

Funding the Growth Machine: The Effects of Municipal Campaign Contributions on Housing Policy Outcomes

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Abstract

Money in politics is the subject of great debate at every level of government, yet it has principally been studied at the federal level in the U.S. Where scholars have analyzed local campaign donations, their work has largely focused on understanding who donates and to what kind of candidates. The actual effects of political donations on local policy outcomes remain essentially unstudied. In this paper, we describe and leverage a novel data set of over 3 million municipal election campaign contributions covering thousands of U.S. cities. We focus on real estate industry contributions; using generalized difference-in-differences panel research designs, we examine the causal impact of real estate industry contributions to local political candidates on the permitting of new housing. Our results show that campaign contributions from organized interests influence housing policy outcomes at the local level. Specifically, more contributions from real estate development groups lead to increases in permitting of multi-family housing. Descriptive patterns in these data help explain these results. Real estate industry contributions largely are directed to non-incumbent candidates, and their effects are largest in open seat races, suggesting that this influence is via supporting new candidates who support more housing in their communities rather than via influence on incumbents. Our findings contribute to a broader understanding of the financial influence of interest groups in municipal policy as well as local politics more broadly.

Keywords: organized interests, interest groups, local politics, local policy, money in politics

Word Count: 9,898

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Introduction

The influence of money in politics has long captured both scholarly and public attention. The long-standing concern is that campaign contributions from individuals and groups buy donor influence over policy, violating democratic principles such as equal representation and advantaging the priorities of wealthy citizens and interest groups over others. Many scholars and pundits have claimed – primarily at the national level – that financial contributions in politics spur economic inequality and limits on such influence could improve representation (Bartels 2008; Gilens 2012; Hacker and Pierson 2010; though see Barber 2016; La Raja and Schaffner 2015). Since the 2010 Supreme Court decision in *Citizens United v. FEC* removed limits on federal election spending by corporations, politicians and academics alike have often bemoaned the implied influence of those with more money to contribute. For instance, the Brennan Center characterizes campaign contributions from companies as giving the “wealthy much more influence than the rest of us.”¹

The local level of politics is no exception to this popular claim by media outlets, especially since many states have no limits on campaign contributions in local elections. A 2020 *Guardian* article typical of this focus stated in its headline that “police unions spend millions to influence policy in biggest US cities.”² And in a 2023 headline, the *New York Times* claimed that New York City mayor Eric Adams’ campaign was “Fueled by Real Estate Titans and Out of Towners” and might lead the mayor to be more friendly to real estate.³ Despite these strong claims in popular media, little research has assessed the policy influence of money in politics at the local level. At the same time, longstanding theories of the “growth machine” in urban politics (e.g. Logan and Molotch 1987; Molotch 1976) hold that cities are often dominated by coalitions of business elites and politicians focused almost exclusively on urban growth at the expense of other policy priorities.

In this paper, we examine interest group financial behavior and influence at the local level to address these claims. To do so, we harness a novel dataset of over 3 million campaign contributions to city council and mayoral candidates between 1999 and 2022 in 545 cities across the country. We

¹<https://www.brennancenter.org/issues/reform-money-politics/influence-big-money>

²<https://www.theguardian.com/us-news/2020/jun/23/police-unions-spending-policy-reform-chicago-new-york-la>

³<https://www.nytimes.com/2023/07/18/nyregion/adams-real-estate-donors.html>

combine the contributions records with data on policy outcomes in order to assess the impact of campaign contributions on policy. We focus on the policy arena of housing development, which is especially important in the context of the current housing affordability crisis. We assess how real estate industry contributions affect policy by analyzing the realm where we most expect their influence to matter: new housing development.

We find that higher numbers and amounts of real estate industry contributions lead to increases in the permitting of housing – especially multi-family housing – in the years following elections. Rather than indicating the nefarious influence of interest groups, however, this paper shows that contributions are greater in places with lower levels of existing housing permitting. We find that real estate industry contributors donate more in cities that are building more housing in general, but donate more in places that are permitting fewer units in comparison to their state in that year on average. This indicates that real estate industry groups likely target their donations to places with more constricted housing supply. The effects of those contributions are to bring those cities closer to an overall average rate of new housing permitting in their states. These effects may therefore be responses to pent-up demand, to interest group contributions, or both.

In addition to analyzing the relationship between political donations and policy outcomes, we pair contribution data with election data and data on the partisanship of candidates to understand the kinds of candidates who receive donations from real estate industry donors. We find that real estate industry donors contribute to candidates of all partisan backgrounds, though contributions lean Democratic. We also find that contributions largely are directed to non-incumbent candidates. When paired with the policy outcome analyses, our results suggest that the real estate industry contributes to candidates for open seats who are most likely to support more housing in their communities. These donors thus largely accomplish policy change via changes in the composition of local government as opposed to influence on the decisions of incumbents.

Together, these findings help build a better understanding of housing development in cities and the political behavior of the real estate industry. Our assessment of these patterns in the housing policy arena also contributes to a growing body of research on the role of interest groups in politics and policy, both at the local level and more broadly in democratic government.

Theoretical Expectations

Previous work studying interest group influence, particularly financial influence, has theorized that interest groups influence politics through several potential avenues: (1) providing information to policymakers, (2) altering policymakers' positions, and (3) changing the composition of government and who makes policy decisions.

The information provision pathway posits that interest groups can influence policy outcomes through the information they provide (Hall and Deardorff 2006). Under this theory, interest groups use their resources and issue area expertise to provide information to policymakers, which in turn influences how policy is designed. Theoretically, the lower the level of government, the more influential the information provision should be, assuming that lower levels of government are also less resourced than federal policymakers. In an interview with a Washington State pro-housing industry group, executives emphasized to us the importance of providing information about permitting processes and housing developer preferences to policymakers.

The second potential pathway by which interest groups could influence policy – and by far the most popular in general political coverage – is by altering policymakers' positions, especially via financial means. Under this theory, elected policymakers change their positions in response to financial contributions from interest groups to conform to interest group preferences (e.g. Hall and Wayman 1990; Peltzman 1984; Silberman and Durden 1976; Stratmann 1991; cf. Ansolabehere, De Figueiredo and Snyder Jr 2003). A more charitable read of this theory would combine information provision with changing candidate views, and indeed, the Washington housing industry interest group noted that contributions were often an attempt to develop a relationship with a policymaker so they could provide them with pro-housing information that might lead to a change of policy down the road.

A third theory is that interest groups influence policy by providing financial contributions to candidates whose pre-existing policy positions align with those of the interest group (e.g. Bronars and Lott 1997). By contributing to a policymaker's campaign – increasing their chances of winning, particularly in low-budget local elections (Adams 2010) – interest groups can change the composition of government. The policymakers holding power might then be more aligned with interest

groups' preferences. Changing one policymaker can also have knock-on effects as other members of the governing body learn about voter preferences. For instance, if a city council candidate handily wins election running on an issue position that differs significantly from those of the other city council members, the other members may shift their positions in light of future electoral concerns. The Washington housing industry interest group noted that open elections were their preferred races in which to engage financially. Races where no one held an incumbency advantage were the ones where they could have the greatest impact by supporting pro-housing candidates, which tended to be the most efficient use of their money in terms of achieving policy change.

These theories provide clear but potentially contradictory implications for how interest group influence plays out. Yet due to the opacity of federal and state policymaking, and the lack of variation over time or across geography, research has been limited by its ability to comprehensively assess important questions about financial influence over policy.

Municipal politics provides a perfect testing ground for theories of interest group policy influence. There are nearly 20,000 incorporated cities, towns, and villages in the United States, and local elected offices make up the vast majority of elected officials in the United States. Local governments provide a large degree of institutional and contextual variation that enables examination of the mechanisms behind whether and how interest groups influence policy.

A burgeoning literature has recently recognized that local politics is an excellent realm in which to examine the dynamics of interest group policy influence (Anzia 2019*a*). This work has largely concluded that interest groups may have a powerful influence on local policy (Anzia 2011, 2013, 2019*b*, 2022). Until recently, however, campaign contribution data was generally insufficient to rigorously test the financial influence theories developed at the national level in the municipal context.

Partisanship and ideology may be one important influence on fiscal policy (de Benedictis-Kessner and Warshaw 2016, 2020; Tausanovitch and Warshaw 2014). Yet partisanship may only be one part of the motivation for policy change at the local level. Some areas of local policy may hew to ideological divides present in national politics, yet other areas may depart from this ideological spectrum (Bucchianeri et al. 2021). More traditionally ideological policy areas may also be the

areas that are devoid of interest group activity at the local level – or at least where interest groups are less active (Anzia 2021). As a result, we might expect interest group influence to have effects in critical non-fiscal policy domains where such groups are most active, such as housing and policing (Anzia 2021; Gaudette 2025).

Housing is a particularly intriguing policy area in which to study interest group influence at the local level. Housing policy and development more generally may not fall along traditional ideological or partisan divisions (Bucchianeri et al. 2021; Hankinson 2018, though see de Benedictis-Kessner, Jones and Warshaw 2024), especially given the ideologically-agnostic nature of the urban growth machine (Logan and Molotch 1987; Molotch 1976, 1993). Yet the vast majority of homeowners are strongly opposed to new housing (Hankinson 2018; Sahn 2021; Yoder 2020). Meanwhile, renters and the real estate industry – and developers in particular – often support new development (Hankinson 2018). The YIMBY (“Yes In My Backyard”) Movement has also emerged in recent years as an interest group in support of increased housing with a particular focus on multi-family units.⁴ These groups on opposing sides of the issue often lead to contentious local policymaking around housing (Einstein, Glick and Palmer 2019; Einstein, Palmer and Glick 2019).

Interest group activity, of course, could just be one small part of the contention around housing policy that results in the status quo of housing development. Housing policy may simply be captured by the establishment anti-development interests of the wealthy and/or existing homeowners (Einstein, Glick and Palmer 2019; Glaeser, Gyourko and Saks 2005), using increased regulation to limit new housing (Molloy 2020). Local residents’ influence over discretionary housing policy is a prime cause of the undersupply of housing in cities (Glaeser, Gyourko and Saks 2005; Mast 2020). Established residents also tend to contribute a disproportionate share of donations in local politics (Heerwig and McCabe 2019), and incumbents collect the majority of donations in municipal elections (Fleischmann and Stein 1998; Holbrook and Weinschenk 2014). These combined patterns suggest that in the arena of housing policy, donors may be contributing to incumbent office-holders who already agree with them – and support the entrenched nature of the status quo on development.

⁴See, e.g., Dougherty (2016).

However, past work on campaign finance in local politics has demonstrated that candidates rely upon contributions from a broad base that extends beyond those aligned with their interests, suggesting some potential for the alternative theoretical pathways by which financial influence may appear in policy outcomes. Candidates who are unable to secure campaign donations are unlikely to win office (Adams 2018), and they tend to gather donations from contributors who are not residents of their city (Adams 2006). Industry groups also donate a large share of candidate money (Hogan and Simpson 2001), suggesting that they see some value or potential return to their contributions. These patterns suggest an alternative to the possibility described above: a need for financial contributions from broader sources of support (and especially interest groups) might lead local politicians to cater to the interests of those donors – and make different policy decisions as a result.

Most of this broader past work on financial contributions in local politics has relied on data from large cities. For example, Adams (2006, 2007) looks at fundraising in Seattle, New York, Los Angeles, and San Francisco. Similarly, Fleischmann and Stein (1998) study campaign contributions in St. Louis and Atlanta elections, while Heerwig and McCabe (2019) analyze the 2013 Seattle elections, Krebs (2001) looks at Los Angeles and Chicago city council fundraising, and Hogan and Simpson (2001) dig into three Chicago mayoral elections. In a more comprehensive approach, Holbrook and Weinschenk (2014) analyze data from the 165 most populous cities in the country, but their analysis is restricted to campaign spending rather than campaign *contributions*.

While this body of work provides important insights into campaign finance at the local level, data on contributions more broadly in local politics has been historically scarce. Thus we still know relatively little about interest group contribution behavior in the majority of municipal elections that occur outside of large cities. Much of the previous work on campaign finance in local elections has also largely focused on describing the existence and scope of interest group financial participation, but also left unanswered the potential *influence* of those interest groups' financial contributions (Adams 2011).

These previous findings point to several distinct expectations for these types of questions. Given that campaign contributions have an impact on local elections, and that interest groups actively

contribute to candidates in those local elections, we should expect to find that interest group contributions are associated with policy changes that align with interest group preferences either through changing policymakers' minds or changing the composition of policymakers in elected positions. In the case of real estate industry contributors, higher levels of contributions might therefore be associated with greater housing development in a given city.

Data and Research Design

To address these questions, we collect data on both contributions to local political candidates and local government policy in cities in the United States.

First, we collect original data on campaign contributions from across the country. Our data encompasses contributions from 1999 to 2023 for municipal elections in a total of 1022 cities across 26 states. In Table 1, we present descriptive statistics on our full contributions data for the top ten states in which we have the greatest number of contributions as well as the entire contributions dataset across all 26 states. The bulk of our data is concentrated in California, New York, South Carolina, Virginia, and Washington.

Due to the lack of uniform data reporting requirements across states and (in most cases) across cities within states, these data come from a variety of sources. We download the entirety of campaign contributions data in all cities and towns in Washington, where local election donations of \$25 or more are required to be reported and the data is made publicly available from 2009 onward.⁵ South Carolina and Virginia similarly require all local election donations to be reported, though the threshold for reporting is higher at \$100 or more. Outside of these states, we targeted large cities that had any data available more opportunistically and gathered data from a variety of sources. In California, much of the data comes from Los Angeles, though over 50% are from mid-sized cities. This is because in California, many cities use a common data contractor, NetFile, whose API makes campaign contributions data available in similar format across cities. Florida data comes from Miami, Tallahassee, Bradenton, and Tampa, while Illinois data is predominantly from Chicago, though it also includes Springfield. The median donation in all states is just over

⁵These data provide universal coverage of this state, where the median city has a population of 136,588. Seattle makes up about 20% of the observations in Washington, meaning the remainder of the data comes from small to mid-sized cities.

\$100, while the average contribution in our dataset is \$468.

Table 1: Descriptive statistics of full contributions data

State	# cities	# donations	# candidates	Avg. donation (\$)	Median donation (\$)
New York	9	992,270	1,910	\$597	\$100
California	55	939,573	1,651	\$523	\$250
Washington	114	422,485	1,941	\$137	\$100
Massachusetts	47	390,314	723	\$204	\$100
District of Columbia	1	193,272	273	\$356	\$125
Illinois	2	133,116	392	\$1,269	\$500
South Carolina	531	111,695	3,530	\$306	\$150
Virginia	177	67,961	781	\$686	\$250
Alaska	1	54,583	60	\$215	\$100
Florida	4	41,756	119	\$310	\$200
Total	1,022	3,499,943	12,570	\$468	\$125

Figure 1 presents our full dataset of campaign contributions in local elections. Each circle on the map represents a single city, with the size of the circle scaled to the total sum of donations in that city. This map demonstrates both the broad geographic spread of our cities as well as the concentration of our data in several states for which we were able to collect universal contributions data.

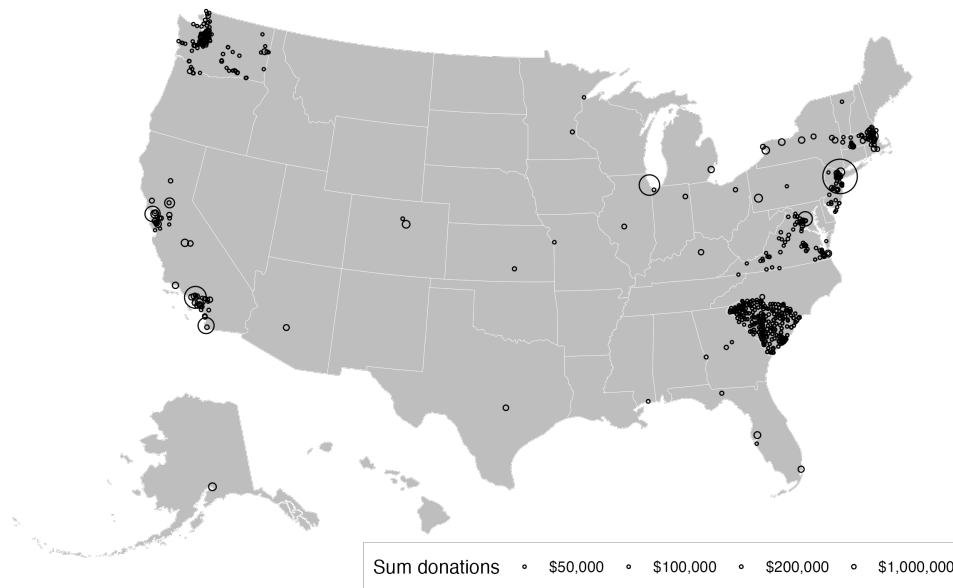


Figure 1: Map of cities included in our contributions dataset

We then coded the contributor type of every single contribution in the data set. Using an

automated dictionary-based approach as well as hand-coding of all contributors in Washington, Virginia, and South Carolina, we identified whether a contribution came from any of a list of different interest groups that are active in local politics. Group classifications in those states included other interest groups such as public- and private-sector unions, advocacy groups, law firms, political action committees, and political parties. This coding enables us to make a more general contribution to the interest groups and local politics literature as it allows us to assess the (financial) political activity of numerous interest groups in city elections. Among these groups, we focus on real estate industry groups, which includes real estate companies, property developers, property managers, and associations representing these types of firms.

From this larger dataset, we focus on the subset of contributions from the real estate industry. For this subset of contributions, along with a team of undergraduate RAs we gathered information on every recipient candidate that received a donation from these groups in eight of the states with the best data coverage (CA, DC, FL, IL, NJ, SC, VA, and WA). We hand-coded the partisan affiliation, incumbency status, election year, and outcome of election for each of these recipient candidates, as well as whether the election involved an incumbent seeking re-election or was an open race. We collected these data by matching donation recipients to existing election results data sets (de Benedictis-Kessner et al. 2023), internet searches of candidate websites and newspapers, and official election records from county and state websites.

These developer contributions data encompass contributions from 204 cities across these 8 states. In Table 2, we present descriptive statistics on our contributions data for all states in which we completed this hand-coding as well as the entire developer contributions dataset. The greatest number of these developer contributions are from California, South Carolina, Washington, Illinois, and Virginia.

In order to analyze the consequences of local political contributions in the hotly debated area of housing, we combine our contributions data with several different measures of housing policy outcomes. First, we use data on permitted housing units and buildings from the Census Bureau’s annual Building Permits Survey. The Census Bureau’s Manufacturing and Construction Division sends this survey to officials who manage the issuance of building permits in all permit-issuing

Table 2: Descriptive statistics of developer contributions data

State	# cities	Years	# election years	# donations	# candidates	Avg. donation (\$)	Median donation (\$)
Washington	85	2009-2021	11	3,941	721	\$518	\$500
California	39	1999-2022	22	3,839	459	\$682	\$500
Virginia	34	2012-2024	13	3,695	306	\$1,134	\$750
South Carolina	21	2007-2023	16	2,223	165	\$665	\$650
Illinois	2	2011-2019	4	2,082	124	\$1,114	\$500
District of Columbia	1	2006-2018	11	592	51	\$624	\$500
New Jersey	19	2009-2022	13	319	73	\$764	\$500
Florida	3	2012-2014	3	132	13	\$442	\$500
Total	204	1999-2024	25	16,823	1,912	\$792	\$500

jurisdictions who then return their responses via mail or an online survey, which the Census Bureau then compiles into yearly summaries of new construction in each permit-issuing jurisdiction.⁶ These data encompass nearly all new residential construction each year by private entities between 1980 and 2024.

From these data, we focus specifically on the total numbers of buildings and units permitted as well as the total numbers of single-family and multi-family buildings and units.⁷ While the permitting of new housing – and different types of new housing – is far from the only possible outcome to measure local governments’ influence on housing markets, it is a suitable one for several reasons. First, debate over new housing construction in cities typically focuses on the construction of new *multi-family* housing, which is often more contentious than single-family construction (Einstein, Glick and Palmer 2019; Hankinson 2018). As a result, building denser multi-family housing is a primary dimension of partisan conflict and influence in cities (de Benedictis-Kessner, Jones and Warshaw 2024). Second, we focus on multi-family housing due to its historical importance as a tool of exclusion in U.S. cities – specifically, use of single-family zoning to restrict the construction of multi-family housing (Sahn 2021; Whittimore 2021). Finally, while there are within-city data on housing policy that may represent a more immediate outcome of government without reliance on the private market, these data are often not available in comparable formats across cities, while the Census Bureau data are in a standard format across years and geographies.

Over time, housing permits have fluctuated both due to overall trends in the housing market –

⁶These permit-issuing jurisdictions are primarily cities and towns, but also include some counties that perform some amount of permitting. We focus on the cities within these data. For more information on these data, consult U.S. Census Bureau (2011).

⁷The Census divides the permits data into single-family buildings (i.e. one-family detached homes), buildings with two units, buildings with 3 units, and buildings with four or more units. We group all buildings with two or more housing units as multi-family buildings for use in our analyses.

such as the 2008-9 Great Recession and the subsequent nadir of housing permitting and construction across the country – and choices made by individual permit-issuing governments. Because of the highly discretionary process of housing permitting, there is a great deal of over-time fluctuation in permitting within each city. For instance, as Figure 2 below shows, the six cities of Seattle, Bellevue, and Redmond (in WA), and San Jose, Hayward, and Pleasanton (in CA), all have followed different trajectories in their permitting of multi-family housing in the past several decades. The drivers of this type of variation in permitting within cities is exactly the focus of our primary analyses that follow.

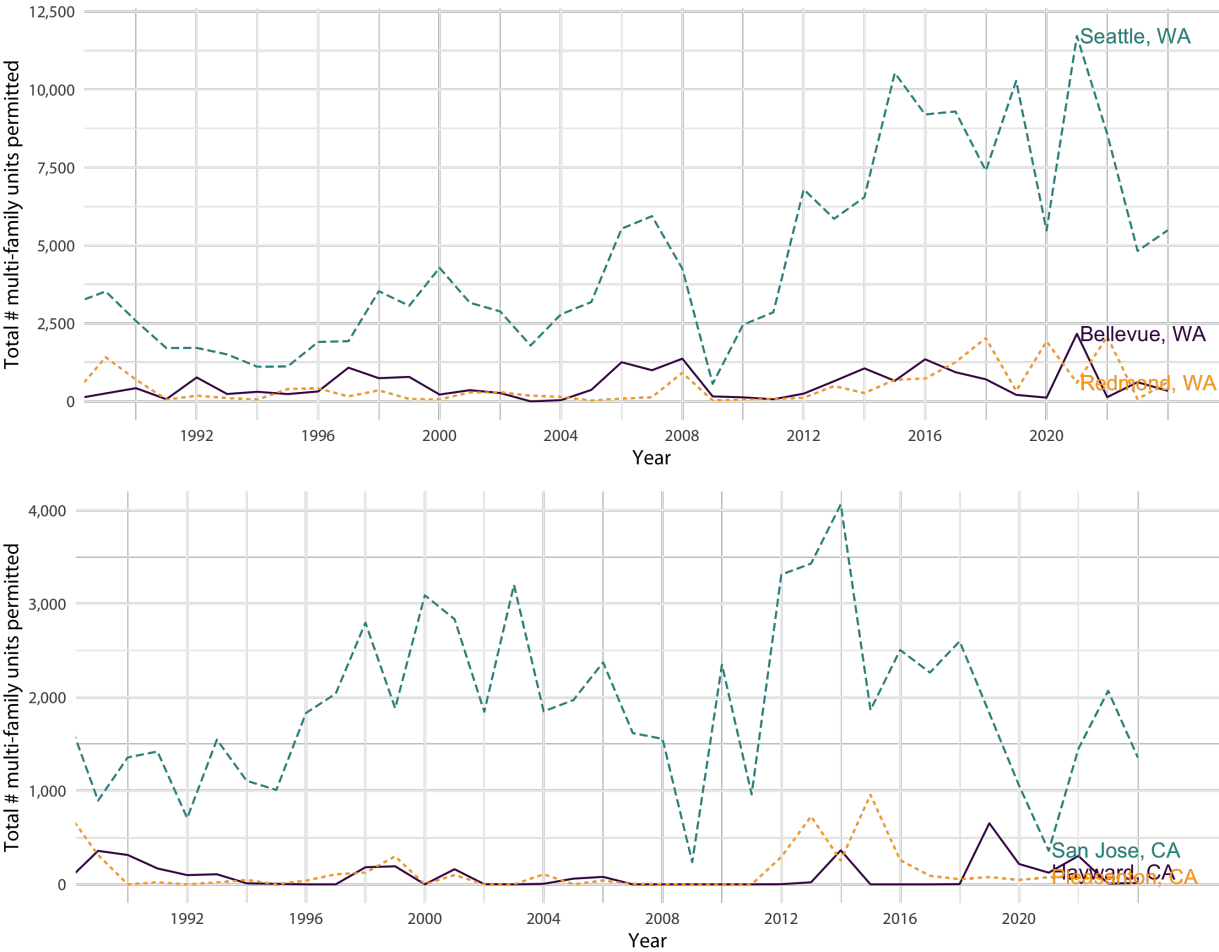


Figure 2: Multi-family buildings permitted in several WA and CA cities over time.

In addition to these primary broad outcome data on housing permits, we also incorporate data on both rent prices and housing sale prices. Our rent price data comes from the Census Bureau’s

American Community Survey (ACS). We use the median gross rent in each city from the 1-year estimates provided by the ACS from 2006-2023, adjusted for inflation to match value in 2022. Our housing price data comes from Zillow, which provides Zillow Housing Value Index (ZHVI) in each year that represents the typical seasonally-adjusted home value for homes in the 35th to 65th percentile in a given city and year.⁸ Both of these measures represent outcomes that are not immediately proximal to local housing policy decisions but are still important policy-relevant measures of the health of the housing in a given city.

Using these combined contributions and outcome data, we conduct a number of analyses to examine the influence of financial contributions on housing policy outcomes using generalized difference-in-differences models. Given our focus on the causal effects of campaign contributions, we choose to focus on this research design to leverage within-city changes in the number and amount of political contributions and the outcome of those changes in the years that follow. A contrasting approach that we do not take might be to look at simple cross-sectional differences between outcomes in those cities with higher levels of contributions and those cities with lower levels of contributions. Yet this approach would capture the effects of those contributions along with a large amount of potential confounding from other features of cities that are different between those with high levels of contributions and those with low levels. And it would be confounded by potential broader trends over time in either outcomes or contributions that affect many cities at once.

Therefore, our main models use a strategy of two-way fixed effects at the city and state-year levels.⁹ This allows us to assess the effects of contributions netting out the effects of time-invariant city-level features or shocks to multiple cities within a given state in certain years. This approach relies on an assumption that there are no time-variant confounders in order to produce an estimate that represents the causal effect of contributions – an assumption which we attempt to validate in Appendix B.

⁸For more information on the ZHVI, see <https://www.zillow.com/research/zhvi-methodology-2019-deep-26226/>.

⁹We show results using alternative fixed effects specifications in Appendix C.

Results

We present results that provide a fulsome picture of real estate industry political giving and its policy consequences. First, we evaluate the impact of their donations on housing permits. Second, we show where real estate donors are most likely to give. Finally, we show what kinds of candidates are supported by real estate industry groups across our dataset, providing potential explanations for the effects on housing permits that we find.

Panel Fixed Effects Results

The results of our analyses examining the causal effects of real estate industry groups on multiple types of housing outcomes are presented in Figure 3, for the total number of housing units permitted, in Figure 4, for single-family units, and Figure 5, for multi-family units. Tabular versions of these results looking at outcomes three years after contributions were made are presented in Table 3.

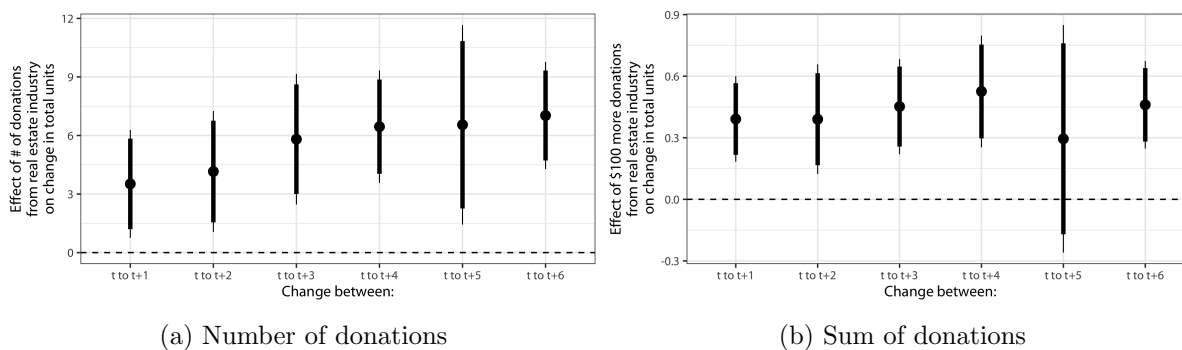


Figure 3: Effects of donations on total units permitted

Figure 4 shows, in the left panel, the effect of the number of real estate industry donations on the change in the number of total housing units permitted between the election year for which the donations were made (year t) and the years that follow (one, two, three, four, five, and six years afterwards). The right panel shows similar estimates of the effect of the total sum dollar amount of real estate donations on the change in the number of total units permitted. The two panels indicate strong and statistically significant effects of increased numbers and amounts of donations on the total number of housing units permitted following the election year.

In the same presentational format, Figure 4 shows the effect of the number (in the left panel)

of real estate industry donations and the sum dollar amount of industry donations (in the right panel) on the change in the number of single-family units permitted between the election year for which the donations were made (year t) and the following years. Both panels indicate that there are small effects of increased numbers and amounts of donations on the permitting of single-family units that begins approximately four years subsequent to the election.

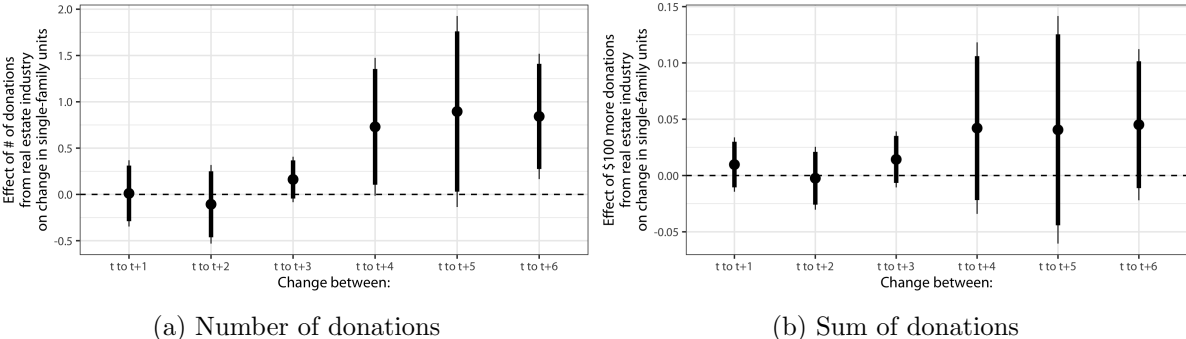


Figure 4: Effects of donations on single-family units permitted

Figure 5 assesses similar effects of the number of donations (left panel) and sum of donations (right panel) on the permitting of multi-family housing units. These results indicate that increased real estate donations appear to lead to an immediate and sustained effect on the number of multi-family units permitted. When real estate industry donations increase, cities permit more multi-family housing units. The effect sizes are quite similar to the effects of contributions on the total number of housing units permitted, suggesting that the effect on total housing units is coming almost entirely from the permitting of multi-family housing.

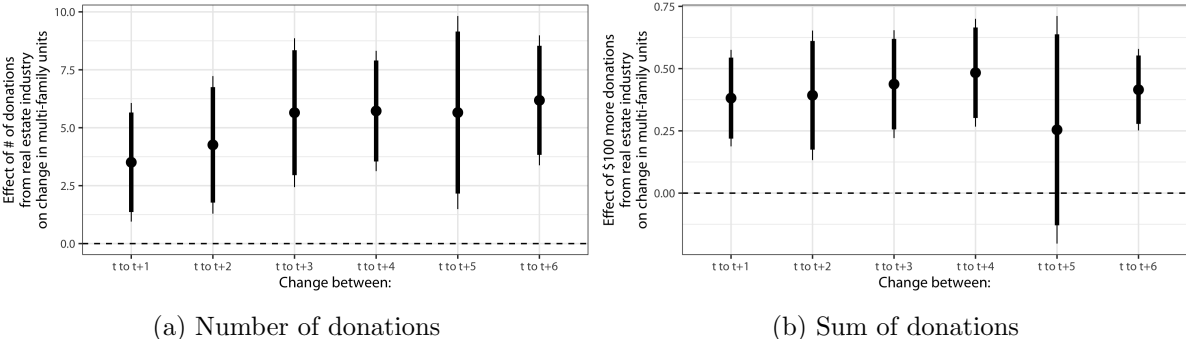


Figure 5: Effects of donations on multi-family units permitted

Table 3 corroborates the visual results from the previous figures. Increases in real estate industry donations are accompanied by increases in the number of total buildings, total units, and multi-family buildings and units permitted four years later.

Table 3: Housing permits results

Dependent Variables: Model:	Δ between election year and t+4 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	1.267***		6.096**		0.927***		0.927***		0.340**		5.170**	
	(0.412)		(2.405)		(0.309)		(0.309)		(0.132)		(2.189)	
Sum donations from real estate industry		0.001		0.006*		0.001		0.001		0.000*		0.005*
		(0.001)		(0.003)		(0.001)		(0.001)		(0.000)		(0.003)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049
R ²	0.592	0.588	0.565	0.557	0.575	0.572	0.575	0.572	0.619	0.612	0.554	0.547
Within R ²	0.025	0.014	0.039	0.022	0.015	0.008	0.015	0.008	0.067	0.050	0.035	0.020

Clustered (City) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

We conduct a variety of robustness tests to examine whether these results are artifacts of our modeling choices or different subsets of data. In Appendix C, we present tabular results for our main analyses but using outcomes measured as the change between the election year and two years afterwards. In Appendix C we also present results from models employing city and year fixed effects, rather than our more stringent specification using city and state-year fixed effects. These results are largely the same as those presented in the main text above.

We also present analyses of different subsets of our data in Appendix D, where we separately analyze each of the three largest individual states for which we have data on real estate industry contributions information (CA, SC, VA, and WA). These results suggest that our main results for the impact of contributions on multi-family housing appear in CA and WA, but in SC we see effects only on the permitting of single-family housing and in VA we actually see negative results. This makes sense considering the constraints on new developments in California and Washington compared to South Carolina; there is likely more space for single-family housing in high-demand South Carolina metropolitan areas than in California or Washington. Virginia's results are opposite to the trends in other states; we find no relationship between multi-family housing permits and increased real estate industry contributions, while there are fewer single-family home permits issued

in cities with more real estate donations.

Additionally, we examine heterogeneity in our results by looking at several theoretically-driven subsets of our data. In Appendix E, we assess whether elections from any particular time period are driving the main results we observe. We find that the main time period driving our empirical results appears to be the 2010s and not the prior decade (the 2000s). However, our estimates from the 2000s are much noisier than those from the 2010s, which may be leading to this heterogeneity. We also analyze whether contributions to mayoral candidates or city council candidates are driving the main results we observe. These results are presented in Appendix F, and indicate that there are similar effects of contributions to both types of candidates. Finally, in Appendix G

WE ASSESS HOW RENT/HOUSING PRICES CHANGE AFTER AN ELECTION.

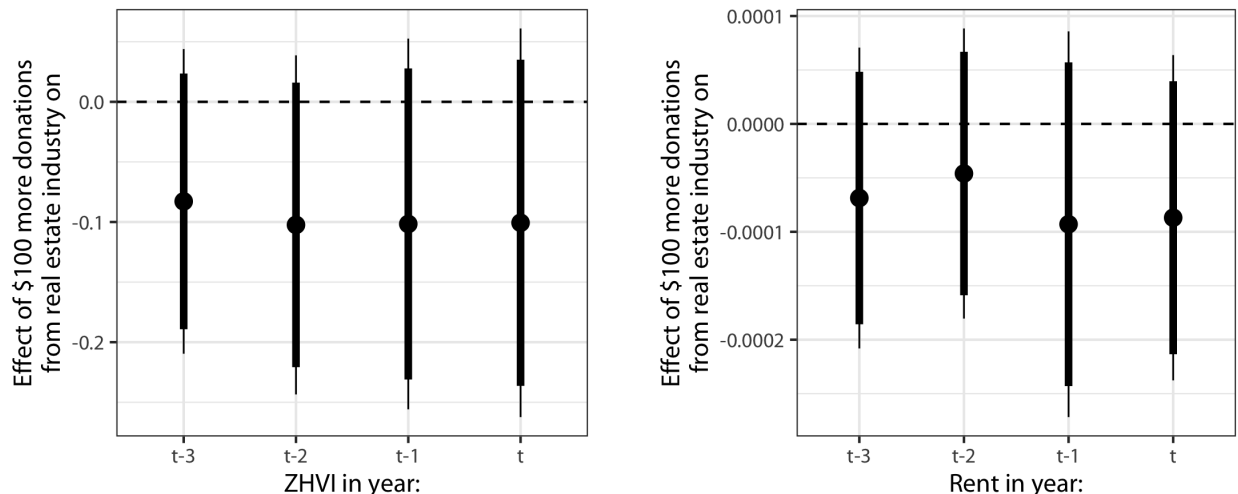
we analyze whether our effects are stronger in places with higher pre-election housing price growth. Using data from the ZHVI to measure annual average prices at the city level, we split our sample of cities into places with below-median and above-median price growth in the three years prior to the election. Our results from these analyses indicate little heterogeneity by pre-election price growth for single-family housing, though there is some indication that more multi-family units are permitted post-election in cities that had high price growth prior to the election.

Descriptive Evidence on Market Conditions in Cities Where Real Estate Industry Groups Donate

Contributions from real estate industry donors appear significantly associated with increased housing permitting, but where are they focusing their donations? We use Zillow's Home Value Index (ZHVI), median rents, and permit data to assess the market conditions in the cities where these donors contribute more. We replicate our main research design strategy used throughout the primary analyses by using city and state-year fixed effects to assess the levels of these outcome variables in cities comparing them to the average in both that same city over time and other cities within the same state in a given year.

We find that there is no apparent relationship between levels of median rent in a city or its home value index in the years prior to an election where real estate industry donors contribute more, as illustrated in Figures 6a and 6b. This suggests that, contrary to popular media narratives, the

real estate industry is not targeting their donations in places with the highest home values or rents where they can maximize what they charge. Instead, the regulatory environment appears to be more predictive.



(a) Relationship between more contributions and Zillow Home Value Index prior to election year.

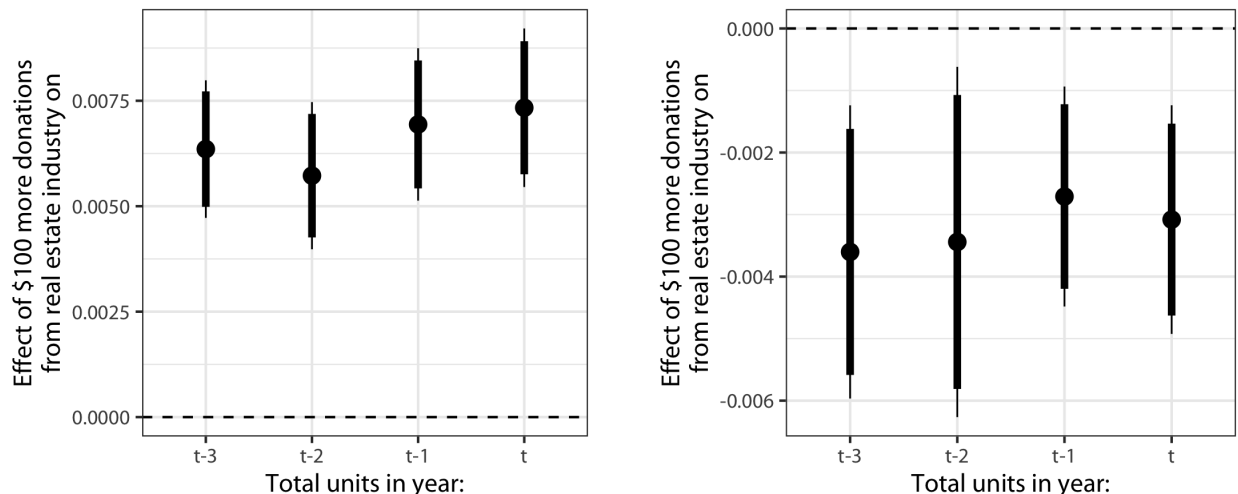
(b) Relationship between more contributions and levels of median rent prior to election year.

Figure 6: Relationship between more contributions and levels of home prices prior to election year.

There are two noticeable trends in cities where real estate industry donors give more contributions. First, we alter our research design slightly to exclude the city and state-year fixed effects and examine how cities that eventually attract more industry donations differ from the entire population of cities in which we have data. These results are displayed in Figure 7a, and show that the real estate industry makes more political contributions in places that already have significantly higher levels of permitting. Yet returning to a research design that incorporates fixed effects and therefore compares cities to more comparable ones (and their own average levels of permitting) complicates the picture. Figure 7b shows that industry donors also give more political contributions in places that are permitting *less* multi-family housing relative to the state-year average.

These two trends paint a portrait of an interest group that prefers to donate to candidates running in *high overall development* cities that are nevertheless permitting *less* than the rest of the state in the years prior to an election. This indicates that, in general, the real estate industry is more politically involved in places that are growing. However, they target their contributions

to cities that are below-average in terms of new construction. Such places likely represent greater opportunity for more building – given the lower new supply – if local governance changes and more permits can be approved.



(a) Relationship between more real estate spending and levels of building prior to election year (no fixed effects).

(b) Relationship between more real estate spending and levels of building prior to election year (city and state-year fixed effects included).

Figure 7: Relationship between larger amounts of contributions and levels of home building prior to election year.

Descriptive Evidence on What Kinds of Candidates Real Estate Industry Groups Support

The previous sections show that real estate industry contributions are associated with significant increases in housing permitting and they are concentrated in cities with below-average growth in regions with above-average growth. However, the mechanism by which contributions might lead to changes in policy are unclear. Our original data set enables us to see the kinds of candidates that real estate industry donors are most interested in supporting in local elections.¹⁰ Using this data, we can better understand who real estate contributors are supporting and whether they may be changing the minds of incumbents through financial donations or changing the composition of those in government by supporting pro-housing candidates in races for open seats.

¹⁰For these descriptive analyses, we omit observations from the states of Illinois and Florida given how few cities we have data for in these states (2 and 3 cities, respectively).

In Figure 8, we display the percentage of candidates who received real estate industry donations who are affiliated with the Democratic party, the Republican party, and any other party. As might be expected given that larger cities are more likely to be more Democratic (Rodden 2018) – and the general partisan lean of urban areas in California – 85% of contributions to candidates in California are to Democratic-aligned candidates. In Washington, where our data covers all cities and therefore the median city size for our data is 136,588, candidates who receive real estate industry donations are more evenly divided in terms of partisan affiliation: about 56% are Democrats and 41% are Republicans. Due to data collection difficulties for smaller cities in the state of South Carolina, results for that state are primarily for the cities of Columbia and Charleston, where Democrats are far more competitive than in the rest of the state. In those cities, roughly 66% of donations go to Democratic candidates. As should be no surprise, there are basically no contributions to Republicans in D.C., where the Republican party is essentially non-competitive.

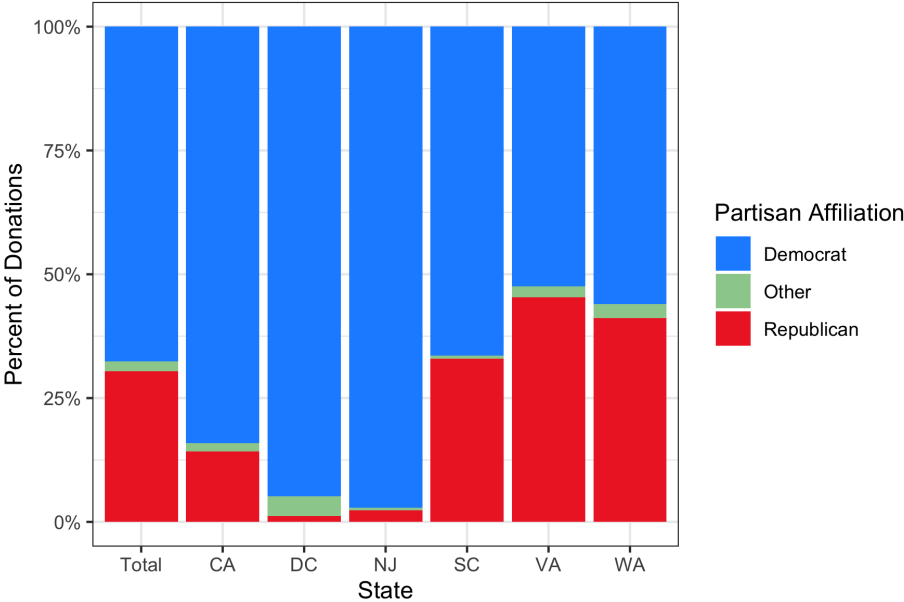


Figure 8: Partisan affiliation of candidates who received real estate industry donation by state.

While this partisan composition of candidates to which the real estate industry donates makes sense from a strategic perspective, it is also notable given recent findings that partisanship is related to housing policy (de Benedictis-Kessner, Jones and Warshaw 2024). That work establishes

that electing a Democrat as mayor leads to increased multifamily housing production, and our results suggest that Democrats are much more likely to receive contributions from real estate industry contributors. Clear preferences for Democratic candidates remain when only open races are considered. This connection suggests that developer preferences over candidates could be related to partisan differences in housing policy at the local level. Indeed, the Washington housing advocacy group noted that there had been a significant shift in partisan policy priorities over the past decade, with Washington Democrats becoming far more open to multi-family housing policy in that state, while previously more libertarian Republicans in the state had started prioritizing single-family suburban housing.

Using our novel data, we are also able to see the donation patterns to elections for open seats versus re-election races. Here, an interesting trend emerges for real estate industry contributors. Candidates seeking re-election have a well-known incumbency advantage in municipal politics (de Benedictis-Kessner 2018; Trounstine 2011), and indeed, when an incumbent is running for re-election, they receive the bulk of donations from real estate industry donors, as illustrated in Figure 9. Focusing contributions on incumbents in re-election races could be interpreted as maintaining allies in government or, alternatively, keeping elected officials open to hearing from real estate donors should housing policy issues arise.

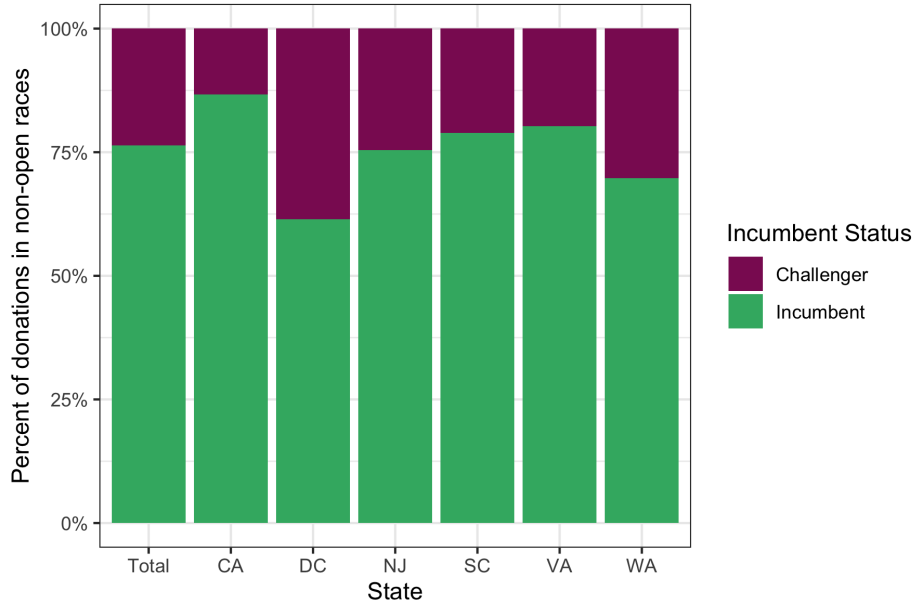


Figure 9: Real estate industry donation in re-election campaigns by state.

However, despite the certainty of donating to an incumbent in a re-election race, the real estate industry clearly prefers backing candidates for open seats (Figure 10). In fact, in California, only 29.5% of candidates who received real estate industry donations were incumbents. Despite dissimilar profiles, Washington State and Washington, D.C. have similar trends, with incumbents getting only 49% and 45.2% of real estate donor donations, respectively. Incumbents are also less popular in South Carolina, where just 46.3% of donations go to candidates seeking re-election. These patterns support the theory that changes in policy are the result of changed composition of municipal governance rather than changed minds of those already in office.



Figure 10: Real estate industry donation by election type and state.

The fact that real estate industry donors contribute more to non-incumbents is particularly striking given that incumbency tends to be the greatest determinant for fundraising success (Krebs 2001) and that challenger spending has a major influence on the vote share for challengers (Holbrook and Weinschenk 2014). Well-resourced challengers are much more likely to win than poorly-resourced ones, but incumbents typically attract the most donations. An industry group that specifically favors non-incumbents may therefore have greater clout with that group given the importance of money in securing victory. Since real estate industry contributions tend to be larger than donations from other groups and individuals (as we discuss below), their contributions could play a meaningful role in changing the composition of municipal government, which might explain why real estate contributions are associated with more multi-family housing permitting.

If real estate donors are seeking to change the composition of who governs in municipal politics rather than the minds of those already in power, they appear to be decently successful, as evidenced by Figure 11. In open races, roughly half of candidates to which real estate industry donors contribute win their election. In all races – open seat and re-election – 66% of contributions to candidates by real estate donors are to the candidate that ultimately wins the election. That percentage remains remarkably steady across states, ranging from 62.4% in Virginia to 70.5% in Washington, D.C. In both cases, the aforementioned trends remain consistent, even when we use the amount of contributions instead of contribution counts.

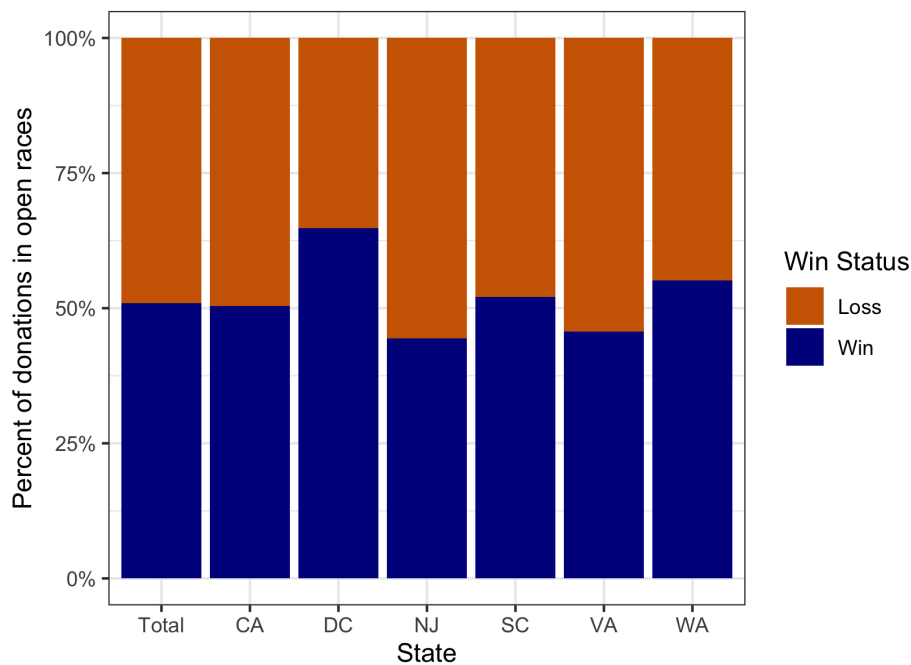


Figure 11: Win vs. loss status of candidates who received real estate industry donation in open seat races by state.

How effective are these contributions at accomplishing policy goals via changing the composition of government? One way of investigating this question is to divide up our analyses of the effects of contributions on housing permitting by whether or not the incumbent is running in the race or not. These results for the effects on the number of multi-family units permitted are displayed in Figure 12. They show that most of the effects that we identify are those in open-seat races. This affirms the theoretical aims of real estate industry groups that seek to target replacement of elected

officials rather than persuasion of existing incumbents.

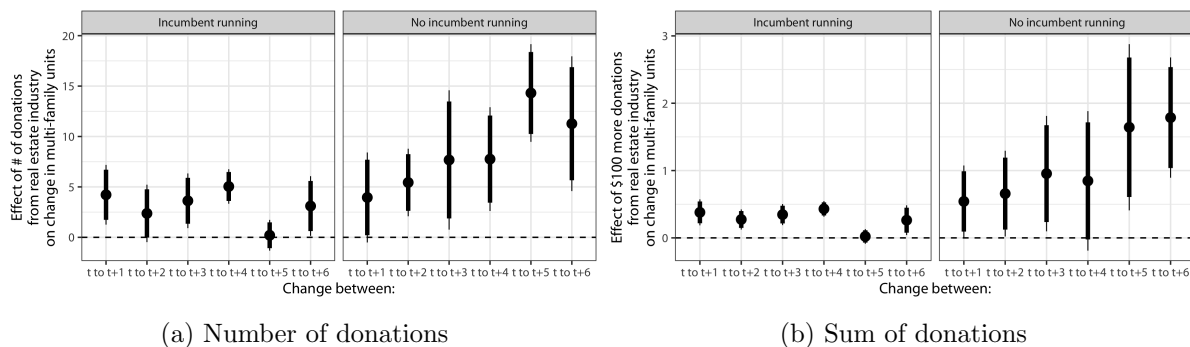


Figure 12: Effects of council donations on multi-family units permitted, by whether mayoral incumbent running

Because we have a broader data set of contributions in local elections, we can compare real estate industry contributions to the broader contribution pool in order to see how they compare. In Figure 13, we plot a cumulative distribution function for real estate industry contributors (in turquoise) and non-real estate industry contributors (in purple). As evidenced in Figure 13, the contributions of non-real estate groups and individuals are, on average, lower in their dollar amounts. The median non-real estate contribution is \$100 while the median real estate contribution is \$500, and over twenty percent of contributions are more than \$1,000.

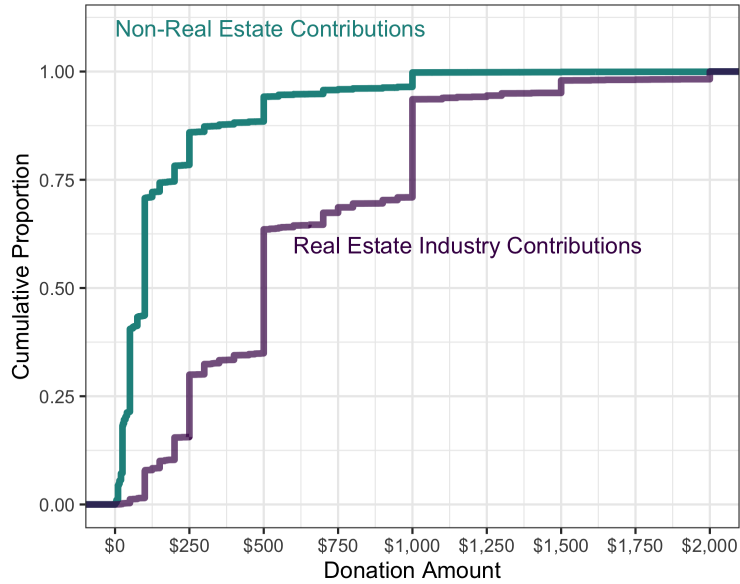


Figure 13: Cumulative distribution of donation amounts for real estate industry and non-real estate contributors (donations over \$2,000 omitted).

Real estate industry contributions are not going to the entire field, either. In our data, real estate donors give to multiple candidates in the same race *only 8% of the time*. In fact, just under 25% of candidates who receive donations get a donation from a real estate donor: only 29.1% of mayoral candidates and just 24.2% of city council candidates receive contributions. This again suggests that there is greater focus on compositional change of elected officials – likely with an eye to downstream policy effects – rather than an attempt to blanket officials with money and change their minds.

These descriptive statistics and figures make clear that the real estate industry is active in local politics and has clear patterns of political giving: Democratic candidates and those running for open seats. These patterns also provide a potential explanation for the significant impact on permitting that we see in races where real estate donors spend more money. Over the past decade, Democratic officials have – on average – become more pro-housing. Combined with the fact that our data includes more liberal-leaning municipalities, real estate industry preferences for Democratic candidates makes sense. Further, a rising YIMBY movement has led to more candidates running for office on explicitly pro-housing platforms. The increase in supply of pro-housing candidates

might thus explain why developer contributions are more concentrated in races for open seats, where replacement mayors and council members are more likely to express pro-housing views.

Discussion and Conclusion

This manuscript represents preliminary efforts to understand the political economy of real estate industry political donors. Specifically, we seek to understand (1) whether contributions in municipal elections impact policy outcomes, (2) in which kinds of market conditions such donors are most likely to contribute, and (3) to which kind of candidates real estate industry donors contribute and whether this may explain the apparent impact of their donations. We find that this industry appears to exert powerful influence in local politics, at least in the areas included in our data.

In terms of whether these candidate-level impacts change policy, we find that real estate industry donations have significant effects on the permitting of multi-family housing. Greater numbers of contributions and increased amounts from real estate donors are both significantly related to higher numbers of permitted multi-family units in the years that follow, and these results appear to persist. The average effect of \$100 more donations from developers results in permits for roughly 0.7 more multi-family units issued. Since the median real estate industry donation is \$500, that means the median real estate donation is associated with 3.5 more units of multi-family housing being permitted. **Relative to the average number of multifamily units permitted in a given year in the cities in our data (25), the effect of a typical \$500 donation of 0.5 multifamily housing units is substantively large.** Our preliminary analyses corroborate what survey evidence of policymakers from Anzia (2022) suggests: real estate developers are major sources of influence in local politics. Their contributions appear to be followed by changes in housing policy outcomes.

However, we caution that our results should not necessarily be interpreted as causal. Real estate industry contributions may not necessarily be *causing* changes in housing policy. In particular, the placebo test results which we present in Appendix B suggest that real estate industry contributions are greater in places with *higher* pre-donation amounts of both single-family and multi-family housing permitted (Figure A1). However, when incorporating fixed effects into these analysis of pre-treatment permitting, we find that industry groups donate more in places with lower *relative* levels

of multi-family permitting (Figure A2). In other words, there are differences in housing permitting and construction levels between cities that have increased donations in the years that precede those donations when we account for city-level typical housing permitting levels. This pair of results suggests those cities with higher contributions are in temporary depressions of development (relative to other years in the same cities). Real estate industry donations, rather than *causing* increases in permitting, may therefore be simply anticipating pent-up demand for multi-family housing in supply-constricted locations.¹¹ We leave further exploration of these results for future analyses.

How do these industry groups make decisions about where to spend their money in local politics? Anecdotal evidence based on conversations with pro-housing interest groups suggests that they are most concerned with winnable races where they can support a candidate that is likely to back preferred pro-housing policies (e.g. streamlined permitting processes, multi-family zoning, etc.). As one lobbyist for builders stated, “we don’t do hero races,” explaining that the group wanted to be involved in races where they could make a difference while also supporting candidates that have been supportive of preferred policies in the past and have a good chance of winning.

Thus, interest groups look for winnable races – particularly open races – where there are candidates who support priority policy areas, demonstrating the importance of changing the composition of policymakers. Real estate donors’ contributions overwhelmingly go to non-incumbents. This supports the theory of interest group political influence focused on altering the composition of municipal governing bodies rather than convincing existing office-holders of their policy goals.

In Washington, the key priorities for pro-housing interest groups are zoning regulations, construction fees, environmental reviews, and at the top of the list: permit timelines. When an interest group decides that a candidate is likely to be a strong pro-housing policymaker, they also encourage member companies to donate, increasing the importance of an interest group’s donation because it is typically followed by donations from associated businesses. These companies are usually not

¹¹A natural implication of this is that housing values are higher in places where housing supply does not match the demand for housing, and so the construction of new housing in places following increased contributions may not actually lower prices as might otherwise be expected from an increase in housing supply (e.g. Been, Ellen and O’Regan 2019). To assess this possibility, we conducted analyses of the effects of increased levels and amounts of donations on the average housing prices in cities. Using the Zillow Housing Value Index (ZHVI) as a measure of housing prices, our results (shown in Appendix J) indicate no effect of industry groups on housing prices.

giving to a specific race in order to get a specific development approved; rather, the industry group said that their member donations are intended to change the regulatory environment to permit more housing development.

Even where there is no candidate with preferred policy positions, industry groups try to develop good relationships with incumbents to provide them with information and, if the policy equilibrium changes, have a voice in the process. These motivations suggest that interest groups seek to influence policy by changing the composition of relevant governing bodies, but also leverage information provision to potentially change the minds of existing policymakers as a means of changing policy outcomes.

It is tempting to extrapolate these findings from the housing and real estate development industry to other policy areas. For instance, other research suggests that police unions may influence local policy outcomes as well (Carreri, Teso and Yu 2025). However, housing is an area of local politics that generates some of the most intense debate among policymakers and residents (Einstein, Glick and Palmer 2019), is subject to less ideological disagreement (Hankinson 2018, cf. de Benedictis-Kessner, Jones and Warshaw 2024), and has a high level of interest group activity (Anzia 2019a, 2022). This suggests that the dynamics of housing policy may be more susceptible to the influence of interest group financial contributions. Policy in other areas of local government may instead be influenced by other forms of activity, such as endorsements (Gaudette 2025).

To explore this possibility directly, in Appendix K we examine the effects of interest group contributions in another potentially contentious policy arena: local government employment and employee pay. Previous research has pointed to large effects of interest group activity in this policy area (e.g. Anzia 2011, 2012, 2013). We replicate our main analyses of real estate industry donations and housing permitting on police union, fire union, and all public employee union contributions on police pay, fire pay, and overall public employee pay, as well as the number of employees in these areas in local governments.

Our results suggest some influence of police union and police-affiliated campaign contributions on average pay for police employed by a city. When police groups make additional donations, the average pay for police goes up two to three years following an election year. Yet these results do not

appear for firefighter interest group donations and firefighter pay, or total public employee union group donations and overall average public employee pay. Nor do public union group donations appear to influence local government employment in any area.

Housing interest groups are not the only interest group whose contributions may affect local policy, but it does not appear that financial contributions in local politics automatically earn interest groups' preferred policies. Instead, our analyses suggest that real estate industry-affiliated contributors act as policy entrepreneurs, supporting candidates with their preferred policy positions and cultivating relationships with policymakers so that when policies change, they can have a voice in the process.

The influence of money in politics is frequently bemoaned as prioritizing the policy preferences of the wealthy. In a twist on the conventional wisdom, our results suggest that real estate developer influence may be part of the solution to the acute and growing housing shortage in much of the U.S. In this instance, money in local politics could ironically lead to improved policy outcomes for working class Americans.

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**Supplementary Appendix for
“Local Money: Evaluating the Effects of Municipal Campaign
Contributions on Policy Outcomes”**

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A Local Donation Data Collection

Washington, South Carolina, and Virginia data were downloaded from the Washington State Public Disclosure Commission, the South Carolina State Ethics Commission, and the Virginia Department of Elections. Each state requires contributions to candidates in local elections to be reported to the respective commissions/offices and then posts the data online. In the case of Washington, the threshold for reporting is \$25, and in the case of South Carolina and Virginia, the threshold is \$100.

The states also classify whether the contributor is an individual or group. These classifications were reviewed for accuracy, then group contributions were split off from individual contributions. All group contributions for each state were then reviewed and hand-coded by contributor type and subtype.

For most California cities, contributions data were gathered from the API for the common data vendor (NetFile) used by a large number of cities and towns. This API both serves as a back-end database for public data portals that these cities host, as well as a resource for gathering broader data across cities. The state of California mandates certain data fields be recorded and reported by campaigns to cities.

Our data from other cities across the country was gathered in a more targeted fashion by searching for data on the largest cities in the U.S., beginning with the highest population cities and working downwards.

Once combined, a team of undergraduate research assistants hand-coded candidate partisan affiliation, incumbency status, and the electoral percentage for all developer contributions. This information was found using internet research and existing electoral result data bases.

B DID Placebo tests

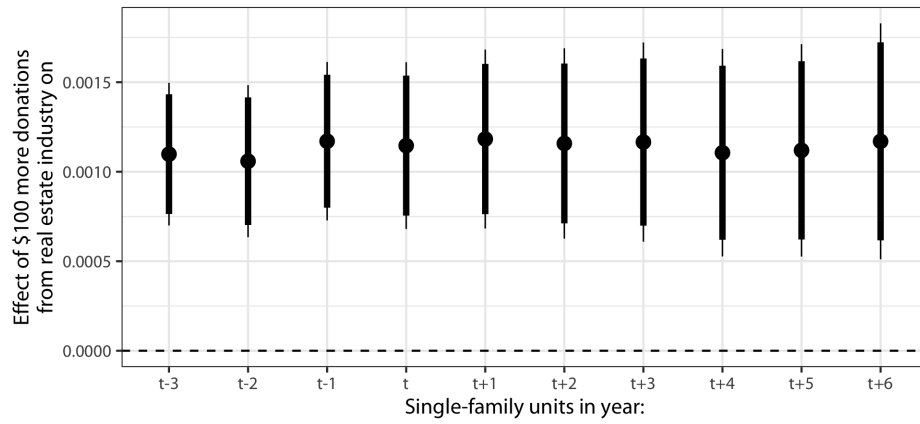
In this section, we present placebo tests in an attempt to validate the assumption that there are not time-varying confounders – colloquially known as the parallel trends assumption.

First, we assess raw differences between places where local candidates receive more real estate industry donations vs. places where they receive less. To do so, we regress raw counts of units permitted in the years prior and following an election without any fixed effects. These cross-sectional differences are displayed in Figure A1, and show clear distinctions. In cities where local political candidates receive more contributions, there are greater numbers of both single-family and multi-family housing units permitted across the board. In other words, real estate groups contribute in places where housing development is occurring.

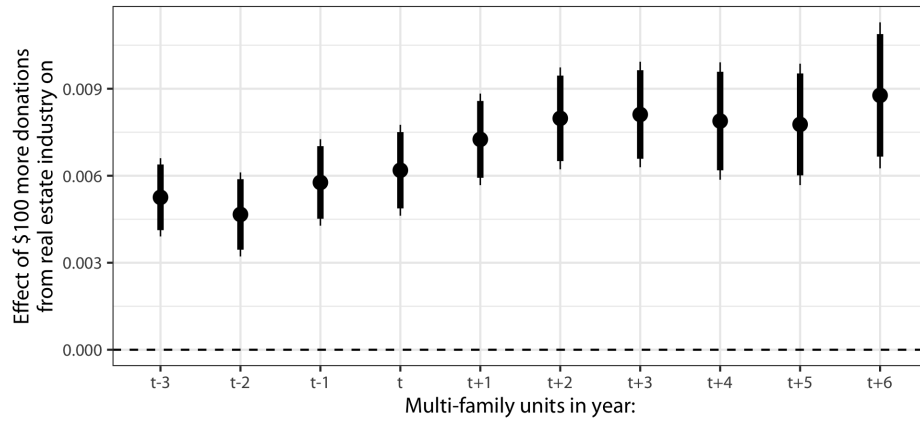
Of course, these cross-sectional differences do not necessarily indicate a problem for the interpretation of our results given that our econometric specification incorporates fixed effects to absorb some of these cross-sectional differences across cities. Next, in Figure A2, we present the effects of greater real estate industry contributions on pre-and post-treatment outcomes measured as levels, but using models with city and state-year fixed effects to mirror our main regression specifications. These results indicate that real estate industry groups donate more to local candidates in instances where there are lower numbers of multi-family housing units permitted (relative to other years in the same city) *prior* to donations. So the increases in multi-family housing units following interest group contributions (our main results) may be simply reversion to the mean, or the release of pent-up demand for multi-family housing units.

These results indicate that places with greater and lesser industry-affiliated contributions are different from one another, but this does not necessarily indicate a violation of the assumption that there are no *time-varying* confounders.

To more rigorously assess this assumption, we turn to placebo tests examining the impact of increased industry contributions on *changes* in outcomes prior to those donations (rather than levels). The results of these analyses are displayed in Figure A3 and Figure A4. They indicate little difference in pre-treatment trends in the permitting of either single- or multi-family housing between cities with more or fewer real estate industry contributions.

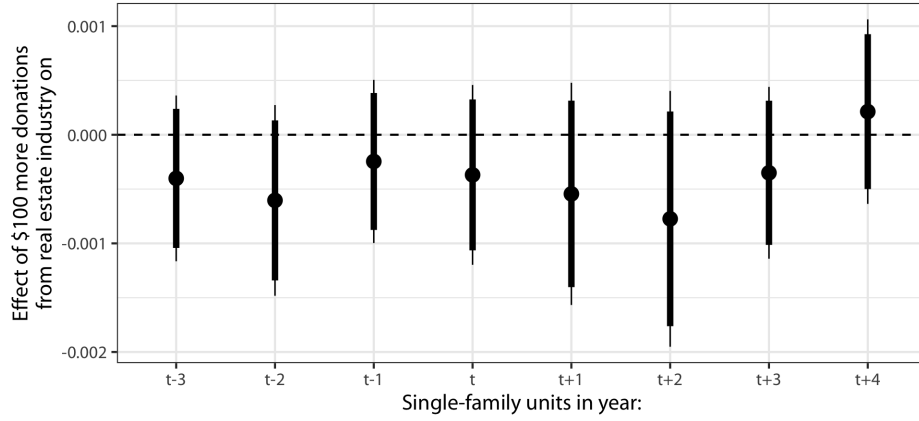


(a) Sum of donations and single-family units

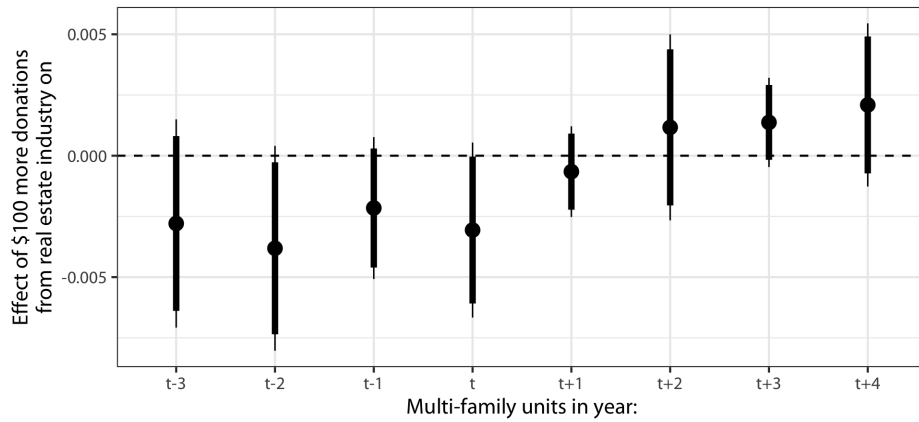


(b) Sum of donations and multi-family units

Figure A1: Differences in single- and multi-family units permitted between places with greater vs. less real estate industry contributions (models without fixed effects)

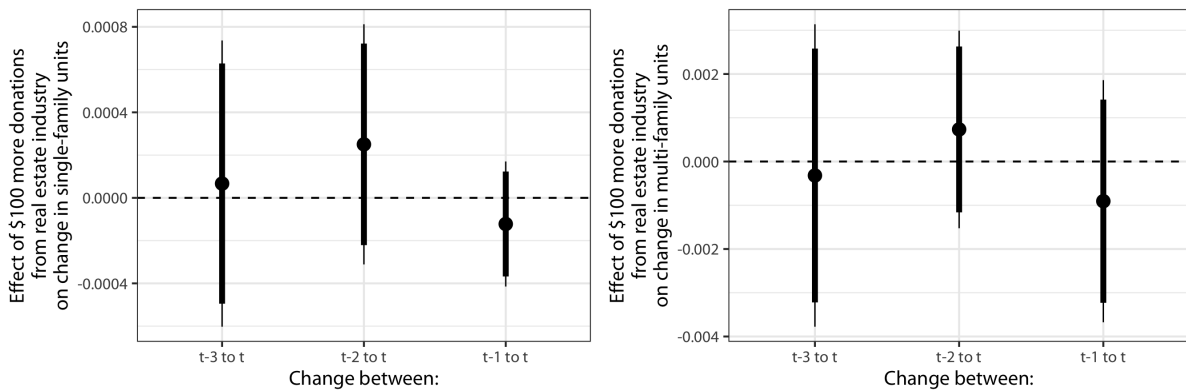


(a) Sum of donations and single-family units



(b) Sum of donations and multi-family units

Figure A2: Placebo effects of donations on levels of single- and multi-family units permitted (models with fixed effects for city and state-year)



(a) Single-family units

(b) Multi-family units

Figure A3: Placebo effects of the sum of donations on pre-treatment changes in housing units permitted (models with fixed effects for city and state-year)

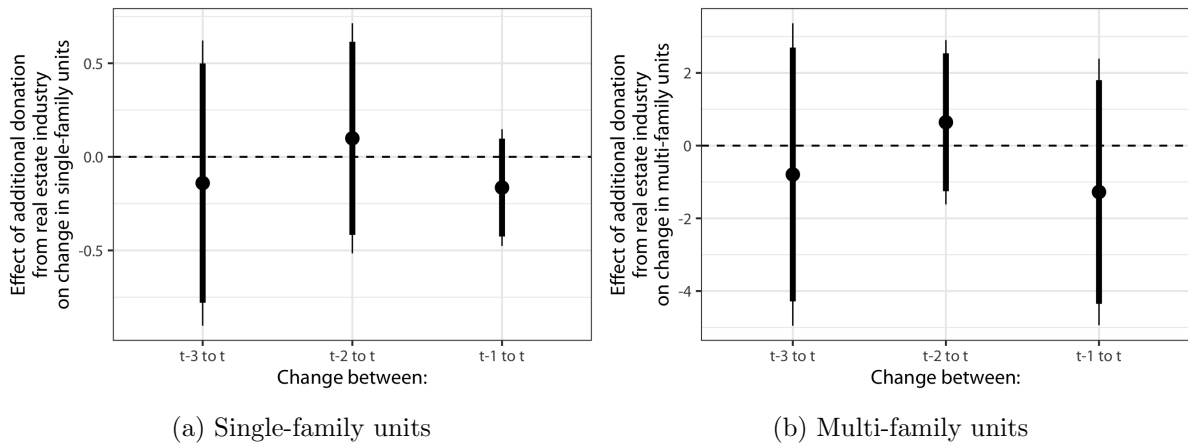


Figure A4: Placebo effects of the number of donations on pre-treatment changes in housing units permitted (models with fixed effects for city and state-year)

C Results from Alternative Model Specifications

In the tables below, we show that our primary results are robust to alternative specifications. In Table A2, we show that our results are similar to those in the main text using city and state-year fixed effects when we use only city and year fixed effects. In Table A1, we use outcomes measured two years after the election rather than three years (as shown in the main text).

Table A1: Alternative models: Housing results two years after election

Dependent Variables: Model:	Δ between election year and t+2 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-0.343		3.862*		-0.406		-0.406		0.062		4.268**	
	(0.318)		(2.243)		(0.294)		(0.294)		(0.050)		(2.124)	
Sum donations from real estate industry		0.000		0.004		0.000		0.000		0.000		0.004
		(0.000)		(0.003)		(0.000)		(0.000)		(0.000)		(0.003)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211
R ²	0.468	0.467	0.431	0.427	0.461	0.459	0.461	0.459	0.505	0.506	0.414	0.407
Within R ²	0.003	0.001	0.024	0.016	0.005	0.002	0.005	0.002	0.005	0.007	0.035	0.023

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A2: Alternative models: Housing results with city and year fixed effects

Dependent Variables: Model:	Δ between election year and t+3 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.427**		5.811***		0.162		0.162		0.265***		5.649***	
	(0.167)		(1.707)		(0.125)		(0.125)		(0.057)		(1.639)	
Sum donations from real estate industry		0.000**		0.005***		0.000		0.000		0.000***		0.004***
		(0.000)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163
R ²	0.454	0.453	0.383	0.368	0.422	0.422	0.422	0.422	0.359	0.349	0.333	0.314
Within R ²	0.005	0.004	0.056	0.033	0.001	0.001	0.001	0.001	0.068	0.053	0.063	0.037

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

D Results from Alternative Sample Modifications

In this section, we run our analyses examining the impact of donations from real estate industry groups on housing permitting using single-state sub-samples of data to ensure that our results are not masking significant heterogeneity across geography. The tables below present results for California, South Carolina, Virginia, and Washington separately, using outcomes measured as changes over two years or three years. These results suggest that while in CA the impact of donations appears for just multi-family unit housing permitting, and in SC and VA the impact appears to be on single-family housing permitting only, in WA the impact appears for *both* single-family and multi-family units.

Table A3: Alternative models: Housing results for CA

Dependent Variables: Model:	Δ between election year and t+2 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-0.706 (0.561)		4.581* (2.720)		-0.796 (0.496)		-0.796 (0.496)		0.090 (0.068)		5.377** (2.234)	
Sum donations from real estate industry		0.000 (0.001)		0.010** (0.004)		-0.001 (0.001)		-0.001 (0.001)		0.000** (0.000)		0.011*** (0.004)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	234	234	234	234	234	234	234	234	234	234	234	234
R ²	0.363	0.358	0.370	0.385	0.353	0.347	0.353	0.347	0.395	0.406	0.360	0.376
Within R ²	0.009	0.002	0.027	0.049	0.013	0.004	0.013	0.004	0.007	0.024	0.048	0.072

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Table A4: Alternative models: Housing results for CA

Dependent Variables: Model:	Δ between election year and t+3 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.328 (0.207)		3.936** (1.696)		0.042 (0.173)		0.042 (0.173)		0.286*** (0.065)		3.895** (1.615)	
Sum donations from real estate industry		0.001** (0.001)		0.009*** (0.002)		0.001 (0.001)		0.001 (0.001)		0.001*** (0.000)		0.008*** (0.002)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	228	228	228	228	228	228	228	228	228	228	228	228
R ²	0.429	0.434	0.416	0.425	0.402	0.404	0.402	0.404	0.445	0.460	0.390	0.398
Within R ²	0.001	0.011	0.015	0.030	0.000	0.004	0.000	0.004	0.056	0.082	0.020	0.033

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Table A5: Alternative models: Housing results for SC

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+2 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.797***		0.482		0.796***		0.796***		0.001		-0.314	
	(0.112)		(0.299)		(0.102)		(0.102)		(0.023)		(0.238)	
Sum donations from real estate industry		0.001***		0.001		0.001***		0.001***		0.000		0.000
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	185	185	185	185	185	185	185	185	185	185	185	185
R ²	0.550	0.553	0.423	0.423	0.553	0.556	0.553	0.556	0.462	0.462	0.388	0.388
Within R ²	0.051	0.060	0.003	0.004	0.054	0.062	0.054	0.062	0.000	0.000	0.002	0.002

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A6: Alternative models: Housing results for SC

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.593***		0.299		0.598***		0.598***		-0.005		-0.299	
	(0.117)		(0.251)		(0.114)		(0.114)		(0.016)		(0.207)	
Sum donations from real estate industry		0.001***		0.001		0.001***		0.001***		0.000		0.000
		(0.000)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	181	181	181	181	181	181	181	181	181	181	181	181
R ²	0.534	0.535	0.416	0.417	0.526	0.527	0.526	0.527	0.424	0.425	0.303	0.302
Within R ²	0.024	0.027	0.001	0.004	0.025	0.027	0.025	0.027	0.000	0.001	0.002	0.000

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A7: Alternative models: Housing results for VA

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+2 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-0.350		-0.905		-0.329		-0.329		-0.022		-0.576	
	(0.369)		(1.485)		(0.348)		(0.348)		(0.045)		(1.234)	
Sum donations from real estate industry		0.000		0.000		0.000		0.000		0.000		0.000
		(0.000)		(0.002)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	239	239	239	239	239	239	239	239	239	239	239	239
R ²	0.227	0.234	0.162	0.155	0.225	0.233	0.225	0.233	0.087	0.083	0.152	0.148
Within R ²	0.017	0.026	0.010	0.002	0.015	0.026	0.015	0.026	0.004	0.000	0.005	0.000

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A8: Alternative models: Housing results for VA

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-0.805*** (0.208)		-0.970 (1.012)		-0.791*** (0.210)		-0.791*** (0.210)		-0.014 (0.029)		-0.179 (0.883)	
Sum donations from real estate industry		-0.001*** (0.000)		-0.001 (0.001)		-0.001*** (0.000)		-0.001*** (0.000)		0.000 (0.000)		0.000 (0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	205	205	205	205	205	205	205	205	205	205	205	205
R ²	0.320	0.327	0.308	0.311	0.319	0.325	0.319	0.325	0.155	0.158	0.284	0.284
Within R ²	0.078	0.088	0.013	0.018	0.074	0.082	0.074	0.082	0.003	0.006	0.000	0.001

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Table A9: Alternative models: Housing results for WA

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+2 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.345 (0.283)		15.561*** (5.422)		0.159 (0.259)		0.159 (0.259)		0.187*** (0.043)		15.402*** (5.299)	
Sum donations from real estate industry		0.000 (0.001)		0.024** (0.012)		-0.001 (0.001)		-0.001 (0.001)		0.000*** (0.000)		0.025** (0.011)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	444	444	444	444	444	444	444	444	444	444	444	444
R ²	0.153	0.151	0.204	0.149	0.123	0.124	0.123	0.124	0.242	0.236	0.189	0.140
Within R ²	0.003	0.001	0.137	0.078	0.001	0.003	0.001	0.003	0.019	0.011	0.136	0.083

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

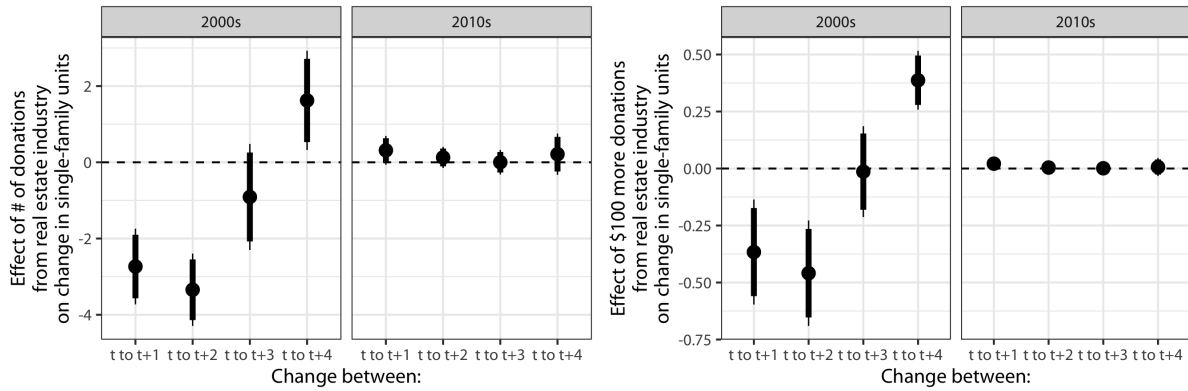
Table A10: Alternative models: Housing results for WA

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	1.062* (0.570)		30.720*** (10.429)		0.593 (0.404)		0.593 (0.404)		0.469** (0.185)		30.127*** (10.089)	
Sum donations from real estate industry		0.001 (0.001)		0.049** (0.024)		0.000 (0.001)		0.000 (0.001)		0.001* (0.000)		0.049** (0.023)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	444	444	444	444	444	444	444	444	444	444	444	444
R ²	0.224	0.207	0.404	0.270	0.198	0.191	0.198	0.191	0.357	0.329	0.411	0.279
Within R ²	0.024	0.004	0.357	0.213	0.009	0.000	0.009	0.000	0.103	0.064	0.371	0.229

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

E Results Over Time

In this section, we run our analyses examining the impact of donations from real estate industry groups on housing permitting in earlier years relative to later years. The figures below present results for donations by decade for the 2000s and the 2010s separately, using outcomes measured as changes between the election year and three years afterwards. These results suggest that our results for housing permitting appear to occur in the 2010s rather than the 2000s, where our estimates are less precise. The estimated effects of donations on housing permitting also appear to be immediate in the 2010s, rather than taking 2-3 years to occur. In addition, Table A11 presents results from models which parallel our main results but interact each measure of real estate industry group donations with the year.



(a) Number of donations

(b) Sum of donations

Figure A5: Effects of real estate industry donations on single-family units permitted

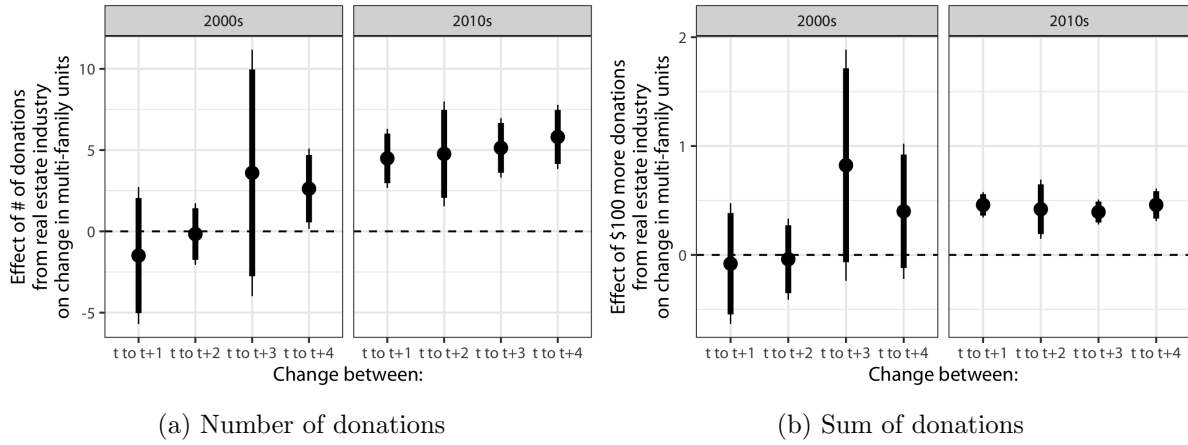


Figure A6: Effects of mayoral donations on multi-family units permitted

Table A11: Housing permits results over time

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	84.667		648.907		76.941		76.941		7.727		571.966	
	(69.929)		(666.566)		(56.512)		(56.512)		(20.285)		(625.094)	
# donations from real estate industry \times Year	-0.042		-0.319		-0.038		-0.038		-0.004		-0.281	
	(0.035)		(0.331)		(0.028)		(0.028)		(0.010)		(0.310)	
Sum donations from real estate industry		0.208***		1.613***		0.149**		0.149**		0.059***		1.464***
		(0.077)		(0.533)		(0.071)		(0.071)		(0.015)		(0.497)
Sum donations from real estate industry \times Year		0.000***		-0.001***		0.000**		0.000**		0.000***		-0.001***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163
R ²	0.454	0.456	0.387	0.381	0.423	0.424	0.423	0.424	0.359	0.359	0.336	0.327
Within R ²	0.007	0.009	0.061	0.052	0.002	0.004	0.002	0.004	0.068	0.068	0.068	0.056

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***, 0.01, **, 0.05, *, 0.1

F Results from Mayoral and Council Candidate Donations Separately

In this section, we run our analyses examining the impact of donations from real estate industry groups on housing permitting to candidates for mayoral and council races separately to examine which type of races may be leading to these policy changes. The figures and tables below present results for donations to mayoral candidates and city council candidates separately, using outcomes measured as changes between the election year and three years afterwards. These results suggest that neither contributions to mayoral our council candidates alone are driving our findings.

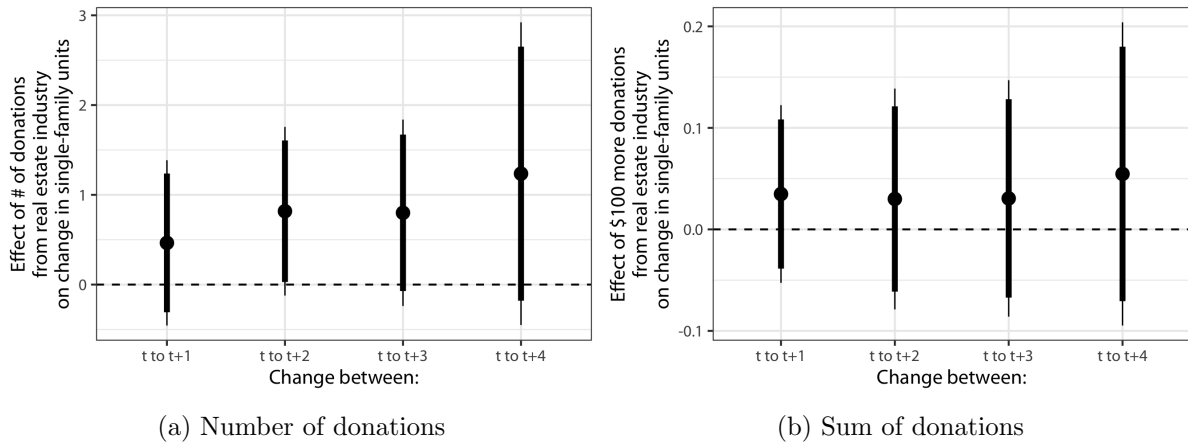


Figure A7: Effects of mayoral donations on single-family units permitted

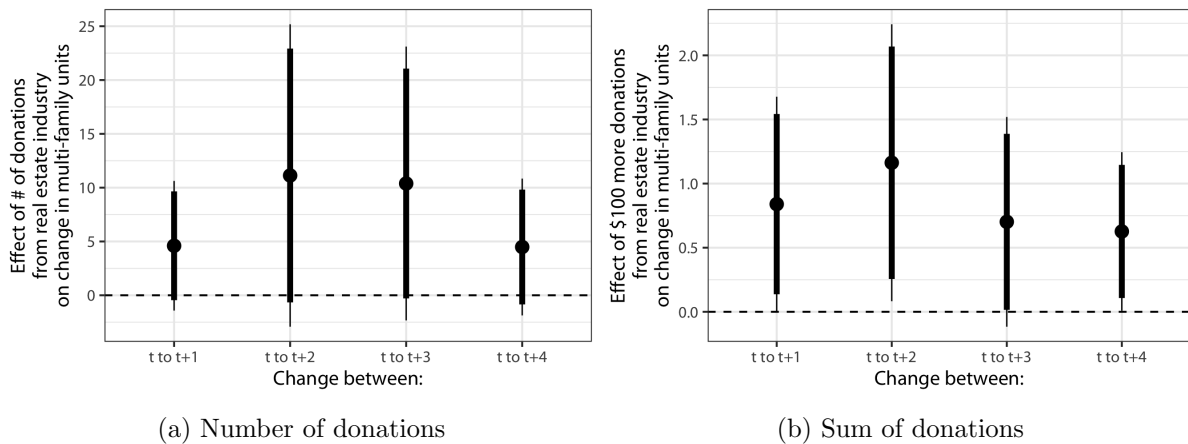


Figure A8: Effects of mayoral donations on multi-family units permitted

Table A12: Housing permits results (Mayoral races only)

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	1.222**		10.129		0.941**		0.941**		0.281		9.188	
	(0.592)		(7.885)		(0.406)		(0.406)		(0.214)		(7.647)	
Sum donations from real estate industry		0.001**		0.009		0.001**		0.001**		0.000		0.008
		(0.001)		(0.006)		(0.000)		(0.000)		(0.000)		(0.006)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	510	510	510	510	510	510	510	510	510	510	510	510
R ²	0.768	0.767	0.634	0.623	0.758	0.758	0.758	0.758	0.825	0.821	0.595	0.582
Within R ²	0.030	0.025	0.072	0.042	0.020	0.018	0.020	0.018	0.069	0.046	0.067	0.038

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***, 0.01, **, 0.05, *, 0.1

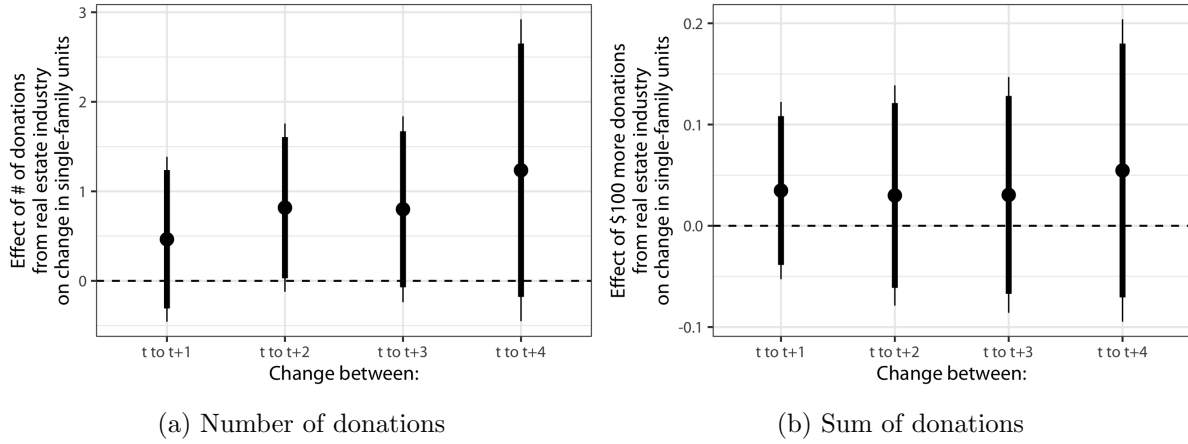


Figure A9: Effects of council donations on single-family units permitted

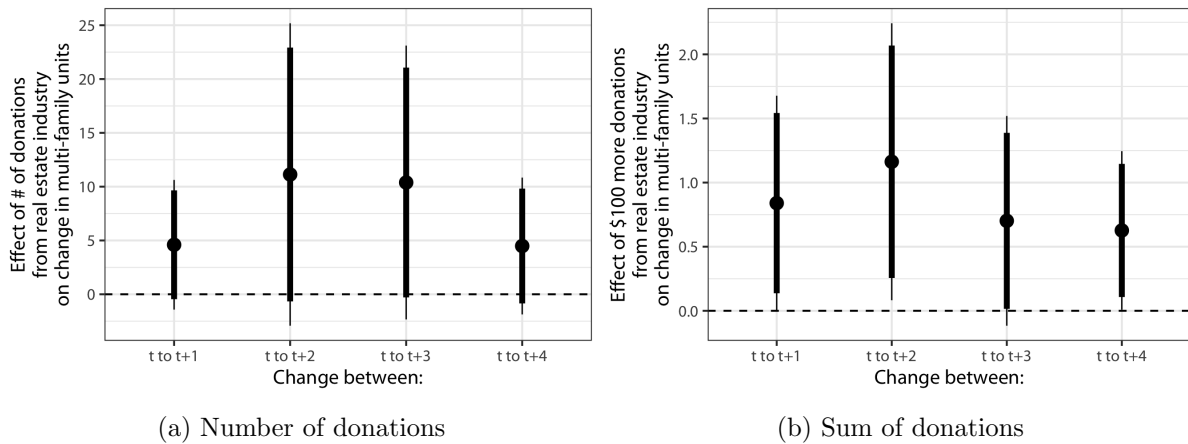


Figure A10: Effects of council donations on multi-family units permitted

Table A13: Housing permits results (Council races only)

Dependent Variables: Model:	Δ between election year and t+3 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	1.222**		10.129		0.941**		0.941**		0.281		9.188	
	(0.592)		(7.885)		(0.406)		(0.406)		(0.214)		(7.647)	
Sum donations from real estate industry		0.001**		0.009		0.001**		0.001**		0.000		0.008
		(0.001)		(0.006)		(0.000)		(0.000)		(0.000)		(0.006)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	510	510	510	510	510	510	510	510	510	510	510	510
R ²	0.768	0.767	0.634	0.623	0.758	0.758	0.758	0.758	0.825	0.821	0.595	0.582
Within R ²	0.030	0.025	0.072	0.042	0.020	0.018	0.020	0.018	0.069	0.046	0.067	0.038

Clustered (City) standard-errors in parentheses

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

G Results by Pre-Election Price Growth

In this section, we run subset analyses examining the impact of donations from real estate industry groups on housing permitting looking separately at places with lower and higher pre-election housing price growth, as measured by the Zillow Housing Value Index (ZHVI). The figures and tables below present these results, and indicate little heterogeneity by pre-election price growth.

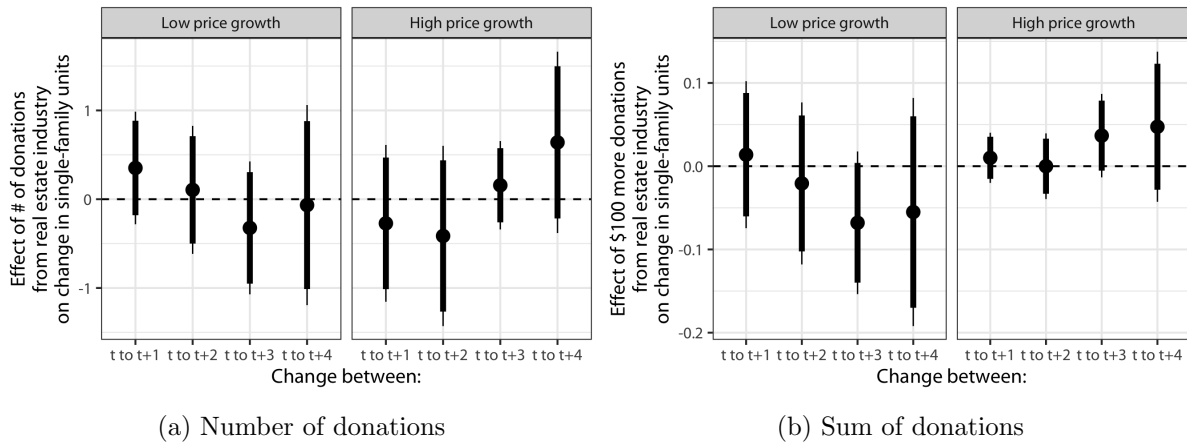


Figure A11: Effects of donations on single-family units permitted, by housing price growth

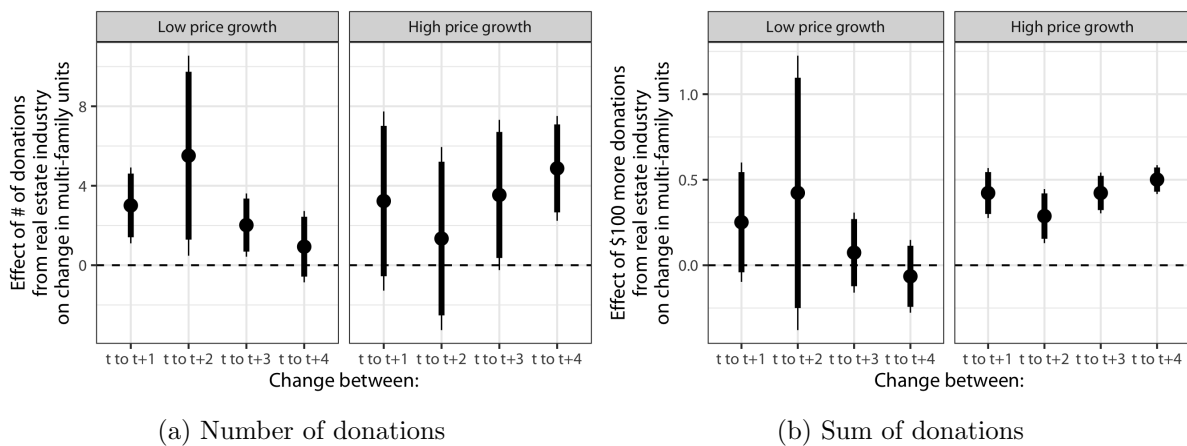


Figure A12: Effects of council donations on multi-family units permitted, by housing price growth

Table A14: Housing permits results, low price growth places

Dependent Variables: Model:	Δ between election year and t+3 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-0.071		1.697*		-0.323		-0.323		0.252**		2.020**	
	(0.478)		(0.931)		(0.382)		(0.382)		(0.112)		(0.812)	
Sum donations from real estate industry		0.000		0.000		-0.001		-0.001		0.000		0.001
		(0.001)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	590	590	590	590	590	590	590	590	590	590	590	590
R ²	0.446	0.450	0.691	0.688	0.421	0.427	0.421	0.427	0.541	0.508	0.699	0.694
Within R ²	0.000	0.007	0.010	0.000	0.006	0.017	0.006	0.017	0.105	0.040	0.018	0.002

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A15: Housing permits results, high price growth places

Dependent Variables: Model:	Δ between election year and t+3 in:											
	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.384		3.693*		0.157		0.157		0.227***		3.536*	
	(0.298)		(2.054)		(0.254)		(0.254)		(0.083)		(1.929)	
Sum donations from real estate industry		0.001**		0.005***		0.000		0.000		0.000***		0.004***
		(0.000)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	434	434	434	434	434	434	434	434	434	434	434	434
R ²	0.531	0.534	0.539	0.551	0.496	0.498	0.496	0.498	0.386	0.397	0.492	0.505
Within R ²	0.003	0.010	0.027	0.053	0.001	0.004	0.001	0.004	0.039	0.057	0.032	0.057

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

H Results by Mayoral Party

In this section, we run subset analyses examining the impact of donations from real estate industry groups on housing permitting but separately analyzing cities with a Democratic mayor and a Republican mayor.

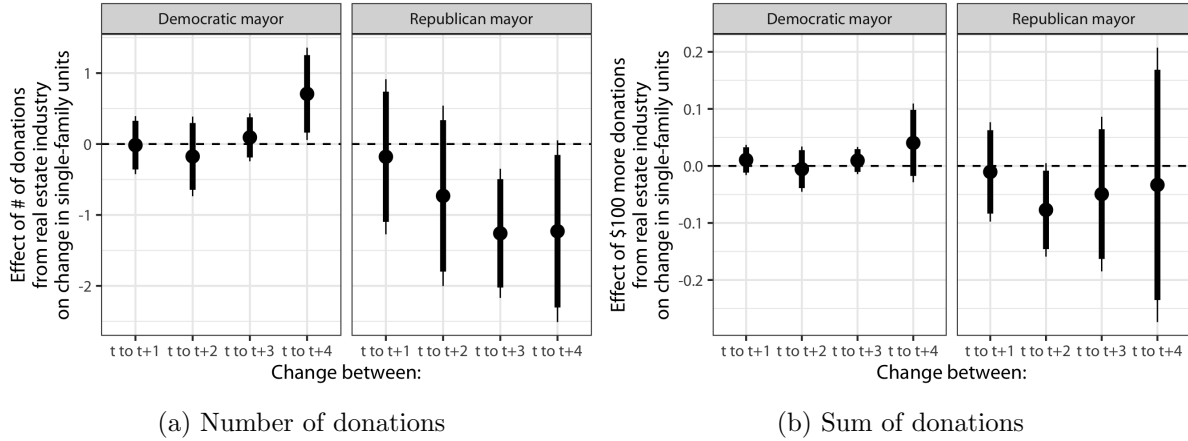


Figure A13: Effects of donations on single-family units permitted, by mayoral party

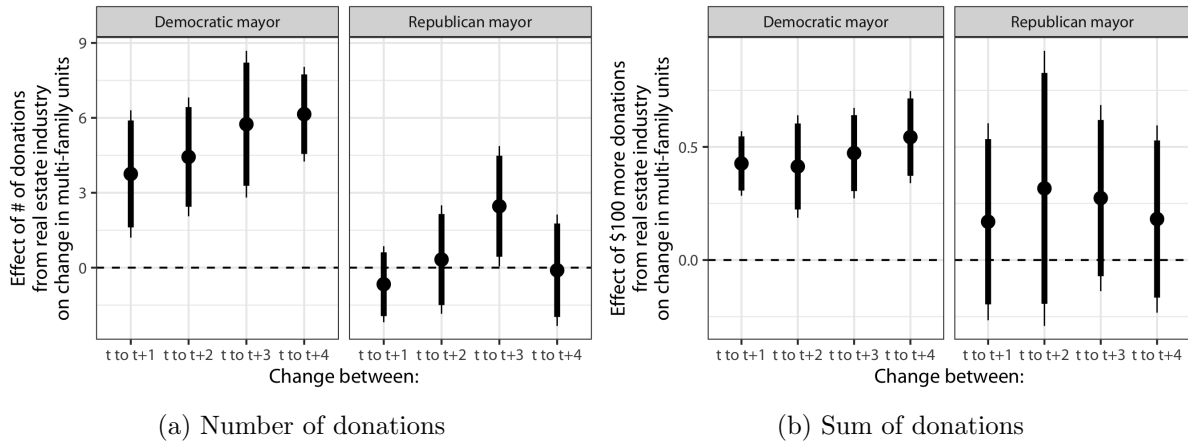


Figure A14: Effects of council donations on multi-family units permitted, by mayoral party

Table A16: Housing permits results under Democratic mayors

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.392**		5.839***		0.094		0.094		0.298***		5.746***	
	(0.188)		(1.578)		(0.172)		(0.172)		(0.049)		(1.499)	
Sum donations from real estate industry		0.000***		0.005***		0.000		0.000		0.000***		0.005***
		(0.000)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	280	280	280	280	280	280	280	280	280	280	280	280
R ²	0.565	0.564	0.471	0.458	0.537	0.537	0.537	0.537	0.414	0.395	0.413	0.397
Within R ²	0.006	0.005	0.064	0.041	0.000	0.000	0.000	0.000	0.101	0.073	0.073	0.046

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

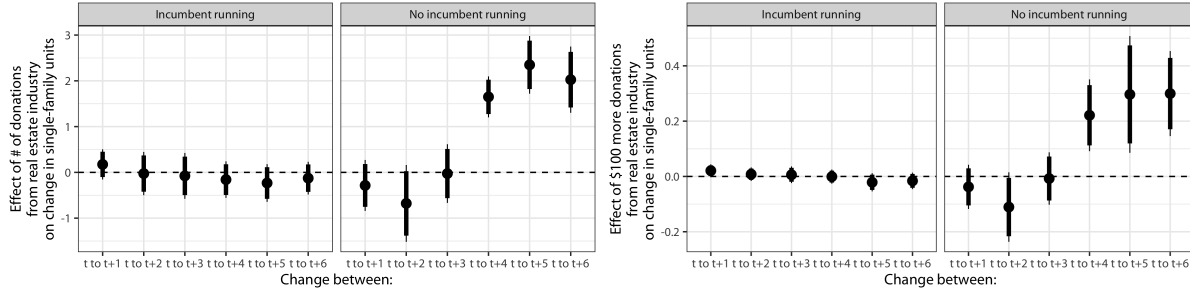
Table A17: Housing permits results under Republican mayors

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	-1.190**		1.201		-1.259**		-1.259**		0.069		2.460*	
	(0.431)		(1.208)		(0.465)		(0.465)		(0.076)		(1.230)	
Sum donations from real estate industry		0.000		0.002		0.000		0.000		0.000		0.003
		(0.001)		(0.003)		(0.001)		(0.001)		(0.000)		(0.002)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	103	103	103	103	103	103	103	103	103	103	103	103
R ²	0.697	0.686	0.650	0.654	0.664	0.651	0.664	0.651	0.779	0.784	0.627	0.631
Within R ²	0.039	0.004	0.003	0.014	0.046	0.009	0.046	0.009	0.005	0.030	0.017	0.027

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

I Results by Whether Mayoral Incumbent is Running

In this section, we run subset analyses examining the impact of donations from real estate industry groups on housing permitting but separately analyzing cities with open-seat mayoral elections vs. those with mayoral incumbents re-running for election.



(a) Number of donations

(b) Sum of donations

Figure A15: Effects of donations on single-family units permitted, by whether mayoral incumbent running

Table A18: Housing permits results without mayoral incumbent running

Dependent Variables: Model:	Total buildings		Total units		Δ between election year and t+3 in:				Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.221		7.647**		-0.026		-0.026		0.247***		7.673**	
	(0.380)		(3.736)		(0.327)		(0.327)		(0.082)		(3.526)	
Sum donations from real estate industry		0.000		0.009**		0.000		0.000		0.000*		0.010**
		(0.001)		(0.005)		(0.000)		(0.000)		(0.000)		(0.004)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	162	162	162	162	162	162	162	162	162	162	162	162
R ²	0.707	0.706	0.632	0.609	0.650	0.650	0.650	0.650	0.608	0.593	0.578	0.550
Within R ²	0.003	0.001	0.137	0.084	0.000	0.000	0.000	0.000	0.063	0.027	0.148	0.092

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Table A19: Housing permits results with mayoral incumbent running

Dependent Variables: Model:	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Variables</i>												
# donations from real estate industry	0.147		3.546**		-0.077		-0.077		0.224**		3.623**	
	(0.306)		(1.562)		(0.256)		(0.256)		(0.086)		(1.384)	
Sum donations from real estate industry		0.000*		0.004***		0.000		0.000		0.000***		0.003***
		(0.000)		(0.001)		(0.000)		(0.000)		(0.000)		(0.001)
<i>Fixed-effects</i>												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>												
Observations	224	224	224	224	224	224	224	224	224	224	224	224
R ²	0.619	0.620	0.453	0.458	0.611	0.611	0.611	0.611	0.530	0.546	0.409	0.414
Within R ²	0.001	0.004	0.018	0.027	0.000	0.000	0.000	0.000	0.067	0.100	0.024	0.032

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

J Analyses of Housing Prices

In this section, we examine the impact of donations from real estate industry groups on housing prices. To do so, we measure housing prices using the Zillow Housing Value Index (ZHVI), an industry standard dynamic measure of the average home price in a locality. The results of these analyses are shown in Figure A16, and indicate that industry contributions appear to have no effect on housing prices in the short term.

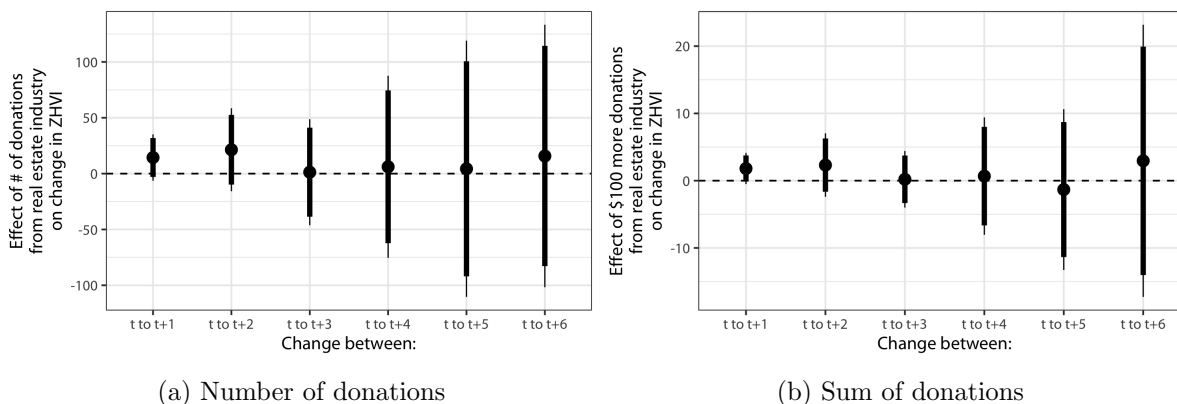


Figure A16: Effects of donations on Zillow Housing Value Index

Table A20: Zillow Housing Value Index results

Dependent Variables: Model:	Δ between election year and t+3 in:			
	ZHVI		Logged ZHVI	
	(1)	(2)	(3)	(4)
<i>Variables</i>				
# donations from real estate industry	-10.763 (35.034)		0.000 (0.000)	
Sum donations from real estate industry		-0.006 (0.041)		0.000 (0.000)
<i>Fixed-effects</i>				
City	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	779	779	779	779
R ²	0.910	0.910	0.914	0.914
Within R ²	0.000	0.000	0.000	0.000

Clustered (City) standard-errors in parentheses
Signif. Codes: ***, 0.01, **, 0.05, *, 0.1

K Results of Donations in Other Policy Areas

In this section, we examine the influence of local campaign donations in several other important policy areas that work such as Anzia (2022) suggests may be affected by interest group activity. In particular, we look at the effects of public employee union groups on the pay and number of public employees both in total and in two specific policy areas (police and fire). These results for employee pay are shown in Figures A17, A18, and A19 and Table A21. Results for the number of total employees are displayed in Figures A20, A21, and A22 and Table A22. Overall, these indicate little influence of public union donations on government finance and employment overall or in specific policy areas, except for slight positive effects on the increase in average police fulltime pay three years after an election from a greater number of police union donations.

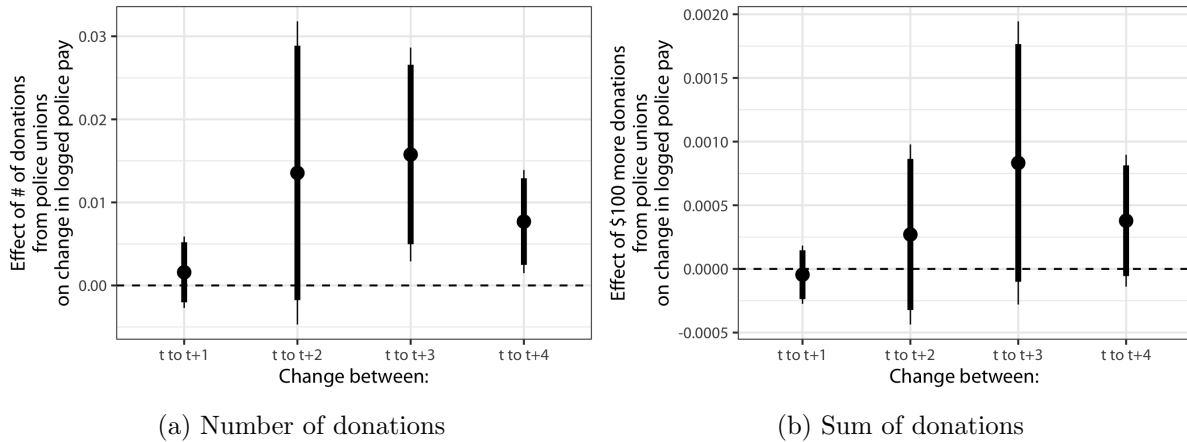
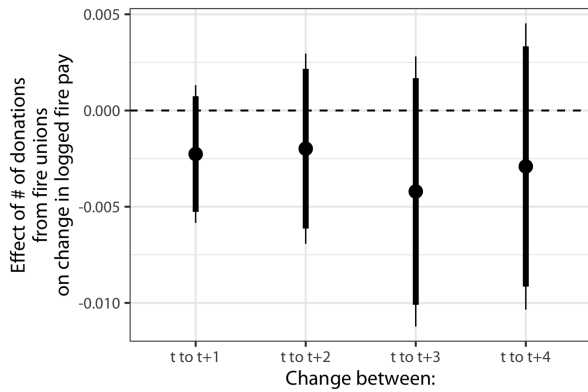
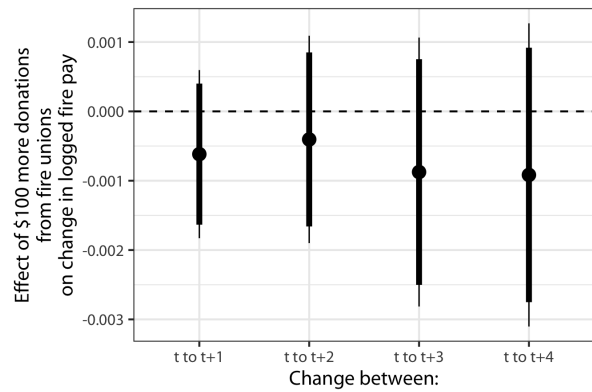


Figure A17: Effects of donations on police pay

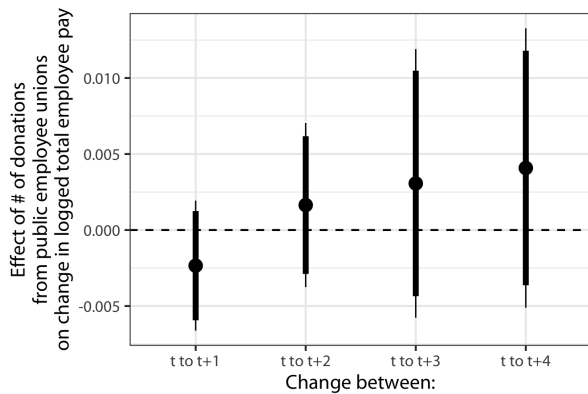


(a) Number of donations

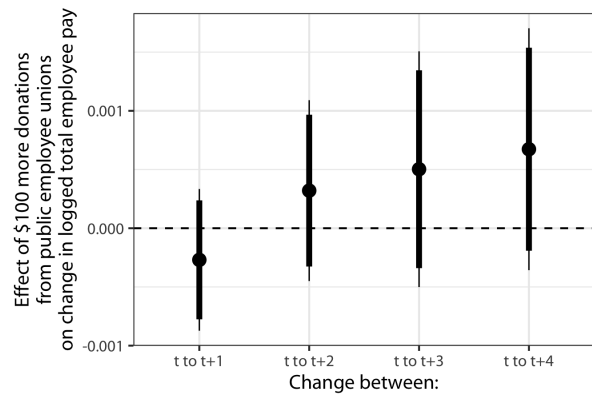


(b) Sum of donations

Figure A18: Effects of donations on fire pay



(a) Number of donations



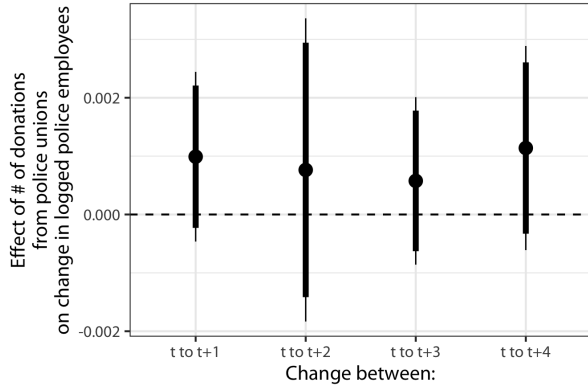
(b) Sum of donations

Figure A19: Effects of donations on public employee pay

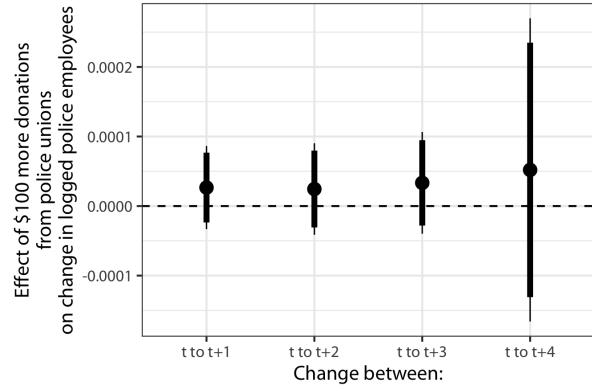
Table A21: Public employee pay results

Dependent Variables: Model:	Δ in logged average pay between election year and $t + 3$ for:					
	Police		Fire		All Public Employees	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
# Police Union Donations	0.016** (0.007)					
Sum Police Union Donations		0.000 (0.000)				
# Fire Union Donations			-0.004 (0.004)			
Sum Fire Union Donations				0.000 (0.000)		
# Public Employee Union Donations					0.003 (0.005)	
Sum Public Employee Union Donations						0.000 (0.000)
<i>Fixed-effects</i>						
City	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	414	414	386	386	423	423
R ²	0.369	0.352	0.605	0.605	0.670	0.670
Within R ²	0.044	0.018	0.006	0.007	0.001	0.002

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

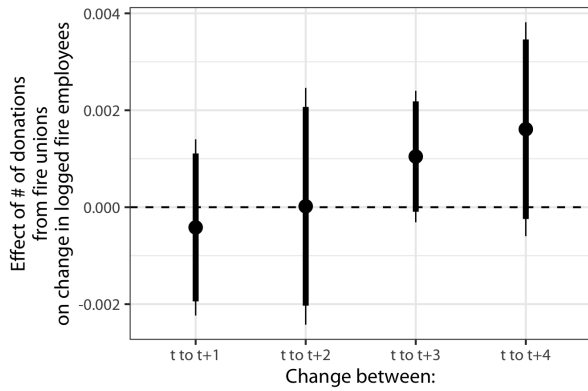


(a) Number of donations

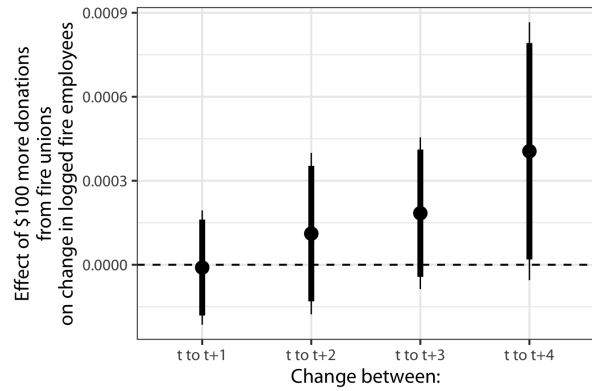


(b) Sum of donations

Figure A20: Effects of donations on number of police employees



(a) Number of donations



(b) Sum of donations

Figure A21: Effects of donations on number of fire employees

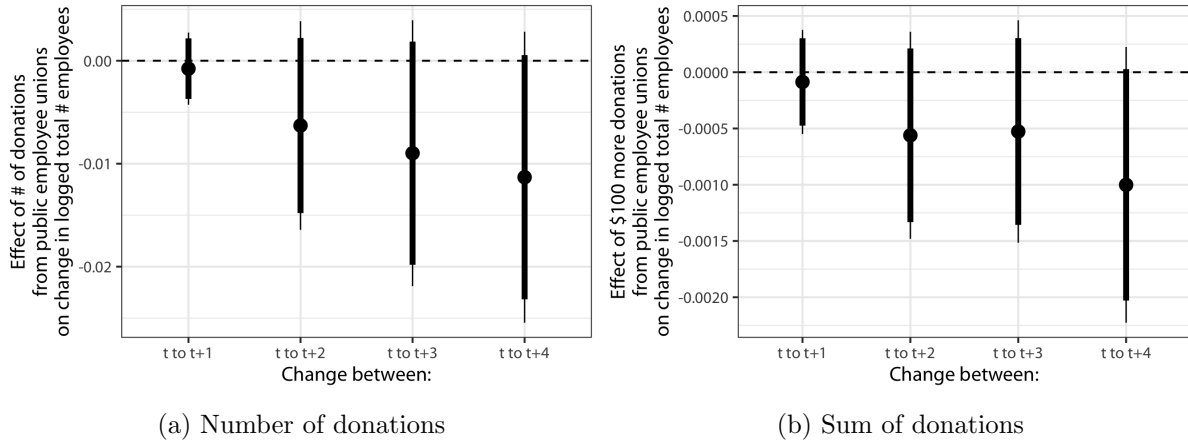


Figure A22: Effects of donations on number of total public employees

Table A22: Number of public employees results

Dependent Variables: Model:	Δ in logged per capita employees between election year and $t + 3$ in:					
	Police		Fire		All Public Employees	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>						
# Police Union Donations	0.001 (0.001)					
Sum Police Union Donations		0.000 (0.000)				
# Fire Union Donations			0.001 (0.001)			
Sum Fire Union Donations				0.000 (0.000)		
# Public Employee Union Donations					-0.009 (0.007)	
Sum Public Employee Union Donations						0.000 (0.000)
<i>Fixed-effects</i>						
City	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fit statistics</i>						
Observations	549	549	503	503	556	556
R ²	0.608	0.608	0.707	0.707	0.730	0.728
Within R ²	0.001	0.001	0.002	0.002	0.006	0.001

Clustered (City) standard-errors in parentheses
 Signif. Codes: ***: 0.01, **: 0.05, *: 0.1