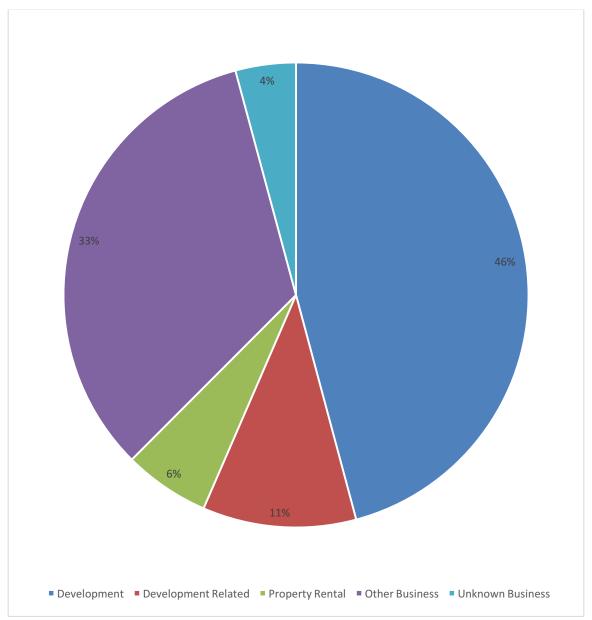


Figure 4.2 — Total donations by corporate subset

Not all candidates are equal when it comes to election viability, a point outlined in Chapter 3. During the 2014 election, 36 candidates (7.9 per cent) did not spend any money on their campaigns while 43 (9.4 per cent) did not raise any money. When the threshold established by Adams and Schreiber is applied to the dataset removing the unviable candidates (Adams & Schreiber 2011), there is some movement in the figures. Roughly

the same amount of money is spread over a smaller group of people, as only 283 of the 446 office seekers meet the standard. The 283 viable candidates received \$9,199,914 in contributions of the Metro Vancouver total of \$9,445,424. Removing office seekers who had little chance of success increases the overall donation mean from \$20,870 to \$32,167, while the median doubles from \$6,150 to \$12,096.

4.1.2. Donation-To-Vote Ratios

The donation-to-vote ratio in Metro Vancouver is \$2.35 raised for every ballot cast. The average is higher for mayoral candidates (\$5.69) and lower for council candidates (\$1.90), while the figure differs from city to city. Burnaby has the lowest donation-to-vote ratio with \$1.55, while Anmore is the highest with \$9.86. It is important to recognize that in smaller communities, where fewer candidates tend to seek office, outliers can easily impact the results. For example, Table 4.2 shows that the spending-to-vote ratio in Anmore is \$29.53, a figure skewed by the fact that successful mayoral candidate John McEwen spent \$17,089 in a race where he received 442 votes. Other examples of outliers appear in North Vancouver (\$16.97 per vote) and Port Moody (\$12.60 per vote). Even in Surrey, where 774,719 votes were cast, the average mayoral candidate spent \$9.08 per vote, well above the regional average.

These figures do not mean that the cost of running a campaign is necessarily higher in some communities than others. What a large donation-to-vote ratio likely indicates is the competitiveness of a given race. Surrey, for example, saw three candidates vying for the mayoral position vacated by Diane Watts. In Port Moody, another expensive race, former city manager Gaetan Royer, with the backing of considerable union support, unsuccessfully challenged incumbent Mayor Mike Clay. Races involving vacant positions or well-funded challengers force all candidates to increase their effort — and the amount they must spend on their campaign — to ensure victory (Jacobson 1985). This is not the case in situations where, for example, a popular incumbent goes up against an unknown challenger.

Table 4.2 — Spending-to-Vote Ratio Listed from Largest to Smallest

			Overall	Mayor	Council \$-To-
City	Votes	Total \$ Spent	\$-To-Vote Ratio	\$-To-Vote Ratio	Vote Ratio
Anmore	3,399	\$33,504	\$9.86	\$29.53	\$4.03
Port Moody	45,368	\$233,354	\$5.14	\$12.60	\$3.62
North Vancouver (City)	63,441	\$320,540	\$5.05	\$16.97	\$2.70
Lions Bay	3,140	\$15,267	\$4.86	\$8.86	\$3.76
White Rock	31,006	\$131,050	\$4.23	\$4.18	\$4.24
Langley (City)	22,827	\$92,841	\$4.07	\$8.01	\$3.20
Pitt Meadows	22,037	\$86,598	\$3.93	\$7.16	\$3.23
Coquitlam	152,617	\$520,869	\$3.41	\$6.55	\$2.90
New Westminster	84,274	\$273,772	\$3.25	\$7.11	\$2.77
Bowen Island	11,091	\$32,656	\$2.94	\$8.95	\$1.70
Vancouver	1,637,365	\$4,662,310	\$2.85	\$5.02	\$2.58
Maple Ridge	97,542	\$265,848	\$2.73	\$7.32	\$1.78
Surrey	774,719	\$2,016,324	\$2.60	\$9.08	\$1.63
West Vancouver (Dist.)	41,559	\$105,702	\$2.54	Acclaimed	\$2.54
Port Coquitlam	59,101	\$149,254	\$2.53	\$4.20	\$2.20
Langley (Township)	168,602	\$415,616	\$2.47	\$6.29	\$1.89
Delta	108,592	\$251,242	\$2.31	Acclaimed	\$1.91
Belcarra	1,454	\$3,418	\$2.17	\$5.38	\$1.25
Richmond	285,065	\$548,283	\$1.92	\$4.92	\$1.45
North Vancouver (Dist.)	70,775	\$128,076	\$1.81	Acclaimed	\$1.77
Burnaby	305,575	\$473,654	\$1.55	\$2.48	\$1.41
Metro Vancouver	3,989,549	\$10,760,178	\$2.70	\$6.47	\$2.19

This broad overview of the Metro Vancouver dataset shows the range of contributions and the level of funding candidates received from the different donor categories. It demonstrates the outsized role corporate donations — particularly from the development industry — play in campaign finance when compared to labour groups, individuals and self-funded contributions. Molotch and Stone would likely cite these totals as evidence of the power and influence corporate elites have over the policy makers at the municipal level. The regression analysis in the following section shows how these dollars translate into more votes and an increasing chance of electoral success.

4.2. Campaign Donations and Electoral Success

The following linear regression models were built on data obtained from the financial disclosure documents filed by mayoral and council candidates following the 2014 municipal elections in Metro Vancouver. Two separate thresholds for candidate viability have been applied to the dataset for this analysis, as explained in Chapter 3. First, the Adams and Schreiber parameters are utilized, which include candidates who can raise \$1,000 in an electoral district with a population of less than 50,000, \$5,000 in a district with a population of between 50,000 and 500,000 and \$10,000 in a district larger than 500,000 people (Adams & Schreiber 2011). Second, a less stringent threshold is applied including all candidates who spent or received at least \$1 during their campaign. By including the results of two separate thresholds of viability, it was hoped that the differences, if any, could be compared. However, as the analysis shows, the results are reasonably consistent across the regression models when the different frameworks are applied.

Campaign Donations, Spending and Electoral Success

There is little doubt that campaign contributions and spending have an impact on vote totals. A natural logarithm of the vote and donation variable (log-log regression) creates a logged estimated equation of Y-hat = 0.576 + 0.831 (x) when the Adams and Schreiber threshold is applied. The adjusted R-squared is 0.611 and the Pearson correlation coefficient is 0.783 (Regression output can be seen in Table A1 of Appendix A). The analysis shows a strong association between campaign donations and vote totals demonstrated in Figure 4.3.

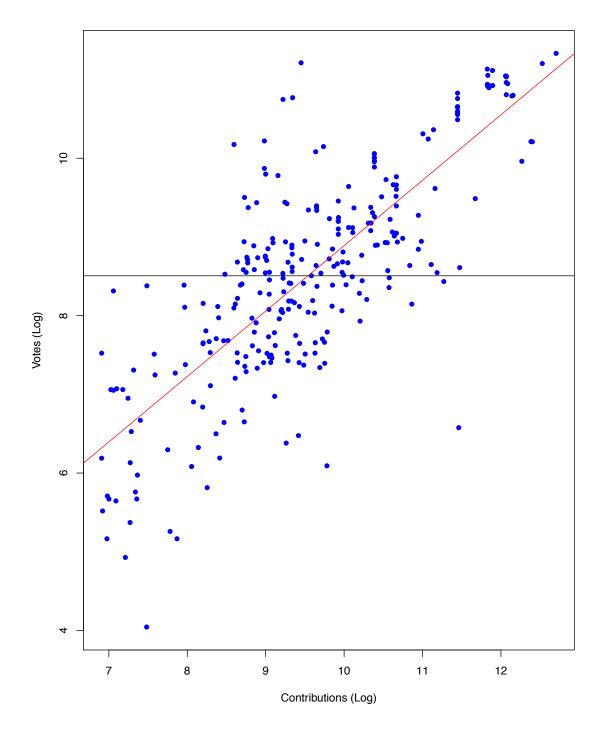


Figure 4.3 — Logged campaign contributions compared to logged votes with Adams and Schreiber threshold applied (n = 283, p-value = <2.2e-16). For the full regression output please see Appendix A (Table A1).

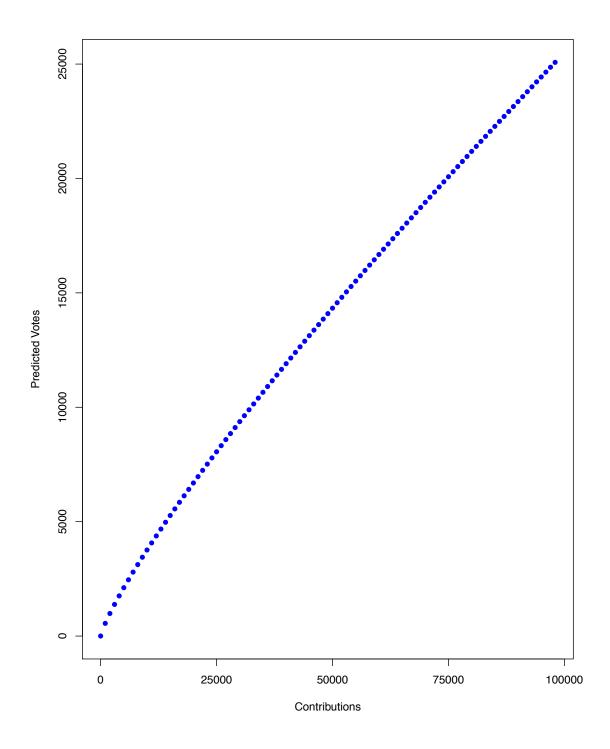


Figure 4.4 — Raw contribution totals compared to predicted votes with the Adams and Schreiber threshold applied (n = 283). For the raw data, please see Appendix B (Table B1).

Using the linear regression line equation, we can compare raw contribution numbers to a predicted vote value, as demonstrated in Figure 4.4. The graph shows that campaign donations correspond with higher numbers of ballots cast in the initial stages. however there is a diminishing vote increase as the total amount of contributions grow. For example, the first \$1,000 a candidate receives, which is the low end of the contribution range in the Adams and Schreiber dataset, equals 555 predicted votes. An increase from \$1,000 to \$2,000 adds 432 more predicted votes for a total of 987 predicted votes. A candidate who raised \$329,017, which is the high end of the contribution range in the Adams and Schreiber dataset, could expect to see a predicted vote total of 68,623. However, at the larger donation level, raising an additional \$1,000 in contributions would only lead to a predicted vote increase of 173 — a significant number but considerably smaller than the returns seen at the lower end of the graph. The average candidate in Metro Vancouver in 2014 raised a mean \$32,240 when the Adams and Schreiber threshold is applied, which correlates to a predicted vote total of 9,889, while a \$1,000 donation increase adds 256 for a 10,145 predicted-vote total. The median contribution total of \$12,312 correlates with 4,376 predicted votes, with a \$1,000 increase adding 301 for a total of 4,676. These figures show that the more a candidate raises, the less impact the money has on the predicted vote total, a finding that is consistent with some of the studies outlined in Chapter 2, particularly Scarrow (2007) and Benoit and Marsh (2006).

The results of the donations-to-votes analysis are similar to the findings in the spending-to-vote analysis. Again, using a natural logarithm of the vote and spending variables, the regression analysis produces an estimated equation of Y-hat = 1.034 + 0.783 (x) when the Adams and Schreiber threshold is applied, as shown in Figure 4.5. The adjusted R-squared is 0.592 and the Pearson correlation coefficient is 0.771 (For the full regression output please see Table A2 in Appendix A). As in the first regression, the analysis indicates a strong relationship between campaign spending and vote totals.

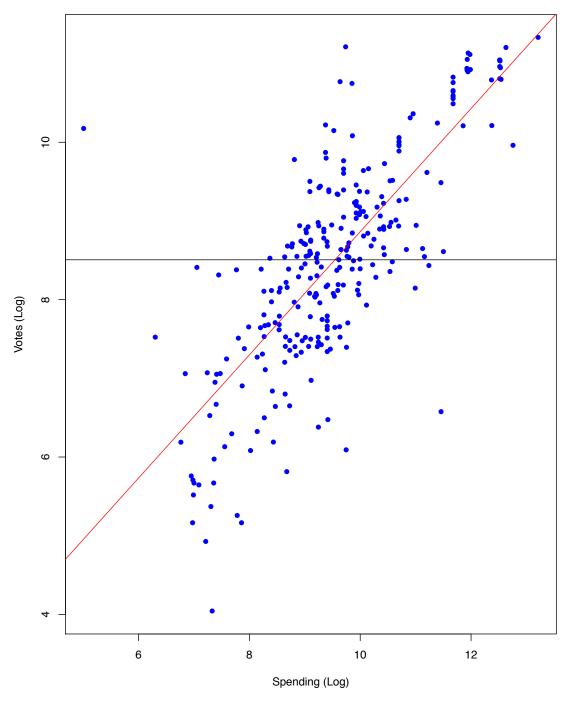


Figure 4.5 — Logged campaign spending compared to logged votes with the Adams and Schreiber threshold applied (n = 283, p-value = <2.2e-16). For the full regression output please see Appendix A (Table A2).

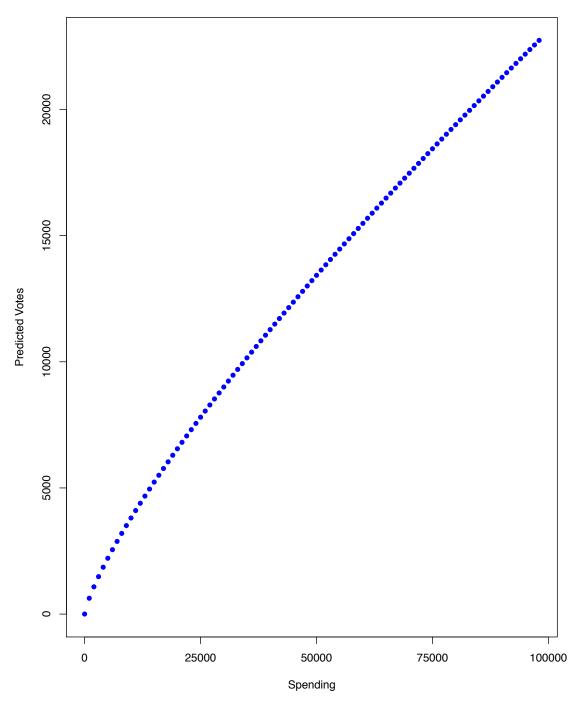


Figure 4.6 — Raw spending totals compared to predicted votes (Adams & Schreiber). For the raw data, please see Appendix B (Table B2).

When raw spending numbers are tabulated using the spending-to-votes equation (Y-hat = 1.034 + 0.783 (x)), the predicted vote total curves in a similar manner as the donation-to-predicted-vote graph shown in Figure 4.4. Once again, the first \$1,000 corresponds with the largest increase in votes, adding 628 to the total, as shown in Figure 4.6. The numbers that follow begin to decrease, with an additional \$1,000 correlating to only 452 additional predicted votes for a total of 1,080, while a third \$1,000 increase boosts the predicted vote figure by 403 for a total of 1,483. A candidate who spent \$545,689 on their campaign — the high end of the spending range in the Adams and Schreiber dataset — would receive a predicted vote total of 88,255 and would only see a 125 vote increase if they spent an additional \$1,000. The average candidate in Metro Vancouver in 2014 spent a mean of \$36,759, which corresponds with 10,607 predicted votes. An additional \$1,000 spent would increase the vote total by 225 for a total of 10,831 votes. The median spending total of \$12,149 correlates with 4,393 votes, with a \$1,000 increase leading to an additional 284 votes for a total of 4,677. Much like the contribution variable, the spending variable curves, with the number of predicted votes shrinking as the candidate increases spending.

Perhaps not surprisingly, the findings diminish slightly when the less restrictive threshold (at least one dollar raised or one dollar spent) is applied to the dataset. However, the analysis clearly indicates that money still plays an important role in vote acquisition. Using the more lenient parameters, the regression analysis model produces an estimated line equation of Y-hat = 3.397 + 0.557 (x), which is graphed in Figure 4.7. The R squared falls to 0.454, the adjusted R squared is 0.452 and the Pearson correlation coefficient is smaller at 0.674 (For the full regression output, please see Table A3 in Appendix A). While the donation-to-vote correlation is not as substantial as when the Adams and Schreiber threshold is applied, clearly there is still a strong relationship between the two variables when the less restrictive framework is utilized.

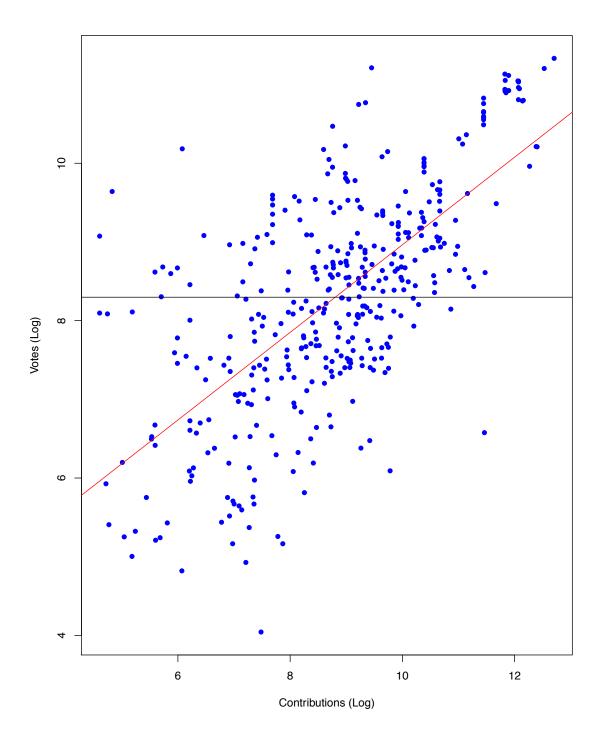


Figure 4.7 — Logged campaign donations compared to logged votes with the less stringent threshold applied (n = 402, p-value = <2.2e-16). For the full regression output please see Appendix A (Table A3).

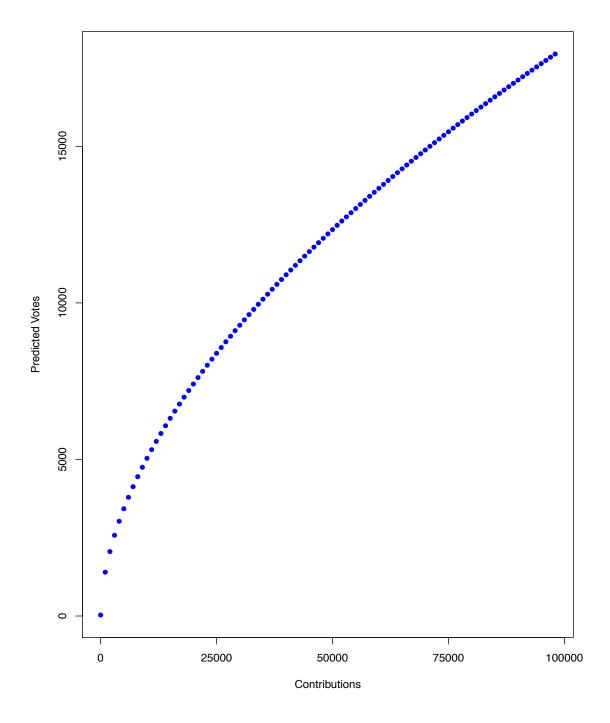


Figure 4.8 — Raw donation totals compared to predicted votes with the less stringent threshold applied. For the raw data, please see Appendix B (Table B3).

When the raw donation totals for the more lenient dataset are analyzed, the differences are even more prominent than in the Adams and Schreiber examples. Figure 4.8 shows that \$1,000 corresponds with a predicted vote total of 1,398, a number that increases by 658 to 2,056 when an additional \$1,000 is contributed. At the high end of the range, the power of a dollar shrinks. A candidate that raised \$329,017 would see a predicted vote total of 35,225, with an additional \$1,000 adding only 59 votes for a total of 35,284. The average candidate raised a mean of \$23,317 when the looser threshold is applied to the dataset. With the average amount, a person could expect to see 8,009 predicted votes, with an additional \$1,000 adding 192 for a predicted vote total of 8,201. The median donation total of \$7,499 correlates to 4,130 predicted votes, with an additional \$1,000 in contributions adding 318 votes for a total of 4,449 predicted votes. Even with the less stringent candidate viability threshold, the predicted relationship curves, with the predicted vote total decreasing as donations increase.

Campaign spending yielded similar results as the donation-to-vote comparison. When the less restrictive threshold is applied to the dataset, the regression model produces the equation Y-hat = 3.330 + 0.562 (x), which is plotted in Figure 4.9. The adjusted R-squared is 0.456 and the Pearson correlation coefficient is 0.676 (For the full regression output, please Table A4 in Appendix A). The figures are lower than when the Adams and Schreiber threshold is utilized, however they continue to be substantive, showing that even when the less restrictive standard is applied to the dataset, the spending continues to influence vote totals.

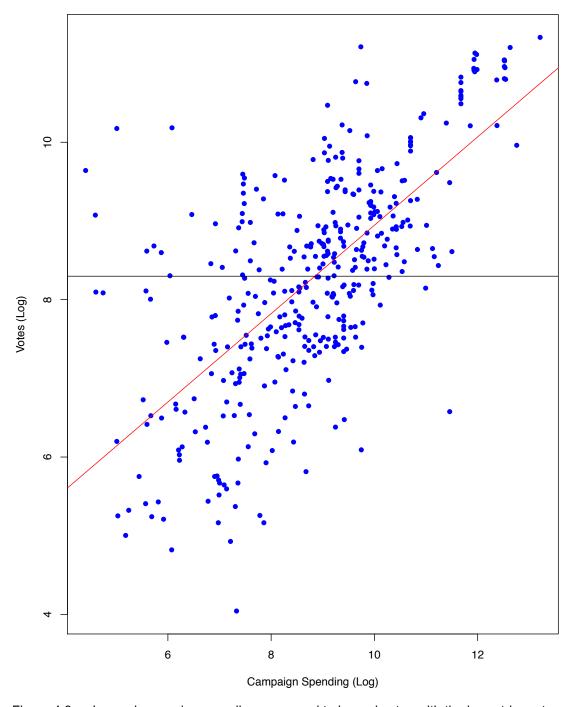


Figure 4.9 — Logged campaign spending compared to logged votes with the less stringent threshold applied (n = 402, p-value = <2.2e-16). For the full regression output please see Appendix A (Table A4).

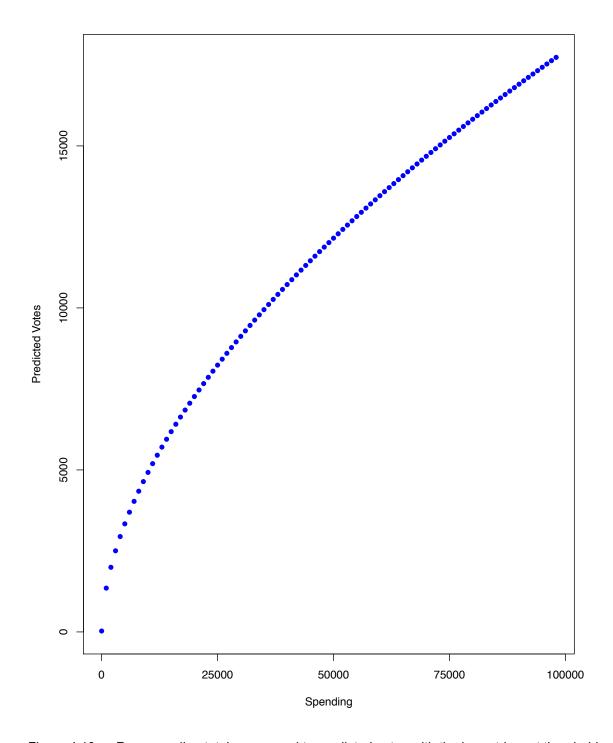


Figure 4.10 — Raw spending totals compared to predicted votes with the less stringent threshold applied. For the raw data, please see Appendix B (Table B4).

The spending numbers show a predicted vote total, outlined in Figure 4.10, that follows closely with the curve for the contribution variable demonstrated in Figure 4.8. The first \$1,000 spent on a candidate's campaign yields 1,351 predicted votes, with an additional \$1,000 increasing the number by 642 ballots cast for a total of 1,994. At the upper end of the range, a candidate who spent \$545,689 could expect to see 46,471 predicted votes, with an additional \$1,000 adding 48 votes for a total of 46,519. The mean spending figure of \$26,596 corresponds with 8,418 predicted votes, with an additional \$1,000 adding 180 votes for a total of 8,598. A candidate who spent the median figure of \$8,319 could expect to see a predicted vote total of 4,343, with an additional \$1,000 yielding an increase of 296 for a total of 4,640. Figure 4.10 demonstrates the curve, with the effect spending has on vote totals shrinking as candidates dispense more funds on their campaigns.

The regression analysis clearly demonstrates that both campaign contributions and campaign spending have a substantive impact on vote totals. The effects are particularly prominent in the initial stages, with money becoming less effective at increasing the number of ballots cast as more is spent and raised. These findings align with the theory that elites described by Clarence Stone outlined in Chapter 2 use fundraising to maintain urban regimes. The results are also consistent with some of the other study findings in Chapter 2. As noted in Scarrow (2007), money loses its effectiveness as a campaign accumulates more funds, a factor that is clearly demonstrated in the Metro Vancouver dataset. For example, when a candidate increases their contributions from \$0 to \$1,000 with the Adams and Schreiber threshold, they could expect to receive a predicted vote total increase of 553. However, a candidate with \$29,000 could only expect to see an additional 260 predicted votes were they to raise another \$1,000. (See Appendix B for all predicted vote total data). The numbers appear to suggest that municipal election campaign finance follows similar patterns as higher levels of government when it comes to the effectiveness contributions have at increasing vote totals.

The Metro Vancouver findings differ, however, from the consensus established by Scarrow (2007), Benoit and Marsh (2006), and Denver and Hands (1997) that challengers receive a greater benefit from higher spending than their incumbent counterparts. Up until

this point, comparisons in the Metro Vancouver study between contributions and votes have included all candidates in the 2014 election. However, the differences between the effect money has on votes becomes apparent when the two candidate categories are isolated. For example, when the Adams and Schreiber threshold is applied, a linear regression model comparing logged incumbent contributions with logged incumbent votes produces the equation Y-hat = 1.41 + 0.76(x). When only challengers are isolated in the dataset, the equation is Y-hat = 0.26 + 0.86(x) (For the full regression output, please see tables E1 and E2 in Appendix E). The unlogged equations produce the curved lines shown in Figure 4.11, which demonstrates that incumbents receive a higher number of votes for the same amount of contributions as non-incumbents.

In a region where the average candidate raised and/or spent a mean of approximately \$30,000 depending on the dataset threshold, Figure 4.11 suggests that for all practical purposes, incumbents receive more votes for each campaign dollar than non-incumbents. This finding runs counter to the previous academic research cited in Chapter 2, particularly the European study examined by Benoit and Marsh, which found that one Euro equates to 0.37 votes for a challenger, but only 0.24 votes for an incumbent. In Metro Vancouver with the Adams and Schreiber threshold applied, an incumbent could expect to receive an additional 756 votes by increasing their contribution total from \$0 to \$1,000. Meanwhile, a non-incumbent would only see a corresponding predicted vote increase of 493 for the same amount of money. However, over the long term, incumbents begin to lose their advantage. After \$15,000 has been raised, the difference between the predicted vote total for incumbents and challengers begins to shrink. By the time the candidates reach the \$59,000 contribution mark, challengers have surpassed incumbents in total predicted votes, as shown in Figure 4.12.

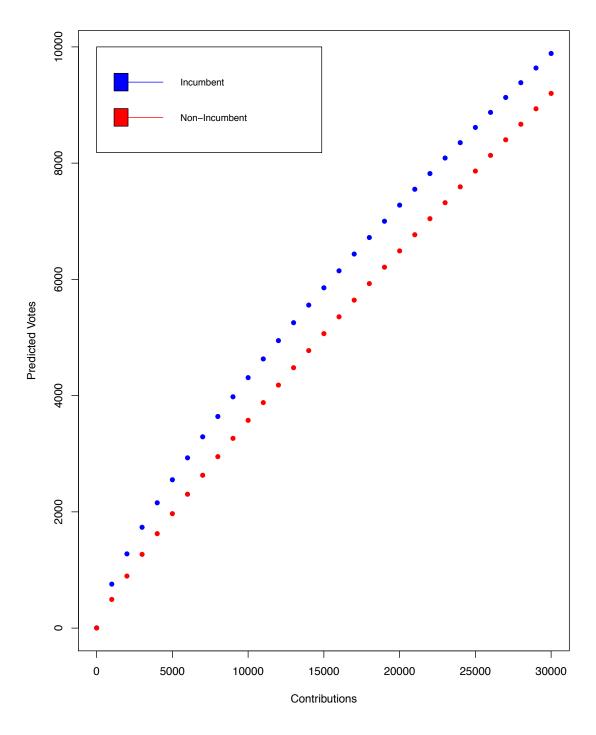


Figure 4.11 — Incumbent and non-incumbent predicted vote totals compared to contributions when the Adams and Schreiber threshold is applied to the data set (For the regression model output please see Table E1 in Appendix E).

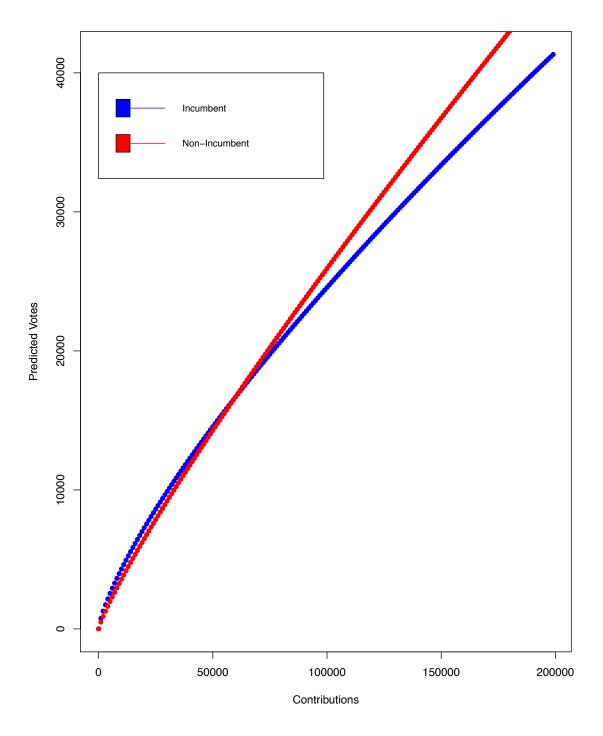


Figure 4.12 — Incumbent and non-incumbent predicted vote totals compared to contributions when the Adams and Schreiber threshold is applied. The larger table shows that non-incumbent candidates eventually overtake incumbents as more campaign donations are accumulated (For the raw data, please see Table E3 in Appendix E).

The results differ when the less stringent threshold is applied to the dataset. The linear model line equation for incumbents is Y-hat = 2.24 + 0.68(x) and Yhat = 3.82 + 0.51(x) for non-incumbents (For the full linear model regression output, please see Table E2 in Appendix E). Initially, challengers have an advantage, receiving 473 more predicted votes than incumbents when they increase their contribution total from \$0 to \$1,000, as shown in Figure 4.13. However, the non-incumbent edge quickly diminishes. Once the candidates surpass \$10,000 in donations, incumbents regain the advantage, which is maintained as more money is contributed, as shown in Figure 4.14.

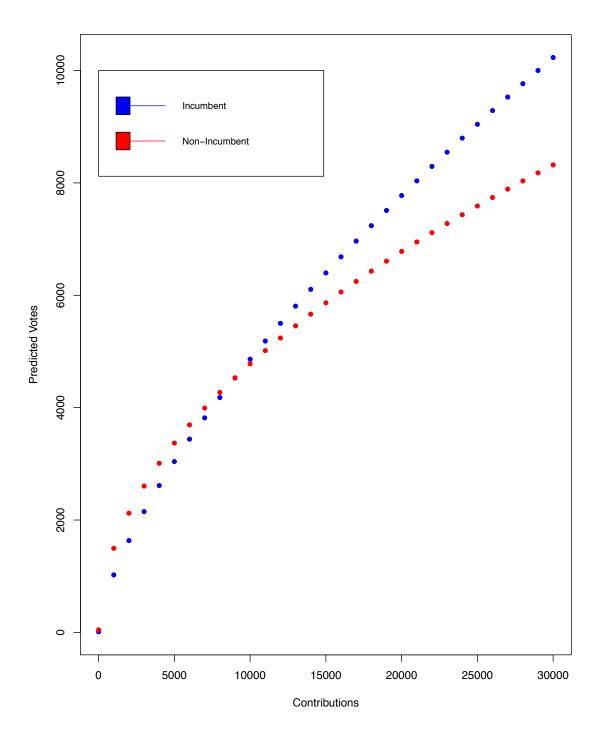


Figure 4.13 — Incumbent and non-incumbent predicted vote totals compared to contributions when the less stringent threshold (\$1 raised or spent) is applied to the data set (For the regression model output please see Table E2 in Appendix E).

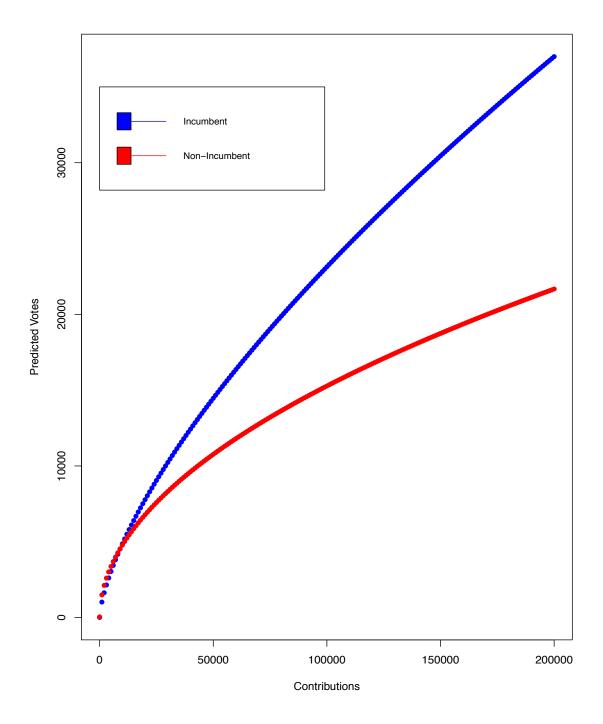


Figure 4.14 — Incumbent and non-incumbent predicted vote totals compared to contributions when the less stringent threshold (\$1 raised or spent). The larger table shows that after initially not receiving the same number of votes as challengers, incumbents eventually overtake non-incumbents as more donations are accumulated. (For the raw data, please see Table E4 in Appendix E).

Whether Denver and Hands' juice analogy works for Metro Vancouver (1997) is difficult to say. When the Adams and Schreiber threshold is applied, incumbents appear to have a short-term advantage, while challengers in big races with deep pockets may be able to overtake the opposition in the long term. The opposite is true when the less stringent parameters are applied to the dataset. Figure 1.13 shows that challengers have an initial advantage in procuring more votes for the same level of contributions, but the gains are quickly lost and incumbents appear to dominate long term. Further research, perhaps accounting for future elections, could be undertaken to determine whether municipal elections in Metro Vancouver fit the larger consensus that challengers receive a greater benefit than incumbents when raising money. The next section will look at the effect incumbency has on the regression models.

4.3. The Incumbency Factor

For the purposes of this thesis, an incumbent is defined as any candidate who held civic office in Metro Vancouver on the day of the 2014 civic election. This includes candidates who may be moving from school trustee to council or from council to the mayor's chair. It also captures candidates who won a by-election at some point during the prior term and did not serve the full length of the three-year period. The incumbent definition, however, does not include candidates who may have served at a different level of government. A Member of the Legislature or a Member of Parliament who decided to run for mayor or a council seat would not be considered an incumbent for our purposes, although they could have significant political name recognition. Perhaps more importantly, the variable does not include council candidates who have previously held office. For example, a person who served several terms in the 1990s, took a break from politics and then returned to run in the 2014 civic election would not be considered an incumbent by the definition applied here.

Factoring in the incumbency variable, which was coded for this analysis (one for incumbents and zero for non-incumbents), does not appear to change the results of the

regression analysis in any meaningful way (For the complete multiple regression model output please see Appendix D). For example, the adjusted R-squared for the contributions-to-votes model with the Adams and Schreiber threshold increases from 0.611 to 0.612, while the spending-to-vote analysis shows similar slight gains, increasing the adjusted R-squared from 0.592 to 0.594. This would suggest that incumbency does not play a substantive role in increasing vote totals in the models. The results are similar for the regression analysis conducted with the larger dataset using the less stringent candidate threshold. Again, the incumbency variable had minimal impact on the model. For the donation-to-vote analysis, incumbency decreased the adjusted R-squared slightly from 0.452 to 0.451. The spending analysis regression results were similar for the dataset with the less stringent candidate threshold (\$1 raised or spent) with the adjusted R-squared falling from 0.456 to 0.455.

Table 4.3 — Differences in R² with Incumbency Variable Added to the Regression Analysis

Variables	Difference	AdjustedR ² Before	Adjusted R ² After	Difference
Spending (Adams & Schreiber)	0.0031	0.592	0.594	0.0017
Donations (Adams & Schreiber)	0.0022	0.611	0.612	0.0009
Spending (Larger Dataset)	-0.0005	0.456	0.455	-0.0027
Donations (Larger Dataset)	0.0002	0.452	0.451	-0.0028

^{*}For the complete multiple regression output please see Appendix D (Table D1, D2, D3 and D4).

4.4. The Incumbency Advantage

The multiple regression results raise questions about the effect incumbency has on electoral success and appears to run counter to other statistical analysis outlined in this research. For example, a chi-squared test reveals that for both the Adams and Schreiber threshold dataset and the larger dataset, a correlation exists between the incumbency variable and whether a candidate was successfully elected. The null hypothesis, which states that there is no connection between incumbency and electoral success, is soundly rejected with a p-value considerably lower than the 0.05 threshold that indicates statistical significance (For complete chi-squared statistical output, please see Appendix F). Clearly, there is a strong connection between these two variables. It should

also be noted that 82.8 per cent of incumbent candidates who sought re-election during the 2014 Metro Vancouver campaign were successful, a percentage that is higher than the Kushner, Siegel and Stanwick study and Jamieson study cited in Chapter 2.

This raises an interesting question: if incumbents appear to have an electoral advantage, why does the incumbency variable have such a small impact on the spending-to-vote and donation-to-vote regression models? The answer to this question could put even greater emphasis on the role money plays in municipal elections. By itself incumbency — and the experience and name recognition that comes with it — may not lead to increases in vote totals. It could be that the fundraising and spending advantages that incumbents enjoy allows this category of candidate to have a strong track record when it comes to electoral success. As the next section shows, incumbents lead non-incumbents in almost every financial metric in the dataset. With the results of the linear regression models and the predicted increases in vote totals that come from donations and spending, it is easy to see how challengers struggle to win seats against an entrenched and well-funded group of incumbent candidates.

4.4.1. Vote Comparisons: Incumbents vs. Non-incumbents

Comparing the vote total means of incumbents and non-incumbents shows the benefits that can come for candidates running for re-election. Overall, when all Metro Vancouver candidates are considered, there is a separation of more than 7,000 votes, with those who are running for re-election averaging 14,162, while those who are challenging receiving a mean of 7,002. The gap is similar when only council candidates are compared. The average incumbent councillor receives a mean that is approximately 6,800 votes higher (14,284) than non-incumbents (7,430). The difference widens considerably when only the mayoral race is considered. The mean comparison found that a challenging mayoral candidate receives an average of 4,282 votes, while a sitting mayoral candidate seeking re-election receives 14,284 votes. Regression analysis adds further evidence that incumbent candidates can expect to receive approximately 200 per cent of the votes of a non-incumbent candidate. For example, when logged votes are compared to incumbency with the Adams and Schreiber threshold applied, candidates running for re-election receive 7,644 votes to a challenger's 3,750 votes (See Table 4.4).

When the Adams and Schreiber threshold is not applied to the dataset (including all candidates that received or spent \$1 on their campaign), incumbents receive 215 per cent of the votes of a challenger.

Table 4.4 — Incumbency and Votes

Adams and Schreiber: In(votes) = 8.2296 + 0.7121(incumbency)			
Incumbent	7,644		
Non-incumbent	3,750		
Ехр	2.04 (204%)		
• Less stringent dataset = In(votes) = 8.072 + 0.764(inucmbency)			
Incumbent	6,877		
Non-incumbent	3,203		
Ехр	2.15 (215%)		

^{*}For the complete regression model output please see Table C1 in Appendix C.

4.4.2. The Fundraising Advantage

What likely accounts for this wide gap in votes between incumbents and non-incumbents relates to the linear regression model outlined earlier in this chapter. Analysis of the total donation variable in the Metro Vancouver dataset shows the donation and spending advantages of office holders compared to first-time office seekers in an election campaign. For example, the mean donation total for all 446 office-seekers across the 21 municipalities in the region is \$21,099. For incumbent candidates, that number almost doubles to \$40,437, while the mean for non-incumbents is significantly lower at \$13,795, as shown in Figure 4.15. That means that in the 2014 civic campaign, those who ran for re-election raised an average of 193 per cent more than someone who had yet to gain office. When mayoral candidates are removed from the equation, the gap closes slightly, however incumbents still maintain a considerable advantage. When only those seeking council seats are considered, the mean incumbent total donation is \$32,376, while it is \$12,272 for non-incumbents, a 163 per cent advantage. The gap is even larger for candidates seeking the mayor's chair, with incumbents generally receiving a 237 per cent advantage, with a mean of \$79,206 to \$23,452 for non-incumbents.

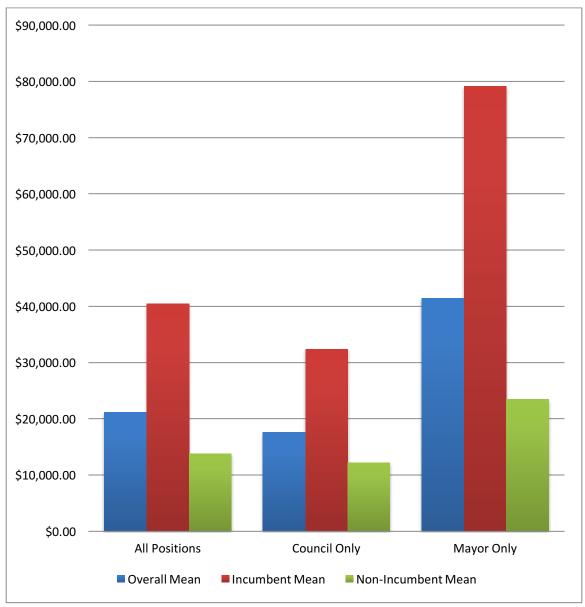


Figure 4.15 — Average donations: incumbents compared to non-incumbents

The mean comparisons are similar to the results of a regression analysis comparing incumbency and fundraising. As noted in Table 4.5, incumbents in the dataset with the Adams and Schreiber threshold applied, can expect to receive 202 per cent of the contributions of a challenging candidate. Even when only candidates considered serious by Adams and Schreiber are considered, incumbents maintain a considerable advantage. Not surprisingly, when the less stringent threshold is applied to the dataset (all candidates with an ability to raise or spend \$1), the divide is even higher at 369 per cent.

Table 4.5 — Incumbency and Fundraising

Adams and Schreiber	In(donations) = 9.2666 + 0.7023(incumbency)	
Incumbent (1)	\$21,351.99	
Non-incumbent (0)	\$10,578.72	
Exp(0.7023)	2.02 (202%)	
Less stringent dataset	In(donations) = 8.417 + 1.305(incumbency)	
Incumbent (1)	\$16,680.57	
Non-incumbent (0)	\$4,523.31	
Exp(1.305)	3.69 (369%)	

^{*}For the complete regression model output please see Appendix C (Table C2).

Similar fundraising gaps can be seen across the various donor categories outlined in the dataset. For example, the mean for all development donations to the 164 candidates who received development support in 2014 was \$14,754. However, here we once again see the sharp contrast between those who hold office and those who are trying to gain a foothold in the political process. Of the 164 office-seekers, the average donation to an incumbent candidate was \$19,314 while non-incumbents received an average of \$10,081. When mayors are removed from the equation, the data shows that council candidates running for re-election received an average of \$16,254, while those running for the first time received \$9,121. Mayoral candidates saw a similar gap, with incumbents showing a mean of \$31,196 compared to the non-incumbent average of \$22,075. Similar differences were seen in the development-related variable, which saw incumbents receive an average of \$5,927 to a non-incumbent's \$2,179.

Unions also showed a preference for experienced office holders. While the mean for all 135 candidates who received labour support in Metro Vancouver was \$6,788, incumbents received an average of \$9,062 to the non-incumbent mean of \$5,028. For council candidates, a \$3,000 difference exists between incumbents and non-incumbents, with those seeking re-election receiving an average of \$8,005 to \$5,091 for new candidates. Labour groups spent more on mayoral campaigns, with incumbent mayors receiving \$13,379 in union support compared to non-incumbent mayors who received \$3,134. There are a number of reasons why labour groups may feel compelled to donate more to mayoral candidates. While mayors make up only one vote on council, they are the chief executive officer of the municipality and have additional responsibilities that

include recommending bylaws to council and setting the council agenda (*Community Charter*, 2003). In most municipalities, the mayoral position is considered full time, while the council positions are generally considered part time. This means that mayors spend more time at city hall and have more influence over the day-to-day operation of the city. Donors likely see these additional responsibilities as an advantage and there is evidence from the 2014 dataset that suggests that unions may be more adept at maximizing their limited contributions. With less than a million dollars at their disposal compared to \$5.3 million in corporate donations, labour groups seem to focus their funds on a smaller group of candidates (135). While corporations donated to 245 candidates — in some cases to both sides of rival campaigns — unions appear to get behind two or three candidates in each city. Giving more money to mayors may be part of a broader strategy to maximize their resources and ensure that they have financially supported politicians with the most influence on council.

Individual donors were not immune to showing preferential treatment to incumbents. A typical candidate seeking re-election received \$9,085 from the individual contribution category, while non-incumbents only saw \$4,643. Both numbers are substantially different from the individual donation variable mean of \$6,084. Mayoral incumbents received a mean of \$17,611 from individual donors, while new office seekers received \$9,776.91.

Clearly, when it comes to fundraising, current council members have an advantage, but there are two donor categories where non-incumbents fared better than their incumbent counterparts. Mayoral challengers received an average of \$22,292 from the other business variable (general businesses not associated with development), while incumbents only received \$20,037. However, these totals were likely skewed by several large donations to challenging mayors in Surrey and Vancouver. There are fewer observations for the mayor value under the office variable, with only 65 total candidates. That means that the large donations from the other business donor category to Surrey non-incumbent mayoral candidate Doug McCallum (\$135,126) and Vancouver NPA non-incumbent mayoral candidate Kirk LaPointe (\$94,734) may have pushed the overall average up. Incumbent Mayor Gregor Robertson, for comparison, received the third highest total in the other business category with \$77,255. With mayoral candidates

removed from the calculations, we see the trend return to normal for the other business variable, with incumbent councillors favoured with an average of \$7,668 from this donor category and non-incumbents only receiving \$5,114.

Another category where non-incumbents had an advantage was in the self-funded variable, however this may simply show the difficulty new office seekers have in raising money. The mean for the overall self-funded category was \$4,119, with incumbents spending \$3,686 and non-incumbents spending \$4,297, close to \$600 more. When the mayoral candidates are removed from the calculations the figures adjust slightly, with incumbents self-funding an average of \$3,285 to the non-incumbent average of \$3,253. The gap becomes even more substantial when only the mayoral races are considered. For those seeking the mayor's chair, incumbents spent an average of \$5,663 on their own campaigns while non-incumbents spent an average that was close to double at \$11,572. This shows that, according to the data, candidates challenging for office feel a need to donate to their own campaigns. They may believe that putting up their own funds will demonstrate their seriousness, with the hope that once they win office they will be able to make new fundraising connections for future campaigns. However, campaigns that are solely paid for with self-funded donations may be a harbinger of electoral defeat. Office seekers who fail to attract donors other than themselves may want to stop throwing good money after bad and reconsider their campaign strategy. On the other hand, incumbent mayors may believe they are safe in their position and do not feel a need to spend their own money on their re-election efforts. With access to donor networks, incumbents may not feel a need to put their own money in play.

4.4.3. Candidate Viability and the Incumbency Advantage

The fundraising gap between incumbents and non-incumbents remains wide when the Adams and Schreiber threshold for candidate viability is applied to the dataset, reducing the number of candidates who meet the standard to 283 office seekers. Of this subset, 111 incumbents raised a total of \$4,981,872, while 175 non-incumbents raised a total of \$4,218,042. However, because of the larger number of non-incumbents, there is a considerable gap in the average amount that an office holder received when compared to an office seeker. For example, the average donation total for an incumbent is \$44,881,

while a non-incumbent only received \$24,103. Again, the differences between incumbents and non-incumbents are seen throughout the donor categories among the candidates that meet Adams and Schreiber's threshold for viability. In every donor grouping, with the exception of the self-funded candidates, incumbents have a significant advantage.

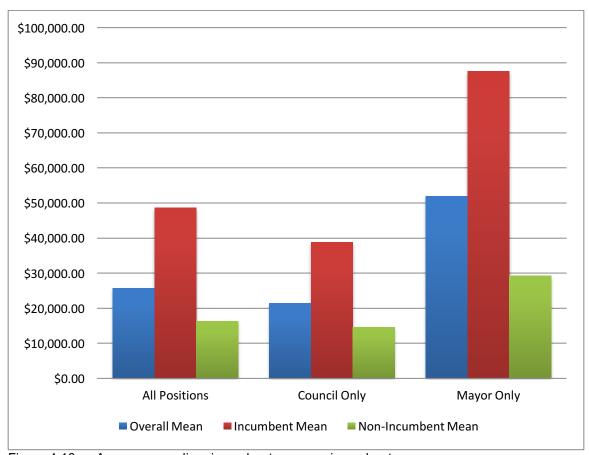


Figure 4.16 — Average spending: incumbents vs. non-incumbents

With more money at their disposal from supportive donors, it is not surprising that incumbents spent more than their non-incumbent counterparts during the 2014 Metro Vancouver civic election. Figure 4.16 shows that on average, office holders spent \$48,542 compared to \$14,832 for those seeking a seat on council for the first time. Once again, mayoral candidates were the biggest spenders, expending \$93,645 per incumbent candidate, while the number was \$23,939 for non-incumbents. Incumbent council

candidates also outspent their non-incumbent opponents by a wide margin, with a mean of \$39,165 to the non-incumbent average of \$13,396.

4.4.4. Multiple Regression and Incumbency

From the regression analysis, we know that campaign spending and donations have a significant and positive impact on vote totals. We also know from the mean analysis that incumbents enjoy large donation and spending advantages over non-incumbents. Therefore, the multiple regression results, which showed incumbency had little impact on vote totals in the regression model, likely mean that money is the key factor driving electoral success. It is possible that it is not incumbency by itself that allows office holders to consistently retain their positions but the fundraising and spending advantages that come with incumbency. The electoral edge that experienced office holders enjoy lends credence to Stone's notions of regime politics and the informal arrangements that exist between policy makers and the corporate elite. If campaign donations are the nexus between politicians and the business community, the statistical evidence suggests that these arrangements are easy to sustain. With little movement at the council table, these informal relationships can exist for multiple election cycles, allowing elites great influence over community planning and public policy.

4.4.5. Grouping Communities by Population

The range in size of Metro Vancouver's 21 municipalities makes apples to apples comparisons difficult. However, grouping the cities by population, a method used by Kushner, Siegel and Stanwick that was outlined in Chapter 2 (Kushner, Siegel & Stanwick 1997), allows for observation among communities with similar population totals. While Kushner, Siegel and Stanwick grouped Metro Toronto municipalities by population size into three categories — small, medium and large — the Metro Vancouver analysis breaks the region up into a total of four groupings: small, small-medium, medium-large and large. Adding the fourth category will allow for a wider range of analysis and avoids putting extremely small communities like Anmore, Belcarra and Lions Bay into the same classification as municipalities like the City of North Vancouver and Port Coquitlam, which would also be considered small if the cities were divided into population thirds.

The small category consists of the six smallest communities based on population size, including Anmore (2,092), Belcarra (644), Bowen Island (3,402), Lions Bay (1,318), Pitt Meadows (17,736) and White Rock (19,339) for a total population of 44,531, or two per cent of Metro Vancouver's total population. The small-medium category includes the City of North Vancouver (48,196), Port Coquitlam (56,342), Port Moody (32,975), the City of Langley (25,081) and the District of West Vancouver (42,694) for a total population of 205,288, or nine per cent of the region's population. The medium-large category consists of the Township of Langley (104,177), Delta (99,863), Maple Ridge (76,052) the District of North Vancouver (84,412) and New Westminster (65,976), making up 19 per cent of the population with a total of 430,480 residents. With 1.6 million people, the large grouping includes 71 per cent of the total Metro population and includes the City of Vancouver (603,502), Surrey (468,251), Coquitlam (126,456), Burnaby (223,218) and Richmond (190,473). Table 4.3 shows how the 21 cities were classified, while Figure 4.17 and 4.18 outlines the donation breakdown by city grouping.

Table 4.6 — Metro Vancouver Cities Grouped by Population

Small (0% — 25%)	Small-Medium (26% — 50%)	Medium-Large (51% — 75%)	Large (76% — 100%)
Anmore	City of North Vancouver	Township of Langley	Coquitlam
Belcarra	Port Coquitlam	Delta	Burnaby
Bowen Island	Port Moody	Maple Ridge	Richmond
Lions Bay	City of Langley	District of North Vancouver	Vancouver
Pitt Meadows White Rock	District of West Vancouver	New Westminster	Surrey

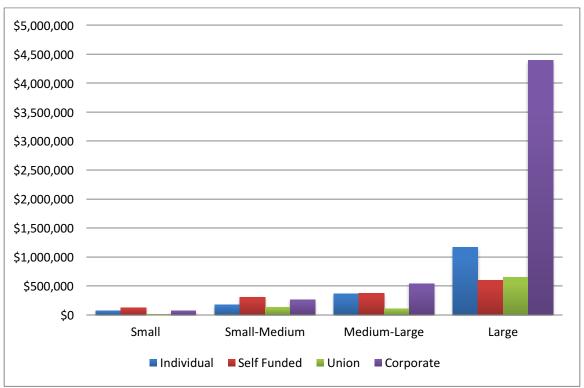


Figure 4.17 — Donation totals by city population grouping

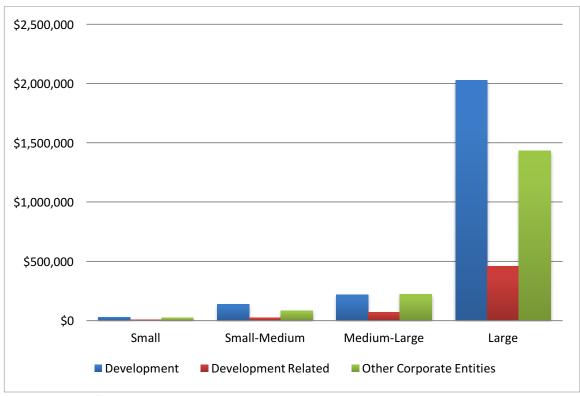


Figure 4.18 — Corporate donation breakdown by city population grouping

Not surprisingly, the above figures show that larger communities received a bigger share of the donations in 2014, with the percentage change in totals aligning closely with the population of each group. For example, the large community category makes up 70.3 per cent of the region's total population and 72.1 per cent of the overall donation total. The medium-large grouping makes up 18.7 per cent of the population and 14.9 per cent of total donations, while the medium-small grouping accounts for 8.9 per cent of the population and has 9.6 per cent of the overall donations. The small grouping makes up 1.9 per cent of the population of the region and 3.2 per cent of total donations. These findings would appear to indicate that campaign contributions tend to follow the larger municipalities where more growth is prevalent.

The alignment between the populations and donation totals should not be surprising. However, the way in which these figures vary between the donor categories is noteworthy and gives further evidence that contributors, particularly corporations, focus their efforts on larger municipalities. The data shows there is an overrepresentation of self-funded candidates in the smaller communities, with the small and small-medium categories, which make up a total of 12.8 per cent of the population, accounting for 31.4 per cent of the self-funded total. The percentage of union donations aligns closely with the population in all four groups, however corporate donors appear to favour the largest municipalities. In the large group of cities, which makes up 70 per cent of the region's population, corporations contributed 83 per cent of their donations, as shown in Figure 4.19. Figure 4.20 demonstrates how the corporate total breaks down into its various subsets.

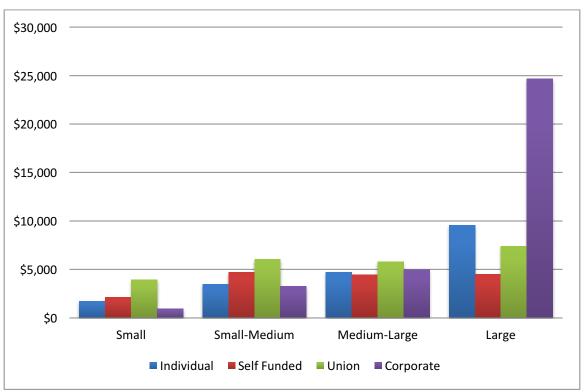


Figure 4.19 — Average donations by population grouping

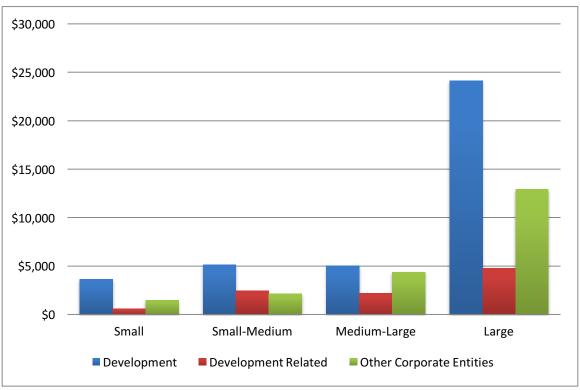


Figure 4.20 — Breakdown of corporate donation averages by population grouping

4.4.6. The Incumbency Factor and City Size

The fundraising gap between incumbents and non-incumbents persists when municipalities are broken down into the Small, Small-Medium, Medium-Large and Large groupings. However, it is worth noting that the incumbency advantage is more prominent in the more populous municipalities, which is consistent with Kushner, Siegel and Stanwick's findings. Again, this fact aligns with the growth machine theory, which suggests that the business community has more influence in cities where development is a common occurrence. The series of bar graphs that make up Figure 4.21 to Figure 4.24 shows that in the smallest communities in the region, a non-incumbent raises 69.6 per cent of the donations raised by an incumbent, a figure that shrinks to 57.7 per cent in the small-medium community grouping and 35.5 per cent in the medium-large category.

Candidates seeking office for the first time in the largest municipalities in the Lower Mainland — Vancouver, Surrey, Richmond, Burnaby and Coquitlam — are only able to raise 31.5 per cent of the funds obtained by their incumbent counterparts. There are many reasons why this fundraising advantage is more prevalent in larger cities. First, as stated in Chapter 2, more money is required to get a campaign message out to voters in a larger municipality. Mail outs and signage need to cover more ground and are more expensive as a result (Kushner, Siegel & Stanwick 1997). Old fashioned shoe-leather campaign practices, like going door-to-door, or standing around a busy public area like a transit exchange or shopping centre, are also less effective in bigger cities, which means it is more difficult for a new candidate to get in front of voters. Candidates in larger municipalities are more reliant on fundraising networks, which are difficult for newcomers to tap into.

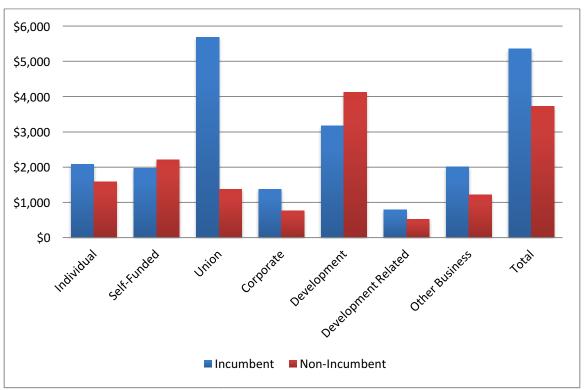


Figure 4.21 — Donation breakdown for the communities in the small category.

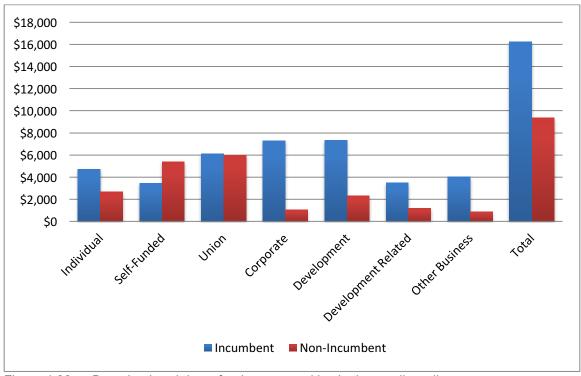


Figure 4.22 — Donation breakdown for the communities in the small-medium category.

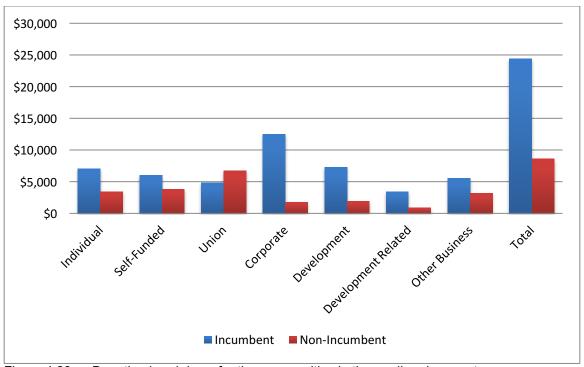


Figure 4.23 — Donation breakdown for the communities in the medium-large category.

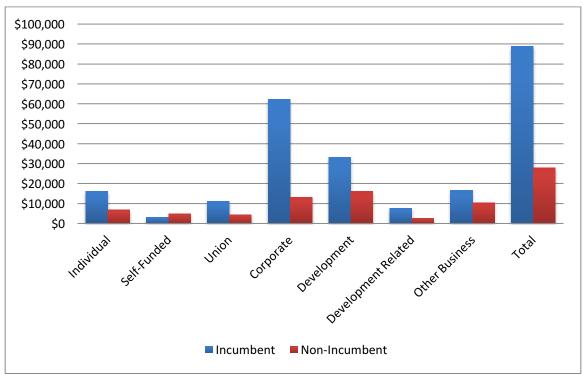


Figure 4.24 — Donation breakdown for the communities in the large category.

The only funding category where a preference for non-incumbents is demonstrated, shown in Figure 4.23, is the union donations for medium-large communities and the development donations in the small communities (Figure 4.21). Non-incumbents also lead in the self-funded category in the small, small-medium and large community groupings, however as noted elsewhere in this research, candidates that donate to their own campaigns are not generally successful. For the small category, the analysis shows that an incumbent receives \$5,354 to a non-incumbent's \$3,729, while in the small-medium community category the gap widens to \$16,236 for incumbents and \$9,372 for non-incumbents. The medium-large community category shows an almost tripling of incumbent donations (\$24,412) over non-incumbent donations (\$8,670) and the gap widens to \$88,902 for incumbents to \$28,084 for non-incumbents in the large community category.

The findings appear to demonstrate the strength of incumbency in Metro Vancouver's municipal elections. The regression analysis shows that money — whether it be through spending or campaign donations — positively relates to votes. A wellfinanced candidate has a strong chance of increasing the number of ballots cast in their favour and winning office. However, incumbents appear to have a particularly significant advantage when it comes to raising money. It is perhaps not surprising that a person in elected office has better access to the kinds of donor networks accustomed to supporting political officials. Individuals with whom the candidates have come into contact over the course of their council term — union representatives, developers, corporate moguls — can be tapped for support at levels that are not possible for someone starting out in politics. This does not necessarily imply that a donor is buying access or has an expectation attached to their financial contribution. The fact that the donor knows the candidate and their voting track record may be enough. It also does not hurt the case for the officeholding candidate that they are extremely likely to be re-elected and may oversee a decision on one of the donor's future projects or proposals. These relationships give candidates running for re-election a clear advantage when preparing their campaigns. The dynamic between the incumbent and the contributor is further evidence of the role regime politics plays at the council table.

4.5. Donation Patterns Across the Metro Region

As shown in Figure 4.24 and 4.25, the City of Vancouver is disproportionately represented when it comes to civic election campaign contributions. The municipality may only make up 26 per cent of the region's population, but it received 37 per cent (\$3,505,938) of the total donations for Metro Vancouver. This difference may indicate several things. It is likely that there are additional costs for candidates seeking to raise name recognition in large and crowded media markets, an assertion previously noted by Kushner, Siegel and Stanwick and outlined in Chapter 2 (Kushner, Siegel & Stanwick 1997). Word-of-mouth campaigning is not necessarily an option in a city of more than 600,000 people, with candidates having to rely more on expensive advertising to promote their message. There is also more money available for candidates soliciting contributions in the City of Vancouver than the outlying suburbs. Corporations and business entities are more likely to locate their headquarters in the region's downtown area as opposed to places like Coquitlam and Langley Township.

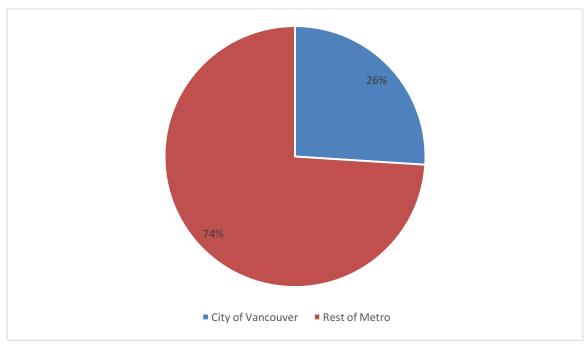


Figure 4.24 — Population breakdown of Metro Vancouver

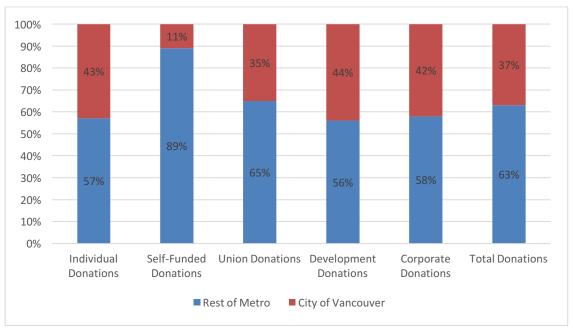


Figure 4.25 — Donations: Vancouver vs. rest of Metro

The City of Vancouver is over-represented in almost every donor category. Seventy-three per cent of Metro Vancouver residents live in suburban areas but they make up only 57 per cent of Metro Vancouver's individual campaign donations. The corporate community has also been more generous with Vancouver candidates than suburban candidates, with the city receiving 44 per cent of the region's development contributions and 45 per cent of the other business contributions. The union totals in Vancouver were not quite as high at 35 per cent, but the figure still outpaces the city's population compared to the rest of the region. Some of these disparities could be explained by the fact that Vancouver's two major parties — the Non-Partisan Association and Vision Vancouver — have unparalleled municipal fundraising operations.

Suburban candidates appear to be balancing out this disparity by donating to their own campaigns. Eighty-nine per cent of all self-funded donations came from outside of the City of Vancouver, which represents 74 per cent of the population. This is likely due to the fact the cost of campaigning in smaller communities is considerably lower than in the big media market of Vancouver. It may be simpler for a candidate to put a few hundred dollars or even thousands of dollars into their own campaign rather than taking the time to solicit friends, family, unions and businesses.

4.6. The Concentration of Donor Contributions

The level of financial influence a small number of large donors have on the political process in Metro Vancouver is apparent when we see the concentration of donations in the 2014 dataset. As stated above, a total of \$9,454,508 was donated during the campaign, of which \$3,234,697 came from the individual and self-funded donation category. That means that the rest — \$6,219,811 — came from 1,431 different unions and corporate entities. However, 25 per cent of these contributors (359 of the 1,431) made up 81.3 per cent (\$5,058,619) of all donations outside of the individual and self-funded category. The top ten contributors alone make up \$1,120,613, or 18 per cent of the total.

These overall figures are partially obscured by the fact that developers break their contributions up among their various corporate subsidiaries. For example, developers Concord Pacific Developments, Westwood Ridge Developments, Anthem Properties Group, Mosaic Developments and Burke Mountain Limited Partnership are all listed separately in the dataset. However, a comparison of each entity's address shows that they all work out of the same building — 1000-938 Howe Street, Vancouver — and share numerous proprietors. An individual who is scanning the various disclosure documents may not know the connections between the various corporate entities that are donating. In the case of 1000-938 Howe Street, a total of \$183,243 was given to candidates in 2014, making this address the third largest contributor in the dataset.

Another example of multiple donor entities sharing an address involves Amacon and Wesgroup Properties. Again, these two developers are listed as separate entities, however both operate out of 100-1450 Creekside Dr., Vancouver. Together, they donated \$160,112 to 76 candidates — the fifth largest donor in the dataset — with an average donation size of more than \$2,100. Meanwhile, 1100-936 Howe St., Vancouver, is the sixth largest contributor and is made up of development companies Noura Construction, Adriatic Investments, ITC Management, CM Bay Properties, Intergulf Investments and Betaview Homes. These six entities donated a combined total of \$93,633 to 46 candidates across the region. When these addresses are lumped together in the dataset, the total amount from the top ten contributors (0.7 per cent of the 1,429 donors) equals \$1,420,989, or 22 per cent of all union and corporate donation totals.

Unions and labour groups have similar approaches to distributing their donations, however their methods are more transparent than their corporate counterparts. Different locals of the Canadian Union of Public Employees may contribute to various candidates, but they are all working under the CUPE banner and are listed as such in the disclosure forms. Still, CUPE's B.C. division is the largest single contributor in the dataset. When all 28 CUPE locals, including the B.C. division, the Metro division and the national office are combined, the total is \$519,383. These funds were disbursed through 291 individual donations averaging \$1,784 for each contribution. It should be noted that many union-backed candidates receive donations from their municipality's local, the B.C. division and the national office, so the 291 separate donations does not mean 291 individual candidates received funds. In fact, only 135 of the 446 candidates (30.3 per cent) received union support. That means that the total benefit that a candidate received from the labour group is higher than the \$1,784 average cited here. By itself, CUPE represents 8.4 per cent of the labour and corporate contributions and 5.5 per cent of the total contributions in the dataset. Table 4.7 shows the top donors in Metro Vancouver in the 2014 civic election.

Table 4.7 — Top 10 Donors in Metro Vancouver (2014)

Donor	Category	Total	# of Donations
Canadian Union of Public Employees (B.C.)	Union	\$251,197	87
Great Canadian Railtour Company	Other	\$225,000	9
1000-938 Howe St., Vancouver	Developer	\$183,243	195
100-1450 Creekside Dr., Vancouver	Developer	\$160,112	76
RPMG Holdings Ltd.	Developer	\$132,780	63
Macdonald Development Corp.	Developer	\$107,810	9
1100-936 Howe St., Vancouver	Developer	\$93,633	46
Canadian Union of Public (Local 23)	Union	\$91,121	9
Wesgroup Properties	Union	\$90,121	49
Bill's Development Ltd. (Best Western)	Other	\$85,972	5
TOTAL		\$1,420,989	548

Chapter 5. Discussion

In *An Economic Theory of Democracy*, Anthony Downs explains the basic logic behind voting (Downs 1957). Policy makers vie for power by making promises they believe will appeal to the electorate. In exchange for electoral support, governments provide benefits to their citizens, for example police and emergency services, roads and infrastructure, garbage collection, etc. Policies do not necessarily have to provide direct and tangible benefits to achieve the support of a rational voter. Downs suggests that altruistic initiatives, like using tax dollars for humanitarian efforts or combating environmental degradation, are examples of benefits governments put forward in their quest for citizen support. Cutting social programs in favour of reducing taxes could also be considered a benefit to voters. In this view, the people casting ballots are rational actors that will support "the party [they] believe will provide [them] with more benefits than any other" (Downs 1957, 36).

To Downs, all citizens of legal voting age are equal. A wealthy industry tycoon has the same amount of voting power as an economically disadvantaged person, and therefore the same level of influence over the political process. In reality, however, the landscape is considerably more complex. In "On money, votes, and policy in a democratic society," Uri Ben-Zion and Zeev Eytan point out some of the inconsistencies in Downs' theory compared to the current political reality. "We question the view that political power is independent of economic power and claim that, via political contributions, there is at least a limited market in which political power can be 'bought' by economic resources. The practical importance of this transaction is that government policy may differ in this case from that chosen under the assumption of equality of political power" (Ben-Zion and Eytan 1974, 2). Money plays a major role in influencing policy-makers, which gives wealthy people more power over the political process, the authors argue. When a smaller number of people have a greater amount of influence, it can skew government outcomes. Policies that may benefit the majority are shelved in favour of initiatives that benefit a minority of wealthy campaign contributors capable of

improving the odds of re-election. Council decisions begin to reflect the views of the donor class instead of the average rational voter described by Downs.

Understanding the power dynamics in growth machine and urban regime theories appears to be as simple as following the money. The first part of the research question asked in Chapter 1 — What impact do campaign donations and spending have on electoral success? — is clearly answered in the regression analysis contained in Chapter 4. Dollars raised and spent correlate with larger vote totals, which is the main contributor to electoral success. The hypothesis outlined in Chapter 1 stating elites described by Molotch and Stone (Molotch 1976, Stone 1989) use campaign contributions to gain direct influence over policy makers holds up to statistical scrutiny. The answer to the second part of the question — who benefits from the current campaign finance paradigm? — is more complex. Candidates with strong donor networks capable of spending large sums of money have a better chance of winning compared to their more cash-strapped opponents. However, not all candidates are equal when it comes to fundraising. The analysis found that incumbent candidates have a decisive advantage when it comes to accumulating donations, making it easier for office holders to retain their positions, while political newcomers are unable to access the funds required to make their election efforts viable. This campaign finance paradigm bolsters the claim that elites in Stone's regime theory use money to maintain influence over municipal policy makers.

In Metro Vancouver's 2014 race, the re-election rate was 82.8 per cent, higher than the figures found in studies by Kushner, Siegel and Stanwick in Toronto and Jamieson's work in California. Overall, office holders receive an average of approximately 7,000 more votes than candidates running for the first time. The disparity between incumbents and non-incumbents was particularly evident when it comes to campaign donations. A candidate running for re-election receives an average of \$40,437 in contributions, close to double the Metro Vancouver average of \$21,099 and 185 per cent higher than the \$13,795 in average contributions for the person seeking office for the first time. The gap is even larger when mayoral candidates are isolated in the dataset. The analysis shows that a sitting mayor can expect to receive approximately \$79,206, more than three times as much as a non-incumbent, who receives an average of \$23,452.

5.1. The Incumbency Advantage

It should not be surprising that incumbents receive such a large fundraising advantage. Through the course of their council work, these office holders come into contact with developers, union officials and business leaders, building networks that can be tapped for contributions during an election campaign. A sitting official also has a voting record that they can brandish to like-minded contributors, demonstrating tangible support for certain policy positions. These relationships are a central component of Stone's regime theory and shows the dependency politicians have on donors to maintain their office.

The reliance politicians have on donors means that the contributors are also important beneficiaries of the current campaign finance paradigm. In an electoral system where spending and donations have a substantive connection with increased vote totals, donors can ensure that sympathetic policy makers are at the helm by simply selecting people that share their point of view and contributing to their campaigns. Consolidating around a certain group of candidates may appear difficult in a system where dozens of office seekers are vying for council positions. However, in practice the process is much simpler. Donors know that incumbents have a better chance of being re-elected than a challenger has at obtaining a council seat. It is in the best interest of those who wish to get the best bang for their donation dollar to make sure that the mayor and councillors seeking re-election receive a cheque from their organization (Jacobson 1985, Krebs 2005). The system allows certainty from one election to the next, limiting the chances of sweeping changes from occurring at the council table. For campaign donors, this allows the informal relationships between contributor and candidate to be maintained in the long term.

Understanding the motives behind political donations is an issue that has been analyzed in other studies. In *Money and Votes Reconsidered: Congressional Elections,* 1972-1982, Gary C. Jacobson found that donors tend to avoid putting their contributions toward hopeless causes (Jacobson 1985). He states "challengers win votes by spending money; but it is also clear that the amount they spend depends on their anticipated ability to win votes" (Jacobson 1985, 31). Jacobson's statement that candidates increase vote totals through donations is backed up by the regression analysis in Chapter 4. The fact

that candidates raise money and spend based on anticipated vote totals fits with the findings in this report when it comes to incumbency.

Even when contributors have backed the wrong candidates — that is, candidates that failed to gain office — they are still legally able to make their influence felt. A particularly troubling phenomenon that came up in the 2014 civic election involved candidates receiving money from donors after the election concluded. In the Tri-Cities, there are a handful of examples where candidates took contributions after the Nov. 15, 2014 election. Barbara Junker in Port Moody received \$3,350 from the New Westminster District Labour Council more than two months after being elected to council for the first time. The money was used to retire some of the debts her campaign incurred in the lead up to the vote. In Coquitlam, Teri Towner received \$1,500 from RPMG Holdings, which counts Onni Development Group as one of its subsidiaries, and \$1,000 from Infinity Properties, nine days after she was successfully elected to her first council term. Even incumbent council members collected donations after they were safely elected, including two-term Coquitlam Mayor Richard Stewart, who received \$9,850 in contributions between November 19 and 24. Receiving donations after ballots have been cast indicates that even when regimes are unable to predict accurately which candidates will win on voting day, they ensure that money makes its way to the successful candidates after the ballots have been cast.

5.2. Development Influence

Much like how all candidates are not equal when it comes to fundraising, not all donors are the same when it comes to making contributions. Corporations make up the largest portion of the total donation pie with \$5,292,836 (56 per cent), giving the business community considerable influence over municipal councils. Instead of contributions from local merchants or small businesses, a majority of donations in the corporate category come from companies that have a vested interest in the land-use process. Development and development-related entities contributed \$2,964,938, making up 57 per cent of the corporate category and 31 per cent of all contributions in 2014. In an electoral system where dollars correlate with votes, the development industry appears to have considerable sway over which candidates win office.

The development industry's ability to donate to candidates is unparalleled in the dataset, where individual contributions totaled \$1,785,161 (19 per cent) and self-funded contributions made up \$1,427,167 (15 per cent) of the \$9,454,508 total. Meanwhile, unions fell short of reaching \$1 million in donations in 2014, making up 10 per cent of total donations. Unions and labour groups are often seen as counterweights to the large amounts of corporate money that flows into campaigns. When governments ban contributions from certain donor categories, as was done in Alberta in 2015 (Bennett 2015) and in Ontario in 2016 (Benzie 2016), they often lump labour groups together with corporate entities as a way of showing that both sides of the political spectrum will be adversely affected by the regulations. However, the data analysis in this thesis clearly shows that unions were far outspent by their corporate counterparts during the 2014 campaign. If labour leaders are part of the elite described by Stone, they would appear to be at a disadvantage when it comes to influencing vote totals and election results.

The tenets of growth machine theory posit that municipal government exists to facilitate and encourage growth, with a focus on what Molotch calls the "land business" (Molotch 1976, 318). For the development industry, the subdivision of land is directly tied to corporate profits. As such, it is no surprise that real estate developers make up one of the largest contribution categories in the 2014 dataset. For less than \$3 million, developers and development-related businesses exert considerable influence over the municipal planning process across the region. Developers also benefit from their alignment with the larger corporate community. While the local restaurant owner or shop keeper may not profit directly from the land business, their bottom lines can improve with an increase in the number of residents (customers) that move into a given locale. As stated earlier in this thesis, regime entities, like chambers of commerce and boards of trade, give permanence to the business elite and tend to adhere to the pro-growth ideology described by Molotch. These organizations provide important support for corporations that are doing business in a municipality, particularly when the company making the proposal is headquartered elsewhere (Stone 1989, 171).

The concentration of donations shows the power of an elite few over the municipal decision-making process. The fact that a small number of contributors can make up such a large portion of the overall donation total is another indication of the influence regimes

have in Metro Vancouver. Chapter 4 notes that 81.3 per cent of all contributions — more than \$5 million of the close to \$9.5 million total — came from 25 per cent of the donors. The ten highest contributors made up 18 per cent of the total, putting a large amount of financial influence in the hands of a few well-connected businesses. Campaign contributions are the nexus between the regime and the policy maker and allow the informal relationship between the elites and the council members to be maintained over time.

5.3. Conflict of Interest

Even if the regression analysis did not show a strong association between funding and increased vote totals, the current electoral finance dynamic in municipal campaigns creates both real and perceived conflicts of interest. For example, city councils are relied upon to vote on labour contracts for their unionized municipal employees, a decision that is deliberated behind closed doors during in-camera meetings. Councils are also tasked with approving development proposals. In Coquitlam, where 54 per cent of all contributions to the nine council members elected in 2014 came from the development industry, council recently approved an 873-unit condo development proposed by Blue Sky Properties. The project was widely opposed by residents in the neighbourhood, according to the city's own surveys and public input processes, and countless residents spoke against the proposal during a public hearing (McKenna, June 2015).

Campaign disclosure forms showed that seven of the nine councillors that voted in favour of the development received approximately \$1,800 each from the company for their campaigns. Did the contribution have an influence over the council vote? It is impossible to know what is in the heads and the hearts of elected officials. However, even if we assume that the council members made their decision based on the merits of the project, the influence of the developer was already felt during the election process. It is highly unlikely that a councillor would be able to achieve their position without considerable financial support, which we know from the 2014 dataset often comes from the development industry. The regression analysis in Chapter 4 shows the impact \$1,800 in contributions can have on a vote total and it is unlikely that Blue Sky would make the donations to candidates that were not sympathetic to their point of view. A majority of

politicians that win their way to the council table already adhere to the pro-growth ideology and are sympathetic to the development industry.

Even if we can accept that each councillor can examine projects on their individual merits, the perception of conflict of interest is still detrimental to the process. Regardless of how good or bad a development proposal, economic policy or union contract may be, the current paradigm creates cynicism among the electorate, with voters becoming increasingly convinced that their political officials only exist to serve their donor networks. Over time this doubt and mistrust can undermine the system and cause voters to question the decisions of their elected officials. Given the findings in this thesis, it appears the credibility of mayors and councillors is being eroded in favour of a system that benefits Metro Vancouver's regime.

5.4. Spending Limits

Changes are coming to the municipal campaign finance process ahead of the 2018 election. In May 2016 legislation enacting spending limits on civic political campaigns received Royal Assent at the B.C. legislature in Victoria, capping campaign budgets on a formula based on a city's population. In jurisdictions of 10,000 people or more, the limit for mayoral candidates is set at \$1 per capita for the first 15,000 population, 0.55 cents per capita for the next 15,000 to 150,000 population, 0.60 cents per capita for the next 150,000 to 250,000 population and 0.15 cents per capita thereafter. For all other candidates (council, school trustee, parks board), the limits are set at half of the mayoral office seekers (*Local Government Election Act*, 2015). Spending limits were one of the recommendations put forward by the Local Government Elections Task Force mentioned at the beginning of this thesis. The limits were formulated by the Special Committee on Local Elections Expenses Limits after public consultations involving hearings, written submissions and online surveys (*Special Committee on Local Elections Expenses Limits Final Report* 2016).

It is too early to say what impact, if any, the new legislation will have on the candidates' approaches to campaigning. However, based on the 2014 Metro Vancouver dataset, it appears that the spending limits are in line with current practices and only a

small percentage of candidates will need to adjust their budgets in future campaigns. Of the 446 people that sought office in the dataset in the last election, only 69 would have breached the new spending caps had they been in place during the last election. While most of the candidates that spent over the cap only exceeded the limit by a few hundred dollars, there were a few egregious examples. Anmore Mayor John McEwen spent \$17,089 in a city with a \$10,000 limit, while Township of Langley Mayor Jack Froese overspent his city's limit of \$64,047 by \$30,000. The candidates who sought office under the NPA and Vision Vancouver banners breached the caps had they been in place in 2014 and considerable work will need to be done for both parties to bring their budgets in line for 2018.

While spending limits impose some degree of control on the runaway costs of campaigning in municipal elections, the changes are limited. First, the caps in B.C. are generous and will likely do little to reduce the amount of money spent during the civic election campaign. In Ontario, for example, the regulations do not follow the notion that a mayoral candidate requires twice as much spending as a council counterpart. The province has a limit of \$7,500 plus 85 cents per elector for mayors and \$5,000 plus 85 cents per elector for councillors. In Quebec, a mayoral candidate starts with a flat amount of \$3,780 plus 30 cents per elector for each elector up to 20,000 people, 51 cents per elector for each elector between 20,000 to 100,000 people and 38 cents per elector for each elector over 100,000. Council candidates receive \$1,890 plus 30 cents per elector (Special Committee on Local Elections Expenses Limits Final Report 2016). Second, in British Columbia the limits are only in effect during the campaign period, which is defined by the Local Elections Campaign Financing Act as the 28 days prior to general voting day (section 10.2, 2016). That means that candidates are still free to spend as much as they like in the months leading up to the vote, while curbing their spending in the final fourweeks of the campaign period.

Third, and perhaps most importantly, the caps will do little to eliminate the conflict of interest — perceived or otherwise — that exists between donors and municipal politicians. As stated above, the spending limits are in line with current practices, meaning they will do little to reduce the amount of money spent during campaigns, particularly outside of the City of Vancouver. This means that large contributors will continue to be

permitted to donate as much as they want to a given candidate even if it means funding 100 per cent of their campaign. Contributors will still be permitted to give contributions after the campaign is over. The legislative changes do little to incentivize politicians to take a more broad-based approach to fundraising rather than relying on a handful of wealthy contributors for large donations. How the new regulations affect voting results is an avenue for future research, building on the work in this thesis, that could be considered after the 2018 municipal election.

Chapter 6. Conclusion

6.1. Key Findings

This thesis has examined the impact campaign contributions have on electoral success through the prism of growth machine and urban regime theories. Molotch contends that cities exist solely to service growth and increase economic prosperity through the subdivision of land, a system that is propped up by like-minded proponents from local town boosters and tourism officials to newspaper publishers and business improvement associations. He believes councils, with the backing of a corporate elite, are tasked with doing everything they can to improve the business climate in their municipality (Molotch 1976). Rules around municipal campaign finance can have a direct impact on policy directions and the management of cities. Molotch's views often overlap with those of Stone, who contends that policy makers are influenced through informal arrangements with corporate elites that he refers to as urban regimes (Stone 1989). Using statistical analysis, this paper examined the relationship between the growth-machine proponents of the regime and how their influence over elected officials is exercised in practice.

The regression analysis contained in Chapter 4 shows that campaign contributions and spending are both strongly and positively related to vote totals. The current campaign finance paradigm benefits incumbent politicians and, more importantly, their donor networks. Corporate elites contribute the most money to council and mayoral candidates, giving these entities a clear advantage in ensuring their views are represented at the council table. The strength of incumbency means that the informal relationships between the regime and the policy makers can exist in perpetuity. The system does not allow for sweeping change at the council table, creating a safe and reliable environment for the corporate community.

Businesses have a role to play in any community, however the current arrangement has some obvious imbalances. Elites use large amounts of money, which has a direct influence on vote totals, to support pro-growth and development-friendly candidates across the region. The haphazard contributions from individual citizens or the self-funded candidates are no match against a well-financed, regime-supported

candidate. Unions can have some success by mobilizing around a small number of candidates, however the disproportionate allotment of resources means that they do not provide a strong check on corporate power. It should also be noted that labour contributors have their own agendas that may not align with the larger community and are not necessarily the counterweight to corporate influence.

The research in this thesis is significant because it sheds light on who holds power at the municipal level. If certain views are shut out of the process by an entrenched council supported by a strong regime — be they the positions of affordable housing advocates, transportation equity proponents or environmental sustainability organizations — in favour of an economic development-driven agenda, municipal planning will suffer. As MacDermid (2009) states, polices that promote unfettered growth tend to incentivize sprawl, which leads to vehicle traffic and land degradation, among other issues, and the environmental impacts that result. The importance of municipal elections and how they are financed should not be underestimated.

6.2. Avenues for Future Research

Recent changes to the election campaign finance system, particularly around disclosure and oversight by ElectionsBC, are welcome developments. Future elections should be examined in a similar statistical manner to determine what, if any, changes are occurring over time. Going forward, further analysis should also look at the impacts the new spending limits are having on results, while cross-provincial comparisons would also add to the overall academic discussion. Further study of future elections in Metro Vancouver could be conducted along with comparisons of how regimes operate in other regions, where similar or stricter finance rules are in place. It is important to remember that the data analyzed in this research came from one region during a single election cycle. As future elections are held, new data could be added to the analysis to determine whether the 2014 results are an anomaly or consistent with other election years.

The regression analysis in Chapter 4 showed that campaign spending and campaign donations has a positive association with vote totals. However, further analysis could include new variables in the dataset. Newspaper and community organization

endorsements, name recognition, face-to-face encounters, numbers of doors a candidate knocked on and whether the office seeker attended town hall meetings or all-candidates functions could be included in the analysis. While data may be difficult to come by, adding these factors to the dataset would create new variables that may shed new light on other methods candidates use to succeed. If the results show that these new variables are ineffective in influencing voters, it could further add to the evidence that money is the key driver when it comes to getting residents out to the polls.

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Appendix A — Regression Output

A1 — Output for Figure 4.3

Residuals:	Min	1Q	Median	3 Q	Max
	-3.5278	-0.5473	0.0746	0.5265	2.7799
	Estimate	Standard error	T-value	P-value	
Intercept	0.57575	0.37954	1.517	0.13	
Logged Contributions	0.83134	0.03942	21.088	<2e-16	
Residual standard error	0.8604 on 28	1 degrees of freedom			
Multiple R-squared	0.6128				
Adjusted R-squared	0.6114				
F-statistics	444.7 on 1 ar	nd 281 degrees of freed	dom		
P-value	<2.2e-16				
Pearson	0.7828074				

A2 — Output for Figure 4.5

Residuals:	Min	1Q	Median	3Q	Max
	-3.4286	-0.537	0.0742	0.5121	5.281
	Estimate	Standard error	T-value	P-value	
Intercept	1.03422	0.3724	2.777	0.00585	
Logged Spending	0.78292	0.03863	20.266	<2e-16	
Residual standard error	0.8813 on 28	1 degrees of freedom			
Multiple R-squared	0.5983				
Adjusted R-squared	0.5923				
F-statistics	410.7 on 1 ar	nd 281 degrees of free	dom		
P-value	<2.2e-16				
Pearson	0.7705609				

A3 — Output for Figure 4.7

Residuals:	Min	1Q	Median	3Q	Max
	-3.5192	-0.6772	-0.0616	0.6846	3.556
	Estimate	Standard error	T-value	P-value	
Intercept	3.39735	0.27379	12.41	<2e-16	
Logged Contributions	0.55669	0.03054	18.23	<2e-16	
Residual standard error	1.042 on 400	degrees of freedom			
Multiple R-squared	0.4538				
Adjusted R-squared	0.4524				
F-statistics	332.3 on 1 ar	nd 400 degrees of free	dom		
P-value	<2.2e-16				
Pearson	0.6736444				

A4 — Output for Figure 4.9

Residuals:	Min	1Q	Median	3 Q	Max
	-3.4029	-0.6449	-0.0231	0.6301	4.035
	Estimate	Standard error	T-value	P-value	
Intercept	3.33001	0.27536	12.09	<2e-16	
Logged Spending	0.56154	0.03057	18.37	<2e-16	
Residual standard error	1.038 on 400	degrees of freedom			
Multiple R-squared	0.4576				
Adjusted R-squared	0.4562				
F-statistics	337.4 on 1 ar	nd 400 degrees of free	dom		
P-value	<2.2e-16				
Pearson	0.6764319				

^{*}During the 2014 Metro Vancouver municipal election, three candidates ran unopposed. They are Delta Mayor Lois Jackson, North Vancouver Mayor Richard Walton and West Vancouver Mayor Michael Smith. Because these candidates did not register a vote total, they were removed from the dataset. Several candidates also withdrew in 2014. They include Bowen Island mayoral candidate Peter Frinton (withdrew on Oct. 16, 2014) and Bowen Island incumbent Mayor Andrew Stone (withdrew on Oct. 28, 2014). Bowen Island council candidates Darron Jennings, Lucas Cro and Andrew Pietrow all withdrew from the race on Oct. 16, 2014. Without a corresponding vote total, these candidates were removed from the dataset.

Appendix B — Predicted Votes Data

B1 — Data for Figure 4.4
 Raw contribution totals compared to predicted votes with the Adams and Schreiber threshold applied.

Prediction (Votes)	In(Contributions)	Contributions	Difference (Votes)
1.778374954	0	1	
554.9887526	6.908754779	1001	553.2103777
987.0747398	7.601402335	2001	432.0859871
1382.529972	8.006700845	3001	395.4552324
1755.925355	8.294299609	4001	373.395383
2113.728954	8.517393171	5001	357.8035987
2459.578195	8.699681401	6001	345.8492408
2795.792309	8.853808275	7001	336.214114
3123.972234	8.987321813	8001	328.1799256
3445.285715	9.105090961	9001	321.3134806
3760.619852	9.210440367	10001	315.3341372
4070.669955	9.305741457	11001	310.0501029
4375.994702	9.392745259	12001	305.3247475
4677.05215	9.472781557	13001	301.0574476
4974.224201	9.546884035	14001	297.1720512
5267.833802	9.615872145	15001	293.6096007
5558.157363	9.680406499	16001	290.3235614
5845.433955	9.741027445	17001	287.2765914
6129.872245	9.798182591	18001	284.4382906
6411.655842	9.852246888	19001	281.783597
6690.94746	9.903537551	20001	279.2916176
6967.892221	9.952325335	21001	276.944761
7242.620304	9.998843186	22001	274.7280836
7515.249094	10.04329297	23001	272.6287891
7785.884933	10.08585078	24001	270.6358396
8054.624584	10.1266711	25001	268.7396511
8321.556436	10.16589028	26001	266.9318517
8586.761523	10.20362918	27001	265.2050873
8850.314388	10.2399955	28001	263.5528652
9112.283814	10.27508559	29001	261.9694255
9372.733451	10.30898599	30001	260.4496366

B2 — Data for Figure 4.6

Raw spending totals compared to predicted votes with the Adams and Schreiber threshold applied.

Prediction (Votes)	In(Spending)	Spending	Difference (Votes)
2.812855051	0	1	
628.329127	6.908754779	1001	625.5162719
1080.671502	7.601402335	2001	452.3423747
1484.222124	8.006700845	3001	403.5506225
1859.024494	8.294299609	4001	374.8023703
2213.802964	8.517393171	5001	354.7784697
2553.398686	8.699681401	6001	339.595722
2880.866795	8.853808275	7001	327.4681093
3198.29856	8.987321813	8001	317.4317642
3507.208544	9.105090961	9001	308.9099848
3808.740223	9.210440367	10001	301.5316785
4103.784955	9.305741457	11001	295.0447315
4393.055436	9.392745259	12001	289.2704811
4677.133404	9.472781557	13001	284.0779679
4956.501909	9.546884035	14001	279.3685059
5231.567901	9.615872145	15001	275.0659914
5502.678476	9.680406499	16001	271.110575
5770.132868	9.741027445	17001	267.4543919
6034.191466	9.798182591	18001	264.0585983
6295.082732	9.852246888	19001	260.891266
6553.008584	9.903537551	20001	257.9258516
6808.148649	9.952325335	21001	255.1400655
7060.663669	9.998843186	22001	252.5150202
7310.69825	10.04329297	23001	250.0345804
7558.383109	10.08585078	24001	247.6848596
7803.836936	10.1266711	25001	245.4538267
8047.167929	10.16589028	26001	243.3309935
8288.475095	10.20362918	27001	241.3071655
8527.849335	10.2399955	28001	239.3742402
8765.374378	10.27508559	29001	237.5250432
9001.127572	10.30898599	30001	235.7531938

B3 — Data for Figure 4.8

Raw donation totals compared to predicted votes with the less stringent threshold applied.

Prediction (Votes)	In(contributions)	Contributions	Difference (vote)
29.8833061	0	1	
1398.847253	6.908754779	1001	1368.963947
2056.993397	7.601402335	2001	658.1461442
2577.64214	8.006700845	3001	520.6487425
3025.212428	8.294299609	4001	447.5702888
3425.260405	8.517393171	5001	400.0479769
3791.104331	8.699681401	6001	365.8439261
4130.753301	8.853808275	7001	339.6489698
4449.477948	8.987321813	8001	318.7246469
4750.970244	9.105090961	9001	301.4922964
5037.93801	9.210440367	10001	286.9677654
5312.438671	9.305741457	11001	274.5006617
5576.079922	9.392745259	12001	263.6412502
5830.146995	9.472781557	13001	254.0670732
6075.686963	9.546884035	14001	245.5399678
6313.566582	9.615872145	15001	237.8796198
6544.5132	9.680406499	16001	230.9466173
6769.144412	9.741027445	17001	224.6312119
6987.990057	9.798182591	18001	218.8456451
7201.50883	9.852246888	19001	213.518773
7410.101047	9.903537551	20001	208.5922175
7614.118603	9.952325335	21001	204.0175558
7813.872836	9.998843186	22001	199.7542326
8009.64082	10.04329297	23001	195.7679846
8201.670455	10.08585078	24001	192.0296346
8390.184612	10.1266711	25001	188.5141574
8575.38456	10.16589028	26001	185.1999475
8757.452799	10.20362918	27001	182.068239
8936.55544	10.2399955	28001	179.1026415
9112.844206	10.27508559	29001	176.288766
9286.458126	10.30898599	30001	173.6139202

B4 — Data for Figure 4.10
 Raw spending totals compared to predicted votes with the less stringent threshold applied.

Prediction (Votes)	In(spent)	spent	Difference (Votes)
27.9383417	0	1	
1351.89935	6.908754779	1001	1323.961008
1994.577267	7.601402335	2001	642.6779174
2504.29497	8.006700845	3001	509.7177023
2943.189777	8.294299609	4001	438.8948073
3335.961644	8.517393171	5001	392.7718667
3695.499869	8.699681401	6001	359.5382248
4029.56354	8.853808275	7001	334.0636717
4343.263043	8.987321813	8001	313.6995032
4640.180637	9.105090961	9001	296.9175931
4922.945288	9.210440367	10001	282.764651
5193.555598	9.305741457	11001	270.6103107
5453.574056	9.392745259	12001	260.0184573
5704.250308	9.472781557	13001	250.6762524
5946.602847	9.546884035	14001	242.3525393
6181.475087	9.615872145	15001	234.8722396
6409.575027	9.680406499	16001	228.0999406
6631.504034	9.741027445	17001	221.9290068
6847.778176	9.798182591	18001	216.2741419
7058.844354	9.852246888	19001	211.0661776
7265.092695	9.903537551	20001	206.2483414
7466.866225	9.952325335	21001	201.77353
7664.468509	9.998843186	22001	197.6022835
7858.169764	10.04329297	23001	193.7012558
8048.211809	10.08585078	24001	190.0420448
8234.812094	10.1266711	25001	186.6002847
8418.167029	10.16589028	26001	183.3549348
8598.454745	10.20362918	27001	180.2877166
8775.837407	10.2399955	28001	177.3826621
8950.463158	10.27508559	29001	174.6257505
9122.46777	10.30898599	30001	172.0046123

Appendix C — Output for Incumbency Advantage

C1 — Incumbency and Votes: Regression output for Table 4.4

Residuals:	Min	1Q	Median	3Q	Max
	-4.1865	-0.7512	-0.0447	0.7927	2.947
	Estimate	Standard error	T-value	P-value	
Intercept	8.2296	0.1017	80.893	<2e-16	
Incumbency	0.7121	0.1632	4.364	1.79E-05	
Residual standard error	1.338 on 28	1 degrees of freedom			
Multiple R-squared	0.0634				
Adjusted R-squared	0.06015				
F-statistics	19.05 on 1	and 281 DF			
D .1 .	4 705 05				
P-value	1.79E-05				
P-value • Less stringent dataset = In(0.764(incumbency)			
		0.764(incumbency)	Median	3Q	Max
• Less stringent dataset = In((votes) = 8.072 +	` ,	Median 0.0194	3Q 0.8622	
• Less stringent dataset = In((votes) = 8.072 + Min	1Q			
• Less stringent dataset = In(Residuals:	(votes) = 8.072 + Min -4.0285	1Q -0.7283	0.0194	0.8622	
• Less stringent dataset = In(Residuals: Intercept	(votes) = 8.072 + Min -4.0285 Estimate	1Q -0.7283 Standard error	0.0194 T-value	0.8622 P-value	Max 3.132
• Less stringent dataset = In(Residuals: Intercept Incumbency	(votes) = 8.072 + Min -4.0285 Estimate 8.07159 0.764	1Q -0.7283 Standard error 0.08118	0.0194 T-value 99.433	0.8622 P-value <2e-16	
• Less stringent dataset = In(Residuals: Intercept Incumbency Residual standard error	(votes) = 8.072 + Min -4.0285 Estimate 8.07159 0.764	1Q -0.7283 Standard error 0.08118 0.1492	0.0194 T-value 99.433	0.8622 P-value <2e-16	
Less stringent dataset = In(Residuals: Intercept Incumbency Residual standard error Multiple R-squared	Min -4.0285 Estimate 8.07159 0.764 1.366 on 40	1Q -0.7283 Standard error 0.08118 0.1492	0.0194 T-value 99.433	0.8622 P-value <2e-16	
• Less stringent dataset = In(Min -4.0285 Estimate 8.07159 0.764 1.366 on 40 0.06152	1Q -0.7283 Standard error 0.08118 0.1492 0 degrees of freedom	0.0194 T-value 99.433	0.8622 P-value <2e-16	

C2 — Incumbency and Fundraising: Regression output for Table 4.5

Adams and Schreiber	In(donatio	ns) = 9.2666 + 0.70	23(incumbend	cy)	
Residuals:	Min	1Q	Median	3Q	Max
	-3.0611	-0.6944	-0.0365	0.6593	3.2606
	Estimate	Standard error	T-value	P-value	
Intercept	9.2666	0.09548	97.053	<2e-16	
Incumbency	0.70229	0.15315	4.586	6.82E-06	
Residual standard error	1.256 on 281 degrees of freedom				
Multiple R-squared	0.06962				
Adjusted R-squared	0.0661				
F-statistics	21.03 on 1	and 281 DF			
P-value	6.82E-06				
Less stringent dataset	In(donatio	ns) = 9.2666 + 0.70	23(incumbend	cy)	
Residuals:	Min	1Q	Median	3Q	Max
	-4.9507	-1.048	0.1868	0.9174	4.1107
	Estimate	Standard error	T-value	P-value	
Intercept	8.41653	0.09498	88.611	<2e-16	
Incumbency	1.30489	0.17458	7.475	4.93E-13	
Residual standard error	1.598 on 4	00 degrees of freedo	om		
Multiple R-squared	0.1226				
Adjusted R-squared	0.1204				
F-statistics	55.87 on 1	and 400 degrees of	freeom		
P-value	4.93E-13				

Appendix D — Adding Incumbency to the Model

D1 — Multiple Regression Output: Incumbency, Votes and Contributions (Adams and Schreiber)

Residuals:	Min	1Q	Median	3Q	Max
	-3.4479	-0.562	0.0653	0.5614	2.6944
	Estimate	Standard error	T-value	P-value	
Intercept	0.65257	0.38393	1.7	0.0903	
Logged Contributions	0.81767	0.04083	20.028	<2e-16	
Incumbency	0.13791	0.10866	1.269	0.2054	
Residual standard error	0.8595 on 280 degrees of	freedom			
Multiple R-squared	0.615				
Adjusted R-squared	0.6123				
F-statistics	223.6 on 2 and 280 degre	es of freedom			
P-value	<2.2e-16				
Variance Inflation Factor	Logged Contributions	Incumbency			
	1.074835	1.074835			
Variance Decomposition Pr	oportions				
Condition Index	Intercept	Contributions	Incumbency		
1	0.003	0.003	0.058		
2.314	0.005	0.004	0.895		
17.017	0.992	0.993	0.047		
Correlation matrix shows co	orrelation coefficients				
	Incumbency	Votes	Contributions		
Incumbency	1	0.1827269	0.1974485		
Votes	0.1827269	1	0.80347		
Contributions	0.1974485	0.80347	1		
P-value	Incumbency	Votes	Contributions		
Incumbency		2.00E-03	8.00E-04		
Votes	2.00E-03		0.00E+00		
Contributions	8.00E-04	0.00E+00			

D2 — Multiple Regression Output: Incumbency, Votes and Spending (Adams and Schreiber)

Residuals:	Min	1Q	Median	3Q	Max
	-3.356	-0.5135	0.0537	0.5171	5.2132
	Estimate	Standard error	T-value	P-value	
Intercept	1.11496	0.37559	2.969	0.00325	
Logged Spending	0.76776	0.03988	19.25	<2e-16	
Incumbency	0.16443	0.11095	1.482	0.13948	
Residual standard error	0.8794 on 280 degrees of	ffreedom			
Multiple R-squared	0.5969				
Adjusted R-squared	0.594				
F-statistics	207.3 on 2 and 280 DF				
P-value	<2.2e-16				
Variance Inflation Factor	Logged Contributions	Incumbency			
	1.07039	1.07039			
Variance Decomposition P	roportions				
Condition Index	Intercept	Spending	Incumbency		
1	0.003	0.003	0.059		
2.314	0.006	0.005	0.899		
16.261	0.991	0.993	0.043		
Correlation matrix shows	correlation coefficients				
	Incumbency	Votes	Spending		
Incumbency	1	0.1827269	0.1977633		
Votes	0.1827269	1	0.8094698		
Spending	0.1977633	0.8094698	1		
P-value	Incumbency	Votes	Spending		
Incumbency		2.00E-03	8.00E-04		
Votes	2.00E-03		0.00E+00		
Spending	8.00E-04	0.00E+00			

D3 — Multiple Regression Output: Incumbency, Votes and Contributions (Less stringent dataset)

Residuals:	Min	1Q	Median	3Q	Max
	-3.5118	-0.673	-0.0608	0.6622	3.5526
	Estimate	Standard error	T-value	P-value	
Intercept	3.42008	0.28159	12.146	<2e-16	
Logged Contributions	0.55266	0.03264	16.934	<2e-16	
Incumbency	0.04284	0.12165	0.352	0.725	
Residual standard error	1.043 on 399 degrees of	freedom			
Multiple R-squared	0.454				
Adjusted R-squared	0.4512				
F-statistics	165.9 on 2 and 399 DF				
P-value	<2.2e-16				
Variance Inflation Factor	Logged Contributions	Incumbency			
	1.139676	1.39676			
Variance Decomposition F	Proportions				
Condition Index	Intercept	Contributions	Incumbency		
1	0.005	0.005	0.061		
2.098	0.009	0.005	0.849		
12.112	0.986	0.99	0.01		
Correlation matrix shows	correlation coefficients				
	Incumbency	Votes	Contributions		
Incumbency	1	0.2170108	0.2642455		
Votes	0.2170108	1	0.792571		
Contributions	0.2642455	0.7925751	1		
P-value	Incumbency	Votes	Contributions		
Incumbency		0	0		
Votes	0		0		
Contributions	0	0			

D4 — Multiple Regression Output: Incumbency, Votes and Spending (Less stringent dataset)

Residuals:	Min	1Q	Median	3Q	Max
	-3.3965	-0.6417	-0.0217	0.6274	4.0288
	Estimate	Standard error	T-value	P-value	
Intercept	3.35234	0.28322	11.836	<2e-16	
Logged Spending	0.55762	0.03266	17.074	<2e-16	
Incumbency	0.04164	0.12118	0.344	0.732	
Residual standard error	1.039 on 399 degrees of	freedom			
Multiple R-squared	0.4577				
Adjusted R-squared	0.455				
F-statistics	168.4 on 2 and 399 DF				
P-value	<2.2e-16				
Variance Inflation Factor	Logged Contributions	Incumbency			
	1.138814	1.138814			
Variance Decomposition P	roportions				
Condition Index	Intercept	Spending	Incumbency		
1	0	0.005	0.061		
2.098	0.009	0.005	0.849		
12.223	0.986	0.99	0.09		
Correlation matrix shows	correlation coefficients				
	Incumbency	Votes	Spending		
Incumbency	1	0.22	0.25		
Votes	0.22	1	0.8		
Spending	0.25	0.8	1		
P-value	Incumbency	Votes	Spending		
Incumbency		0	0		
Votes	0		0		
Spending	0	0			

Appendix E — Comparing Incumbents and Challengers

E1 — Incumbents Vs. Challengers (Adams and Schreiber)

Residuals:	Min	1Q	Median	3Q	Max
	-2.7085	-0.4527	0.0703	0.5766	2.6624
	Estimate	Standard error	T-value	P-value	
Intercept	1.40635	0.60117	2.339	0.0212	
Logged Incumbent Contributions	0.75589	0.05981	12.638	<2e-16	
Residual standard error	0.8055 on 10	8 degrees of freedor	n		
Multiple R-squared	0.5966				
Adjusted R-squared	0.5929				
F-statistics	159.7 on 1 ar	nd 108 DF			
P-value	<2.2e-16				
Pearson	0.772394				
Pearson Logged Non-Incumbent Contributions Con		Output for Figure	4.11		
		Output for Figure	4.11 Median	3Q	Max
Logged Non-Incumbent Contributions Con	mpared to Votes:			3Q 0.521	Max 2.5575
Logged Non-Incumbent Contributions Con	mpared to Votes:	1Q	Median	•	
Logged Non-Incumbent Contributions Con	mpared to Votes: Min -3.5418	1 Q -0.5757	Median 0.0057	0.521	
Logged Non-Incumbent Contributions Con Residuals:	mpared to Votes: Min -3.5418 Estimate	1Q -0.5757 Standard error	Median 0.0057 T-value	0.521 P-value	
Logged Non-Incumbent Contributions Con Residuals:	mpared to Votes: Min -3.5418 Estimate 0.25597 0.86047	1Q -0.5757 Standard error 0.51445	Median 0.0057 T-value 0.498 15.635	0.521 P-value 0.619	
Logged Non-Incumbent Contributions Con Residuals: Intercept Logged Non-Incumbent Contributions	mpared to Votes: Min -3.5418 Estimate 0.25597 0.86047	1Q -0.5757 Standard error 0.51445 0.05503	Median 0.0057 T-value 0.498 15.635	0.521 P-value 0.619	
Logged Non-Incumbent Contributions Con Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error	mpared to Votes: Min -3.5418 Estimate 0.25597 0.86047 0.8905 on 1	1Q -0.5757 Standard error 0.51445 0.05503	Median 0.0057 T-value 0.498 15.635	0.521 P-value 0.619	
Logged Non-Incumbent Contributions Con Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error Multiple R-squared	mpared to Votes: Min -3.5418 Estimate 0.25597 0.86047 0.8905 on 1 0.5884	1Q -0.5757 Standard error 0.51445 0.05503 71 degrees of freed	Median 0.0057 T-value 0.498 15.635	0.521 P-value 0.619	
Logged Non-Incumbent Contributions Con Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error Multiple R-squared Adjusted R-squared	Min -3.5418 Estimate 0.25597 0.86047 0.8905 on 1 0.5884 0.586	1Q -0.5757 Standard error 0.51445 0.05503 71 degrees of freed	Median 0.0057 T-value 0.498 15.635	0.521 P-value 0.619	

E2 — Incumbents Vs. Challengers (Less Stringent Threshold)

Residuals:	Min	1Q	Median	3Q	Max
	-2.78479	-0.47347	0.01996	0.60503	2.56032
	Estimate	Standard error	T-value	P-value	
Intercept	2.249	0.4991	4.506	1.57E-05	
Logged Incumbent Contributions	0.6775	0.0507	13.363	<2e-16	
Residual standard error	0.8541 on 11	7 degrees of freedom			
Multiple R-squared	0.6042				
Adjusted R-squared	0.6008				
F-statistics	178.6 on 1 an	d 117 DF			
P-value	<2.2e-16				
	0.7772832 ompared to Vo	tes: Output for Figure	4.13 (Less S	tringent Thres	shold)
Pearson Logged Non-Incumbent Contributions C Residuals:		tes: Output for Figure	4.13 (Less S Median	tringent Thres	shold) Max
Logged Non-Incumbent Contributions C	ompared to Vo		•		
Logged Non-Incumbent Contributions C	ompared to Vo	1Q	Median	3Q	Max
Logged Non-Incumbent Contributions C Residuals:	ompared to Vol Min -3.5567	1Q -0.7977	Median 0.1029	3Q 0.6922	Max
Logged Non-Incumbent Contributions C Residuals: Intercept	ompared to Vot Min -3.5567 Estimate	1Q -0.7977 Standard error	Median 0.1029 T-value	3Q 0.6922 P-value	Max
Logged Non-Incumbent Contributions C Residuals: Intercept Logged Non-Incumbent Contributions	ompared to Vot Min -3.5567 Estimate 3.82448 0.50461	1Q -0.7977 Standard error 0.34842	Median 0.1029 T-value 10.98	3Q 0.6922 P-value <2e-16	Max
Logged Non-Incumbent Contributions C Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error	ompared to Vot Min -3.5567 Estimate 3.82448 0.50461	1Q -0.7977 Standard error 0.34842 0.04066	Median 0.1029 T-value 10.98	3Q 0.6922 P-value <2e-16	Max
Logged Non-Incumbent Contributions C Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error Multiple R-squared	ompared to Vot Min -3.5567 Estimate 3.82448 0.50461 1.104 on 281	1Q -0.7977 Standard error 0.34842 0.04066	Median 0.1029 T-value 10.98	3Q 0.6922 P-value <2e-16	Max
Logged Non-Incumbent Contributions C Residuals: Intercept Logged Non-Incumbent Contributions Residual standard error Multiple R-squared Adjusted R-squared	ompared to Vot Min -3.5567 Estimate 3.82448 0.50461 1.104 on 281 0.3541	1Q -0.7977 Standard error 0.34842 0.04066 degrees of freedom	Median 0.1029 T-value 10.98	3Q 0.6922 P-value <2e-16	Max
Logged Non-Incumbent Contributions C	ompared to Vot Min -3.5567 Estimate 3.82448 0.50461 1.104 on 281 0.3541 0.3518	1Q -0.7977 Standard error 0.34842 0.04066 degrees of freedom	Median 0.1029 T-value 10.98	3Q 0.6922 P-value <2e-16	Max

E3 — Data for Figure 4.12

Predicted Votes (Incumbent)	Predicted Votes (Non-Incumbent)	In(Contributions)	Contributions	Difference
4.081236475	2303.248612	0	1	-2299.167376
756.5190674	493.233892	6.908754779	1001	263.2851754
1277.039803	895.1637916	7.601402335	2001	381.8760114
1734.830805	1268.722893	8.006700845	3001	466.1079122
2156.110266	1624.970293	8.294299609	4001	531.1399725
2552.165512	1968.873487	8.517393171	5001	583.2920256
2929.21331	2303.248612	8.699681401	6001	625.9646974
3291.154437	2629.902417	8.853808275	7001	661.2520206
3640.646513	2950.088415	8.987321813	8001	690.5580984
3979.606634	3264.724872	9.105090961	9001	714.8817621
4309.477187	3574.511977	9.210440367	10001	734.9652102
4631.379112	3880.000353	9.305741457	11001	751.3787596
4946.206217	4181.633736	9.392745259	12001	764.5724816
5254.686261	4479.77692	9.472781557	13001	774.9093416
5557.422173	4774.734798	9.546884035	14001	782.6873744
5854.920829	5066.765783	9.615872145	15001	788.1550465
6147.613722	5356.091512	9.680406499	16001	791.5222095
6435.872166	5642.90406	9.741027445	17001	792.9681055
6720.018728	5927.371384	9.798182591	18001	792.6473446
7000.335972	6209.641523	9.852246888	19001	790.6944496
7277.073256	6489.845885	9.903537551	20001	787.2273705
7550.452094	6768.101853	9.952325335	21001	782.3502405
7820.670442	7044.514878	9.998843186	22001	776.1555649
8087.906156	7319.180174	10.04329297	23001	768.7259815
8352.319811	7592.184121	10.08585078	24001	760.1356897
8614.057035	7863.605413	10.1266711	25001	750.4516222
8873.250436	8133.516022	10.16589028	26001	739.7344147
9130.021223	8401.98201	10.20362918	27001	728.0392137
9384.480569	8669.064214	10.2399955	28001	715.4163551
9636.73077	8934.818832	10.27508559	29001	701.9119379
9886.866235	9199.297922	10.30898599	30001	687.5683127
10134.97434	9462.549838	10.34177474	31001	672.4244985
10381.13614	9724.619601	10.37352243	32001	656.5165429

10625.42706 9985.549227 10.40429314 33001 639.8778321 10867.91738 10245.37801 10.43414521 34001 622.539361 11108.67276 10504.14279 10.46313191 35001 604.5299686 11347.75468 10761.87814 10.49130199 36001 585.876544 11585.22079 11018.61658 10.51870022 37001 566.6042083 11821.12525 11274.38878 10.54536775 38001 546.7364743 12055.51904 11529.22365 10.57134257 39001 526.2953886 12288.4502 11783.14854 10.59665973 40001 505.3016576 12519.9641 12036.18934 10.62135174 41001 483.7747596 12750.10362 12288.37057 10.64544871 42001 461.7330459 12978.90936 12593.71552 10.66897865 43001 439.1938303 13206.4198 12790.24633 10.69196764 44001 446.1734701 3432.67149 13039.98405 10.77443999 45001 392.6874395 13657.69912 13288.94872 10.73641841 46001 368.7503953 13881.53572 13537.15948 10.75792416 47001 344.3762364 14104.21274 13784.63458 10.77897712 48001 319.5781583 14325.76016 14031.39145 10.79959599 49001 294.3687023 14566.20659 14277.44679 10.81979828 50001 268.7598002 14765.57937 14522.81655 10.83960052 51001 242.7628154 14939.390462 14767.51604 10.85901823 52001 216.386506 15201.20736 15011.55992 10.87806066 53001 189.6474316 15632.84008 15497.73664 10.91510665 55001 135.1034396 15647.21604 1672.62639 11.00211651 60001 -7.036782055 16005.69779 16941.88919 11.01864554 61001 -36.39139526 17714.87651 17732.81599 11.00211651 60001 -7.036782055 16006.66755 15981.45822 10.996875784 54001 162.54922397 16066.6575 15981.45822 10.996875784 54001 162.54922397 16066.6575 15981.45822 10.996875784 54001 162.54922397 16066.6575 15981.45822 10.996875784 54001 162.54922397 16066.6575 15981.45822 10.996875784 54001 -7.036782055 16066.6575 15981.45822 10.996875784 54001 -7.036782055 16066.6575 15981.45822 10.96665399 64001 -7.03678					
11108.67276 10504.14279 10.46313191 35001 604.5299686 11347.75468 10761.87814 10.49130199 36001 585.876544 11585.2079 11018.61668 10.51870022 37001 566.6042083 11821.12525 11274.38878 10.54536775 38001 546.7364743 12055.51904 11529.22365 10.57134257 39001 526.2953866 12288.4502 11783.14854 10.59665973 40001 505.3016576 12519.9641 12036.18934 10.62135174 41001 483.7747596 12780.10362 12288.37057 10.64644871 42001 461.7330459 12978.9036 12539.71552 10.66897865 43001 439.1938303 13206.4198 12790.24633 10.69196764 44001 416.1734701 13432.67149 13039.98405 10.71443999 45001 392.6874395 13657.69912 13288.94872 10.73641841 46001 368.7503953 13815.3572 13537.15948 10.77897712 48001 319.5781583 <th>10625.42706</th> <th>9985.549227</th> <th>10.40429314</th> <th>33001</th> <th>639.8778321</th>	10625.42706	9985.549227	10.40429314	33001	639.8778321
11347.75468 10761.87814 10.49130199 36001 585.876544 11585.22079 11018.61658 10.51870022 37001 566.6042083 11821.12525 11274.38878 10.54536775 38001 546.7364743 12055.51904 11529.22365 10.57134257 39001 526.2953866 12288.4502 11783.14854 10.59665973 40001 505.3016576 12519.9641 12036.18934 10.62135174 41001 483.7747596 12797.01362 12288.37057 10.64544871 42001 461.7330459 12978.9036 12539.71552 10.66897865 43001 439.1938303 13206.4198 12790.24633 10.69196764 44001 416.1734701 13432.67149 13039.98405 10.7144399 45001 392.6874395 13657.69912 13288.94872 10.73641841 46001 368.7503953 13815.3572 13537.15948 10.77897712 48001 319.5781583 14325.76016 14031.39145 10.79959599 49001 294.3687023 <td>10867.91738</td> <td>10245.37801</td> <td>10.43414521</td> <td>34001</td> <td>622.539361</td>	10867.91738	10245.37801	10.43414521	34001	622.539361
11585.22079 11018.61658 10.51870022 37001 566.6042083 11821.12525 11274.38878 10.54536775 38001 546.7364743 12055.51904 11529.22365 10.57134257 39001 526.2953866 12288.4502 11783.14854 10.59665973 40001 505.3016576 12519.9641 12036.18934 10.62135174 41001 483.774796 12750.10362 12288.37057 10.64644871 42001 461.7330459 12978.90936 12539.71552 10.66897865 43001 439.1938303 13206.4198 12790.24633 10.69196764 44001 416.1734701 13432.67149 13039.98405 10.71443999 45001 392.6874395 13687.569912 13288.94872 10.73641841 46001 368.7563953 13881.53572 13537.15948 10.75792416 47001 344.3762364 14104.21274 13784.63488 10.77897712 48001 319.5781683 14325.76016 14031.39145 10.79959599 49001 294.3687023	11108.67276	10504.14279	10.46313191	35001	604.5299686
11821.12525 11274.38878 10.54536775 38001 546.7364743 12055.51904 11529.22365 10.57134257 39001 526.2953886 12288.4502 11783.14854 10.59665973 40001 505.3016576 12519.9641 12036.18934 10.62135174 41001 483.7747596 12750.10362 12288.37057 10.64544871 42001 461.7330459 12978.90936 12539.71552 10.66897865 43001 439.1938303 13206.4198 12790.24633 10.69196764 44001 416.1734701 13432.67149 13039.98405 10.71443999 45001 392.6874395 13657.69912 13288.94872 10.73641841 46001 368.7503953 13881.53572 13537.15948 10.75792416 47001 344.3762364 14104.21274 13784.63458 10.779897712 48001 319.5781583 14325.76016 14031.39145 10.7995999 49001 294.3687023 1456.20659 14277.44679 10.81979828 50001 268.7598002	11347.75468	10761.87814	10.49130199	36001	585.876544
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14765.57937 14522.81655 10.83960052 51001 242.7628154 14983.90462 14767.51604 10.85901823 52001 216.3885806 15201.20736 15011.55992 10.87806606 53001 189.6474316 15417.51152 15254.96228 10.89675784 54001 162.5492397 15632.84008 15497.73664 10.91510665 55001 135.1034396 15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17530.25894 17656.43802 11.06665399 64001 -126.1790787 <td>14325.76016</td> <td>14031.39145</td> <td>10.79959599</td> <td>49001</td> <td>294.3687023</td>	14325.76016	14031.39145	10.79959599	49001	294.3687023
14983.90462 14767.51604 10.85901823 52001 216.3885806 15201.20736 15011.55992 10.87806606 53001 189.6474316 15417.51152 15254.96228 10.89675784 54001 162.5492397 15632.84008 15497.73664 10.91510665 55001 135.1034396 15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -187.4096428 <td>14546.20659</td> <td>14277.44679</td> <td>10.81979828</td> <td>50001</td> <td>268.7598002</td>	14546.20659	14277.44679	10.81979828	50001	268.7598002
15201.20736 15011.55992 10.87806606 53001 189.6474316 15417.51152 15254.96228 10.89675784 54001 162.5492397 15632.84008 15497.73664 10.91510665 55001 135.1034396 15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 </td <td>14765.57937</td> <td>14522.81655</td> <td>10.83960052</td> <td>51001</td> <td>242.7628154</td>	14765.57937	14522.81655	10.83960052	51001	242.7628154
15417.51152 15254.96228 10.89675784 54001 162.5492397 15632.84008 15497.73664 10.91510665 55001 135.1034396 15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428<	14983.90462	14767.51604	10.85901823	52001	216.3885806
15632.84008 15497.73664 10.91510665 55001 135.1034396 15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167<	15201.20736	15011.55992	10.87806606	53001	189.6474316
15847.21504 15739.89598 10.93312483 56001 107.3190572 16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	15417.51152	15254.96228	10.89675784	54001	162.5492397
16060.65755 15981.45282 10.95082409 57001 79.2047334 16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	15632.84008	15497.73664	10.91510665	55001	135.1034396
16273.18792 16222.41918 10.96821553 58001 50.76874713 16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	15847.21504	15739.89598	10.93312483	56001	107.3190572
16484.82568 16462.80664 10.98530967 59001 22.01903646 16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	16060.65755	15981.45282	10.95082409	57001	79.2047334
16695.58961 16702.62639 11.00211651 60001 -7.036782055 16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	16273.18792	16222.41918	10.96821553	58001	50.76874713
16905.49779 16941.88919 11.01864554 61001 -36.39139526 17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	16484.82568	16462.80664	10.98530967	59001	22.01903646
17114.56764 17180.60542 11.03490579 62001 -66.03777665 17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	16695.58961	16702.62639	11.00211651	60001	-7.036782055
17322.81596 17418.78513 11.05090588 63001 -95.96917076 17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	16905.49779	16941.88919	11.01864554	61001	-36.39139526
17530.25894 17656.43802 11.06665399 64001 -126.1790787 17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	17114.56764	17180.60542	11.03490579	62001	-66.03777665
17736.9122 17893.57344 11.08215793 65001 -156.6612445 17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	17322.81596	17418.78513	11.05090588	63001	-95.96917076
17942.79082 18130.20047 11.09742517 66001 -187.4096428 18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	17530.25894	17656.43802	11.06665399	64001	-126.1790787
18147.9094 18366.32786 11.11246282 67001 -218.4184666 18352.28201 18601.96412 11.12727769 68001 -249.6821167	17736.9122	17893.57344	11.08215793	65001	-156.6612445
18352.28201 18601.96412 11.12727769 68001 -249.6821167	17942.79082	18130.20047	11.09742517	66001	-187.4096428
	18147.9094	18366.32786	11.11246282	67001	-218.4184666
18555.92228 18837.11747 11.14187628 69001 -281.1951911	18352.28201	18601.96412	11.12727769	68001	-249.6821167
	18555.92228	18837.11747	11.14187628	69001	-281.1951911

E4 — Data for Figure 4.14

Predicted Votes (Incumbent)	Predicted Votes (Non-Incumbent)	In(Contributions)	Contributions	Difference
9.478252843	45.80988969	0	1	-36.33163685
1022.168227	1496.160833	6.908754779	1001	-473.9926062
1634.267681	2122.113103	7.601402335	2001	-487.8454218
2150.681016	2603.680361	8.006700845	3001	-452.9993447
2613.349432	3010.325775	8.294299609	4001	-396.9763422
3039.76009	3369.018027	8.517393171	5001	-329.2579369
3439.337516	3693.608731	8.699681401	6001	-254.2712151
3817.897305	3992.335414	8.853808275	7001	-174.4381096
4179.347982	4270.57	8.987321813	8001	-91.22201786
4526.476613	4532.046575	9.105090961	9001	-5.569962004
4861.3592	4779.485622	9.210440367	10001	81.87357853
5185.594838	5014.94202	9.305741457	11001	170.6528177
5500.448497	5240.012996	9.392745259	12001	260.4355003
5806.942739	5455.969304	9.472781557	13001	350.9734344
6105.919158	5663.841685	9.546884035	14001	442.0774732
3398.080983	5864.479933	9.615872145	15001	533.6010499
6684.023485	6058.594488	9.680406499	16001	625.4289963
6964.256231	6246.786489	9.741027445	17001	717.4697426
7239.219714	6429.569964	9.798182591	18001	809.6497505
7509.298014	6607.388555	9.852246888	19001	901.909459
7774.828594	6780.628314	9.903537551	20001	994.2002795
3036.11	6949.627666	9.952325335	21001	1086.482334
3293.407976	7114.685247	9.998843186	22001	1178.722729
3546.960389	7276.066169	10.04329297	23001	1270.89422
3796.981235	7434.007064	10.08585078	24001	1362.974171
9043.663921	7588.720193	10.1266711	25001	1454.943729
9287.183991	7740.396821	10.16589028	26001	1546.787169
9527.701391	7889.210022	10.20362918	27001	1638.491368
9765.362384	8035.317007	10.2399955	28001	1730.045377
10000.30116	8178.861094	10.27508559	29001	1821.440071
10232.64123	8319.973363	10.30898599	30001	1912.667868
10462.49657	8458.77408	10.34177474	31001	2003.722491
10689.97267	8595.373899	10.37352243	32001	2094.598768

10915.16739	8729.87491	10.40429314	33001	2185.292477
11138.17174	8862.371536	10.43414521	34001	2275.800202
11359.07054	8992.951318	10.46313191	35001	2366.11922
11577.943	9121.695598	10.49130199	36001	2456.247402
11794.86325	9248.680116	10.51870022	37001	2546.183134
12009.90078	9373.975536	10.54536775	38001	2635.925242
12223.12084	9497.647912	10.57134257	39001	2725.472932
12434.58484	9619.759094	10.59665973	40001	2814.825742
12644.35059	9740.367099	10.62135174	41001	2903.983493
12852.47268	9859.526433	10.64544871	42001	2992.946252
13059.00268	9977.288379	10.66897865	43001	3081.714302
13263.98937	10093.70126	10.69196764	44001	3170.288107
13467.47898	10208.81069	10.71443999	45001	3258.668292
13669.51535	10322.65973	10.73641841	46001	3346.85562
13870.14013	10435.28916	10.75792416	47001	3434.850971
14069.3929	10546.73757	10.77897712	48001	3522.65533
14267.31135	10657.04158	10.79959599	49001	3610.269767
14463.93137	10766.23594	10.81979828	50001	3697.695427
14659.2872	10874.35368	10.83960052	51001	3784.93352
14853.41152	10981.42621	10.85901823	52001	3871.98531
15046.33556	11087.48345	10.87806606	53001	3958.852105
15238.08918	11192.55392	10.89675784	54001	4045.535252
15428.70096	11296.66483	10.91510665	55001	4132.036128
15618.19829	11399.84215	10.93312483	56001	4218.356138
15806.6074	11502.11069	10.95082409	57001	4304.496704
15993.95348	11603.49421	10.96821553	58001	4390.459266
16180.2607	11704.01542	10.98530967	59001	4476.245273
16365.55228	11803.6961	11.00211651	60001	4561.856185
16549.85056	11902.55709	11.01864554	61001	4647.293465
16733.17701	12000.61843	11.03490579	62001	4732.558578
16915.55231	12097.89931	11.05090588	63001	4817.652991
17096.99637	12194.41821	11.06665399	64001	4902.578166
17277.5284	12290.19284	11.08215793	65001	4987.335563
17457.16691	12385.24027	11.09742517	66001	5071.926635
17635.92975	12479.57692	11.11246282	67001	5156.352827
17813.83417	12573.21859	11.12727769	68001	5240.615576

Appendix F — Chi-squared: Incumbency and Electoral Success

F1 — Chi-Squared Test Statistical Output

Chi-Squared Test of Incumbency and Electoral Success (Adams and Schreiber)				
X-squared	98.384			
DF	1			
P-value	<2.2e-16			
Chi-Squared Test of Incumbency	and Electoral Success (Less Stringent Threshold)			
X-squared	164.91			
DF	1			
P-value	<2.2e-16			