

PUBLIC COMMENT AND PUBLIC POLICY

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Abstract

Is public policy responsive to demographically and ideologically unrepresentative comments given at public meetings? I investigate this possibility using a novel dataset of over 40,000 comments made at the San Francisco Planning Commission between 1998 and 2021, matched to information about proposed developments discussed in hearings and administrative data on commenters. I document four stylized facts: first, commenters at public meetings are unrepresentative of the public along racial, gender, age, and homeownership lines; second, distance to the proposed development predicts commenting behavior, but only among those in opposition; third, commission votes are correlated with commenters' preferences; finally, the alignment of white commenters (vs. other racial groups) and neighborhood group representatives and the general public (vs. other interest groups) better predict project approvals.

Verification Materials:

The data and materials required to verify the computational reproducibility of the results, procedures and analyses in this article are available on the American Journal of Political Science Dataverse within the Harvard Dataverse Network, at: <https://doi.org/10.7910/DVN/WZOC7H>

Assessing whether government policies respond to the preferences of citizens is a key indicator of democratic performance. In this article, I investigate whether public policy is responsive to comments given by members of the public at open meetings. Public meetings are a widespread but understudied form of citizen-government contact: 97% of municipal governments in the United States hold regular public meetings where residents can comment on a wide range of policies (Adams 2004). While the voluminous literature on responsiveness in national or state politics typically relies on comparing aggregate measures of public opinion to votes in a legislature with agenda control, (e.g. Stimson, MacKuen and Erikson 1995; Caughey and Warshaw 2017) in public meetings, officials vote on specific issues immediately after hearing a sampling of the public’s views face-to-face. Evidence suggests that the population of commenters are likely unrepresentative of all city voters or residents; if public officials use comments as a way of gauging mass opinion, this may distort policymaking.

Scholars have generally been skeptical of the ability for public comment to shift policy outcomes. Checkoway (1981) contends that “agency officials may either give cursory consideration to or ignore altogether certain views expressed in hearings.” Difficulties in gathering data on meeting participation and policy outcomes across many decisions has resulted in few opportunities to empirically examine the connection between the two.

Despite this skepticism, there are several reasons to believe that public comments do in fact have an effect on policy outcomes. Interest groups across multiple issue areas and ideologies mobilize to turn out their members to speak at public meetings and provide them with suggested talking points to do so. Public officials in municipal governments identify public meetings as one of the places where they learn about the public opinion of their constituents (Dynes, Karpowitz and Monson 2022). And press accounts have pointed to repeated public consultation as a key factor in the rising cost of infrastructure and the inability for government to function effectively (Klein 2020).

The case I use to study public comment in this article is the San Francisco Planning Commission (SFPC). The SFPC is a body of appointed citizens who “advise the Mayor, Board of Supervisors and City Departments on San Francisco’s long-range goals, policies and programs on a broad array of issues related to land use, transportation, and current planning.” Unlike legislatures, which are typically studied to evaluate responsiveness, commissions in municipal governments are generally not elected. Despite the lack of an electoral connection, these commissions make consequential

policy decisions and are required to solicit public feedback when doing so. Because they focus on one policy area, commission votes are easily comparable. The majority of the public agenda of the SFPC is devoted to hearings on discretionary approvals of proposed private developments. Each development on the agenda has a dedicated period of public comment, where citizens can raise concerns or voice support, prior to the vote on approval by the Commission.

San Francisco is a useful case for several reasons: first, as a large city, there are many proposed development projects seeking entitlements at any time. Second, relative to other cities San Francisco has a longer approval process and more opportunities for public input (O’Neill et al. 2021). Additionally as a large city, there are many interest groups who participate in public meetings and racial diversity in public meeting commenters. Fourth, unique among large cities in California, meeting minutes are digitized back to 1998 and record commenters’ names and whether they are speaking for or against the project. San Francisco is certainly not a representative city along demographic lines or in the centrality of public meetings in political conflict, but it presents a hard case for detecting responsiveness to the general public due to the professionalized and contested nature of land use politics. And given the acute nature of the housing crisis in the San Francisco Bay Area, it is a fruitful place to explore the role that public meetings play in the political economy of housing production.

I collect minutes of the weekly meetings of the SFPC from 1998-2021, coding information about the development projects and issues the Commission reviews, who participates in the public comment process, and the votes and outcomes of projects seeking approvals. Project records are merged with data from the San Francisco Planning Department on proposed developments. I also obtain information about commenters from various administrative records, including the county voting and deed records. Using these joined data I document four stylized facts.

First, I find that commenters are unrepresentative of the general population and voters along a number of lines. Commenters are more likely to be non-Hispanic white than the general population; the median commenter is 23 years older than the median resident; commenters are more politically active and partisan; and commenters are more likely to be homeowners. These findings mirror recent work documenting inequalities in suburban Boston (Einstein, Glick and Palmer 2019) and in Houston and Palo Alto (Yoder 2020), but are striking given that the racial diversity, political liberalism, and high share of renters in San Francisco.

Second, I provide evidence that spatial proximity drives participation in public meeting turnout. Looking at the distance between commenters' home address and the proposed project they speak on, I find that negative commenters are much more likely to be spatially proximate, while the distribution of positive and neutral commenters' distance from the project is uniform. This observed behavior is consistent with not in my backyard (NIMBY) attitudes spurring participation and may lead to a negative bias in the signal of public preferences on development proposals.

Third, I show evidence consistent with responsiveness to the preferences of commenters in the actions taken by the SFPC. Commenters' preferences correlate with project approvals, on their own and when controlling for staff recommendations. This correlation is robust across all entitlement types, project types, and staff recommendations. When the public comment is more favorable towards a project, it has a higher chance of being approved, but I do not present evidence that there is a causal link between the two.

Finally, I show that some groups' preferences correlated more strongly with outcomes than others. Among organized interests, the preferences of neighborhood groups and pro-development groups correlate positively with the actions of the SFPC, while social interest groups, housing interest groups, and pro-development organizations do not. Correlations between the general public's preferences and project approvals are similar to those of successful organized groups. Looking at the net preferences of commenters by race, I find that the preferences of whites are best represented by SFPC votes; the multivariate correlation coefficient of whites' preferences is larger than that of Asian, Black, and Latino's preferences combined.

These four findings indicate that public meetings, contra their intent to allow the voices of marginalized groups to be heard by government, are dominated by white, wealthy, older commenters and organized groups. These interests are not only overrepresented in public debate, but also more likely prevail in setting policy.

1 Responsiveness to Public Comment

Do the policies of the over 90,000 local governments in the United States reflect the preferences of their constituents? While canonical theories of urban politics emphasize the influence of elites in local government (e.g. Dahl 1961; Stone 1989), recent empirical studies have shown a healthy degree of responsiveness to public preferences. These studies have relied on self-described ideology

(Palus 2010), Presidential vote shares (Einstein and Kogan 2016), or survey-based measures of policy liberalism (Tausanovitch and Warshaw 2014) to measure public opinion and spending as the measure of policy liberalism. Studies of policy-specific responsiveness, like Lax and Phillips examination of gay marriage in the states, are rare in local government because of the absence of over-time measures of public preferences and policy change on local issues. Complicating matters further, local governments in increasingly majority Democratic cities engage in policymaking on issues, such as housing and land use, that do not neatly map to single-dimensional measurements of policy liberalism (Marble and Nall 2021).

While government may be responsive to public opinion in the aggregate, some favored groups may be more likely to see their preferred policies enacted than others. Scholars have also investigated whether government is equally responsive to different groups in society, primarily investigating the outsize influence of the wealthy (e.g. Bartels 2008; Gilens 2012). Aside from wealth, policies are also more likely to align with the preferences of whites than those of African-Americans or Latinos (Griffin and Newman 2008). Service demands of citizens can also reveal patterns of unequal response; gaps in home assessments lead Black and Hispanic households to shoulder higher effective tax rates than whites (Avenancio-León and Howard 2022), requests for building code inspections are responded to slower in Black neighborhoods and are less likely to result in a citation (Nivola 1978), and processing time for requested environmental enforcement is slower in wealthier neighborhoods (Jones et al. 2022).

Organized interests may also be able to influence policy due to their access and expertise. Federal bureaucrats are more responsive to business interests than ordinary citizens (Yackee and Yackee 2006) and larger firms are more likely to see language used in their comments adopted into final version of rules (Carpenter et al. 2022). Interest groups also play an important role in mobilizing and informing individual commenters. Over 80% of comments submitted on new federal rulemaking come from just 100 organizations, who provide common language for individuals to use in their mail (Judge-Lord 2022). The ecology of interests groups who lobby local governments and the sets of interests they deal with are quite different than the federal bureaucracy, with developers, neighborhood associations, taking on a primary role (Anzia 2022).

Much of the work on policy responsiveness focuses on the connection between latent public opinion and policies, with an electoral connection tying the two together (Warshaw 2019). Com-

menting at public meetings, the focus of this article, presents a different and less explored context for assessing responsiveness. First, the electoral connection is weak; I examine appointed officials who do not directly face voters, although they may reflect back on the mayor or city councilors who appointed them.

Second, by examining votes on specific development proposals instead of policy change, there is no temporal gap in responsiveness. In discussing dynamic responsiveness, Caughey and Warshaw (2017) note “even if elected officials are perfectly representative, they will often be unable to bring all policies immediately in line with new configurations of mass preferences.” This also means that studying responsiveness in public meetings cannot examine issues off the agenda. Public comment is not deliberative democracy: the agenda for meeting are fixed and generally require that comments pertain to the specific agenda item at hand, with the exception of a general public comment period. Comments, generally limited by time, address the body of public officials, with no response from the officials other than to issue information or corrections. While commenters can refer to statements made by other commenters, there are no opportunities for dialogue or response.

Third, the signal of public opinion is clear and direct. Politicians often have distorted beliefs about the preferences of their constituents, (Broockman and Skovron 2017), especially in the low-information environment of local politics. From the perspective of public officials, public comment serves as a useful informational signal (Dynes, Karpowitz and Monson 2022). In public meetings, comments are made immediately before a vote and allow public officials to make a tally of opinion. Unlike deliberative forums where issues may be raised but meeting participants cannot agree on an action to take, all items on a public meeting agenda are voted on after public comment is made. Individuals speak directly to the policy choice at hand and have the opportunity to influence the decision with immediate effect. In an era of nationalizing politics where even local political deliberations are structured by national issues and rhetoric (Barari and Simko 2021), these meetings provide a focus on specific, locally-administered issues.

The normative standards to judge the performance of commissions by are less clear than in electoral institutions. Unlike referenda, there is no expectation that the policy supported by the majority should be elected. Public comment may serve to legitimate decisions made by public officials who have no intention of incorporating any new input (Mazmanian and Nienaber 1979) or to provide a release valve for aggrieved individuals and interests groups (Checkoway 1981).

The actions of the SFPC that I examine are referred to as quasi-judicial; they grant discretionary permits based on conformity with the Planning Code. Public comment, per Article I of the SFPC's rules and regulations, is to ensure "the diverse voices of San Francisco are given the opportunity to be heard and represented." Exactly how the public's voice should be factored into policymaking is unclear: the *amicus curiae* may be one model, where public comment adds context and expertise that the SFPC lacks. Expectations around differential responsiveness are clearer: we would not expect the SFPC to systematically favor the opinions one racial group over others. But in cases with spatially distributed costs and benefits, some commenters may argue that their voices count more than others. There is no legal doctrine like "one person, one vote" enshrining equality of voice.

Existing evidence on responsiveness at public meetings is mixed: many authors conclude that commenting has no effect on policy and is simply democratic theater (Checkoway 1981; Adams 2004). However, in the domain of land use, two studies have found a correlation between public opposition and the likelihood of permits or rezonings being denied (Rosener 1978; Steggert 1972). A review of several studies of public involvement in environmental decisions, Chess and Purcell (1999) find that the public has an effect on decisions around siting, but only when a project has already been approved.

While public meetings are prevalent across municipal governments in the United States, citizen participation is strikingly low. Self-reported participation in public meetings from surveys is less than 5%, lower than any other form of political participation (Verba, Scholzman and Brady 1995). Attending and speaking at public meetings is costly: meetings are hours-long and often take place in the middle of the day far from residents' homes or offices. Speaking at meetings also requires "civic skills:" knowledge of the policy issue being discussed and familiarity with the comment process and what kinds of messages to present. These high costs to entry result in inequalities in who participates. Examining municipalities in the Greater Boston Area, (Einstein, Glick and Palmer 2019) find that Asian commenters are underrepresented relative to the percentage of registered voters by half, Black commenters are underrepresented by over 20%, and Hispanic commenters make up less than a third of the percentage of voters. Large class differences mirror these racial differences; meeting attendees are more likely to be homeowners, have higher incomes, make political contributions, and invest in the stock market (Schaffner, Rhodes and La Raja 2020; Yoder 2020).

Another way that those who speak at public meetings differ from the mass public is in their beliefs. Due to the high time and skill costs of attending and speaking at meetings, it will only be worth the expected gain for commenters with extreme views to turn out (Fiorina 1999). Self-reported meeting attendees' views on national policy issues is bimodal, with more liberal and conservative extremists turning out than those in the center, in contrast with a normal distribution of opinion among those who do not attend meetings (Schaffner, Rhodes and La Raja 2020). However, measures of ideology using poll questions on national policy issues may not capture extremism on local issues that do not map onto traditional liberal-conservative dimensions (Marble and Nall 2021). Comparing the content of public comments on proposed affordable housing developments to town-level support in a previous ballot initiative, (Einstein, Glick and Palmer 2019) find that commenters are far less likely to support affordable housing than the public at large.¹

Extremist commenters' overrepresentation at public meetings may be particularly acute in policy decisions over siting, as concerned commenters proximate to the proposed project turn out at higher rates. Spatial proximity to proposed new developments intensifies opposition to development due to NIMBY attitudes. Renters also exhibit spatial sensitivity to development, even absent the financial threat that homeowners face to their property values (Hankinson 2018). While we do not know whether spatial proximity also increases likelihood of attending meetings, commenters overall express views more anti-development than mass opinion (Einstein, Glick and Palmer 2019). Unrepresentative turnout is concerning on its own, but would be especially troubling if it had effects on policymaking.

Unlike in other policy domains, real-estate development, where a private actor who relies on financing must ultimately build the permitted project, delay can be costly enough to make a project infeasible. For opponents of proposed projects, convincing the Commission to vote against the project may not be realistic, but they may be able to block a project through repeated delay. In practice, "while it is rare for elected officials to change their votes based on citizen comments at a public meeting, it is much more common for votes to be delayed because of public outcry, especially if it is unexpected" (Adams 2004, p.50). This makes observing the same project over repeated meetings as I do in this article important; a policy may ultimately be enacted, but only

¹Although see (Karpowitz 2006) who finds that public meeting attendees are no more extreme than non-attendees, but simply higher intensity of opinion.

after delay and modification.

2 Public Comment in the Building Permit Approval Process

Land-use policy in the United States is administered primarily by city and county governments (Hirt 2015). These governments draw up general plans to guide development, zoning codes, which dictate what can be built where, and issue permits to build after determining projects' compliance with zoning. These functions are generally handled by a Planning Department, a professionalized bureaucracy staffed with trained urban planners. In addition to following the guidance of elected officials and applying their own expertise, the planning bureaucracy frequently solicits the opinions of the public.

Over 80% of municipalities have citizen commissions dealing with planning and zoning that allow members of the public to attend and comment (ICMA 2011). Most planning commissions are appointed by the mayor, city council, or a combination of both. Of the 7 members of the SFPC, 4 are appointed by the mayor and 3 by the Board of Supervisors.

The SFPC meets weekly on Thursdays at 1PM at City Hall. The typical meeting lasts nearly six hours, but can often run deep into the night. In addition to the commissioners, staff members attend and present recommendations on agenda items, and members of the public attend to give comments. SFPC meetings following a normal order: first considering items to be moved to a hearing at a later date, then voting on "consent" items which do not require discussion, then a report on commission and department matters, 15 minutes of public comment on issues not on the agenda, then hearings on project entitlements on the Regular Calendar, and finally hearings on requests for Discretionary Review. The Regular and Discretionary Review calendar items are where the public has an opportunity to comment directly on approvals that the SFPC will immediately vote on and will be the focus of the analyses in this article.

Permits are required for nearly every alteration of land or a structure in San Francisco. The vast majority of these permits are issued "over-the-counter", requiring applications to fill out paperwork and have it approved by a planner in the department. Permits that require an in-house review are submitted to the Planning Department; most are issued without a hearing, but some permits seeking specific entitlements must be approved by the SFPC. Most of the entitlement applications heard by the Commission fall into three types: Conditional Use Authorizations, Environmental

Impact Studies, and Variances. Discretionary Reviews are not entitlements sought by the project sponsor, instead, they are a “second-look” requested by an outside party who believes that despite being granted entitlements, the project is not appropriate (see Appendix A (Page 2) for definitions of the types of hearings examined).

For each item, the hearing usually begins with a presentation by the member of the Planning Department staff who has evaluated the application. The staff presentation lays out the details of the application, summarizes the compatibility with the city’s General Plan in their expert view and issues raised by the public in a written comment period, and issues a recommendation on how to vote to the Commissioners. The presentation summarizes a written packet attached to the agenda of the meeting, posted online six days prior to the hearing but sometimes distributed to Commissioners further in advance. By the time the hearing takes place, Commissioners are well informed on technical aspects of the proposal, public sentiment expressed in meetings with community groups and from written communication. Then public comment begins with the project sponsor and members of their team such as architects or lawyers speak first. In the case of Discretionary Reviews, the review requestor speaks followed by the property owner or project sponsor. Then, all present members of the public who wish to comment are given three minutes each to speak. 73% of agenda items have someone commenting and the average number of commenters per item is greater than five. Following public comment, the Commission votes on the item, choosing to approve it, as is or with modifications, continue it to a future meeting, or disapprove the item. Project sponsors may also choose to withdraw the item before the vote.

3 Data on Public Meeting Participation and Development Approvals

I join three sources of data to examine the correlation between public comment and commission decisions: 1) records of public comments given at meetings of the San Francisco Planning Commission; 2) administrative data on commenters from voter registration; and 3) administrative data on permit applications from the San Francisco Planning Department. The meeting minutes and administrative data are joined by names of commenters, while the projects on the meeting agenda are linked to records using unique identifiers created by the San Francisco Planning Department.

19. [2015-009460CUA](#) approval sought (B. BENDIX: (415) 575-9114)
 830 EDDY STREET & 815 VAN NESS AVENUE - located on the southwest corner of Van Ness Avenue and Willow Street; Lots 018, 022-044 in Assessor's Block 0738 (District 5) - Request for **Conditional Use Authorization** pursuant to Planning Code Sections 253, 253.2, 303, and 304 to demolish an approximately 9,370 square foot two-story parking garage containing 62 off-street parking spaces and to construct a 120-foot tall residential building of approximately 119,050 gross square feet containing 126 dwelling units and up to 105 off-street parking spaces. The project is seeking exceptions as a Planned Unit Development to the Planning Code's requirements for rear yard (Section 134), architectural obstructions over the public right-of-way (Section 136), dwelling unit exposure (Section 140), street frontage (Section 145.1), off-street loading (Section 152) and bulk (Section 270). The subject property is located within RC-4 (Residential-Commercial, High Density) Zoning District, the Van Ness Special Use District, and 130-V Height and Bulk District. This action constitutes the Approval Action for the project for purposes of CEQA, pursuant to Section 31.04(h) of the San Francisco Administrative Code.
Preliminary Recommendation: Approve with Conditions lot zoning number of housing units
 SPEAKERS: = Brittany Bendix – Staff Report
 + Michael Yarne – Project presentation
 + Moe Jamil – 80 parking spaces max
 + Adam Mayer – Support
 = Sue Hestor – Transit Van Ness Avenue Planning staff recommendation individual speakers with indicator of support and summary of comments
 ACTION: Approved with Conditions commission decision
 AYES: Fong, Richards, Hillis, Koppel Melgar
 ABSENT: Johnson, Moore roll-call vote
 MOTION: [19819](#)

Figure 1—**Example of Agenda Item from Public Meeting Data:** Figure shows an example agenda item from the scraped public meeting data, highlighting the fields that are extracted from the text data.

3.1 Meeting Minutes

I collect records from 957 meetings of the San Francisco Planning Commission between 1998-2021 from publicly archived transcripts, yielding 8,392 agenda items where a project proposal is heard and voted on.² Figure 1 shows an example agenda item from these transcripts. I parse information about the approval sought from the SFPC, the size of the project in height and units (for residential projects), and the use and height zoning of the lot. I also observe the recommendation of the Planning Department staff, who are tasked with assessing the legality and appropriateness of the requested change, including soliciting the feedback of neighbors and interested parties. Finally, I observe the action taken by the SFPC and the votes cast for and against the action by the Commissioners.

In the meeting minutes data, commenters are generally listed by name with an indication of whether they support, oppose, or are neutral towards the motion, and a brief summary of their comment. While commenters are not required to identify themselves, they fill out a comment card to be put in the speaking queue for an agenda item. Most commenters list their official names which are recorded in the transcript, allowing them to be matched to administrative data. The stenographer also frequently records information about the commenters' affiliation with an interest group, if they present themselves as such, and the content of their comment. To examine

²I include items only from the Regular Calendar and the Discretionary Review Calendar sections of the meeting minutes. Project proposals are also heard on the Consent Calendar, where all items are voted on as a package, and in the Items Proposed for Continuance, where the project sponsor typically requests a continuance to have more time to prepare their presentation. As a result, there are no project-specific outcomes to examine.

the prevalence of interest groups mobilizing supporters to speak at public comment, I extract the names of organizations from the comment text. I supplement this list of organizations recorded in the meeting minutes with a notification list maintained by the San Francisco Planning Department. A detailed description of group classification and a dictionary can be found in Appendix D (Page 5).

Of 42,451 comments, 31,182 (74%) have an indication of the comment polarity (whether the commenter is in favor, opposed, or neutral towards the project’s approval) recorded by the stenographer. I use this recorded polarity in all analyses. A further 3,956 (9%) of comments have a summary of the speaker’s comment but no polarity. A simple keyword search of comments in ”support” or ”opposition” classifies 351 (1%) of comments, while the average sentiment of the comment text classifies a remaining 2,712 (7%). To validate this classification method, I predict the average sentiment for all 27,903 comments that have both polarity recorded and detailed comment text. For these overlapping comments, the predicted sentiment correctly classifies the polarity 69% of the time.³

3.2 Matching Commenters to Administrative Records

I match the commenters in the meeting minutes to records of registered voters from a commercial voter file vendor to obtain information about their political, demographic, and economic characteristics, as well as their address. I am able to match 47.7% of commenters in my data to a unique entry in the voter file, with a further 4.3% of commenters matching to multiple registered voters due to repeated names.⁴

For individuals whose names do not match to the voter file, I estimate commenters’ race and ethnicity exploiting racial variation in common surnames using the *wru* package in R (Imai and Khanna 2016). Using the frequency of surnames by racial group in San Francisco county, collected by the census, this method uses Bayes’ rule to calculate the probability that a given commenter is of a specific ethnorace, conditional on their surname. I assign commenter the ethnoracial group with the highest posterior probability among the four groups categorized by the Census: Asian,

³Details about the sentiment analysis procedure can be found in Appendix B (Page 3). Analyses in the results section include observations with imputed polarity; similar analyses using only recorded polarity are found in Table E.8 and are consistent with all findings.

⁴Appendix C (Page 4) contains details about the matching procedure and comparisons to previous studies that match public meeting commenters to voter file data.

Black, Latino, and non-Hispanic white. I supplement the gender field in the voter file with a similar prediction algorithm using firstnames, implemented using the *gender* package in R (Mullen 2021).

Finally, I identify commenters' affiliation with interest groups based on two sources: their self-identification in their comment and a notification list of local activists maintained by the San Francisco Planning Department. Appendix D (Page 5) details the classification of interest groups. Data on ethnoracial and gender identity, and interest group affiliation are available for all commenters, not just those who are matched in the voter file.

4 Who Comments and Why

Who participates in public comment at the San Francisco Planning Commission, and why? Figure 2 shows that commenters in public meetings are starkly unrepresentative of the population along a number of observable dimensions. Across every demographic trait, less privileged groups are underrepresented in comments compared to the electorate and moreso relative to the general population. The inequalities in public meeting attendees in San Francisco mirrors those found in other contexts (Einstein, Glick and Palmer 2019; Yoder 2020).

Ethno-racial minorities are as underrepresented as a whole, but African-Americans on their own are slightly overrepresented relative to their share of the population. The proportion of Latino and Asian-American commenters is about two thirds of their proportion of the population. Women are underrepresented by 10%, a notable difference given no voter registration differences by gender. Looking at age differences, commenters (median age: 61) are older than voters (median age: 46) and the general population (median age: 38). Since meetings are held midday during the workweek, it is unsurprising that people of retirement age, whose opportunity cost of attending is much lower, are over-represented.

Commenters are also more partisan than registered voters; San Francisco's voters are heavily Democratic and commenters are even moreso. Commenters have voted in an average of 7 recent elections, compared to 4 for all registered voters, indicating that they are generally more politically active.

Planning Commission commenters are more likely to be homeowners than the general population by over 10 percentage points. The domination of public meetings by homeowners is particularly notable in San Francisco, which unlike the smaller towns where homevoters are thought to hold

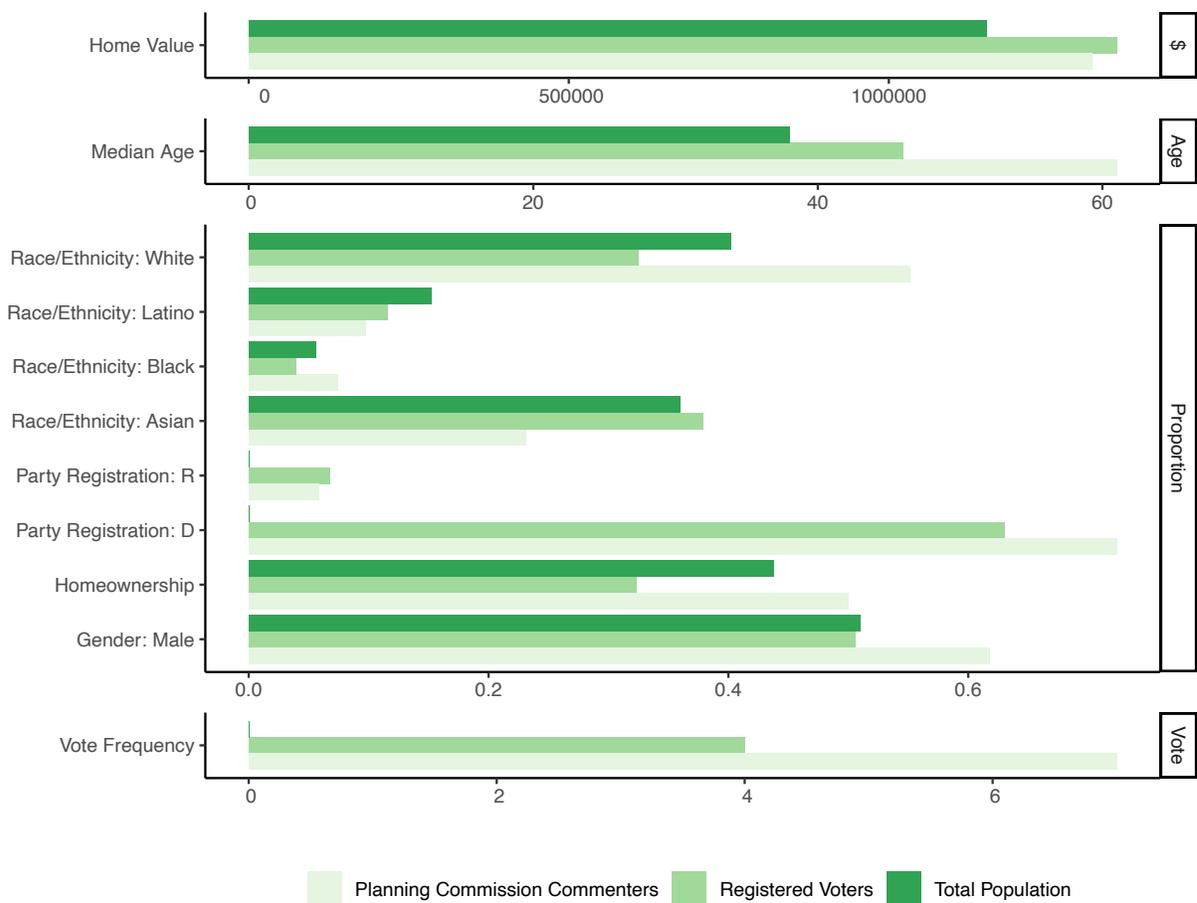


Figure 2—**Planning Commission Commenters Are Older, Whiter, More Likely to Own Their Home than Voters and General Population:** panels show comparisons of commenters at meetings of the San Francisco Planning Commission (1998-2021), registered voters in San Francisco County (January 2018) and the general population (2015-2020).

sway (Fischel 2001; Einstein, Glick and Palmer 2019), San Francisco is a renter-majority city. Interestingly, while commenters' homes are more valuable than the median homeowner in San Francisco, they are lower than the median value for registered voters as a whole.

Many commenters are affiliated with organized groups, although the majority of commenters are members of the general public. Neighborhood associations represent between 5 and 10% of commenters in any given year but all other types of groups turn out less than 5% of commenters. Since at least 2014, YIMBY, or “Yes in my backyard,” groups have made participation in public meetings arguing for the approval of new development a central part of their political strategy (Dougherty 2020), and now are the second most numerous group of commenters after neighborhood associations. The development process in San Francisco and other large cities has created an industry to help property owners navigate it; it is not uncommon for homeowners to hire consultants and attorneys for minor home modifications. As a result, the largest number of commenters at public meetings are the project sponsors and their team. Figure D.3 shows the proportion of speakers from different types of organized groups by year.⁵ The categorization of individuals' organizational affiliations is not exhaustive, so the estimates represent a floor on the prevalence of groups activity in public meetings.

5 Proximity and Turnout

What motivates individuals to turn out to speak at particular SFPC meetings? Few residents have strong enough ideological preferences to motivate speaking at every meeting on every item. Some projects are more desirable or objectionable than others: residential-only projects draw an average of 3.8 comments, 44% of which are negative, compared to office (2.7 comments, 16% negative), commercial (5.2 comments, 32% negative), and mixed-use (5.4 comments, 35% negative) projects. Among residential proposals, projects with more units of both market-rate and affordable housing draw more comments, although the percentage of negative comments declines as the number of units increases. Interviews with staff at the San Francisco Planning Department suggest that sponsors of larger projects may conduct more comprehensive outreach to neighborhood groups before they appear before the Planning Commission, reducing opposition at the public hearing.

⁵Figure D.3 includes the prevalence of comments from Planning Staff, who often introduce a project and present the staff recommendation. Most of these comments are coded as neutral by the stenographer. These comments are excluded from all analyses in the following sections.

Another explanation is that many of the largest projects in San Francisco are built in former industrial or office districts without a large existing residential population. ‘Not in my backyard’ (NIMBY) sentiment has usually been shown to reduce support for unwanted uses like new housing when sited nearby instead of far away (Hankinson 2018). But NIMBYism may motivate behavior, such as voting or speaking at a public meeting, in addition to changing attitudes (Stokes 2016). Siting new development nearby not only decreases residents’ support for its construction, but also motivates them to turnout to speak at a public meeting against it.

Figure 3 shows a density plot of the distance between a commenter’s home address and the address of the proposed project. Comments are divided between those in support, in opposition, or neutral. Residents in opposition are concentrated within a kilometer of the proposed project, consistent with spatial proximity driving participation. Negative commenters live, on average, over a kilometer closer to the proposed project than positive commenters.⁶ The density curve in Figure 3 is simply a count of commenters, not a turnout rate: the hypothetical denominator (all possible commenters who live within in a x meter radius) would increase exponentially. The right-skewedness of the negative commenters may be motivating turnout for opponents in contrast with the uniform distribution of commenters in support and neutral to projects.

6 Public Preferences and Project Outcomes

In the previous section, I established that individuals who give public comment are unrepresentative of the voting population along demographic lines. The age, race, and homeownership characteristics that differentiate commenters and voters are all associated with anti-development views. Furthermore, more comments in opposition come from areas directly surrounding a proposed project, suggesting that spatial proximity not only motivates decreased support for a project but increases behavioral action to fight it. Taken together, this suggests that public comment may be out of step with mass opinion.

This unequal participation would be doubly troubling if policy is responsive to the the public comments it generates. While making claims about the causal effect of public comments on SFPC votes is a difficult task, I establish two descriptive facts with the data at hand: whether the balance

⁶This difference in means is statistically significant under a one-sided t-test ($\bar{x}_- = 2.9km, \bar{x}_+ = 3.8km, p < 0.01$) and the difference in distribution is statistically significant under a Kolmogorov–Smirnov test ($p < 0.01$).

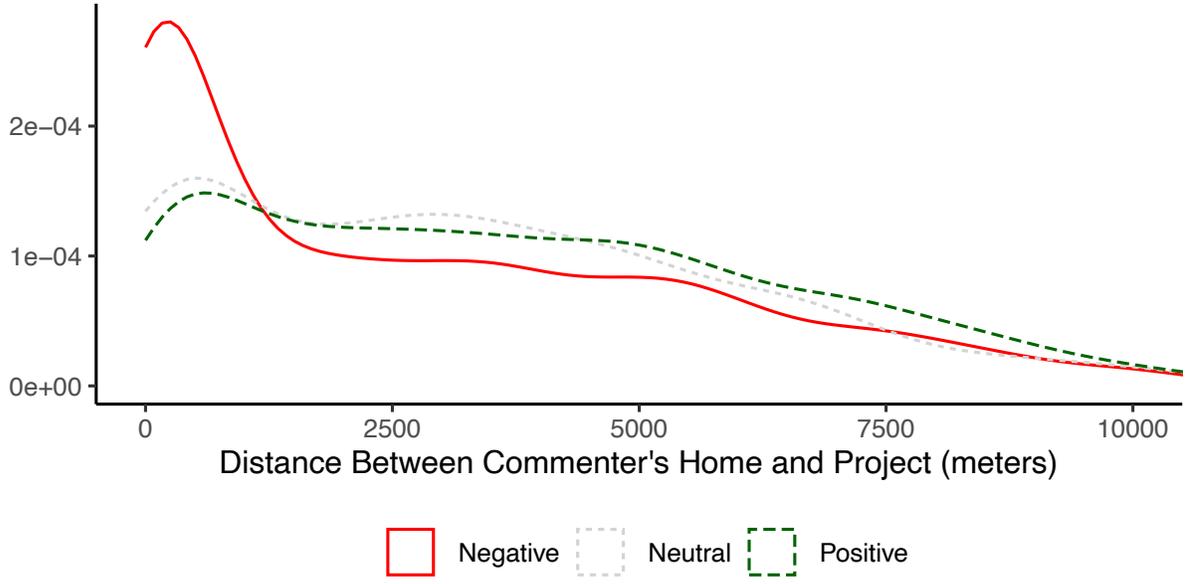


Figure 3—**Comments Against Projects More Concentrated Near Project:** Figure shows density of comments by distance between the project and the commenters’ residence. Figure excludes Planning Staff and commenters from other branches of city government. X-axis is truncated at 10,000 meters.

of comments for and against a project correlates with its approval and which groups’ preferences align more often with approvals.

To measure preferences of all commenters and subgroups, I use a measurement strategy borrowed from Gilens and Page (2014), who construct measures of interest group alignment on national policy issues and examine the correlations between interest group and mass preferences and policy outcomes. To standardize across projects which may have different numbers of total comments, I take the logarithm of the count of comments for and against the project, ensuring that the difference between 11 and 12 comments in favor is less meaningful than 1 and 2 comments. I add one to each count of comments since some projects may have 0 comments in support or opposition.

$$P_i = \log(\# \text{ in favor} + 1) - \log(\# \text{ opposed} + 1) \tag{1}$$

In addition to this measure of net preference, I use the simple proportion of comments in favor of a project as an alternative measure of commenter preference. I first look at the basic relationship

between the net preference and project outcomes by estimating the following regression model:

$$A_i = \alpha + \beta P_i + \zeta R_i + \epsilon_i \quad (2)$$

A_i and R_i are ordinal variables of the outcome of the Commission vote and the staff recommendation, respectively. The Planning Staff’s recommended action, coded using the same values as the dependent variable, capturing information about the project’s compatibility with the General Plan and previewing potential issues that will be raised in public comment. The SFPC follows staff recommendations 56% of the time; when they do deviate, 68% of the time they do to vote against the project (e.g. voting to continue the project when staff recommended to approve with conditions). The relationship between recommendations and actions are shown in Figure 4.

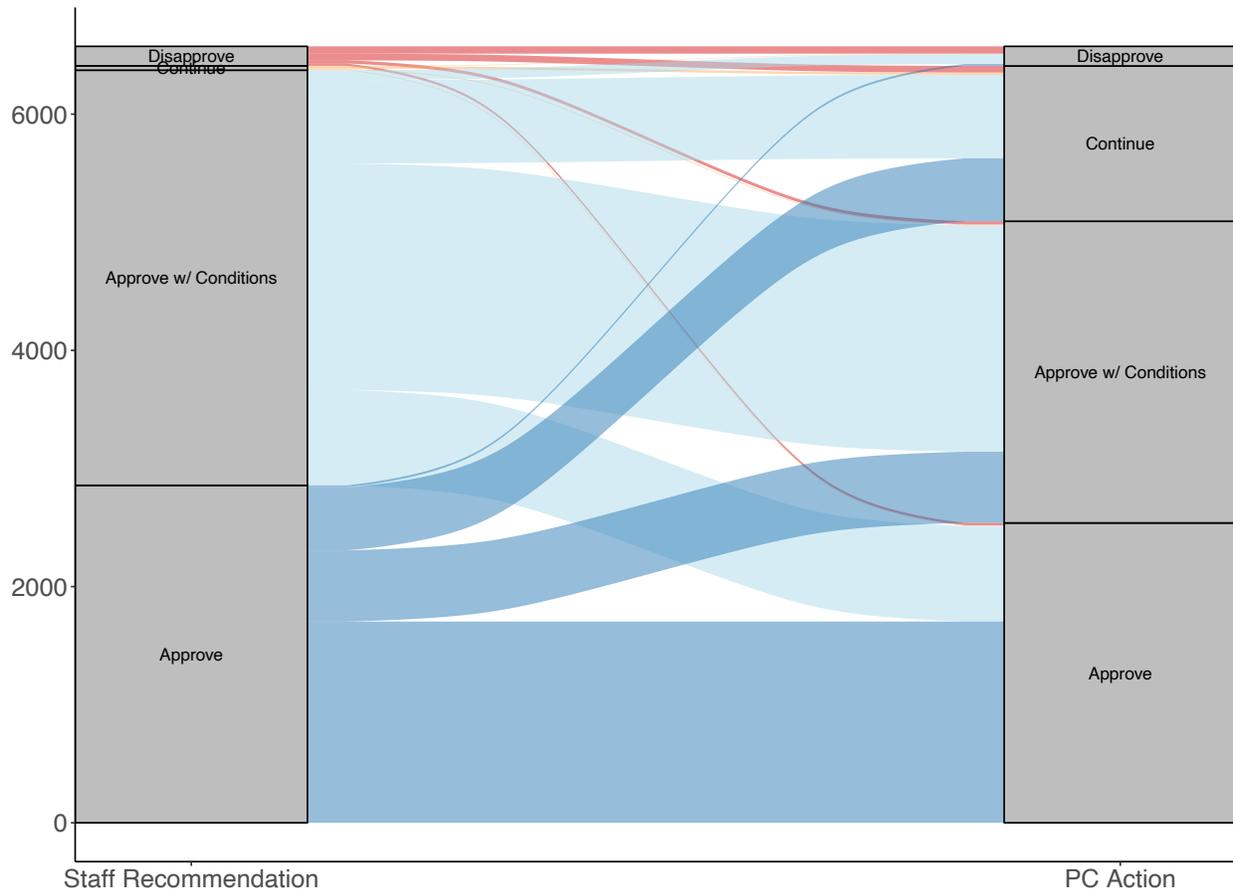


Figure 4—**Commissioners Usually Follow Staff Recommendation:** Figure shows the relationship between staff recommendations and Commission action. The Planning Commission follows the staff recommendation 56% of the time. 68% of the instances where the Commission deviates from the recommendation it is against the project.

The frequency with which the SFPC follows the staff recommendation reflects the degree to which staff brief the Commissioners on their reasoning and their efforts to solicit public opinion through meetings with neighborhood groups and by collecting written communication. Between the staff recommendation and the vote, public comment is the only formal input method that Commissioners receive, and has the potential to surface voices and issues that had not come up in the staff review or to emphasize the depth of support or opposition that was not previously apparent.

A_{ia} and R_{ia} take the following values:

$$A_i, R_i \in \left\{ \begin{array}{ll} -1 & \text{disapprove, withdraw} \\ 0 & \text{continue} \\ 1 & \text{approve with modifications} \\ 2 & \text{approve} \end{array} \right\}$$

I also estimate models adding fixed effects for the type of entitlement sought (in Models 3 and 6 of Table 1), year and month fixed effects (in Models 1 and 2 of Table E.9), and time trends (in Models 3 and 4 of Table E.9).

Finally, to examine the relative weight of comments in support, in opposition, and neutral to project approval, I estimate a similar regression using counts of comments instead of the net preference measure.

Table 1 shows the relationship between public comment and project approval. Columns 1-3 show the correlation between the net preference of all commenters, columns 4-6 show the correlation between the proportion of comments in favor and a positive outcome, and columns 7-9 show the models using counts of positive, negative, and neutral comments. Models 1, 4, and 7 do not control for staff recommendation and therefore include variances, which do not have staff recommendations. Models 3, 6, and 9 contain entitlement fixed effects.

The results of models 1-6 show a clear relationship between the preference of commenters and the likelihood of approval. A one standard deviation increase in the proportion of commenters in support of the project (0.31) is associated with a 0.15 point increase in the likelihood that the project is approved, conditional on the staff recommendations. The count of positive and

	Net Preference			Proportion			Count		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	1.05*** (0.01)	0.43*** (0.03)		0.94*** (0.03)	0.22*** (0.04)		1.10*** (0.01)	0.52*** (0.03)	
Net. Pref.	0.19*** (0.01)	0.20*** (0.01)	0.18*** (0.01)						
Prop. Positive				0.42*** (0.03)	0.49*** (0.03)	0.47*** (0.04)			
Staff Rec.		0.46*** (0.02)	0.47*** (0.02)		0.50*** (0.02)	0.50*** (0.03)		0.44*** (0.02)	0.47*** (0.02)
Comments									
Positive							0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)
Negative							-0.03*** (0.00)	-0.02*** (0.00)	-0.02*** (0.00)
Neutral							0.01 (0.01)	0.00 (0.00)	0.00 (0.00)
Type FE	N	N	Y	N	N	Y	N	N	Y
R ²	0.03	0.15	0.16	0.03	0.19	0.20	0.02	0.13	0.15
Num. obs.	8150	6574	6324	5082	4468	4342	8150	6574	6324

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.1$

Table 1: Correlation Between Public Comments and Project Approvals: table shows results of ordinary least squares regressions of project approval on public comments. Models 1-3 use a measure of net preference of all commenters. Models 4-6 use the proportion of comments in favor. Models 7-9 count total comments in support, opposition, and neutral towards project. Observations include all hearings on the Regular and Discretionary Review calendars of the San Francisco Planning Commission 1998-2021. Regressions in Columns 2-3, 5-6, and 8-9 control for staff recommendation and exclude variances, which staff does not issue recommendations for.

negative comments also have a statistically significant relationship with the likelihood of approval. Each additional positive comment increases the likelihood of approval, controlling for the staff recommendation, by 1.7% and additional negative comment decreases the likelihood of approval by 2.1% in the model controlling for the staff recommendation and entitlement type. The difference in the magnitude of the coefficients is nearly significant ($p = 0.06$).

These results show evidence consistent with responsiveness, but commenter turnout is endogenous to the likelihood that the project will be approved. The staff recommendation is a strong signal of the viability of a project since the commission tends to follow the recommendation; in Table E, I find that projects recommended for approval with conditions see more turnout than those recommended for approval or disapproval. However, when I examine the correlation between commenter preference and project outcomes by staff recommendation, items recommended for approval and approval with conditions is nearly identical in Figure E.7. Furthermore, the correlations between commenter preference and project outcomes are nearly identical with and without controlling for staff recommendation (see columns 1 and 2 of table 1).

Results do not vary substantially across different entitlements and projects; Figure E.7 plots OLS regression coefficients for the most common entitlements and for projects that contain residential, office, and commercial uses. All entitlement and project types show a clear and similar correlations between commenter preferences and project outcomes. I also investigate whether the preferences of commenters who live nearby projects are more likely to align with project outcomes in Figure E.8, finding that nearby commenters' preferences do not correlate with project decisions. So while nearby neighbors turn out at disproportionate rates, they do not appear to be generally successful in blocking projects.

The analyses in Table 1 provides evidence consistent with responsiveness to public comment—that is, the proportion of commenters in support of a project is associated with an increase likelihood it is approved, all else equal. Another important question is of congruence between citizens' preferences and enacted policies on development remains (Lax and Phillips 2009). Even when the majority of comments are in opposition to the project, the modal outcome is that the project is approved with conditions. On the other hand, the staff recommendation, which is not uninfluenced by public opinion, aligns with the Commission's vote half of the time. When the Commission vote deviates from the staff recommendation, 74% of the time it does so against the project. The high

rate of approval in Planning Commission votes certainly does not represent perfect congruence with public opinion expressed in comments. However, it may better approximate latent opinion, which is likely more favorable given NIMBYism motivating turnout to public meetings.

Next, I turn to examining preferences of groups of commenters and their alignment with project outcomes. One of the purported benefits of public hearings is to allow a diverse set of voices to be heard when making policy. This promise may be undermined in two ways: first, if the underrepresented voices are not in attendance at the meetings, they cannot be heard from and their views cannot be considered. Second, even if their voices are heard, they can carry less sway than traditionally favored groups. I have previously shown that the first concern is well-founded. To examine the second concern, compare the magnitude of group-specific preferences on each project with the project outcome.

I look for evidence consistent with differential responsiveness across two types of groups who have distinctive preferences on projects and whose voices public hearings are designed to surface. Along demographic lines, I look at the project-specific preferences of different racial groups, who have different preferences on general development issues. I also look at the preferences of organized interests and the general public. Relative to other venues, public meetings should advantage the general public and organized groups of citizens relative to real estate interests.

To calculate the total number of comments by polarity for each ethnoracial group, I predict the race/ethnicity of commenters using the procedure described in the previous section and multiply the individual posterior probabilities by the comment polarity indicator. This incorporates the uncertainty of the classification into the measure of comments by race. For interest groups, I first identify group members from a list of neighborhood group contacts maintained by the San Francisco Planning department for the purposes of project outreach. I supplement that list with self-identification with an organization in the text of the public comment. If a commenter identifies with a group public at one hearing, I assume they are acting as a member of that group in all other comments they make.

Figure 5 shows the frequency of support and opposition to projects among organized groups. Some groups almost always adopt the same position: Planning Staff are nearly always providing informational presentations, the Project Team of property owners, architects, lawyers, and consultants are in favor of the projects they are requesting approvals for, and the Discretionary Review

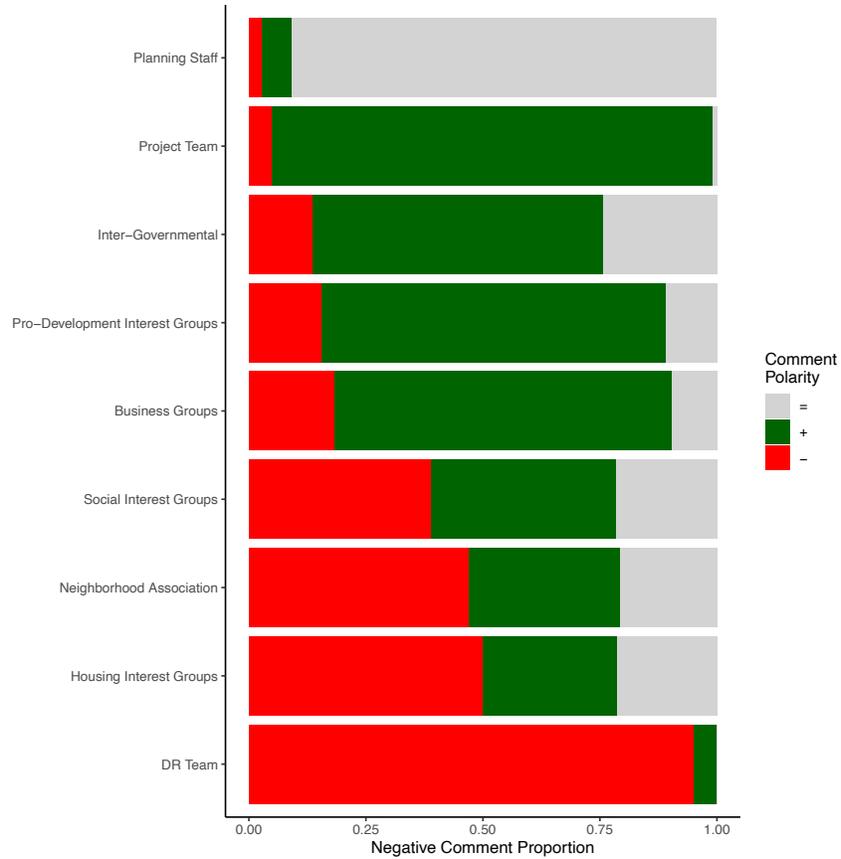


Figure 5—**Support for Projects Among Organized Groups:** figure shows proportion of comments in support, in opposition, or neutral to projects from representatives of various organized groups. See Appendix D (Page 5) for classification of these groups.

team are in opposition to the project that they would like to see reconsidered. Some interest groups take one side the majority of the time, such as YIMBY activists (Pro-Development), or representatives of the building trades (Business). Groups whose core mission is not related to housing, like groups promoting the rights of LGBTQ people or social service providers from religious institutions, do not either support or oppose projects the majority of the time. Housing groups, like tenants organizations or affordable housing developers, and neighborhood-specific organizations also have a mixed record, although they oppose projects more than they support them. I replicate this analysis among ethnoracial groups of commenters in Figure E.6, finding statistically significant but substantively small differences in project support across groups: over 60% of comments are in favor of project development among all four ethnoracial groups. This stands in contrast to surveys of general favorability towards new housing construction, which show a majority of whites opposed while other groups show majority support (e.g. Varian 2022). Looking at group support for different project types, I similarly find at least 60% of commenters from each group in support of housing projects; commercial and office projects are even more popular than housing among Asian and Black commenters.

How strongly do the preferences of these groups correlate with project approvals? Figure 6 shows the results of bivariate regressions, regressing project approval on individual net group alignment of comments, and multivariate regressions, regressing project approval on all groups' alignments. The top panel shows that both organized interests and the general public's preferences are correlated with outcomes on their own. However, the conditional correlations in the multivariate regression show that, when controlling for the preference of other groups, the SFPC is more responsive to neighborhood groups and pro-development groups. Turning to the alignment of racial groups' preferences with outcomes in the bottom panel, we also see that, on their own, the preferences of all racial groups are responded to. However, conditional on the preferences of other groups, white commenters preferences are better predictors of the Planning Commission's actions than that of other groups.⁷ Of course, these multivariate correlations do not imply that Planning Commissioners are overtly discriminating against commenters; the shared identities, geographic locations and

⁷The correlation coefficient between white commenter preference (0.14) is larger than the combined coefficients of Asian, Black and Latino commenter preferences. The linear hypothesis test that the size of the coefficient on white preferences is equal to the combined size of the coefficients of Asian, Black, and Latino commenter preferences, $\beta_W = \beta_A + \beta_B + \beta_L$, is rejected at $p = 0.04$.

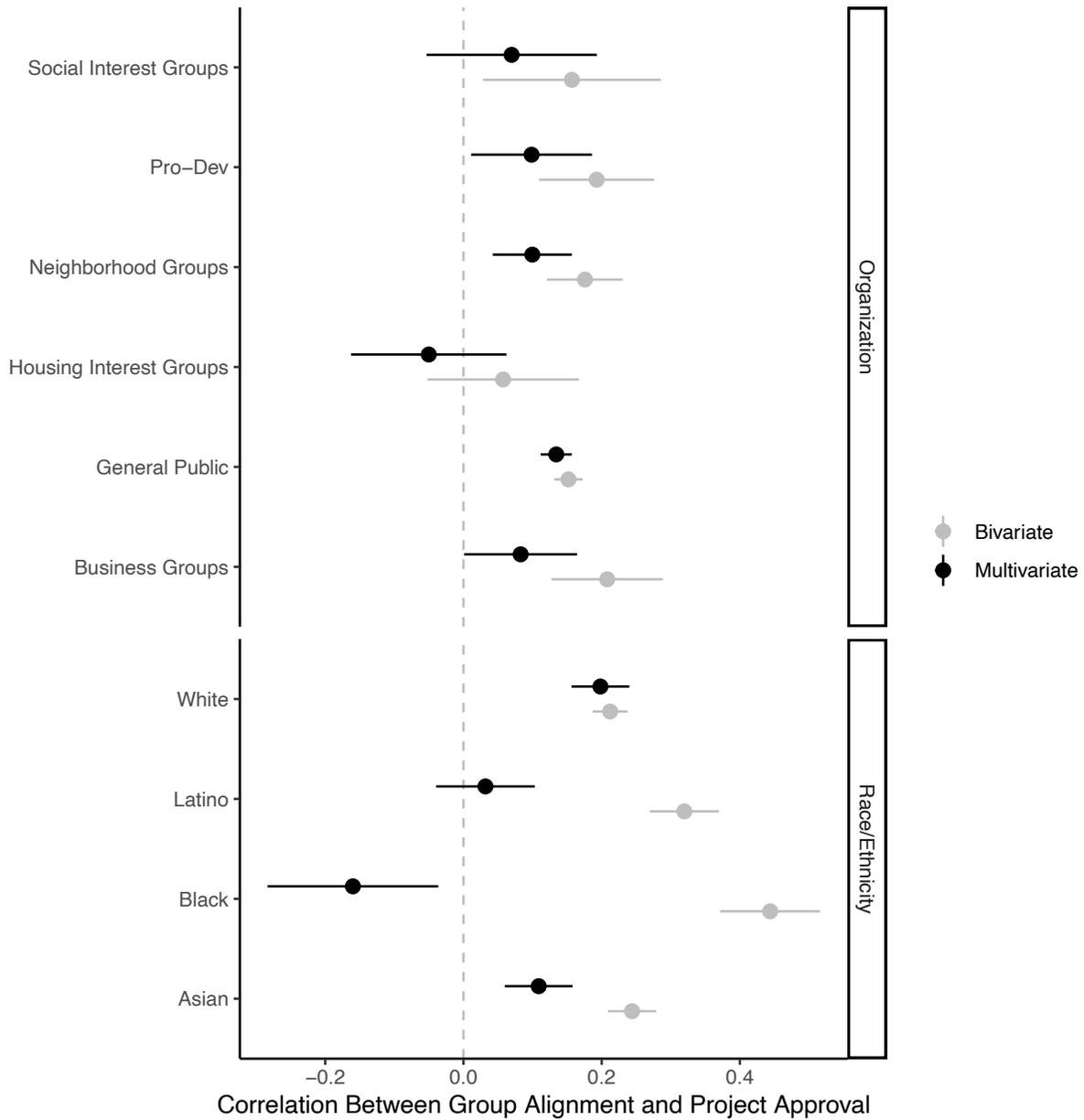


Figure 6—**Correlation Between Group Alignment and Approval:** figure shows relationship between group alignment on project approval, calculated from public comment, on project approval. Grey points represent coefficients from a bivariate regression of just that group. Black points represent coefficients from a multivariate regression of all groups within panel. Points represent regression coefficients and bars represent 95% confidence intervals. All regressions controls for staff recommendation. See Appendix Table E.5 (Page 10) for tabular presentation of regression results. See Appendix D (Page 5) for classification of these groups.

political preferences of Planning Commissioners with certain types of speakers may generate the results that I observe. To map the objective function of Planning Commissioners' weighting of comments from different sources, further work exploiting exogenous variation in commenting is needed.

7 Conclusion

Understanding the causes and consequences of political participation are central to evaluating the effectiveness of democracy. Engagement with electoral politics, such as voting and donating to or volunteering on campaigns, complement civic engagement, such as contacting elected officials, protesting, attending public meetings, serving on boards, and working for community organizations. Recent advances in the availability of administrative data has deepened our understanding of who votes and donates to campaigns, and how to reduce these inequalities (Fraga 2018; Grumbach and Sahn 2020). But we know comparatively little about other forms of participation. Furthermore, while the policy implications of activities to support winning elections are evident, the effects of other forms of participation, particularly lobbying through public meetings, are less clear.

Scholars of inequality have documented elite influence in local elections (Anzia 2014), lobbying (Kalla and Broockman 2016), and national policymaking (Page, Bartels and Seawright 2013; Gilens and Page 2014). While local government in the United States has the potential to be more responsive to residents' concerns (Oliver 2001), deeper inequalities in who participates may distort policymaking. In this article, I provide evidence consistent with the later hypothesis: commenters at public meetings on proposed developments are demographically unrepresentative of the general population and their preferences generally align with policy outcomes. Furthermore, some groups preferences correlate more with outcomes than others.

Like in any form of political participation, resources predict who is likely to turn out to public comment (Verba, Schlozman and Brady 1995). As previously discussed, one resource that stands out among commenters is time. Retired residents without young children have a much lower opportunity cost of time and can easily attend mid-day weekday meetings. Civic skills, built through repeated engagement with government are also likely particularly important in an environment without consistent media coverage or messaging from elites. The deliberative culture of specific bodies can be alienating to some residents and discourage participation (Collins 2018). Discussions

of land use can be hostile, with audible audience reaction to comments, and filled with jargon and complex terminology unfamiliar to residents without a degree in urban planning or a obsession with the minutiae of zoning codes. Interest groups, particularly neighborhood associations, are able to overcome the civic skills barrier by helping residents they turn out figure out the process. Neighborhood groups notify individuals when to show up, how to sign up to speak, and can often provide a pre-written script to emphasize the points the neighborhood group wants to convey.

The unrepresentativeness of commenters documented in this and other work is especially concerning since public meetings could be an important venue for residents with few other political resources. Residents who are not enfranchised and therefore cannot cast a vote in local elections or those without financial resources to contribute money to a campaign can nonetheless speak at public meetings and have their voice heard.

How might we expect the effects seen in this study to generalize to other contexts? There are several reasons why the alignment of opinion expressed at public comment and commission outcomes may be particularly robust in this setting. San Francisco is characterized by particularly contentious development politics, a civically active population, and a professionalized municipal government which has the highest spending per capita among large cities. Compared to other California jurisdictions, San Francisco is an outlier in how long development projects take to receive their entitlements due to the repeated solicitation of public input (O’Neill et al. 2021). As the politics of land use in San Francisco approaches the “organized combat” of national politics (Hacker and Pierson 2010), it is therefore notable to find that the general public’s preferences correlate with outcomes as strongly as well-resourced interests. It is possible therefore that the correlations for the general public represent a floor while the correlations for organized interests represent a ceiling.

There are additional reasons to believe that the evidence consistent with responsiveness to public comment in this article may be understated. Larger and more diverse cities may have lower turnout and a less robust political culture than smaller homogeneous jurisdictions where public meetings have typically been studied (Oliver 2001; Karpowitz 2006). Furthermore, this study examines appointed, rather than elected, officials and a Commission dealing with one specific policy area. The decreased visibility of the SFPC, relative to say, the City Council, and the insulation from electoral pressures of appointed citizen commissioners relative to elected officials may allow

commissioners to act in what they perceive to be the general interest while ignoring commenters. Compared to other policy areas, land use and development decisions are made individually, often on a discretionary basis, and with many opportunities for public input. General public comment at a city council meeting on fiscal policy, for instance, where cities are highly constrained by budgetary requirements, would be unlikely to yield similar levels of responsiveness to residents' concerns. Further evaluation of public comments in different geographic areas, government bodies, and in relation to different policy areas will help define the scope conditions of the effects shown in this article.

The idea of inserting friction into the private development process and allowing the voice of the public to be heard at every step was reaction to the overreaches of urban renewal programs that destroyed neighborhoods in the name of progress throughout the 20th century. Laws that mandated open meetings and opportunity for public comment were enacted to give the communities whose homes, businesses, and community centers were destroyed without consultation a voice in future decisions over development (Teaford 2000). But the intent of these institutions does not appear to match their use in practice. While interest groups working to protect tenants from eviction and to fight gentrification and displacement use public comment at public meetings to have their voices heard, public meetings in municipal governments have been largely been captured by white, wealthy, longtime residents who are motivated by NIMBYism. This article raises the possibility that these comments have policy consequences: commenter preference correlates with project outcomes, and the groups most able to navigate the public hearing process are the ones whose preferences are most often made into policy.

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