Testing the Turnout-Policy Connection:
Senior Citizens, City Elections, and Local Transportation

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Abstract: The idea that public policy is biased in favor of groups of citizens who vote at high rates is central to scholarship on American politics, but few studies have actually tested it. In this paper, I carry out a test of the expected turnout-policy connection that leverages variation in the turnout of senior citizens in city elections and the senior-friendliness of city transportation policy. Surprisingly, my results do not support the conventional wisdom: I find no significant association between the percentage of seniors in the electorate and better transportation for seniors. I then use this null finding as a launching pad for developing expectations about the conditions under which a group of citizens *will* influence policy. In a second round of empirical tests, I find support for those expectations: transportation policies are friendlier to seniors in cities where senior citizens are a cohesive, politically-focused group, and where they engage in political activities *other* than voting.

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V.O. Key once wrote that "politicians and officials are under no compulsion to pay much heed to classes and groups of citizens that do not vote" (Key 1949, 527). Today, the idea that public policy tends to be biased in favor of groups of citizens who vote at high rates is central to the scholarly study of American politics—and for good reason. Some of the subfield's best-documented empirical findings show that individual characteristics such as race, education, and age are strong predictors of the decision to vote (e.g., Rosenstone and Hansen 1992, Verba et al. 1995), and that in the aggregate, active voters are an unrepresentative subset of those eligible. Given the dominant theoretical frameworks of American politics, it is no great leap to the conclusion that political outcomes and policies are biased as a result. The Downsian model of political competition, rooted in the median voter theorem, emphasizes the link between voters and elected officials, and it implies that politicians make policy decisions in response to those who vote in their elections (Downs 1957). If some groups of citizens vote at higher rates than others, then elected officials should favor them in their policy decisions.[1]

But if political science adherence to the idea of a turnout-policy connection is robust, the empirical evidence in support of such a connection is not. As Martin and Claibourn (2013, 59) put it, "very few studies have successfully connected citizen participation with policy or political outcomes. Rather, scholars tend to take a theoretical approach and assume effects" (see also Leighley 1995, Lijphart 1997, Verba et al. 1995). There are some studies that link the overall turnout rate to election outcomes (e.g., Hajnal and Trounstine 2005, Pacek and Radcliff 1995), and others document a relationship between turnout in congressional districts and policy responsiveness in roll-call votes (Martin and Claibourn 2003) and federal spending (Martin

[1] Strictly speaking, this could happen for one of two reasons: either because voters select representatives who share their policy views or because officials are disproportionately responsive to citizens who will be important to their reelections (see Griffin and Newman 2005). The empirical implication, however, is the same either way: the greater a group's share of the active electorate, the more policy should tilt in its favored direction.

2003). But studies that actually document a link between the higher turnout rates of particular groups and policy outcomes in their favor are surprisingly rare.

There are some notable exceptions. Button (1989) examines six communities in Florida from the 1950s to the 1980s and finds that when African American voter registration and turnout rose after the passage of the Voting Rights Act, there were significant expansions in public services (see also Keech 1968). Hill and Leighley (1992) find that when turnout in state elections is biased in favor of citizens of high socioeconomic status, state welfare policies tend to be less generous. In my own research on school board elections, I argue that teacher unions and their supporters have a greater relative presence in low-turnout environments, and I document a negative relationship between overall turnout and policies preferred by public school teachers (Anzia 2014). All of these studies take the important step of showing that when groups of citizens make up a larger share of the electorate, they are more likely to receive the policies they favor. But given the centrality of this general theoretical expectation in political science research (e.g., Bennet and Resnick 1990; Piven and Cloward 1988; Lijphart 1997), what is perhaps most striking is that so few studies have provided empirical evidence in support of it.

One likely reason for the dearth of empirical research on voter participation and policy outcomes is that American politics scholars in recent decades have focused very heavily on national elections and the U.S. Congress. National politics is certainly an appealing research target: it receives the lion's share of media attention, and it offers troves of easily accessible data to analyze. But national politics may well be a context in which it is quite difficult to detect a relationship between turnout and policy. As Citrin et al. (2003) explain, in national elections, the preferences of voters are not all that different from the preferences of nonvoters. There is also little variation in policy to analyze when the focus is a single policy-making body like the U.S.

Congress. Congressional roll-call votes offer one way out of this dilemma; they at least provide variation in legislators' positions on policies. But policy, of course, is shaped both by action and inaction (Hacker and Pierson 2014, Moe 2015, Pierson 2015). And by focusing on roll-call votes, scholars are looking only at the subset of issues that is being acted upon—and ignoring the effects of what policymakers are *not* doing in a policy area.

For both substantive and methodological reasons, then, it should be much easier to detect a relationship between turnout and policy in state and local governments. First, there are 50 states and tens of thousands of local governments, each with different policies. Second, in local elections in particular, turnout tends to be much lower than in national elections, and thus the potential for turnout bias is much greater (Hajnal and Trounstine 2005). State and local governments therefore stand to be an excellent test bed for the expected link between turnout and policy—a context in which it seems most likely that such a link should exist in detectable form.

Perhaps it is not surprising, then, that the few existing studies that successfully connect the turnout rates of particular demographic groups to political and policy outcomes usually do so with state- and local-level data. It is also not surprising that they focus on two groups of citizens that are known to vote at disproportionately low rates: racial minorities and low-income citizens (e.g., Hajnal and Trounstine 2005; Hill and Leighley 1992). That said, one of the strongest predictors of the individual decision to vote is *age* (e.g., Campbell et al. 1960, Glenn and Grimes 1968). Indeed, Wolfinger and Rosenstone (1980, 102) find that age is one of the most important factors in explaining turnout, second only to education. How, then, does turnout bias in favor of older voters affect public policy? Does the disproportionately high turnout of senior citizens lead to policies that disproportionately favor seniors?

The answer, very simply, is that we do not know. Campbell's (2003) landmark study of Social Security and senior citizens' activity in national politics shows convincingly that seniors have indeed been influential in that arena, but the goal of her study is not to isolate the effect of high turnout; she instead illustrates the multiple channels through which seniors influence Social Security policy. There is also an education finance literature on the so-called "Grey Peril," the general argument being that the size of the local senior population (most of whom do not have school-aged children) has a negative effect on public school spending. Some empirical findings support that argument (e.g., Brunner and Balsdon 2004, Miller 1996, Poterba 1997), but the evidence overall is mixed (see Fletcher and Kenny 2008). Regardless, these school finance studies do not focus on or measure the turnout rates of seniors in local elections. As it stands, we do not have a good sense of how age bias in turnout affects public policy.

Moreover, understanding the impact of seniors' political participation in state and local government is important in its own right. State and local governments account for more than half of all government spending in the United States, and as Kiewiet and McCubbins (2014) explain, these governments today are devoting increasing shares of their budgets to formula-based programs that largely benefit older Americans—most notably, Medicaid and government employees' retirement benefits. Scholars and practitioners alike have argued that state and local spending on older Americans is beginning to crowd out spending on other public services (ibid). In such a policy environment, it is well worth asking whether high senior citizen participation rates affect how governments spend public money, how governments adapt to tightening budgets, and how receptive elected officials are to reform proposals.

This paper is a first step in that direction: it is an attempt to assess the relationship between the importance of senior citizens as voters and the senior-friendliness of local

government policies. As my empirical case, I focus on senior citizen turnout in the elections of over 400 Californian cities, asking whether cities that have larger shares of seniors in the active electorate are more likely to offer special transportation services to seniors. My initial findings, it turns out, are not what the literature leads us to expect: I find no statistically significant relationship between the senior-friendliness of city transportation policies and the percentage of city voters who are 65 and over.

Why, in this case, does it look like the group's electoral presence is *not* significantly associated with the presence of policies favorable to them? The second part of the paper uses this null finding as a launching pad for developing theoretical expectations about the conditions under which a group of citizens *will* influence policy. The crux of my argument is that policies will be more likely to tilt in a group's favor when the group is socially cohesive and focused on issues relevant to the group, and when the group engages in political activities *other* than voting. In a second round of empirical tests, I find strong support for these theoretical expectations.

Senior Citizens in City Elections: Testing the Turnout-Policy Connection

With few exceptions (e.g., Hill and Leighley 1992), research that examines the turnout-policy connection does not actually measure the turnout rates of the particular groups in the particular elections they are focused on—and for good reason. It is notoriously difficult to collect *any* data on voter turnout in local elections, let alone data on the turnout rates of different groups. To get data on turnout in local elections disaggregated by type of voter, one usually has to acquire individual voter files, and in many states, the voter files provided by the state government only provide information on individuals' participation in state elections—not in local elections, which are usually held on different dates. The solution to that problem would be to go county to county (or city to city) to collect and assemble local government voter files, but

that quickly turns into a tedious, costly, and time-consuming process. Thus, while local governments are—in principle—an excellent test bed for the hypothesized turnout-policy connection, there are considerable obstacles to collecting the data needed for such a test.

It is mainly for data availability reasons, then, that I focus my analysis on cities in California. In California, Political Data, Inc., (PDI) collects, cleans, assembles, and regularly updates the voter files of all of the state's local jurisdictions that administer elections. I was therefore able to purchase from PDI data on the number of registered voters, by age, who voted in recent municipal elections in the state. California happens to be a great testing ground for other reasons as well: It has more than 480 municipal governments, each with a population of senior citizens, and each with its own policies. In addition, the timing of regular city elections varies across the state, with some holding elections at the same time as state and national general elections, others holding city races concurrently with state and national primary elections, and still others on entirely different days (off-cycle). Because the timing of elections has such a large impact on overall turnout rates (Anzia 2014, Hajnal et al. 2002), the within-state variation in local election timing makes it likely that age bias in participation will vary from city to city as well (see Hajnal and Trounstine 2005).

In March of 2014, therefore, I used the local election data provided by the California Elections Data Archive (CEDA) to identify the most recent regular election date for each of the state's municipal governments.[2] Then, for that list of city election dates, as well as for the dates of recent statewide primary and general elections, PDI provided city-level data on the number of residents who were registered and the number who voted in that election, broken down by age.

[2] At the time, the most recent year of election data available through the CEDA was 2012, so the most recent election figures in my dataset are from November 2012.

A few caveats about this dataset are worth mentioning. First, because some of the smallest cities do not hold elections every cycle (for example, they might skip an election if the race is uncontested), I limit my analysis to cities with at least 1,000 residents. I also exclude four cities with more than 1,000 residents that did not, according to the CEDA data, have a regular election between 2008 and 2012. Of the remaining cities, some were not included in the data sent by PDI; most of these were cities that held their regular elections on highly unusual days, such as Piedmont and Modesto, which held elections in February of 2012.[3] Even with these cities excluded, however, the PDI dataset contains rich information on the age distribution of registered and voting citizens in the elections of 433 California cities.[4]

Age and Turnout in California City Elections

Given how little we know about voters in local elections (see Oliver 2012), an important starting point is to simply describe how registration and voting rates vary by age in these cities. First, what percentage of city residents in each age category are registered to vote? To answer that question, I started with the PDI data on the number of registered voters in each age category and city as of the November 2010 election, and then I merged in city-by-age population data from the 2010 U.S. Census to calculate—for each age category and each of the 433 cities—the percentage of the city population registered to vote. The first row of Table 1 presents the average percent registered for two categories of city residents: those who are between 20 and 45 years old, and those who are between 65 and 90 years old.[5] On average, 57% of the younger group is registered to vote, whereas 74% of the older residents are—a significant difference in

[3] I also exclude Laguna Woods, 90 percent of which is a retirement community.
[4] All of the elections in this dataset were held between 2008 and 2012. It is important to note that the PDI data tell us how many people voted in a particular city on a particular day—not how many people voted in particular races on those days. Therefore, if some voters turned out to vote for the president in November 2012 and did not cast a vote in city races, those voters are still counted as having turned out on the city election day.
[5] For all of the analysis to follow, I limit the data to residents 90 years old and younger, because many cities have very small numbers of residents older than 90, and because the registration figures are less reliable for those over 90.

favor of older citizens. Then, of those registered to vote, what percentage voted in the most recent city election? Those figures are presented in row 2 of Table 1. I find that 47% of the registered 20- to 45-year-olds in the average city voted, compared to 74% of the 65- to 90-year-olds. Thus, in the typical California city, city electorates tilt strongly in favor of older residents, both because older residents are more likely to be registered, and because among those registered, older residents vote in local elections at much higher rates.

Does the age gap in turnout depend on when the city election is held? I explore this in rows 3-6 of Table 1, where I calculate the percentage of registered voters in each age category who voted in the most recent city election, broken down by when the election was held. Rows 3-6 show not only that overall turnout is highest in city elections held concurrently with presidential elections, but also that the turnout gap between the two age groups is smallest in those cities as well. Specifically, for cities in row 3, the age gap is 23 percentage points. By contrast, it is 32 points during midterms, 31 points during off-cycle elections, and 46 points during statewide primaries. Thus, age bias in turnout does depend on the timing of city elections—and is especially large in cities that hold their elections concurrently with primaries.[6]

What does all of this mean for the composition of the electorate in city elections? After all, a high turnout rate among a very small group of citizens might not weigh heavily on the decisions of election-oriented politicians. High turnout by a large group, by contrast, should matter a great deal. Because my goal is to test whether elected officials are more responsive to

[6] In the online appendix, I regress the age gap in turnout on indicators for the timing of the city's election and other city and election characteristics. The coefficients on the election timing indicators are statistically significant, but only one of the other independent variables—the percentage of residents living in urban areas—is a significant predictor. Also, one might be concerned that Table 1 is simply picking up differences in the cities that have elections at these four times. In the online appendix, I examine how the age composition of the electorate varies *within* cities on different election dates, and the patterns I find are the same as those shown here.

groups that make up a larger share of the voting electorate, the quantity of greatest interest here is the percentage of city election voters who are senior citizens.

For each city, therefore, I calculate the percentage of city election voters who are between 65 and 90 years of age—a variable I call *Percent senior*. The distribution of *Percent senior* in the dataset ranges from 10% to 62% and is shown by the solid line in Figure 1. That figure also shows the distributions of two other variables for comparison purposes: the percentage of the city *voting-age population* that is between 65 and 90 years old (the dotted line) and the percentage of city *registered voters* who are between 65 and 90 years old (the dashed line). Focusing on the dotted line, we can see that in the median city, seniors make up 15% of the voting-age population, but they make up 19% of those registered and an even larger 25% of voters in city elections. There is also right skew in the distribution of *Percent senior*: in 104 of the 433 cities, for example, more than a *third* of the voters are senior citizens—even though their presence in the population as a whole in those cities is considerably smaller. Therefore, the electoral presence of senior citizens varies a great deal across Californian cities. In what follows, I test whether this variation helps to explain variation in city policy.

City Transportation Services for Senior Citizens

To test the turnout-policy connection, it would be helpful to have city-level measures of seniors' policy preferences; with those data in hand, and with data on what cities actually do in those policy areas, I could test whether city policies are more aligned with seniors' preferences when seniors make up a greater percentage of the city electorate. Unfortunately, however, there are no public opinion data that detail the preferences of senior citizens on local policy issues in each of these 433 cities. An alternative approach, then, is to ask whether there are local policies for which it is safe to assume that seniors have certain preferences—and moreover, preferences

that diverge from those of non-seniors. If so, one way forward would be to measure city variation in those policies and test whether *Percent senior* helps to explain that variation.

A good candidate for that approach, I argue, is local transportation policy—specifically, local transportation services designed for senior citizens. Many cities, counties, and special districts across the United States provide what is called demand-response (DR) service, which is defined by the Federal Transit Administration as "a transit mode comprised of passenger cars, vans or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations."[7] DR service is therefore different from standard public transportation in that it usually does not follow a fixed route or operate on a set schedule; instead, it picks up and drops off users in the locations of the users' requests. Many local governments do not provide DR service, but the ones that do typically provide the service for senior citizens, disabled citizens, or both. My assumption, then, is that seniors would rather have access to DR service than not, and moreover that they would rather have a service exclusively for them (and the disabled) than a service that is open to the public. Non-seniors, by contrast, do not directly benefit from DR service (unless it is available to the general public), and so by comparison, we should expect them to be less strongly in favor of DR service for seniors.[8]

With this logic as the motivation, during the spring of 2014, I hand-collected data on the DR services available to senior citizens in each California municipality. Most of the information

[7] Federal Transit Administration, 2013. "National Transit Database Glossary." Charlottesville, VA: Federal Transit Administration. Available at http://www.ntdprogram.gov/ntdprogram/Glossary.htm (accessed January 30, 2014).
[8] Most other city policy areas do not have these features. Many of the most common city services—such as street sweeping, refuse collection, and public parks—are distributed relatively equally among city residents (Oliver 2012). For example, seniors might prefer high spending on public safety, but the preferences of non-seniors might not be all that different. Another possibility is tax policy; as I explained earlier, one argument in the education finance literature is that seniors prefer lower taxes and less spending on public schools than younger residents. But it is not obvious that the same should be true of city tax policy; seniors presumably do benefit—sometimes very directly—from city services paid for by local taxes.

was available on the websites of California's cities, counties, and transit authorities, but when needed, I followed up with phone calls to the relevant agencies. Over the course of two months, I mapped out which DR services were available to seniors living in each municipal government. In addition to identifying whether DR service was available, I made note of the agency providing the service, the geographic area served, and age or other eligibility requirements of the service. The result was a dataset of all the public DR services available to senior citizens in California.

In roughly a third of the 433 cities, senior citizens do not have access to DR service, but in the cities where they do, the most common provider is the city government itself. Specifically, there are 172 cities in which seniors have access to a DR service provided by a city agency—most often a transportation department, a parks and recreation department, a human services department, or the city manager's office. In addition, seniors in 88 cities have DR service provided by regional transit authorities or transit districts; these entities serve multiple cities and are typically governed by boards composed of city council members and county commissioners from the jurisdictions served. And finally, 83 cities have DR service for seniors provided by the county government. There are a few cities that have more than one DR service for seniors; for example, 37 of the cities that have county-provided DR service have a second DR service provided by a transit authority or a city agency.

If only city agencies could provide DR service, then testing for the turnout-policy link in city government would be straightforward. The question, then, is how to deal with cities that receive service from a regional transit authority or a county government. Because the governing boards of transit authorities are usually composed of city councilmembers from the various cities

they serve (and county commissioners),[9] the governing boards of transit authorities may well pay attention to voters in city elections. But there is little reason to expect a link between city elections and policies made by county governments. For these reasons, in the analysis to follow, I categorize cities according to whether they receive DR service from either city agencies or transit authorities. Specifically, the dependent variable *DR service* equals 0 if the city's seniors have no access to DR service from a city or transit authority (183 cities), 1 if seniors have access to a DR service that is also available to the public (83 cities), and 2 if seniors have access to DR service that is exclusively for seniors (167 cities).

To test whether the percentage of seniors in the electorate affects the senior-friendliness of city transportation policy, I regress this dependent variable on *Percent senior* using an ordinal logit model.[10] If the hypothesis implied by the literature is correct, then the coefficient on *Percent senior* should be positive: cities where a larger percentage of city election voters are seniors should be more likely to provide DR service to their senior residents.

Even if this hypothesis is correct, there may be city characteristics correlated with both the percentage of seniors in the electorate *and* the senior-friendliness of transportation. For example, perhaps larger cities, or cities with greater density, tend to have lower percentages of seniors in the population (and in the electorate), but also have greater government capacity to provide DR service. For this reason, I include log city population and log population density in the model (as measured by the 2010 U.S. Census), expecting them to have a positive relationship with *DR service*. Income may be a factor as well if cities with high percentages of seniors tend

[9] For example, the city of Canyon Lake is served by the DR service of the Riverside Transit Authority, and the Board of Directors for that authority includes a city councilmember from Canyon Lake (as well as city councilmembers from the other cities served, and representatives from Riverside County).

[10] My conclusions are mostly the same when I use OLS, which treats the intervals between adjacent categories as equal. It is not clear that such an assumption about equal intervals is warranted, however. For example, it is reasonable to think that, for seniors, having some DR service is much better than having none, even if it is open to the public. However, compared to DR service open to the public, having an exclusive DR service for seniors is arguably somewhat better.

to be less affluent and less able to afford DR service. To account for this possibility, I include log per capita income in the model.[11] In addition, it may be that more liberal cities provide a wider array of services and also tend to have younger populations, so I include the percentage of the city's two-party vote that went to Barack Obama in November 2012. Finally, city officials are probably less inclined to provide DR service if the county already provides it, so I include a measure of the senior-friendliness of DR service provided by the county government: mirroring the dependent variable, it equals 0 if the county provides no DR service to the city, 1 if it provides DR service to the general public in the city, and 2 if it provides DR service exclusively for the city's seniors.

This last independent variable is meant to address how city officials' decisions might be influenced by the services that county governments provide, but it also raises the question of whether cities within the same county share other important characteristics in common—and whether the model needs to be adjusted accordingly. It is true, for example, that many counties provide transportation funding to their cities and transit authorities, and that they are often charged with distributing state money to local governments within their boundaries. The concern, then, is that if I estimate a positive coefficient on *Percent senior*, it may have little to do with city officials responding to city voters. Instead, one could argue, it is driven by counties with large senior populations that just happen to have relatively large budgets for transportation.

In what follows, I deal with this concern in two ways. First, I cluster the standard errors in each model by county to address correlation of the errors of cities in the same county. In addition, I estimate models both with and without county fixed effects. On the one hand, including 53 dummy variables in a model with 433 observations places heavy demands on the estimation. But including the county fixed effects does allow me to account for city features that

[11] The city income data come from the American Community Survey; I use the five-year estimates from 2013.

are constant for cities within the same county, such as higher overall transportation funding levels. In what follows, then, I use both approaches: I start by comparing similar cities across counties, and then I limit the comparisons to cities within the same county.

I begin with the basic model: a regression of *DR service* on *Percent senior* and the city-level control variables. The coefficient estimates and standard errors are presented in column 1 of Table 2. Based on those results, does it look as though local transportation policy is more senior-friendly in cities where larger percentages of city voters are seniors? The answer, very clearly, is no: the coefficient on *Percent senior* is statistically insignificant. It does look as though larger and denser cities tend to have transportation policies friendlier to seniors; the coefficients on log population and log population density are both positive and statistically significant. But surprisingly, even with these city-level factors taken into account, the results of this model do *not* show that cities with more seniors in the electorate are more likely to have policies that cater to seniors.

Could it be that cities in the same county share characteristics correlated with *Percent senior* and *DR service*—and that omitting these characteristics from the model works to mask a positive relationship between senior turnout and policy? To test this, I add county fixed effects to the model in column 2 (and exclude the county DR service control variable). As before, I find that larger cities are more likely to provide DR services. But again, the estimates give no indication that seniors' voting presence is positively associated with senior transit provision. In fact, the coefficient on *Percent senior* is negative—a finding that is hard to square with the idea that higher senior turnout leads to policies friendlier to seniors.

Given that this null finding is not what the American politics literature leads us to expect, what can explain it? Could it be, perhaps, that the operationalization of the dependent variable is

problematic? To evaluate this possibility, I use two simpler dependent variables in columns 3 and 4. The dependent variable in column 3 equals 1 if a city's seniors have access to any DR service from a city agency or transit authority—regardless of who else can use it; it equals 0 if the city has no DR service. Even in this logit model however, I find no significant effect of senior turnout on policy.[12] Here, it does appear that having a county-provided DR service makes cities less likely to provide their own, and counter to my expectations, I find that more Democratic cities are less likely to provide DR service. But for the main variable of interest, I do not find the expected relationship: the coefficient on *Percent senior* is still insignificant.

In column 4, the dependent variable is a binary indicator for whether seniors have access to DR service provided by the *city* government; indicators for whether a city gets services from transit authorities and county governments enter as controls. Intuitively, I find that city officials are less likely to provide DR service if the city's seniors already get such a service from a transit authority. Even controlling for these variables, however, and focusing exclusively on whether the city government provides DR service, I do not find the expected relationship between senior turnout and senior-friendly policy.

Another possibility is that it may be difficult to detect a positive relationship (supposing one exists) using cross-sectional data. After all, *Percent senior* in columns 1 through 4 captures the importance of seniors in *recent* city elections, even though several cities' DR services were started many years ago. Is it possible, then, that in the years leading up to DR service adoption, cities saw much higher senior turnout—and that that higher senior turnout (not captured in my data) was, in fact, what pressured city officials to enact senior-friendly policy?

[12] The county DR control variable in column 3 is also just a binary indicator for whether the county government provides any DR service to seniors in the city.

To test this possibility, one would like to have panel data on city DR service provision as well as historical city election turnout data broken down by age. Unfortunately, those data do not exist: there is no way to acquire reliable panel data on city DR service provision in California, and even if I could, obtaining historical city election turnout data broken down by age for 433 cities is prohibitively difficult. That said, by turning to historical data on city election timing, it is possible to make some reasonable assumptions about how well *Percent senior* from recent elections represents *Percent senior* from past city elections. As I discussed earlier, the share of seniors in a city's electorate depends heavily on when the city elections are held. And as I show in the online appendix (using additional data from PDI), for cities that don't change their election schedules, *Percent senior* fluctuates very little from election to election. For example, when I examine the set of cities that have consistently held on-cycle elections since the 1990s, I find that the median within-city difference between *Percent senior* in November 2006 and *Percent senior* in November 2010 is a mere 1 percentage point. Moreover, most of the cities in this dataset have had the same election schedules since 1996—the first year that CEDA began compiling local election data. Thus, for most cities, *Percent senior* in recent elections is probably a good measure of seniors' voting presence in past elections, and we need not worry much that past city electorates—for example, the ones immediately preceding the adoption of DR services—featured much larger shares of senior citizens.

That said, there are 46 cities in the dataset that *have* changed their election schedules since 1996. For most of these cities, I do not have data on the age breakdown of voters in their elections before they switched to their new schedules, because almost all of them changed their election schedules during the 1990s and early 2000s. There are 7 cities, however, in which the election timing change is fairly recent, and for them, I was able to obtain PDI data by age for the

cities' final elections before they switched. In the online appendix, I show that these cities indeed saw a large change in *Percent senior* from before to after the election timing change.

As a next step, then, I return to the original model from column 1 of Table 2, but I make adjustments for these 46 cities that have switched their election schedules since the mid-1990s. Specifically, I exclude the 39 cities for which I don't have *Percent senior* from a representative city election before they changed their election timing, and for the 7 cities for which I do, I use the value of *Percent senior* from the election before the timing switch—not (as before) the information from the most recent city election. I present the results of this model, with these adjustments incorporated, in column 5 of Table 2. Strikingly, even with these adjustments, I find no clear association between the importance of seniors in city electorates and the senior-friendliness of city transportation policy: the coefficient on *Percent senior* is still statistically indistinguishable from zero.

One final possibility worth entertaining is whether there is something about DR service in particular that is problematic—and that makes it difficult to uncover a positive relationship between senior turnout and policy. Perhaps, one could argue, it is better to look at each city's total expenditures on public transportation, and then assess whether cities with larger shares of seniors in the electorate spend more overall on this government function.

Analyzing total public transit expenditures would certainly broaden the analysis, but it is important to recognize that looking more narrowly at DR service actually offers a cleaner test of the hypothesized turnout-policy connection. DR service is usually exclusively for seniors and the disabled, whereas almost all other forms of public transportation are available to everyone. Thus, it is not obvious that seniors should be more in favor of public transportation spending than non-seniors. Even so, to round out the analysis, I explore this in columns 6 and 7, where I

use OLS to model each city's logged per capita public transit operating expenditures from 2014, using data from the California State Controller's Office.

In column 6, which is a model without county fixed effects, I actually do estimate a positive coefficient on *Percent senior*, indicating that cities with greater shares of seniors in the electorate do spend more, overall, on public transit. However, omitted county-level characteristics are arguably an even bigger threat here than they were in the models of *DR service*. That is, if counties with relatively large senior populations also happen to have large budgets for transportation—a portion of which is distributed to cities within each county—then the positive coefficient on *Percent senior* might simply reflect those cross-county differences rather than city officials' differential responsiveness to their electorates. In column 7, then, I add county fixed effects to the model, partialling out the effects of unobserved city characteristics that are constant for cities within the same county. And as I show in column 7, once I introduce county fixed effects, the coefficient on *Percent senior* is no longer statistically significant. Therefore, even when I look at overall public transit spending—a second-best measure of the senior-friendliness of policy, but one that is less narrow—I do not find a robust effect of the share of senior citizens in the electorate.

It is important to remember that this is, in many ways, a context in which it should be fairly *easy* to detect the expected positive relationship between the importance of a group in the electorate and public policies that cater to that group. This empirical design allows me to compare hundreds of governments, each with different policies. It focuses on a group of citizens that is known to have great influence on national policy (Campbell 2003). And instead of assuming something about the importance of seniors as voters in elections, I have measured it—and tested whether it can explain variation in policies friendly to seniors. Yet I have not found

the expected relationship. Contrary to the general expectations of the literature, I have found that on average, there is no clear evidence of a turnout-policy connection.

Theory: When Does a Group of Citizens Have Influence?

Several questions emerge from this analysis. Why does senior turnout *not* explain the senior-friendliness of transportation policy? If the size of this group's voting presence doesn't matter, then what *does* explain variation in policy outcomes? Given that these empirical findings fail to support such a strong expectation in the political science literature, there is opportunity here for theoretical development. And to pursue that theoretical development, I propose that we begin by asking: beyond high turnout, what conditions have to be met in order for a group of citizens to influence public policy?

One easy response—and one that fits nicely within the Downsian theoretical framework (Downs 1957)—is that group members have to have preferences that are distinct from non-group members (see, e.g., Citrin et al. 2003, Schlozman et al. 2012). If seniors' preferences are roughly the same as those of non-seniors, we should not expect seniors' share of the electorate to make a difference to public policy. But in the case analyzed here, it is difficult to see how this could be the explanation for the null findings. After all, I chose to examine senior transportation services *because* it is safe to assume that seniors' preferences on the issue look different than those of non-seniors. Seniors benefit directly from DR services in a way that non-seniors do not: they are the ones using the transportation. And so in this case, it is unlikely that the null effect of senior turnout can be explained by similarity in the preferences of seniors and non-seniors.

Instead, I propose that we should first draw a distinction between the substance of citizens' preferences and the *focus* of the citizens who hold those preferences. Because even if citizens are able to state a preference on a policy issue when asked, that issue may or may not

actually be important to them. As Arnold (1990) explains in his discussion of "attentive publics," some groups of citizens feel passionately about a particular issue and weigh that issue heavily in their vote decisions, whereas others—even if they can state an opinion—are less attentive to the issue and make their vote decisions on the basis of other factors. One possibility, then, is that having homogenous, distinct preferences on an issue is not enough for a group's turnout to affect policymakers' decisions. If Arnold's logic is correct, the group also has to be focused on the issue and willing to vote (at least partly) on that basis.

If that's the case, then the logical next question is: what makes certain groups of citizens focused on particular issues and others less focused? In the modern American politics literature, this is not a central research question, but several decades ago, it was a core concern of scholars studying political behavior. And some of the classics of American politics suggest that individuals' preferences—and their prioritization of certain issues—are shaped heavily by their social interactions. For example, Berelson et al. (1954) argued that people's political views are shaped by the groups they associate with, and that organizational memberships reinforce individuals' latent political dispositions. In *The American Voter*, Campbell et al. (1960) analyzed how group membership influences individuals' behaviors and political views, writing that "when primary groups engage in political discussion and are homogenous in basic member viewpoints, the attitudes of the individual must be continually reinforced as he sees similar opinions echoed in the social group" (ibid, 293). These early works therefore stressed the importance of social networks for explaining political behavior—including individuals' policy preferences, the intensity of those preferences, and individuals' commitment to the issues most relevant to their social networks and groups.

In more recent work, scholars have begun to build on these insights using newer data and more sophisticated methodology, and they have provided more evidence of the importance of social influences on individuals. For example, Sinclair (2012), Nickerson (2008), and Gerber, Green, and Larimer (2008) use experiments to show that social networks do indeed influence political behavior—and not only through the sharing of information that occurs in groups, but also by imposing social pressure on members. And while it is true that American society as a whole has seen considerable decline in group memberships that involve social interaction (Putnam 2000, Skocpol 2003), there are still many forums—such as workplaces—in which social interaction helps to shape people's preferences and political orientation (e.g., Estlund 2003, Mutz and Mondak 2006, Hertel-Fernandez 2016). Increasingly, then, political scientists are looking to social networks and group memberships as potentially important influencers of individuals' political behavior—and finding evidence that they do, in fact, matter.

So far, however, this newer work has focused on evaluating the effects of social networks on individual-level political actions such as turning out to vote and contributing money to campaigns; it has not, by contrast, explored how social networks shape individuals' preferences on particular policy issues, the intensity with which they hold such preferences, or individuals' willingness to take political action on the basis of those preferences. But there is good reason to think that social networks should affect these things as well. If strong social ties to a group make an individual more likely to vote or contribute money, they probably also influence, reinforce, and intensify the individual's views on policy issues—especially the policy issues most relevant to members of the group. Arnold (1990) suggests as much in noting that citizens who interact frequently are more likely to become attentive publics. And thus it may well be that groups of citizens who regularly interact, who are part of what Campbell et al. (1960) call "self-conscious

groups,"[13] and who are part of tightly-knit social and political networks, have more focused preferences on issues of relevance to the group, and are more likely to vote and participate in politics on the basis of those preferences. Furthermore, it may be that this factor—how interactive and focused the group is—counts for more in influencing policy than simply the sheer number of voters in a community who share certain demographic traits.

The practical challenge, of course, lies in measuring the social interactions of groups. As Sinclair (2012, pp. 17-18) explains, identifying and measuring social and political networks is extremely difficult—and there is no one perfect way of doing it. In the specific case of senior citizens in California city governments, there simply aren't any existing data on the interactions and group-focus of seniors in each of the 433 cities in my dataset. And yet data challenges aside, this may well be incredibly important for understanding seniors' political effectiveness: data from the 2006 Social Capital Community Survey, for example, show that seniors who participate in senior groups are more likely to vote, sign petitions, and attend public meetings than seniors who do not.[14] The question, then, is how we might identify communities where seniors interact a great deal and are politically focused on senior issues—and distinguish them from communities where seniors interact less, have less focus, and vote on the basis of other matters.

I propose that one reasonable way of doing this is to distinguish between cities with and without senior centers. Senior centers provide a variety of services to communities' seniors, and they are also places where seniors interact socially as a group. On average, then, I expect that

[13] Campbell et al. (1960, p. 293) distinguish between "self-conscious groups, such as racial or ethnic communities, and those groups that emerge from certain formal categories, such as the age cohort of people over 60 years old or such as women." For the former, individuals are "part of a group conscious of itself as a group" (ibid, 473)—or members. The latter simply have some shared demographic characteristic.

[14] See the online appendix for details. These data are from the Social Capital Community Survey, 2006 (computer file), http://www.ropercenter.uconn.edu/data_access/data/datasets/social_capital_community_survey_2006.html (Roper Center for Public Opinion Research Study USMISC2006-SOCCAP Version 2, Saguaro Seminar [producer], accessed December 2, 2012), 2006. Storrs, CT: The Roper Center for Public Opinion Research, University of Connecticut (distributor), 2009.

seniors in cities with senior centers should be more attentive to local senior issues than those in cities without senior centers. If that is true, and if the group-oriented focus of a community of citizens matters for their political influence, then cities with senior centers should also be more likely to have senior-friendly transportation. Following this logic, I used information on the Congress of California Seniors' website, cross-checked with information on cities' official websites, to create an indicator equal to 1 if the city has a senior center (360 cities) and 0 if it does not (73 cities). In what follows, I use this variable to test whether a group of citizens whose members are *focused* on issues relevant to the group are more likely to receive favorable policies than a group that is less politically focused.

This, then, is one way of answering the question I posed earlier—about the conditions that have to hold in order for a group of citizens to have influence. Another possibility is that *other* forms of political activity are actually more important than voting for influencing public policy. After all, a citizen's vote for a candidate, by itself, does not clearly communicate policy preferences. And especially in local politics, where there are few public opinion polls, elections are usually nonpartisan, and politics is less ideological than at the national level (Oliver 2012), elected officials may not actually know what citizens want—even if those citizens vote at high rates. If so, then political activities that *do* convey citizens' preferences on issues—activities such as contacting elected officials, testifying at hearings, or lobbying as a group—might be key to whether a group of citizens secures policy outcomes they favor.

In proposing such a possibility, I join a growing number of American politics scholars arguing (and finding) that for influencing politics and policy, non-voting forms of political activity are just as important, if not more important, than voting. Consider work by Bartels (2008, pp. 275-279): even when he controls for the differential voting rates of low-, middle-, and

high-income citizens, he finds that U.S. senators are still mostly responsive to the preferences of high-income voters in their roll-call votes—which suggests that high-income citizens are having influence through some *other* form of political activity. Martin (2003) notes that political activities like contacting elected officials convey much more "policy content" to decision-makers than voting (see also Schlozman et al. 2012, Verba et al. 1995), and Arnold (1990) explains that many attentive publics are highly organized and communicate their members' policy preferences by lobbying (see also Griffin and Newman 2005). Recent theoretical work by Hacker and Pierson (2010, 2014) and Bawn et al. (2012) pushes back more forcefully against the Downsian theoretical framework—which puts voters in a central role—arguing that American politics scholars have not paid enough attention to the political influence of interest groups. In supportive evidence, Gilens and Page (2014) find that when it comes to explaining congressional roll-call votes, the preferences of economic elites and interest groups are more important than the preferences of the median voter in the electorate.

If voting is not enough to have influence, then what might a more comprehensive model of political influence look like? Campbell's (2003) study of senior citizens and Social Security is a good example: it illustrates the many ways in which groups of citizens can influence policy—and what conditions must hold for them to be successful. Voter turnout is certainly a part of the story. Prior to the expansion of Social Security, Campbell explains, senior citizens participated at rates similar to or even lower than those of young citizens, and when the program expanded—giving seniors greater time and income—their turnout increased. But the expansion of Social Security did more than increase seniors' numbers as voters. It also enhanced the content and meaning of their participation, through several channels. Seniors increasingly wrote letters to policymakers to communicate their preferences, and their preferences became much

more intensely focused on Social Security. They also gained clout through the AARP, and political parties began to mobilize them around the issue. Seniors' voices also found a more formal place within government itself: key government agencies, such as the Social Security Administration and the Agency on Aging, became important vehicles for communicating the interests of seniors to policymakers. And so while seniors' voting rates did increase after the expansion of Social Security, there were many other changes that also contributed to their enhanced political clout and policy success.

Turning back to seniors in California cities, this implies that there could be many ways—other than voting—that seniors might influence city policy. Seniors might attend city council meetings or contact their elected officials directly. They might be active through interest groups or as key players in political parties. One challenge, however, is that in the context of California cities, these channels are either hard to measure or are likely irrelevant: there are no records of city council meeting attendance that note the ages of those testifying, local elections in California are formally nonpartisan, and in research I have done elsewhere, I have found that city councilmembers and mayors across the United States report very little political activity by formal organizations of senior citizens (Anzia 2015). However, there is one type of city institution that is easier to measure and could be an important way that seniors voice their preferences to elected officials: senior commissions.

Nearly all city governments in the United States have citizen authorities, boards, or commissions,[15] most of which have appointed members who advise the city council on designated issues (such as zoning). Senior commissions, in particular, are set up to consider and advise city officials on policy matters of interest to seniors. These commissions are therefore a

[15] According to the ICMA 2011 Municipal Form of Government Survey, 95% of respondent municipalities report having some boards and commissions, including all but 5 of the 209 California cities that responded to the survey.

potentially quite important way in which a community's seniors can make themselves heard—and exercise influence. To test whether this is the case, for each of the 433 cities in my dataset, I used information on cities' websites—following up with a phone call if necessary—to establish whether or not each city has a senior board or commission. The hypothesis, then, is that the 106 cities that have senior commissions will be more likely to provide DR service exclusively for seniors than the cities without senior commissions.

Empirical Analysis: Turnout, Senior Centers, and Senior Commissions

Are city governments more likely to provide senior-friendly transportation services where seniors are socially interactive and politically focused? Are city officials more responsive to senior citizens when those seniors have access to other channels—beyond voting—for voicing their concerns to policymakers? In the next set of empirical tests, I turn to these questions, again using ordinal logit to model each city's *DR service.* I include all of the same independent variables as before; the difference here is that I also include *Senior center* as a measure of senior social cohesion and *Senior commission* as a measure of seniors' non-voting political activity.

As before, I start with the simplest model that includes all 433 cities and excludes county fixed effects; the estimates are presented in column 1 of Table 3. The coefficient on *Percent senior* is still statistically insignificant, as before. Strikingly, however, both of the new variables—*Senior center* and *Senior commission*—have a positive, statistically significant relationship with the senior-friendliness of city transportation. To give a sense of the magnitude of these effects, in Table 4, I use the estimates of this model to calculate the predicted probability that a city will have DR service exclusively for seniors. (I calculate the probabilities using Clarify (Tomz et al. 2003), setting the continuous variables at their means and *County DR* at zero.) There, in the top panel, we can see that the predicted probability of exclusive DR service

in a city with no senior center and no senior commission is only 25%. By contrast, cities with senior centers (but no senior commissions) are predicted to have exclusive DR service 39% of the time—a 14 point difference. The same is true of cities with senior commissions but no senior centers: the model predicts that 39% will have exclusive DR service. And in cities with both senior centers and senior commissions, the expectation is that 55% will have exclusive DR service for seniors—more than double the rate of cities with neither.

Next, in column 2 of Table 3, I estimate the same model, this time without the 39 cities that changed their election schedules within the last two decades.[16] As before, *Percent senior* is statistically insignificant, but having a senior center and a senior commission are both positively associated with having DR service. And in column 3, when I add county fixed effects to the model, I find the same patterns. Thus, even when I focus on variation within counties, I still find that cities with these institutions are significantly more likely to have senior-friendly transportation.[17]

One might be concerned, however, that these effects are not causal; it may be, for instance, that some unobserved city characteristic explains both the presence of these city institutions *and* the senior-friendliness of city transportation policy. One possibility especially worth considering is whether historical senior activism in the city is the crucial omitted variable—one that is biasing these coefficients upward. If cities with more activist seniors are more likely to have senior centers, senior commissions, *and* senior transportation, we would not want to conclude that senior centers and senior commissions are the causing the policy variation.

[16] As before, I continue to include the 7 cities that recently switched their election schedules and for which I have turnout data from a pre-switch city election.

[17] The predicted probabilities calculated from these models (not shown) are almost exactly the same as those calculated from the first model. In addition to these ordinal logit model estimates, I have used matching to test for differences in the transportation policies of cities with and without senior centers and with and without senior commissions. Even when I match cities on a host of characteristics such as city size, population density, per capita income, Democratic presidential vote share, and *Percent senior*, I still estimate significant, positive effects of both senior centers and senior commissions. See the online appendix.

It is important to point out, however, that even if senior activism *is* a crucial predictor of the availability of senior-friendly transportation, that only strengthens my main conclusion that senior voting is not the most important consideration. Presumably, "activism" implies activities other than turning out to cast ballots in elections. And so even if it were true that senior activism is what explains variation in policy, my main conclusion from earlier would remain unchanged: the turnout-policy link does not hold in this case, and something else—such as another form of political activity—is more important.

Still, in order to evaluate the theoretical argument I laid out above, it is important to consider whether having a senior center and a senior commission does, in fact, make a difference to city policy. And addressing the endogeneity concern requires an understanding of why certain cities got these institutions and others did not. For senior centers, this is a relatively easy task: many senior centers were established during the 1970s and 1980s following the passage of the national Older Americans Act (OAA) of 1965. The OAA created a series of federal grants to address the needs of older people, and one of those grants—started in 1972—was specifically for the purpose of building local senior centers. Thus, not only are most senior centers quite old—dating back to the 1970s and 1980s, before the adoption of most DR services—but also the assignment of senior centers to cities was determined in part by formula, based on local characteristics such as the size of the local senior community at the time.

It is less clear, by contrast, why and when some cities created senior commissions. One possibility, which I raised above, is that seniors are more politically active in certain cities than in others, and politically active seniors are more likely to secure a special commission devoted to their interests. Another possibility is that certain cities, perhaps more progressive cities, simply provide a wider array of services (including senior transit) and are also more inclined to invite

citizens to participate in the policymaking process. If either of these accounts is accurate, then it would call into question whether having a senior commission is actually what causes cities to be more likely to provide DR service.

In an attempt to address these concerns, I add two additional variables to the model in column 4 of Table 3. The first is the share of the city's population that was 65 years or older as of the 1980 Census of Population.[18] Because the allocation of OAA grant funding for senior centers was formulaic, dependent on the number of seniors in communities across the state, this variable is strongly correlated with the presence of a senior center in the city.[19] It is also a rough indicator of historical senior activism in the city—certainly not a perfect measure, but the best available. In addition, I include the log of the total number of citizen commissions, committees, and boards in each city as a predictor, using data I hand-collected from cities' websites. Some cities have no commissions, others have a few, and still others have twenty or more. If there are some cities that simply encourage greater citizen participation, and they also happen to be cities that provide more services, then the number of city commissions should help to capture that—and reduce bias in the estimate of the effect of *Senior commission*.[20]

I present the estimates of this model in Table 3, column 4. The coefficients on the two new control variables are both statistically insignificant: having a larger senior population in 1980 and having a larger number of commissions are not significantly associated with the availability of DR service. More importantly, however, with these controls added, the

[18] This Census variable is missing for 16 cities out of the 394 that were included in column 3.
[19] In the online appendix, I show that city population in 2010 and the share of seniors in the population in 1980 are significant predictors of whether a city has a senior center today. Notably, *Percent senior*—which is the share of seniors in the electorate in recent elections—is *not* a significant predictor of whether a city has a senior center.
[20] In the online appendix, I show that the total number of commissions does predict the presence of a senior commission, as does city population and population density. I was unable to determine the total number of boards, committees, and commissions for 3 cities in the dataset.

coefficients on both *Senior center* and *Senior commission* remain strong and positive.[21] The findings are therefore consistent with my theoretical expectations: when seniors are a cohesive group with focused preferences, and when seniors' voices are heard through participatory channels other than voting, policy outcomes are more likely to tilt in their favor.

In column 4, I test another implication of my theoretical argument. That is, if senior centers give a community's seniors an opportunity to socialize and become more politically focused as a group, then perhaps cities that have had senior centers for a longer time should have even more focused and effective seniors than cities with newer senior centers. To test this, I set out to collect the establishment dates of all 876 senior centers in the Congress of California Seniors' directory; I then coded each city according to its oldest senior center.[22] In column 5 of Table 3, I replace the binary senior center indicator with a measure of senior center age: the log of the number of years a city had had a senior center as of 2014.[23] Consistent with expectations, the coefficient on senior center age is positive and statistically significant. Thus, compared to cities with no senior centers or newer senior centers, cities with older senior centers are indeed more likely to have DR service.

It is worth emphasizing that in all of these models, the coefficient on *Percent senior* remains statistically insignificant—showing that the sheer number of seniors voting has no clear relationship with transportation policy. One additional possibility worth testing, however, is that seniors' presence in the electorate *does* matter under certain conditions—in particular, when seniors are a cohesive group focused on issues relevant to seniors. Perhaps, in those contexts,

[21] The same is true when I add county fixed effects to the model; results not shown.
[22] Some centers had the information on their websites; others required an email or phone call. In the end, I was able to acquire the exact establishment date or an approximate date for 757 of the senior centers. Of the 360 cities in my dataset with a senior center, I acquired the establishment date for at least one center in 326 of them.
[23] This equals zero for cities that did not have senior centers as of 2014. I take the natural log because a few large cities had some senior centers as far back as the 1920s, giving the distribution of *Age of senior center* a long right tail. I am missing this variable for an additional 24 cities, bringing the number of observations in this model to 351.

the size of the senior voting bloc *does* matter. The hypothesis to be tested, then, is that the percentage of seniors in the electorate *will* have a positive effect on city transportation policy in cities with senior centers, but it will not have an effect in cities without them.

In column 6 of Table 3, I test this by interacting the *Senior center* variable with *Percent senior*. The coefficient on *Percent senior* is statistically insignificant, indicating that in cities without senior centers, seniors' presence in the electorate has little effect on the availability of senior-friendly transportation. To understand the effect of seniors' electoral presence in cities that do have senior centers, I combine the coefficients on *Percent senior* and its interaction with *Senior center*, with the results shown at the bottom of column 6. There, we can see that the effect is positive—the expected direction—and significant at the 5% level. This suggests that seniors' turnout does matter in some contexts—and in the contexts where seniors interact regularly and are more likely to be focused on issues relevant to the group.

The predicted probabilities from this model are shown in the second panel of Table 4. The predicted probability of exclusive DR service in cities without senior centers or senior commissions is still low—about 19%. But then I calculate two different probabilities for cities with senior centers (and no senior commissions): those with low senior turnout—where seniors make up 16% of city electorates (the 5^{th} percentile)—and those with high senior turnout—where seniors make up 43% of the electorate (the 95^{th} percentile). For the low-turnout cities, the probability of exclusive DR service is 31%. For high-turnout cities, it is 51%. The pattern is similar for cities with senior commissions. Without a senior center, the expectation is that 34% will have exclusive DR service. For cities with senior centers but low senior turnout, the predicted probability is 50%. And in cities with senior commissions, senior centers, *and* high senior turnout, the probability of having exclusive DR service is 70%. Thus, there is some

evidence of a turnout-policy connection for seniors in city politics, but that connection is conditional. In order for a group to be influential as a voting bloc, it has to be a cohesive group—and one that is politically focused on issues relevant to the group.

In a final test, I turn back to the alternative dependent variable from earlier: log per capita expenditures on public transit in 2014. In column 7, I regress each city's public transit expenditures on the same variables as in column 4; as before, I also include county fixed effects to account for cross-county variation in transportation budgets.[24] The results in column 7 are strikingly consistent with the results of the earlier models. The effect of *Percent senior* is statistically insignificant, as before. But I find that cities with senior centers spend more than twice as much per capita on public transit, and I also find that having a senior commission is associated with a 40% increase in public transit expenditures (p=0.103). Thus, the main results focused on DR service are not just reflecting something special about that particular kind of service. Even focusing on this broader dependent variable, the share of seniors in city electorates matters little, while the presence of senior centers and senior commissions matters a great deal.

Discussion

This paper began with a simple purpose and a simple hypothesis. The purpose was to test a core theoretical idea of American politics: that groups of citizens who vote at high rates and make up a larger share of the electorate are more successful in securing favorable policies than groups with a smaller voting presence. For an idea so widely accepted by scholars of American politics, it is surprising that it has been subject to so little empirical testing. Relying on an empirical design that exploits variation in turnout and policy in over 400 California city governments, I set out the straightforward hypothesis that transportation policy would be

[24] Because the dependent variable is public transit expenditures, and because the model includes county fixed effects, I exclude the control for county-level DR service.

friendlier to senior citizens in cities where seniors make up a larger percentage of voters in city elections. Surprisingly, though, my empirical results did not support that expectation. Even though I directly measured the percentage of seniors in city electorates and examined a policy area of relevance to seniors, I found no evidence of the expected turnout-policy connection.

That null finding calls for explanation. In the second part of this paper, I revisited some theoretical contributions of an older political science literature to develop a two-part argument. The first part of the argument is that a group of citizens that is focused on a particular issue and casts votes on the basis of that issue will have more success in getting policies they favor, compared to a group with less focus. There are many factors that likely contribute to a group's focus, but the amount of social interaction in the group—which helps to crystalize and focus members' political views—stands to be an important one. Second, I argue that voting is not a very precise way of communicating a group's policy preferences to elected officials, and other forms of political activity may well have greater policy-shaping impact.

For this study in particular, I have only rough measures of these phenomena for the 433 cities in my analysis. But even with these rough measures, I find considerable support for my argument. Cities with senior centers—where senior citizens regularly interact socially—are more likely to have senior-friendly transportation. Moreover, in the cities that do have senior centers, there is some evidence that seniors' share of the voting electorate is associated with senior-friendly policies. And finally, when cities have senior commissions, which are charged with advising city councils on matters of interest to seniors, once again I find that city policies are more in favor of this demographic group. Therefore, while the exact size of the senior voting bloc does not matter in every situation, it does under certain conditions; and if we really want to explain variation in policy, there are other forms of political activity that matter as well.

As I alluded to earlier, one could raise a number of concerns about my empirical analysis, especially in the second part of the paper. Perhaps the most glaring problem is the possible endogeneity of senior centers and senior commissions, which I attempted to address by controlling for cities' senior populations in 1980 and their overall numbers of citizen commissions, committees, and boards. These controls, of course, are not perfect, and going forward, more work must be done to unpack the channels through which groups of citizens exert influence on policy. But as a step toward learning about what *does* explain variation in policy—and the conditions under which turnout matters—this is a promising set of findings, and one that will hopefully inspire further research on this important subject.

I should emphasize that these findings in no way imply that turnout never matters for policy. As I discussed earlier, there is already some evidence—not much, but some—that turnout does shape policy in particular contexts for particular groups. Hill and Leighley (1992), for example, find that turnout bias in favor of high-income voters in state elections leads to less generous welfare policies. My own research shows that in off-cycle elections, in which overall turnout is low, organized groups with a big stake in the election outcome make up a disproportionately large share of those voting—and are more likely to get policies they favor (Anzia 2014). There is nothing in the findings of this paper that necessarily contradicts those conclusions. This study has only examined one group (seniors) in one context (city elections in California) and its influence on one policy (transportation). Moreover, the results in Tables 3 and 4 suggest that under certain conditions—when the group of citizens is a cohesive unit focused on issues of relevance to the group—the group's voting presence does matter. Turning back to Hill and Leighley (1992), if high-income voters in state elections are very focused on issues such as welfare policy, it makes sense that state policies would be correlated with their

numbers in the electorate. Similarly, my work on election timing looks at organized groups such as teacher unions and municipal employee unions—groups that are very focused on the core policy issues of interest to their members. There is therefore nothing in my findings here that is inconsistent with these studies. And by testing the turnout-policy connection in a new context with a new group, we learn something important about the conditions under which that connection will exist.

Going forward, American politics scholars should pursue other tests of the turnout-policy connection and the conditions that create such a connection. They should also devote greater attention to what makes certain groups attentive publics and others not—and do more to understand the policy effects of political activities other than voting. After all, as Harold Lasswell (1958, p. 7) wrote, "the study of politics is the study of influence and the influential." If a primary aim of political science is to understand influence, it is not enough to only study voting. We must also learn about the conditions under which voting is influential and also the other avenues groups pursue to exert influence. To be sure, collecting data on voter turnout is easier than measuring testimony at government hearings, lobbying interactions, letter-writing to elected officials, and the social interactions of groups. But even if these phenomena are harder to measure and raise thorny questions of identification, they stand to play a very important role in shaping public policy and representation—and their effects need to be understood.

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Figure 1: Senior citizens in California municipalities

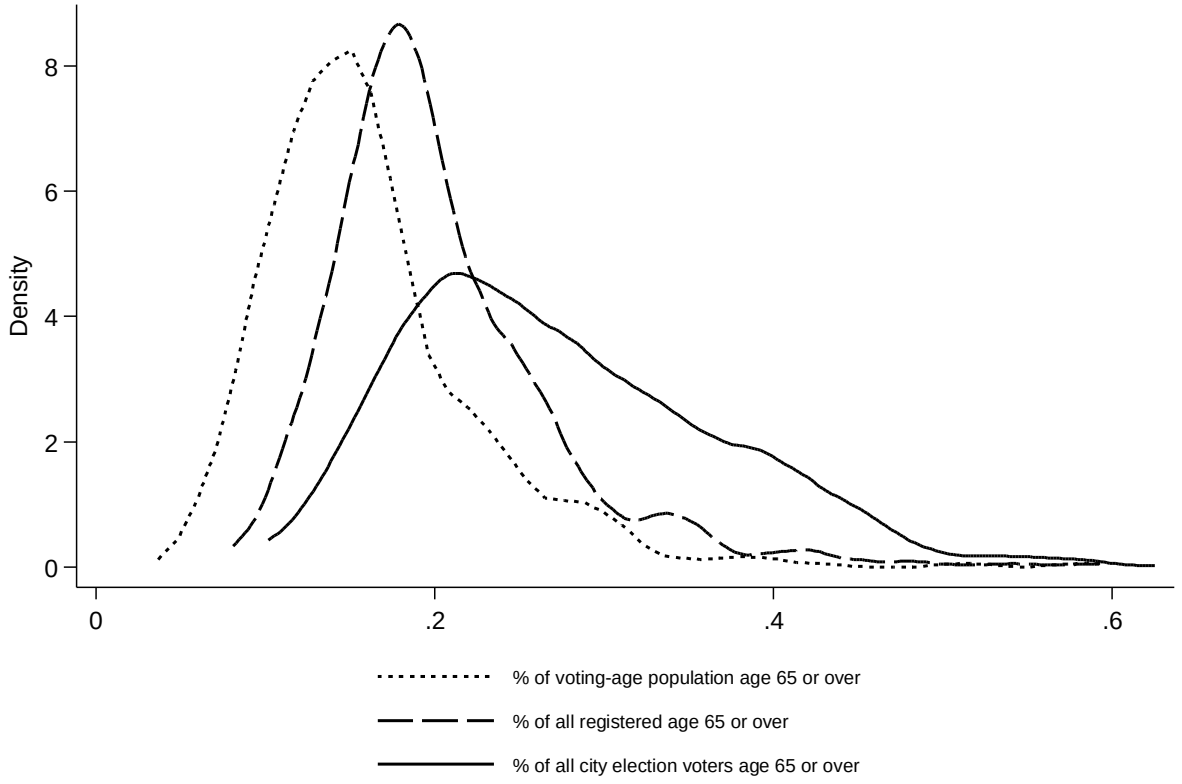

Table 1: Registration and Voting in City Elections, by Age Group

		Ages 20-45	Ages 65-90	Difference	N
(1)	% of Population Registered	0.565	0.742	0.177	433
(2)	% of Registered Voting in City Election	0.473	0.739	0.266	433
(3)	Concurrent with presidential elections	0.614	0.846	0.232	289
(4)	Concurrent with midterm elections	0.474	0.795	0.321	18
(5)	Concurrent with statewide primaries	0.223	0.687	0.464	18
(6)	Off-cycle	0.138	0.451	0.313	108

Notes: For all rows, the difference between the registration/turnout rates of the older and younger voters is statistically significant at the 1% level.

Table 2: Seniors in the Electorate and Senior-Friendly Transportation Policy

	Demand Response Service for Seniors					*Ln(Per Capita Public Transit Expenditures)*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Percent senior	0.548	-2.013	-0.798	0.636	1.253	4.526**	0.93
	(1.823)	(1.278)	(1.821)	(1.883)	(1.667)	(1.935)	(0.903)
Ln(Population)	0.36***	0.398**	0.244	0.382***	0.369***	0.29***	0.368***
	(0.111)	(0.155)	(0.155)	(0.123)	(0.123)	(0.099)	(0.100)
Ln(Population density)	0.32**	-0.029	0.395**	0.644***	0.332**	-0.048	-0.318*
	(0.153)	(0.204)	(0.182)	(0.234)	(0.158)	(0.258)	(0.185)
Ln(Income per capita)	-0.221	-0.582	-0.537	-0.215	-0.21	-0.442*	0.044
	(0.328)	(0.444)	(0.334)	(0.330)	(0.314)	(0.247)	(0.296)
Dem. presidential vote	-1.025	-1.036	-2.329**	-2.57**	-1.118	0.4	0.493
	(1.071)	(1.643)	(1.064)	(1.193)	(1.053)	(1.256)	(1.301)
County DR	-0.314		-1.148**	-0.763	-0.283		
	(0.317)		(0.489)	(0.493)	(0.302)		
Transit authority DR				-1.975***			
				(0.400)			
Model	Ordinal Logit	Ordinal Logit, County FE	Logit	Logit	Ordinal Logit	OLS	OLS, County FE
Observations	433	433	433	433	394	394	394
Pseudo R-squared	0.04	0.23	0.07	0.15	0.04		
R-squared						0.09	0.51

Notes: Standard errors clustered by county in parentheses. The dependent variable in columns 1, 2, and 5 is *DR service*, equal to 0 if the city has no DR service for seniors provided by the city or a transit authority; it equals 1 if the city has DR service for seniors open to the public; it equals 2 if the city has DR service exclusively for seniors and the disabled. The dependent variable in column 3 equals 1 if the city has any DR service for seniors provided by the city or a transit authority. The dependent variable in column 4 equals 1 if the city has any DR service for seniors provided by the city (not transit authorities). The dependent variable in columns 6 and 7 is the log of per capita city public transit expenditures in 2014. All hypothesis tests are two-tailed. * p<0.10; ** p<.05; ***p<0.01.

Table 3: Senior Turnout, Senior Centers, and Senior Commissions

	Demand Response Service for Seniors						*Transit Expend.*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Percent senior	0.595	1.33	-1.302	2.415	2.088	-4.05	1.133
	(1.135)	(1.687)	(1.328)	(1.478)	(1.606)	(3.986)	(1.155)
Senior center	0.634**	0.608*	0.73*	1.13***		-0.898	0.813***
	(0.292)	(0.315)	(0.379)	(0.322)		(0.835)	(0.294)
Senior commission	0.616***	0.65***	0.848***	0.795***	0.871***	0.807***	0.337
	(0.236)	(0.185)	(0.266)	(0.205)	(0.210)	(0.208)	(0.203)
Ln(Population)	0.228**	0.235**	0.25	0.202	0.247**	0.194	0.262**
	(0.096)	(0.112)	(0.164)	(0.124)	(0.118)	(0.124)	(0.105)
Ln(Population density)	0.304**	0.309**	-0.066	0.383**	0.33**	0.38**	-0.343*
	(0.152)	(0.150)	(0.204)	(0.157)	(0.153)	(0.164)	(0.186)
Ln(Income per capita)	-0.207	-0.184	-0.372	-0.198	-0.234	-0.113	0.371
	(0.199)	(0.328)	(0.455)	(0.354)	(0.356)	(0.366)	(0.296)
Dem. presidential vote	-1.163*	-1.203	-0.611	-1.344	-1.458	-1.439	0.885
	(0.705)	(1.058)	(1.403)	(1.027)	(1.032)	(1.048)	(1.422)
County DR	-0.329**	-0.298		-0.263	-0.308	-0.263	
	(0.144)	(0.312)		(0.309)	(0.290)	(0.306)	
Senior population, 1980				-2.328	-1.788	-2.576	-0.291
				(1.752)	(1.770)	(1.786)	(1.426)
Ln(Commissions)				-0.23	-0.228	-0.237	-0.085
				(0.216)	(0.215)	(0.214)	(0.169)
Age of senior center					0.243**		
					(0.097)		
Senior center * Percent senior						7.251**	
						(3.986)	
Model	Ordinal Logit	Ordinal Logit	Ordinal Logit, County FE	Ordinal Logit	Ordinal Logit	Ordinal Logit	OLS, County FE
Observations	433	394	394	375	351	375	375
Pseudo R-squared	0.05	0.06	0.25	0.08	0.08	0.08	
R-squared							0.54
Percent senior + (Senior center*Percent senior)						3.201** (1.383)	

Notes: Standard errors clustered by county in parentheses. The dependent variable in columns 1-6 is *DR Service*; in column 7, it is logged per capita public transit expenditures in 2014. All hypotheses are two-tailed. * p<0.10; **p<0.05; ***p<0.01.

Table 4: Predicted probability of exclusive DR service

		Without Senior Commission	With Senior Commission
(1)	Without Senior Center	0.254	0.388
	With Senior Center	0.391	0.546
(2)	Without Senior Center	0.190	0.341
	With Senior Center, Low *Percent Senior*	0.309	0.497
	With Senior Center, High *Percent Senior*	0.511	0.695