Information, Turnout, and Incumbency in Local Elections

By Jessica Trounstine
Princeton University

Abstract:
It is a well established fact that incumbents win reelection at high rates. But scholars continue to debate the degree to which incumbents are advantaged as a result of selection, responsiveness, or institutional insulation. Research has suffered from causality problems at the state and federal levels, and at the local level little research exists. This paper begins to address these problems. First, I lay out a theoretical framework for distinguishing between systems in which responsiveness is encouraged versus systems in which incumbents can be reelected without regard to their effectiveness as representatives. Next, I employ a regression discontinuity design to show that incumbents benefit electorally from serving in office beyond what we would predict from their quality alone. Then I provide evidence that low-information and low-participation elections increase the proportion of incumbents who run for reelection and the proportion who win.

Jessica Trounstine is an assistant professor of politics and public affairs at Princeton University. Please address correspondence to Jessica Trounstine at the Woodrow Wilson School, 303 Robertson Hall, Princeton University, Princeton, NJ 08544. Tel. 609-258-8990 Email: jessica@trounstine.com

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It is virtually always better to be an incumbent than a challenger in American elections. While political scientists have provided considerable evidence of this pattern at all levels of government, the source of the advantage (and the degree to which it is viewed as nefarious) remains debatable. Previous research on this topic can be categorized as representing three different views of the incumbency advantage.¹ Some scholars have argued that the apparent advantage is really a selection effect; incumbents are \textit{ex ante} better politicians (Jacobson and Kernell 1981). Others have argued that it is incumbents’ actions in office, their records of service, which increase their probability of election (Fenno 1978). Both of these views are encouraging; regardless of the reason for winning, the reelection of incumbents reflects the success of representative democracy. A third, less optimistic possibility is that incumbents, once elected, become entrenched regardless of their performance in office (Key 1949). In this view, incumbents implement or take advantage of institutional structures that decrease the contestability of the electoral arena.

Distinguishing among these causal processes is difficult because reelection is the observational equivalent for all three. Just noting high reelection rates can not help us to untangle the source of the advantage, but doing so is crucial for evaluating the success of democracy. A lack of competitive elections is not, in and of itself, problematic (Buchler 2007). But, if winning is disconnected from quality or from voter approval then constituents may lack meaningful representation and may be unable to control their government. As a result we might expect less policy responsiveness when incumbents are protected by institutional structures.

¹ The “incumbency advantage” typically refers to the increase in vote share a party can expect from running an incumbent versus a non-incumbent. Throughout this paper I use the term more vaguely to refer to the higher probability of winning enjoyed by incumbents compared to non-incumbents.
The goal of this paper is to use local level elections in the United States to establish a link between incumbency and reelection that goes beyond selection and to provide evidence that exogenous institutions can increase the probability of reelection. The vast majority of work on this topic has focused on elections and representation at the federal level, though a substantial body of work has analyzed state politics as well (see Hogan 2004 for a review). In comparison, examinations of local level politics are much rarer. Yet, the local level in American politics is where we see the most variation in terms of election institutions, reelection strategies, and effects. While the average reelection rate of Congressional incumbents hovers in the high 90s (see Abramowitz et al 2006), the average reelection rate at the local level is about ten percentage points lower and has a wide standard deviation. This variation in outcomes and in institutions affecting the electoral process means that cities offer a better venue for investigating patterns of reelection. Furthermore, the source of the incumbency advantage has been understudied at the local level. While we know that incumbents are more likely to win in a number of large cities, we have little comparative work than analyzes the mechanisms. Given that different factors may affect reelection at different levels, more work is needed with a local focus.

Aside from extending analysis to the local level, this paper contributes to the larger debate on incumbency by offering a discussion of the institutional mechanisms that work to protect incumbents. I present a theoretical framework that allows us to distinguish between systems in which responsiveness is encouraged versus systems in which incumbents may be reelected without regard to their effectiveness as representatives. It is only by focusing on elections at the local level that we capture enough variation in systemic structure to test this idea.

I begin by reviewing a small slice of the vast literature on incumbency. Then, I present a discussion of institutions and strategies that decrease contestability. Following this I offer
quantitative support for my claims. Using a historical time-series from four cities, I provide
evidence of a connection between incumbency and reelection using a regression discontinuity
analysis. Then, with a modern data set of more than 7,000 cities I show that institutions which
decrease information about elections and decrease participation increase the proportion of
incumbents who run for reelection and the proportion who win. I then connect low turnout to
high reelection rates. I argue that together these findings indicate that incumbents benefit from
institutional structures that enhance the probability of reelection regardless of the office holder’s
quality or performance as a representative.

Literature Explaining the Incumbency Advantage

A positive view of the incumbency advantage asserts that incumbents are successful
because they are, quite simply, good at what they do – campaigning, governing, and/or
representing voters’ demands. In this view, incumbency is a sign of being a high quality
contender, or in Zaller’s (1998) words, a “prize fighter.” As Erikson and Wright (2001) have
suggested, the electoral process is designed to select strong candidates who “tend to win and
retain their strength in subsequent contests” (p78). Cox and Katz (2002) show that since the
mid-1960s incumbents have been likely to face weak challengers and retire strategically when
they have been in danger of losing. This evidence suggests that the incumbency advantage is a
selection effect – there is no causal link between incumbency and reelection; office holders and
challengers are simply not comparable types of candidates.

2 The following section offers an extremely attenuated list of the work that has focused on the
incumbency advantage (see Hirano and Snyder 2007 for a more thorough literature review)
Others suggest that incumbency does affect reelection. Office holders gain governing experience, provide services, and make policy decisions that benefit their constituents while in office (Herrera and Yawn 1999, Cain, et al 1987, Fiorina 1989). The greater the access to resources which satisfy voters, the stronger the incumbency advantage should be (Hirano and Snyder 2007; Berry et al 2000; Carey et al 2000; Cox and Morgenstern 1993). In part, this is because incumbents can prevent the emergence of quality challengers through their record of service (Gordon et al 2007, Carson et al 2007, Cox and Katz 1996 and 2002, Stone et al 2004). Abramowitz et al (2006) explain that the modern increase in the incumbency advantage reflects a stronger connection between incumbents and constituents as people have come to live in increasingly homogenous communities where constituent preferences are more easily met.

Richard Fenno’s work epitomizes the view that incumbent reelection is the result of finely honed relationships between office holders and constituents. He explains:

[I]ncumbency is not an automatic entitlement to a fixed number of votes or percentage points toward reelection. Nor is the ‘power of incumbency’ something that each member finds waiting to be picked up and put on like a new suit. Incumbency should be seen as a resource to be employed, an opportunity to be exploited; and the power of incumbency is whatever each member makes of the resource and the opportunity …. [T]he power of incumbency is conditional” (2003 [1978] p211)

For scholars like Fenno, reelection is a sign that voters are being well represented.

In an alternate view, a view that this paper supports, the reelection of incumbents can reflect a distortion of the democratic process when incumbents win due to systemic factors that favor current office holders. Scholars have shown that incumbents have access to various resources that increase their chances of reelection, which are unavailable to challengers, and
which may not be related to the quality or performance of the incumbent. These include benefits like franking (Jacobson 1997, Cover and Brumberg 1982, Mayhew 1974), campaign resources (Abramowitz 1991, Abramowitz et al. 2006), media coverage (Prior 2006), and control over districting (McDonald 2006, Monmonnier 2001, Tufte 1973). We need not worry about these kinds of advantages if selection effects ensure that the politicians in office are the best candidates among the pool of potential office holders. But, if selection effects do not completely explain the incumbency advantage, and if these resources increase the propensity to win regardless of the performance of the office holder, the incumbency advantage might be more akin to a new suit. If systemic factors play a substantial role in the reelection of incumbents we can say that the electoral connection has the potential to be damaged.

To analyze the strength of various factors that contribute to the incumbency advantage scholars have asked whether direct incumbent resources (such as franking, staff, or fundraising), ability to deter quality challengers, or experience of the incumbent have the most explanatory power (see Levitt and Wolfram 2004 for example). Evidence has been offered in support of all of these explanations. Scholars have also analyzed the effect of responsiveness to voters on reelection chances both directly (Hogan 2004) and indirectly (McAdams and Johannes 1987, 1988). Results have been inconclusive; some scholars find that incumbents’ advantage can be explained primarily by the experience they gain by serving in office (e.g. Lee 2001) or congruence with voters (McAdams and Johannes 1988). Others have found that incumbents are less responsive when they represent less competitive districts (Griffin 2006). If it is the case that safe incumbents are less responsive but see reelection rates similar to or higher than responsive incumbents, then we should question the claim that reelection is driven by attentiveness.
The paucity of data available for studying city electoral processes has meant that fewer scholars have pursued analysis at this level; and nearly all have focused on one or a small number of cities. However, scholars have shown that being an incumbent increases the probability of election in a number of different locales (Krebs 1998; Prewitt 1970; Lieske 1989). Local candidate success has been linked to campaign spending (Krebs and Pelissero 2001, Fuchs et al 2000; Krebs 1998; Lieske 1989; Lewis et al 1995), name recognition (Lieske 1989), prior office holding (Krebs 1998; Merritt 1977), endorsements from local media, political organizations, and parties (Krebs 1998; Stein and Fleischman 1987; Gierzynski and Breaux 1993, Davidson and Fraga 1988), race and/or ethnicity (Kaufmann 2004, Herring and Forbes 1994; Lieske and Hillard 1984), and certain educational and occupational credentials (Lieske 1989; Hamilton 1978). In an extensive analysis of incumbent/challenger voting in suburban elections Oliver and Ha (2008) found that challenger support was highest among dissatisfied voters and those interested in local politics.

Regardless of the level of investigation (city, state, or federal), one of the problems with determining the degree to which incumbency advantages accrue as a result of selection or office holding is the endogenous nature of the relationships. We should expect that the strongest candidates will also benefit from the best resources in campaigns and in office. Many conclusions drawn in the literature are consistent with selection effects – incumbents win because they are the better candidates and the better politicians garner better resources with which to satisfy their constituents. It is no surprise when these politicians win reelection.

A handful of findings point toward an effect of incumbency that is not attributable to selection or responsiveness. Lascher (2005) finds that California incumbents are more likely to win in large counties, a result he ascribes to low challenger visibility. In an analysis of school
bond elections Dunne et al (1995) show that politicians can affect electoral outcomes by influencing who shows up at the polls. Officials do this by selecting election dates that discourage opponents from turning out to vote while mobilizing supporters thereby determining a median voter who suits their preferences. A study of school board elections by Berry and Howell (2007) finds that incumbents benefit from inattentive publics. When student achievement was not the focus of media attention, incumbent decisions to run for reelection, challengers’ decisions to contest elections, and incumbent vote shares were not affected by changes in test scores. These findings are consistent with my argument that incumbents sometimes win reelection regardless of their performance as representatives. In the next section I describe institutional settings that make this outcome more likely to occur.

Exogenous Influences on Incumbency

Scholars study the incumbency advantage because it, presumably, has implications for the quality of governance. In a democratic system citizens should be able to evaluate governmental performance and replace elected officials if their preferences are not met. This requires that citizens a) know something about what the government has been doing and b) turn out to vote. It is also helpful for comparison if citizens know something about the alternative set of elected officials they might elect (e.g. challengers). I argue that certain political institutions create environments in which citizens are more likely to learn about governmental performance and available alternatives, and in which they are more likely to vote. I refer to such high information and high turnout environments as contestable; the threat of facing a strong challenger keeps incumbents faithful to their voters regardless of the competitiveness of any
given election.\textsuperscript{3} As a result contestable environments should be associated with a lower incumbency advantage and, potentially, a higher level of policy responsiveness.

This argument follows from a number of related suppositions. First, as Oliver and Ha (2007) show when “voters [are] less interested or informed about local elections…[they are] more likely to support incumbents, in the absence of any other information.” Voters who are more familiar with or who share issue positions with the challenger are more likely to support challengers in local elections. Conversely, where exposure to the challengers’ name and/or issue positions is low, voters should be more likely to use incumbent name recognition as a heuristic for quality.\textsuperscript{4} Assuming that at least some voters will become more supportive of the challenger with additional information, high information environments should be relatively worse for incumbents and low information environments relatively better.

High turnout environments should also be detrimental for incumbents. As DeNardo (1980) has argued, higher turnout can bring more unreliable and unpredictable voters into the political process which can aid those out of power. In low turnout settings incumbents can selectively target supporters for mobilization and they may have an easier time defining and catering to the demands of a smaller electorate. Furthermore, competitive elections, where

\textsuperscript{3} The term contestable was developed by Baumol, Panzar, and Willig (1982) to refer to economic markets in which the threat of competition is enough to constrain monopolistic behavior by firms. My use of the term is similar. Although I am unable to measure it this way, contestability should be thought of as a scale rather than a dummy variable; systems are more or less contestable not contestable or uncontestable.

\textsuperscript{4} One might also think that nonpartisan elections should increase the reliance on the incumbency heuristic (Schaffner, Streb, and Wright 2001). As will be shown below this hypothesis is not borne out by my data. The lack of effect is predicted by work by Ansolabahere et al (2006) that finds the incumbency advantage increases in partisan elections relative to nonpartisan elections.
incumbents are most vulnerable, generate higher turnout (see Geys 2006 for a review). This is both because voters perceive a greater chance of being pivotal (Downs 1957, Riker and Ordeshook 1968) and because candidates increase their mobilization efforts (Rosenstone and Hansen 1993, Cox and Munger 1989). Dunne et al (1995) show that as the costs of voting increase, those who will benefit least from the incumbent’s victory drop out of the electorate more rapidly than those who stand to benefit the most. This means that as voting becomes more onerous (and turnout declines), incumbents are likely to be left with a more supportive electorate. Together these results suggest that institutions that increase turnout should be correlated with low reelection probabilities.

Finally, although it will not be tested here, contestable environments should be associated with more responsive policy. In more contestable environments incumbent reelection is more likely to be dependent on responsiveness to constituent preferences. So, incumbent performance matters more in high information, high turnout environments relative to low information, low turnout environments. This means that contestable environments are likely, as Doug Arnold put it, to “keep officials on their toes when they first make decisions” (2004:1). As a result, more contestable environments should exhibit increased responsiveness.

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5 Their model assumes the following: the benefits of a particular election outcome are disproportionately distributed across the population such that the benefit function of the election outcome is convex (e.g. those who gain the most are a smaller proportion of the population than those who gain the least); while the costs of the outcome are independently and more evenly distributed. Voters only vote when the benefits they receive (or the losses they incur) exceed the costs of voting. This implies that increasing the costs of voting will disproportionately affect net losers, shifting the median voter toward the net gainers.
In short, institutions that increase contestability have an inverse relationship with incumbency and responsiveness. When politicians operate in an environment of limited contestability they are freed from constituents’ demands even while they are advantaged in elections. If we assume that elected officials prefer to have the option to disregard constituent preferences if they so choose, low information and low turnout environments will be also be more appealing from the incumbents’ perspective. Similarly, we might expect that challengers will prefer to compete in more contestable elections where the incumbent is more vulnerable, thus reinforcing the incumbency advantage in uncontestable settings. The following sections describe in more detail the operation of institutions that decrease contestability in cities.

**Information & Knowledge**

The lack of political information among potential voters is a well established feature of modern politics. But some institutions are likely to exacerbate this condition by decreasing the availability, accuracy, or comprehensiveness of information about elections and governmental performance.\(^6\) For instance, only four states, California, Maryland, Nevada, and New Jersey require sample ballots to be mailed to registered voters prior to municipal elections.\(^7\) When a voter receives a sample ballot he/she is assured of seeing challengers’ names at least once prior

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\(^6\) Of course many voters choose to remain uninformed about elections even when information is readily available. However, there is no reason to think that there should be a nonrandom distribution of uniformed voters that is correlated with institutions that I test in these analyses.

\(^7\) Maryland only requires Prince George’s County to mail sample ballots. In Oregon local elections have been vote by mail since 1987. Because voters are mailed ballots to their homes they are essentially mailed a sample ballot prior to the election. In the statistical analyses Oregon is coded as requiring mailing of sample ballots.
to the election. If name recognition plays a role in local voting (and Oliver and Ha suggest that it does), then sample ballots may increase the probability of voting for challengers. Sample ballots may also aid voters in researching information about candidates’ platforms and issue positions.

Additionally, most localities do not have their own news source (Oliver and Ha 2007). For instance, of the 7,174 cities in my data set only 1,476 (23%) have daily papers. Arnold (2004) argues that incumbents are likely to be advantaged in elections by the absence of news coverage because they maintain opportunities to enhance their name recognition and tout their achievements through newsletters, meetings, and advertisements. Particularly if challengers are disadvantaged relative to incumbents with regard to campaign resources, when no media outlet is available challengers will tend to have a more difficult time disseminating information about their candidacy. Furthermore, Arnold finds that richer information environments increase challenger identification even among survey respondents who did not regularly read a newspaper. Thus, we should expect that the presence of a local newspaper should increase the contestability of the electoral arena and decrease the incumbent advantage.9

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9 Scholars have presented evidence that leads to the opposite prediction: news coverage should be positively correlated with incumbency advantage. Incumbents are covered much more frequently in the media (Arnold 2004), they are more likely to be endorsed by local newspapers (Ansolabehere, Lessem, and Snyder 2006), and in areas with more television stations voters are more likely to support the incumbent (Prior 2006). On the other hand Ansolabehere, Snowberg, and Snyder (2005) provide evidence that incumbents are not advantaged when they are more likely to be covered by television news. Thus, the effect of news coverage for federal incumbents is unclear. The effect on local officials may be different. The vast majority of municipalities have no media dedicated to coverage of their community. While it might be case that relative coverage helps incumbents, my analysis looks at the presence or

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8 See footnote 21 for the source of this figure.
Finally, Oliver (2001) and Oliver and Ha (2007), have found that constituents are more likely to be interested and knowledgeable about local politics in smaller communities where voters are more likely to know and support challengers to office. These findings lead to the prediction that population will be positively correlated with reelection.

A Smaller and More Manageable Electorate

It is well-established in the turnout literature that institutions which lower the costs of voting increase turnout (Rosenstone and Wolfinger 1978). Only nine states require registrars to mail voters the location of their polling place for local elections\(^{10}\) and in all but seven states voters must register at least 10 days before any election\(^{11}\). This means that in most localities it is

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\(^{10}\) The states that require mailing of polling place locations are California, Colorado, Hawaii, Maryland, New Jersey, Nevada, and New York. Colorado and Maryland require mailings for some municipalities but not others. Oregon elections are all cast by mail and registered voters are mailed ballots to their home. Some or all municipalities in these states are coded as requiring mailings depending on state law. Arizona requires mailings in federal and state elections but makes the mailing optional in local elections. Delaware, Alabama, Georgia, and Washington mail registration cards to voters that list their precinct number and in some cases their polling place however no notification of a coming election is mailed to voters in these states. These states are coded as not mailing polling place locations.

\(^{11}\) The seven states are Idaho, Maine, Minnesota, New Hampshire, North Dakota, Wisconsin, and Wyoming. Idaho, New Hampshire, and Wyoming enacted same day registration in the mid 1990s. The remaining states enacted their policy prior to the start of my data set. Alaska, Arkansas, Colorado,
incumbent upon constituents to remember to register early enough and to figure out when and where to vote prior to the election. This could be a high hurdle for local races as only about 8% are held concurrently with state or federal elections. It comes as no surprise then to find that the median turnout in local elections is 35% of registered voters, falling as low as 1% in some places.\footnote{These figures are from the International City County Managers Association survey conducted in 1986. This is the most recent year that the ICMA asked localities about turnout. There is no other comprehensive source for turnout data in city elections.} Scholars have found that institutions associated with lower turnout have differential effects on various subpopulations (Wolfinger et al 2005; Brians 1997). This means that varying turnout levels may be associated with differences in the composition of local electorates. In particular, I assume that higher turnout is generally associated with increased diversity of the electorate (Dunne et al 1995; Oliver and Ha 2007). So we should expect that institutions which increase turnout, like the mailing of polling locations, shorter registration deadlines, and concurrent elections will negatively affect incumbent reelection.

This theoretical framework leads to a number of related predictions which are tested in the remainder of the paper. First, we should be able to detect an incumbent advantage that is not solely due to selection. I find that when we compare candidates who barely won elections to those who barely lost, winners see a marked increase in their probability of running and winning in the next election. Second, institutions that decrease contestability should positively affect incumbents’ decisions to run for reelection and the probability that they will win. I find that

\begin{flushright}
Florida, Georgia, Hawaii, Louisiana, Michigan, Mississippi, Montana, Nevada, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, and Wyoming require registration at least 30 days in advance for some years in the data set.
\end{flushright}
incumbents are more likely to run and win in cities where institutions decrease information and participation. Cumulatively these findings indicate that uncontestable environments lead to a scenario in which reelection can be disconnected from responsiveness.

**Establishing an Incumbency Advantage Beyond Selection**

Scholars employ a number of different methods for studying the incumbency advantage in state and federal contests. The technique developed by Gelman and King (1990) represents the foundation of many analyses because it explicitly models incumbent strength independent of a party’s strength among voters. Gelman and King measure incumbency advantage as the difference between a party’s expected vote share when running an incumbent and the party’s expected vote share when running a new candidate. However, given that most local elections (~75%) are nonpartisan we can not use this method to gain a thorough understanding of incumbency at the local level. Two additional measures, the sophomore surge and the retirement slump are common in the literature (see for example Ansolabehere et al 2007 or Ansolabehere and Gerber 1997). The retirement slump, which averages the parties’ vote share loss when their members do not seek reelection, is also unusable in nonpartisan contests. However, the sophomore surge, which measures the average vote gain for an incumbent in her second election can be applied in nonpartisan settings and will be discussed below.

Yet another strategy for analyzing incumbency, developed by Lee (2001, 2008), uses the structure of elections to approximate an experimental setting by using a regression discontinuity design. A regression discontinuity uses cutoff scores along a continuous dimension to assign participants to different pretest categories. This is theoretically similar to the assignment of individuals into treatment and control groups in a randomized experiment allowing researchers to
test the effect of the treatment on some outcome. In Lee’s case the continuous dimension is the margin of victory and the cutoff is the electoral rule designating winners versus losers; winning is the treatment. The pretest is election \( t \) and the outcome is election \( t + 1 \). The cutoff for winning is a deterministic function of the candidate’s vote margin. This design allows Lee to analyze the effect of winning in election \( t \) on the probability of victory in election \( t + 1 \), while controlling for the margin of victory in election \( t \).

The continuous density of the margin of victory is a crucial assumption to the capacity of regression discontinuity to measure an incumbency advantage. In order for this condition to be met one might imagine that margin of victory is composed of both systematic components that are within the candidates’ control (e.g. candidate attributes/actions) and an exogenous random component with a continuous density. Alternatively, one could assume that candidate quality is continuous. Lee (2008) shows that as long as candidates do not have the ability to sort precisely around the winning threshold, localized randomization can occur even though the systematic components matter in determining winners and losers. As a result, in very close elections there will be no difference in the quality of the winning and losing candidates because the assignment of winning status is essentially random.

If winning and losing is randomly determined at the threshold, then we can ask “what is the effect of the treatment (e.g. winning election \( t \)) on running and winning in the next election?” As long as there are no meaningful pre-existing differences between the treatment and control groups (winners and losers of election \( t \)), then we can attribute any differences in outcomes (running and winning in election \( t + 1 \)) to the treatment. In the incumbency setting this means that at the time of the first election bare winners and bare losers should be statistically identical.
on all pre-treatment characteristics, particularly those like political experience that are likely to affect winning in election $t$ and election $t+1$.

In other words candidates who barely win elections should be similar to candidates who barely lost elections with respect to quality. When it comes time for the next election, the only difference between them is the determination of whether or not they won the earlier election and the potential advantages they accrued while in office. If the incumbency advantage is merely a selection effect, only margin of victory should affect outcomes in the next election, not the candidates’ winner/loser status. If we find incumbency status to have an effect on the probability of running and of winning in the next election, and if we can show that bare winners are not significantly more qualified than bare losers, then we have support for an incumbency effect.

I modify Lee’s method to study incumbency at the local level in order to rule out the argument that the advantage is wholly attributable to selection. To do so I analyze data that I collected on city council elections from 1900 to 1985 in Austin, Dallas, San Antonio, and San Jose. I collected mayoral data for the same time span from Chicago, Kansas City, New Haven, New York and Philadelphia to test whether or not city executives also have an incumbency advantage. Because of a lack of close mayoral elections, a regression discontinuity analysis is inappropriate with these data, so I only report mayoral results where other approaches are used. These cities were chosen primarily on the basis of available election returns for the entire time span. Together the collection represents diverse regions of the United States and cities with substantial variation on demographic and political measures.

The structure of local council elections poses a number of econometric challenges in estimating incumbency effects. First, as explained above, because these city council elections are nonpartisan I am unable to estimate the effect at the unit (party) level as Lee and others have
done. Instead, my unit of analysis is the candidate in a municipal election (whereas Lee’s is the Congressional district). This is especially problematic in estimating the effect of incumbency on winning in election $t+1$. While it is plausible that winning is randomly assigned in very close elections at time $t$, there is no possibility that running in election $t+1$ is randomly determined. In fact, it is highly probably that the bare losers and bare winners who choose to run again look significantly different from the bare losers/winners who sit out the second time around; and that the reasons they choose to run again are correlated with their probability of winning. As a result, the outcome data (winning in election $t+1$) are not available for all of individuals in the sample and the data that we do observe are likely to produce biased estimates. In statistical parlance this problem is referred to as truncation by death; we can not know the effect of the treatment for the patients who die during the trial. One solution to this conundrum (which I employ) is to estimate the effect of winning in election $t$ on both running and winning in election $t+1$ rather than on the conditional probability of winning (see McConnell et al 2008 for a defense of this procedure).13

The data are complicated in a number of additional ways. In all four cities a candidate could be elected outright in the primary if he won enough votes. When the threshold was not met, candidates were forced into run-off elections. Furthermore, for most of the time period council candidates were elected city-wide (at-large), but in the later part of the time series San

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13 Although potentially biased, in the on-line appendix I present a model that estimates the effect of winning in election $t$ on winning in election $t+1$ restricted to candidates who won/lost by +/-5% and who ran in election $t+1$. The results are extremely close to those reported in the second column of table 2 suggesting that the bare winners and loser who drop out do not look much different from the bare winners and losers who compete in the second election. This implication is confirmed by an analysis of past campaign and political experience showing no statistically significant difference between bare winners/losers who choose to run again versus those who don’t.
Jose, San Antonio, and Dallas adopted district elections. In Dallas, San Antonio, and Austin after 1953, elections represent contests for a single seat even when the elections were city-wide. In San Jose and in Austin prior to 1953 multiple councilors were elected at a time. In these races the top-$N$ vote getters won, where $N$ represented the number of seats. I discuss my method for controlling on these variations below.

I analyze two related dependent variables. First I determine the effect of incumbency on candidates’ probability of running in election $t + 1$ and then I determine the effect on candidates’ probability of both running and winning in election $t + 1$. In the base model I include only three independent variables: the candidate’s victory status in election $t$, the candidate’s margin of victory in election $t$, and the interaction between these two terms. Margin of victory is calculated for each candidate depending on his or her victory status. For winners it is the candidate’s percentage of the vote minus the percentage of the vote won by the losing candidate with the highest total. For losers it is the opposite; the candidate’s percentage of the vote minus the percentage of the vote won by the winning candidate with the lowest percentage. This measure allows me to compare estimates in multi-candidate races to those with only two candidates.

The first two columns of Table 1, present the results for council candidates whose margin of victory is +/- 5%. The second two columns present results for all candidates and races. In additional tests I repeated the analyses using only the winning candidate with the lowest total and

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14 It would be better if I could estimate these analyses without including candidates from the same race. For example Lee only includes Democratic candidates, which is not possible in my analyses. I attempt to deal with the econometric problem in two ways. First, in all of the analyses I cluster the standard errors by election. Secondly, I repeated the specifications after randomly selecting a winner and loser from each election. The results do not change in any substantial way.
the losing candidate with the highest total. I also tested alternative functional forms with second, third, and fourth order polynomials in the margin of victory. I analyzed the data for elections before 1950 separately from post-1950 elections. I added city and decade fixed effects, indicators noting whether or not the election was a primary with no run-off, and whether or not the election was citywide. I also estimated the results restricted to candidates who ran for open seats in election $t$. Finally, I split the council analysis into two regressions analyzing district elections separately from at-large elections. The results changed very little with these different specifications, so only the first order logistic regression results including all candidates with no controls are presented below in Table 1. The alternative models are available in the on-line appendix associated with this article.

Table 1

The results are clear - the effect of winning in election $t$ has a positive and significant effect on the probability of running and winning in election $t + 1$. The graphical representation of these results, shown in Figures 1-2, makes these effects especially clear.

Figures 1-4

The dots in these figures represent the unconditional (actual) mean of running or winning in election $t + 1$ for intervals of margin of victory which are 0.02 wide. Losers are represented by points to the left of zero and winners are represented by points to the right. The lines represent predicted values from the regressions in Table 1 that include all observations. The jump in predicted probability of running and winning in election $t + 1$ for candidates who won versus those who lost in election $t$ represents the estimated effect of incumbency. For

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15 Unlike the findings from Congressional elections, it appears that the advantage was much stronger prior to 1950 in these four cities.
candidates who win or lose by 5 percentage points or less, incumbency increases the probability
of running in the next election by about 32 percentage points and the combined probability of
running and winning by about 44 percentage points. In an additional tobit analysis (shown in the
on-line appendix), I find that conditional on running, bare winners can expect about 46% of the
vote in the next election compared to bare losers who can expect about 31%. A similar tobit
analysis of mayors, restricted to candidates with a margin of victory of +/-18, suggests that
mayoral winners expect about 43% of the vote while mayoral losers can expect about 23%.
Using the more typical measure of sophomore surge controlling for the number of candidates in
the election, I find that incumbent councilors increase their vote their by about 10 percentage
points in the next election. The increase is about 11 percentage points for mayors.

We would expect to see such a large difference in reelection probabilities if winners are
significantly better candidates than losers and elections are an adequate mechanism for selecting
the highest quality candidate. That is, in order to have confidence that the incumbency
advantage is not purely a selection effect it must be the case that the bare winners and bare losers
of election $t$ are similar (at time $t$) on characteristics that might influence the outcome of election
$t$ and election $t + 1$, such as political and campaign experience. If the candidates who win
elections really are stronger then we would expect to see measurable differences between the
quality of the winners and quality of the losers at the time of the first election. It would be best if
we had measures of all of the relevant indicators of quality such as campaign funds and
charismatic appeal. These data are not available. Instead I compare winners and losers on two
measures of quality that I do have – campaign experience (number of previous elections the
candidate entered) and governing experience (number of previous terms the candidate served).
Figures 3-4 demonstrate that there are no significant differences between bare winners and bare losers of city council elections. To test the effect of quality more formally, I added Prior runs and Prior terms to the models presented in Table 1. The results (available in on-line appendix) suggest essentially no change on the effect of winning in election \( t \). Thus, we can be confident that the regression discontinuity design is picking up real incumbency effects.

To begin investigating the sources of the incumbency advantage for winners, I analyzed the strength of the challengers faced by incumbents in their first and second elections (available in on-line appendix). I have data on challenger experience for 234 incumbents who competed in at least two elections and find no evidence of significantly lower quality opposition in the second race. On average, incumbents face challengers with a mean campaign experience (prior runs) of .50 in both election \( t \) and election \( t + 1 \). The mean political experience (prior terms) of challengers is .299 compared to .265. A paired two-sample mean comparison test suggests that the probability that these political experience means are equal is .72. On the other hand, when we look at the quality of challengers faced by incumbents who won by 5% or less, there is evidence of a significant scare-off effect even though the sample size is small (35 observations). The mean campaign experience of challengers in election \( t \) is 0.83 compared to 0.20 in election \( t + 1 \); and the mean political experience is 0.66 compared to 0.00.

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16 The figures were produced by regressing candidates’ prior number of terms and prior number of runs for council on victory status, vote margin, and the interaction between the two. Typically we present independent variables along the x-axis and dependent variables along the y-axis. I reverse the axes here for ease of comparison with figures 1 and 2.

17 The effect of incumbency does not just apply to bare winners and losers. It is a weighted treatment effect for the whole population where the weight is the probability that the candidate will draw a margin of victory that is near the threshold for winning (Lee 2008).
When incumbents win elections because they are the stronger candidate, incumbency status does not appear to change the calculation of challengers. But when incumbents win elections by chance, quality challengers opt out of the electoral process. We might interpret this as evidence that everyone knows (in advance) who the high quality candidates are. But accurately detecting the quality of mediocre candidates might be more difficult. It is possible that after winning a single election, even by a close margin, incumbents are perceived to be higher quality candidates the next time around. Risk-averse challengers choose not to face these strong candidates thereby helping to generate an incumbent advantage.¹⁸

**Decreasing Contestability of the Electoral Arena**

Given the evidence that local legislators who win election to office once are more likely to run and win a second time, this section turns to an analysis of potential contributors to that advantage. It is likely that the local incumbency effect is produced by a variety of different mechanisms. For some incumbents the apparent advantage is really the result of selection – high quality candidates win and keep winning. But as the regression discontinuity suggests, selection is not the only factor. Serving in office may provide candidates with experience and expertise that is valued by voters. Particularly if they are responsive to constituents’ preferences,

¹⁸ One might take these data as evidence that a candidate’s “real” quality is revealed by the first election, causing quality challengers to drop out the next time around. In order for this to be true it must be the case that margin of victory is not actually continuous, that bare winners really are better candidates than bare losers, and that winning is not randomly assigned at the threshold. If these assumptions are not believable then the regression discontinuity results are useful for showing that incumbents are likely to run and win in the next election, but not for ruling out preexisting quality as the sole determinant.
incumbents ought to have little trouble keeping their jobs. Knowing all of these things risk-averse challengers may be likely to time their runs with incumbent retirement; again adding to the incumbency advantage. However, there may also be systemic factors that affect voters’ ability to evaluate candidates and their likelihood of turning out to vote regardless of incumbents’ actions in office. If some institutional settings make it harder for voters to figure out what incumbents are doing and who the challengers is or make it harder for them to get cast a vote, then we should see a measurable increase in incumbency advantage in these less contestable environments.

One problem with evaluating this prediction empirically is that it is difficult to measure incumbent success independently of contestability (or competitiveness) because the cause and effect are cyclical. That is, we should expect weak incumbents to create less contestable political arenas that increase the incumbency advantage while decreasing the need for responsiveness. In an attempt to minimize this problem I take advantage of the subordinate status of cities with regard to state laws that are likely to affect information and turnout. While city councilors are affected by these institutions but they do not decide what the law will be. I supplement these state level analyses with local level factors that also affect information and turnout.

The admittedly imperfect data that I use come primarily from the International City County Manager’s Association (ICMA). The ICMA conducts periodic assessments of local governments by mailing a survey to city clerks in all United States cities with more than 2,500 residents. They have a response rate of about 64%. Using surveys from 1986, 1992, 1996, and 2001, I created a dataset with 7,174 unique municipalities and a total of 18,416 observations (many cities were not included in all years). The ICMA data include information on institutional features of city government. These data were merged with census data to control for city level
demographics. Census data from 1990 were used for the 1986 observations and 2000 census data for the 2001 observations. Values were linearly interpolated for 1992 and 1996. Additional data were merged in from the 1987, 1992, 1997, and 2002 Census of Governments files regarding city expenditures. I coded the presence of a local daily or weekly newspaper from the 2000 edition of the Editor and Publisher International Yearbook and the 2009 on-line database provided by the Audit Bureau of Circulation.\(^{19}\)

Finally, I added data on state level institutions that govern local elections. I identified states that required sample ballot and polling place mailings by evaluating statutes for states that Wolfinger et al (2005) code as having sent mailings for the 2000 presidential election.\(^{20}\) The coding of these variables is constant for all years of the data. I gathered registration deadlines from Brians (1997) and the Federal Election Assistance Commission.\(^{21}\) This variable changes over time for some states.

The Incumbency Advantage in Low Information/Low Turnout Elections

To evaluate the factors that contribute to incumbent success I analyze the likelihood that city councilors will run for reelection and the likelihood that they will win. I use the proportion

\(^{19}\) The Yearbook lists cities that are covered by daily newspapers. I matched their list with my data from the International City County Manager’s Association. Approximately 93% of the cities listed in the Yearbook are included in my data. I supplemented this coding with data from the Audit Bureau of Circulation on weekly papers. The variable that I use in the analyses is coded 1 if a city had a daily or weekly newspaper according to either source.

\(^{20}\) The coding notes these authors used were generously provided by Megan Mullin. See footnotes 9 and 12 for additional detail about the coding.

\(^{21}\) See footnote 13 for more detail about the coding of this variable.
of the council running and winning reported by the ICMA as dependent variables. In cities without staggered council terms an average of 70% of incumbents run for reelection and 85% of those running win.\textsuperscript{22} There is substantial variation across cities. The standard deviation is 27% for running and 23% for winning. So, given that all of these officials share some minimal amount of governance experience, what accounts for this variation? I argue that the contestability of the electoral environment plays a significant role.

I begin by analyzing the effect of low information and low turnout environments on incumbents’ propensity to run for reelection and their victory rates. To measure the information environment I use state law regarding the mailing of sample ballots and two local level factors – the presence of a local newspaper and population size. To estimate the effect of turnout I use two state level institutions – the mailing of polling place locations and same-day registration; and one local level institution – concurrent elections. When voters have more information about their choices for replacing elected officials and are more likely to participate we can expect the electoral arena to be more contestable and so should see fewer incumbents running and winning.

In order to analyze the effect of the state laws on local elections I employ a split sample design to estimate the predicted proportion of incumbents running and winning. One might imagine that the most straightforward procedure would be to regress incumbent reelection rates on dummy variables for the state requirements. Because there are differences across states that

\textsuperscript{22} Unfortunately the ICMA reports only the proportion of the whole council running for and winning reelection even in cities with staggered council terms where only a portion of the council seat are up for election in a given year. I control for this by adding a dummy variable for staggered terms in the analyses, but this undoubtedly adds error to my estimates. The average run rate for cities with staggered terms is 36%
affect reelection rates it is important that I include state fixed effects in the models; and because I have time-series data it is important that I cluster the errors by city. However, state fixed effects are collinear with ballot requirements (because this is a state level code) and clustering the errors by state precludes me from clustering the errors by city. I get around this by estimating reelection rates in cities that are located in states with the requirement separately from those that are located in states without the requirement. This allows me to cluster the errors by city while still accounting for the hierarchical nature of the relationship between state law and local outcomes using state fixed effects (Jusko and Shively 2005). This procedure allows all of the coefficients to vary between states with and without the requirement.  

To analyze the local factors that affect information I regress incumbent run and win rates on a dummy variable noting whether or not the city has a local or weekly *Newspaper* and the natural log of the city *Population*. A dummy variable for *Concurrent* elections (elections held in November of even numbered years) tests the effect of a local institution that impacts turnout.  

In both the split sample design and the local context analyses I include a number of control variables that might affect incumbents’ decisions to run and their ability to get reelected. I add a dummy variable designating whether a majority of the city council is elected by *District* or at-large. This accounts for the lower cost of campaigns and lower levels of competitiveness in

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23 In the on-line appendix readers can find the mean proportion of incumbents running and winning in states with and without the requirements and an alternative set of estimations using Elazar’s coding for state culture in place of the state fixed effects. In all cases the results remain significant and in the predicted direction although the effects are somewhat smaller with regard to the mailing of polling locations and sample ballots.

24 This variable was created from a 1986 ICMA question regarding the timing of the next municipal election and is constant for all years in the data set.
district elections as well as the ability for incumbents to provide targeted benefits in districted cities, creating a personal vote connection with their constituents. District councilors also typically represent smaller constituencies than at-large councilors and so may benefit from increased name recognition. I control for per capita *Council Size* to account for the possibility of increased competitiveness in smaller legislatures or decreased capacity to be responsive when an official represents larger numbers of constituents. I include a dummy variable noting whether or not elections are *Partisan*. Although parties play a diminished role at the local level today, in some cases parties provide organizational and financial support to candidates as well as resources for mobilizing voters. So, partisan elections may have a positive effect on incumbent reelection rates. On the other hand, because voters tend have less information about challengers in nonpartisan cities they may be more likely to rely on incumbency as a cue for experience.

To capture the possibility that incumbents are more likely to run when they earn more money or have more power, I include the percentage of city budget spent on *Central Staff* (which includes councilors’ salaries) and whether the city has a *Council-manager* or mayor-council structure. Oliver and Ha (2007) argue that council-manager structures tend to create low information political arenas. However, typically councilors in these cities have fewer opportunities to influence city policy because of the power of the city manager, and so may be less interested in running for reelection. As a result, there is no clear prediction for this variable.

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25 I replaced the central staffing variable with a direct measure of council salaries for a sample of cities. The results are consistently positive but not consistently significant because of the reduction in cases.
I include two proxies for candidate quality - the proportion of the council that identifies as Business Managers and Professionals. I expect both to be positive. As a proxy for councilors with low opportunity costs I include the proportion that is Retired. I expect the effect to be positive. I also control for the presence of council Term-Limits and Staggered council terms which should both be negative.

Research on the federal incumbency advantage has found that economic downturns can hurt incumbents (Brady, Buckley, and Rivers 1999). I control for this with using the proportion of people in the city who are Unemployed. Additionally, certain types of voters are more likely to have high levels of information about candidates, have a larger stake in local elections, and to turn out to vote, potentially putting more pressure on incumbents to be responsive. I use the proportion of housing units occupied by Home-Owners and the proportion of the population that is College Graduates to represent this population. I also control for Median Household income.

Given that an uncontestable electoral arena on its own is insufficient to ensure reelection, for an incumbent to represent her constituents she must be able to determine what the people want from a representative. This might be harder in more heterogeneous places. Additionally Oliver and Ha (2007) find that more diverse cities engender increased interest in local campaigns. I capture this with a measure of the racial Diversity of the population. This is a

26 The ICMA lists the occupation of city councilors in nine categories: lawyers, professionals, business managers, business employees, farmers, homemakers, teachers, clergy, and retirees. At the city level there is no clear way to measure candidate quality. Lieske (1989) offers evidence that college degrees and occupational prestige are strongly associated with candidate success in Cincinnati and Bridges (1997) shows that successful coalitions in the Southwest were dominated by prominent members of the business community. I use the categories of business managers and professionals as possible indicators of these types of candidates.
Herfindahl index (1-sum of the squared proportions) of the African American, Latino, Asian American, other non-white, and white populations in a city. I expect fewer incumbents to run and win in more diverse cities.

I estimate a probit selection model which allows me to take into account strategic entry decisions of incumbents.\textsuperscript{27} This set-up assumes that incumbents who run are not a random sample of the incumbent population with respect to their likelihood of winning. In the first stage I estimate the probability of running for reelection and in the second I estimate the probability of winning. The selection equation for running includes all of the variables listed above. The outcome equation on winning includes the same variables except Central Staff, Term Limits, Staggered Council, and percent Retired. Observations with missing data on either dependent variable are excluded from the analysis. Fixed effects for states and survey years (1992, 1996, and 2001 with 1986 as the excluded category) are included. Standard errors are clustered by city to account for the relationship in errors across observations.

\textsuperscript{27} I do not have the proper data for a true selection model as my data are city level. While I know the total number of council members, proportion of the council that ran for reelection, and the proportion who won, I know nothing about these particular councilors. I convince Stata to run my model by transforming the data set so that I have one observation for each councilor in each city. These observations are identical on all city level variables. I coded the proper proportion of each city’s councilors as having run and won. I then ran probit models with sample selection using Stata’s “heckprob” command. For comparison I also estimated the proportion of incumbents running for reelection using OLS in the untransformed data set. The results were similar, but the standard errors generally larger on the transformed results. I am grateful to Chris Achen for helping me develop this design.
Table 3 shows the estimated proportion\(^ {28}\) of incumbents running and winning from these models holding all variables constant at their mean values.\(^ {29}\) The fully specified base model using all states can be found in Table A1. The split sample models and the Stata code for obtaining the estimates are available in the on-line appendix.

The results are clear: When institutions encourage voters to gain more information or turn out to vote fewer incumbents run for reelection and they are less likely to win. These differences are meaningful. Approximately one incumbent councilor in every two cities fails to run and win when voters are mailed sample ballots. Having a local newspaper decreases the probability of running by about 3 percentage points and decreases the estimated proportion of incumbents

\[^{28}\text{Estimates were generated by running post-estimation simulations in Stata as described by Timpone (2002) and Bartels and Sweeney (2004). For each model I drew simulations of the model’s parameters from a multivariate normal distribution with means equal to the model’s vector of parameters and variance equal to the variance-covariance matrix. I then estimated the probability of running (Φ[γ'z]), the probability of running and winning (Φ_2[β'x,γ'z,ρ]), and the probability of winning conditional on running (Φ_2[β'x,γ'z,ρ]/Φ[γ'z]), 1000 times for each model using the simulated parameters, setting each explanatory variable at its mean value. Table 4 reports the median values of these estimates and their 95% confidence intervals (the 2.5th and 97.5th percentiles). I also estimated predicted probabilities using Stata’s “mfx” command. The results were nearly identical but because Stata’s command does not report errors or confidence intervals, I report the values from my simulations.}\]

\[^{29}\text{Setting staggered council elections to zero increases the estimated proportion of incumbents running and winning (by approximately 20 percentage points). Most cities use staggered council elections. So while any given incumbent has a high probability of running for and winning reelection (as shown in the regression discontinuity), the proportion of the council that runs and wins in a particular election is lower.}\]
running by 1 percentage point. The larger the city, the better incumbents do. An increase of 1,500 residents increases the probability of running about 1 percentage point. Going from the 10\textsuperscript{th} to the 90\textsuperscript{th} percentile of population increases the estimated proportion of incumbents running by about 3 percentage points and the proportion running and winning by 2 points.

Laws that affect turnout have a similar effect. About 2 councilors in every 5 cities fail to seek and win reelection when polling locations are mailed. Same day registration decreases the proportion of incumbents running and winning by about one incumbent for every seven cities. When elections are held concurrently with federal elections the probability of incumbents running decreases by nearly 7 percentage points and the estimated proportion running decreases by 3 percentage points.\textsuperscript{30} Overall, these data provide evidence that when constituents have more information about elections and are encouraged to participate, incumbents are less insulated.

\textsuperscript{30} It is interesting to note the nearly significant, positive conditional effect of concurrent elections on winning (shown in Appendix A1). There are two possible explanations for this result. Given that concurrent elections decrease constituents’ knowledge and engagement of local issues (Oliver and Ha 2007), voters may be more likely to use incumbency as a heuristic in these settings. Alternatively, it could be that the incumbents who choose to run knowing that they will face a more activated electorate are simply of higher quality and so more likely to win. This argument suggests another possible reason for the relationship between contestable environments and an incumbency effect. Highly contestable environments may limit the number of low quality candidates who run for office. This could mean that in contestable environments a greater proportion of the apparent incumbency effect would be the result of selection. So we might expect a smaller pure incumbency effect (e.g. stripped of selection) when elections are contestable. Ideally one would test this proposition with a regression discontinuity, but my data are insufficient for such an analysis.
The Institutions, Turnout, and Incumbency Advantage

If a larger and more unpredictable electorate is part of the reason that incumbents run and win less frequently when local officials are required to mail poll locations, registration closes closer to the election, and local elections are held concurrently with national elections, then these institutions should also positively affect local level turnout. In turn we should see a negative association between turnout and reelection.\textsuperscript{31}

Because the ICMA has only collected turnout data in one year of its survey (1986), I can neither conclusively sort out the mechanism that leads to the relationship between turnout and reelection nor properly determine the direction of causality. However, I take advantage of the timing of the election process to provide solid evidence that there are cross-sectional relationships among institutions, turnout, and reelection that are consistent with my theory.

First, I show that the state and local level institutions that decrease barriers to participation increase turnout. The dependent variable is \textit{Turnout} of registered voters in the most recent municipal election as reported by the 1986 ICMA. The main independent variables are dummy indicators for high-turnout institutions (required mailing of \textit{Polling place} locations, a 10 day \textit{Registration} cut-off, and \textit{Concurrent} elections). I include the proportion of the city council \textit{Running} for reelection as a measure of competitiveness of the election. I include the variable percent \textit{Unemployed} to control for the alternative possibility that dissatisfaction with the

\textsuperscript{31}Oliver and Ha predict the opposite effect. They argue that low turnout elections should be populated by more highly interested voters – parents of school age children, home-owners, long-term residents – who may be more supportive of challengers. If they are right turnout will have a positive relationship with incumbent reelection.
incumbent increases turnout. The additional controls are similar to those used in the previous section including local institutions and socio-economic characteristics. I cluster the standard errors by state. The results displayed in Table 4 indicate that institutions that decrease the costs of participation have a significant, positive effect on local level turnout.

Mailing polling place locations increases turnout by about 5 percentage points and allowing voters to register within 10 days of the election increases turnout by about 6 percentage points. Concurrent elections increase turnout by nearly 13 percentage points.

Next I analyze the effect of turnout on incumbent reelection rates. As I did in the previous section I estimate a probit model with selection. This set-up allows me to estimate the effect of turnout on reelection conditional on incumbents having entered the race, helping to control for the competitiveness of the election. The dependent variables are whether or not an incumbent ran and whether or not he/she won. The main independent variable is Turnout. I include the same controls as in the previous selection models.

Survey data on incumbent approval would be better but are not available. In alternate tests I added other measures of possible voter dissatisfaction like per capita taxes and debt rates with no substantive difference in the outcomes.

Allowing same day registration increases turn out of eligible voters by more than 10 percentage points. This result should be cautiously interpreted because of a large number of missing observations on this dependent variable.

There are also significant interactions between the state institutions and concurrency. Concurrent elections have a more powerful effect on turnout when polling locations are mailed and where 10 day registration is allowed.
The full results of this estimation, presented in the second column of Table A1, indicate a significant negative relationship between turnout and reelection. Conditional on incumbents running, increasing turnout from 14% to 67% (going from the 10th to the 90th percentile) decreases the estimated proportion of incumbents winning by about 7 percentage points, from 90% to 83%. Moving from the minimum level of turnout to the maximum decreases the proportion from 91% to 79%, about 12 percentage points. When more voters participate fewer incumbents win reelection.

**Conclusion**

Gaining deeper knowledge of the presence and sources of the incumbency advantage contributes to our understanding of representative democracy. If incumbents win reelection because they are the best candidates and/or because they are responsive their constituents then the rise in the incumbency advantage can only be considered a good thing. This paper has provided evidence that this may not be the right conclusion to draw about local elections. First, I have shown that city council members are much more likely to run and win after they have served a single term in office. This suggests that incumbents do not win reelection simply because they started out as the best candidates. Secondly, I have shown that certain exogenous institutions can increase the probability of reelection.

There is a tremendous amount of political science evidence that incumbents gain experience over time, that they work hard to learn what their constituents want and to take actions in office that faithfully represent their voters. However, some political environments undoubtedly encourage these behaviors more than others. I have suggested that we can (theoretically) measure the contestability of any electoral arena. By determining the degree to
which constituents are able to learn about the activities of their government and about available alternatives, and the degree to which voting is made less costly we can determine how likely officials are to use responsiveness as a strategy for reelection.

The mailing of sample ballots, the presence of a local newspaper, and smaller populations all have the potential to increase constituent information while the mailing of polling place locations, holding concurrent elections, and establishing registration deadlines closer to election-day increase the probability of voting. In the presence of institutions that increase information and turnout fewer incumbents run for reelection and fewer win. I have argued that this is because these institutions increase contestability of the political arena; they create more knowledgeable and less predictable electorates. In such environments incumbents should only be able to win reelection by faithfully representing their constituents. Running should be less attractive and winning harder in these cases.

Given the institutional context that they face, we can expect politicians to behave strategically when choosing to run for office and deciding what strategies to adopt to ensure reelection – they will be as responsive as they need to be. When incumbents win reelection in uncontestable environments they have less incentive to be responsive. Evidence presented by Griffin (2006) suggests that at least at the Congressional level incumbents who do not worry about reelection are less likely to be attentive to the preferences of their constituents.

Griffin’s results imply that the findings presented in this paper may be relevant to elections at higher levels of government, but there are other reasons to think that local elections are unique in meaningful ways. For instance, it is likely that career ambition and candidate quality are substantively different in state and federal elections which could affect the relationship between information, turnout, and reelection. In fact, there is some evidence that the
incumbency advantage is lower for state legislators compared to members of Congress (Snyder and Ansolabehere). On the other hand, a number of scholars have shown that Senators, who typically face higher-profile elections, have lower reelection rates than House members (see for example Abramowitz and Segal 1992). So the degree to which these measures of contestability affect other elected officials remains unclear. It is also possible that other institutions are more important for defining contestability at higher levels of government given that information and turnout levels are likely to be higher overall in these settings.

Until we dissect the many elements that contribute to the incumbency advantage at all levels of government we will never be able to fully evaluate the success of our system. In order to fully understand the mechanisms that connect institutions to reelection and to determine effect of incumbent safety on responsiveness at the local level we need much better data on constituent preferences and local policy outcome. But this paper takes a first step in this direction by showing that incumbents are not always advantaged because they are best candidates and by identifying institutions that affect the incumbency advantage in municipal elections.
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Margin +/- 5%</th>
<th>All Elections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Probability of Running Election</td>
<td>Probability of Winning Election</td>
</tr>
<tr>
<td></td>
<td>$t+1$</td>
<td>$t+1$</td>
</tr>
<tr>
<td></td>
<td>Coefficient</td>
<td>St. Err</td>
</tr>
<tr>
<td>Won, Election $t$</td>
<td>1.380 * 0.738</td>
<td>2.361 ** 1.013</td>
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<td>8.636 17.774</td>
<td>-17.902 22.361</td>
</tr>
<tr>
<td>Margin*Won</td>
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<td>7.160 22.390</td>
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<tr>
<td>Constant</td>
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<td>-2.137 ** 0.767</td>
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<tr>
<td>$N$</td>
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<tr>
<td>Pseudo $R^2$</td>
<td>0.145 0.102</td>
<td>0.160</td>
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</tbody>
</table>

Note: Logistic regressions; Robust standard errors clustered by election
*p<.10, **p<.05

The regression discontinuity design suggests that if the incumbency effect were attributable solely to selection then we ought to see no substantive or significant effect on “won” or the interaction of “margin*won.” The interaction effect is included to allow the vote margin to affect winners and losers differently.
<table>
<thead>
<tr>
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<th>Estimated Proportion Running</th>
<th>Estimated Proportion Running and Winning</th>
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</thead>
<tbody>
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<td>35% (34-36%)</td>
<td>29% (17-34%)</td>
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<tr>
<td></td>
<td>+10**</td>
<td>+9**</td>
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<tr>
<td>No Sample Ballot Requirement</td>
<td>45% (44-45%)</td>
<td>38% (37-40%)</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Local Newspaper</td>
<td>43% (42-44%)</td>
<td>37% (35-38%)</td>
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<tr>
<td></td>
<td>+1*</td>
<td>+1</td>
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<tr>
<td>No Local Newspaper</td>
<td>44% (44-45%)</td>
<td>38% (36-39%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Small Population</td>
<td>42% (41-43%)</td>
<td>36% (34-38%)</td>
</tr>
<tr>
<td></td>
<td>+3**</td>
<td>+2†</td>
</tr>
<tr>
<td>Large Population</td>
<td>45% (44-46%)</td>
<td>38% (37-40%)</td>
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<tr>
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<tr>
<td>Polling Locations Mailed</td>
<td>38% (37-39%)</td>
<td>33% (27-36%)</td>
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<td></td>
<td>+7**</td>
<td>+5**</td>
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<tr>
<td>No Poll Mail Requirement</td>
<td>45% (44-45%)</td>
<td>38% (37-39%)</td>
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<td></td>
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<tr>
<td>Same Day Registration</td>
<td>41% (40-42%)</td>
<td>35% (29-39%)</td>
</tr>
<tr>
<td></td>
<td>+2**</td>
<td>+2</td>
</tr>
<tr>
<td>Registration 1 Month in Advance</td>
<td>43% (43-44%)</td>
<td>37% (35-39%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concurrent Elections</td>
<td>41% (40-43%)</td>
<td>36% (34-38%)</td>
</tr>
<tr>
<td></td>
<td>+3**</td>
<td>+1</td>
</tr>
<tr>
<td>Non-concurrent Elections</td>
<td>44% (44-44%)</td>
<td>37% (36-39%)</td>
</tr>
</tbody>
</table>

Note: Cell entries are estimates predicted using probit models with sample selection; 95% confidence intervals in parentheses. Regression results available in on-line appendix.

†p<=.15 *p<=.10; ** p<=.05.
Table 4: Effects of State and Local Institutions on Turnout of Registered Voters in 1986

<table>
<thead>
<tr>
<th>Institution</th>
<th>Coefficient</th>
<th>St Err</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polling Places Mailed</td>
<td>0.051 **</td>
<td>0.022</td>
</tr>
<tr>
<td>10 Day Registration</td>
<td>0.062 **</td>
<td>0.022</td>
</tr>
<tr>
<td>Concurrent Elections</td>
<td>0.128 **</td>
<td>0.032</td>
</tr>
<tr>
<td>% Council Running</td>
<td>-0.030 †</td>
<td>0.020</td>
</tr>
<tr>
<td>Population (log)</td>
<td>-0.012 *</td>
<td>0.007</td>
</tr>
<tr>
<td>Local Newspaper</td>
<td>-0.011</td>
<td>0.010</td>
</tr>
<tr>
<td>Partisan Elections</td>
<td>0.031 *</td>
<td>0.017</td>
</tr>
<tr>
<td>District Council</td>
<td>-0.023 **</td>
<td>0.010</td>
</tr>
<tr>
<td>Council Manager System</td>
<td>-0.068 **</td>
<td>0.015</td>
</tr>
<tr>
<td>Term Limits</td>
<td>-0.001</td>
<td>0.029</td>
</tr>
<tr>
<td>Staggered Council Elections</td>
<td>-0.094 **</td>
<td>0.018</td>
</tr>
<tr>
<td>Council Size Per Thousand Persons</td>
<td>0.012 **</td>
<td>0.005</td>
</tr>
<tr>
<td>% Unemployed</td>
<td>-0.292</td>
<td>0.525</td>
</tr>
<tr>
<td>% Homeowners</td>
<td>0.110 *</td>
<td>0.057</td>
</tr>
<tr>
<td>% College Graduates</td>
<td>0.021</td>
<td>0.057</td>
</tr>
<tr>
<td>Median HH Income (thsd)</td>
<td>-0.002 **</td>
<td>0.001</td>
</tr>
<tr>
<td>Diversity</td>
<td>-0.007</td>
<td>0.057</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.573 **</td>
<td>0.063</td>
</tr>
</tbody>
</table>

N: 2503
R²: 0.176

Note: OLS regression with robust standard errors clustered by state.
†p<=.15, *p<=.10 **p<=.05
### Table A1: Factors Affecting Incumbent Reelection

<table>
<thead>
<tr>
<th></th>
<th>Base Model</th>
<th>Turnout Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>St Err</td>
</tr>
<tr>
<td>Turnout of Registered Voters</td>
<td>-0.535 **</td>
<td>0.157</td>
</tr>
<tr>
<td>November Concurrent Elections</td>
<td>0.075 †</td>
<td>0.048</td>
</tr>
<tr>
<td>Population (log)</td>
<td>-0.010</td>
<td>0.019</td>
</tr>
<tr>
<td>Local Paper</td>
<td>0.003</td>
<td>0.030</td>
</tr>
<tr>
<td>Partisan Elections</td>
<td>0.087 **</td>
<td>0.040</td>
</tr>
<tr>
<td>District Council</td>
<td>-0.004</td>
<td>0.027</td>
</tr>
<tr>
<td>Council Manager System</td>
<td>0.025</td>
<td>0.028</td>
</tr>
<tr>
<td>% Council Professionals</td>
<td>0.161 *</td>
<td>0.083</td>
</tr>
<tr>
<td>% Council Business Managers</td>
<td>0.075 †</td>
<td>0.052</td>
</tr>
<tr>
<td>Council Size Per Thousand Persons</td>
<td>0.050 **</td>
<td>0.021</td>
</tr>
<tr>
<td>% Unemployed</td>
<td>-0.326</td>
<td>0.839</td>
</tr>
<tr>
<td>% Homeowners</td>
<td>-0.041</td>
<td>0.156</td>
</tr>
<tr>
<td>% College Graduates</td>
<td>0.512 **</td>
<td>0.154</td>
</tr>
<tr>
<td>Median HH Income (thsds)</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Diversity</td>
<td>0.232 **</td>
<td>0.099</td>
</tr>
<tr>
<td>1992</td>
<td>-0.066 **</td>
<td>0.033</td>
</tr>
<tr>
<td>1996</td>
<td>0.053 †</td>
<td>0.034</td>
</tr>
<tr>
<td>2001</td>
<td>-0.071 *</td>
<td>0.039</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.683 **</td>
<td>0.285</td>
</tr>
<tr>
<td>November Concurrent Elections</td>
<td>-0.065 **</td>
<td>0.021</td>
</tr>
<tr>
<td>Population (log)</td>
<td>0.027 **</td>
<td>0.009</td>
</tr>
<tr>
<td>Local Paper</td>
<td>-0.032 **</td>
<td>0.015</td>
</tr>
<tr>
<td>Partisan Elections</td>
<td>-0.018</td>
<td>0.020</td>
</tr>
<tr>
<td>District Council</td>
<td>0.057 **</td>
<td>0.013</td>
</tr>
<tr>
<td>Council Manager System</td>
<td>-0.047 **</td>
<td>0.013</td>
</tr>
<tr>
<td>% Council Professionals</td>
<td>-0.021</td>
<td>0.041</td>
</tr>
<tr>
<td>% Council Business Managers</td>
<td>0.061 **</td>
<td>0.025</td>
</tr>
<tr>
<td>Council Size Per Thousand Persons</td>
<td>-0.008</td>
<td>0.008</td>
</tr>
<tr>
<td>% Unemployed</td>
<td>-0.364</td>
<td>0.372</td>
</tr>
<tr>
<td>% Homeowners</td>
<td>-0.068</td>
<td>0.064</td>
</tr>
<tr>
<td>% College Graduates</td>
<td>-0.198 **</td>
<td>0.626</td>
</tr>
<tr>
<td>Median HH Income (thsds)</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>Diversity</td>
<td>0.045</td>
<td>0.044</td>
</tr>
<tr>
<td>% Budget Spent on Central Staff</td>
<td>0.224 **</td>
<td>0.095</td>
</tr>
<tr>
<td>Term Limits</td>
<td>-0.136 **</td>
<td>0.022</td>
</tr>
<tr>
<td>Staggered Council Elections</td>
<td>-0.860 **</td>
<td>0.026</td>
</tr>
<tr>
<td>% Council Retired</td>
<td>0.095 **</td>
<td>0.030</td>
</tr>
<tr>
<td>1992</td>
<td>0.284 **</td>
<td>0.014</td>
</tr>
<tr>
<td>1996</td>
<td>0.270 **</td>
<td>0.015</td>
</tr>
<tr>
<td>2001</td>
<td>0.224 **</td>
<td>0.017</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.008</td>
<td>0.126</td>
</tr>
<tr>
<td>N</td>
<td>68212</td>
<td>19607</td>
</tr>
<tr>
<td>Censored Observations</td>
<td>38423</td>
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<tr>
<td>Uncensored Observations</td>
<td>29789</td>
<td>5746</td>
</tr>
<tr>
<td>ρ</td>
<td>-0.020</td>
<td>0.072</td>
</tr>
</tbody>
</table>

Note: Probit models with sample selection; State fixed effects included but not presented. Robust errors clustered by city. †p<=.15. *p<=.10, **p<=.05
References


Hirano, Shigeo and James Snyder. 2007. “Using Multi-Member-District Elections to Estimate the Sources of the Incumbency Advantage.” Typscript


