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How Citizen Opposition to New Housing Becomes Concentrated in Expensive Housing Markets

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Abstract: Across the US and Western Europe, strong local opposition has made it difficult for governments to build more housing and address rising affordability problems. We show that this opposition is especially concentrated in high-cost areas. Using geolocated survey data from the US and five Western European countries, we find a consistent, robust link between housing costs and opposition to new development—one that cannot be explained by demographic differences between low- and high-cost places. We suggest this happens because expensive cities attract people who care more about preserving the look and feel of their neighborhood. A pre-registered survey experiment, exposing respondents to information about rising prices, offers further evidence for this explanation. Together, our findings suggest a self-reinforcing cycle: rising prices fuel opposition to new housing, which restricts supply and drives prices even higher.

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From 1970 to 2020 the urban population of the EU and the US grew by 200 million - or fifty percent - while the rural population decreased by 15 million (Ritchie and Roser 2018). This ongoing urbanization fuels a fundamental conflict in urban politics between those who want cities to develop and grow and urban conservationists who are weary of such changes (Jacobs 1961; Glaeser and Cutler 2021). The outcome of this political struggle carries important implications for cities and for society at large. If cities are going to make room for the middle and working class that has traditionally used them for upward mobility (Glaeser 2011), increasing prosperity and tempering regional inequality (Hsieh and Moretti 2019; Ganong and Shoag 2017), then they need to build more housing.

In most developed countries, land use regulation is governed by local democratic processes (Fischel 2015). As a result, local public opinion plays a crucial role in shaping how cities manage urban growth. A growing body of research has examined how citizens think about new housing developments (Nall 2015; Broockman, Elmendorf and Kalla 2024; Hankinson 2018; Larsen, Nyholt et al. 2024*a*), and what factors make particular projects more or less popular (Trounstine 2021; de Benedictis-Kessner and Hankinson 2019; Wicki and Kaufmann 2022). Recent work has also begun to explore contextual variation in opposition, showing that neighborhood-level characteristics—such as racial composition or rates of homeownership—can shape how communities respond to development (Trounstine 2020; Sahn 2021; Einstein, Glick and Palmer 2019). Yet beyond these social and demographic factors, we know surprisingly little about how local opposition to new housing varies across and within cities.

In this article, we connect citizen opposition to residential developments to one of the most significant economic trends of recent decades: the uneven surge in housing prices (Fuller, Johnston and Regan 2020; Glaeser, Gyourko and Saks 2005*a*; Ansell and Adler 2019). Using geocoded survey data combined with detailed registry data from local housing markets, we show that local opposition is concentrated in areas with high housing costs. This pattern holds across five Western European countries and in the United States. It also holds for both renters and homeowners, and cannot be readily explained by the demographic differences between high and low cost areas emphasized in prior work.

What explains this relationship between housing costs and opposition to new housing? Our analyses suggest that it cannot be explained by differences in economic opportunity or resources—controlling for income, wealth, and other indicators of socio-economic status does not meaningfully weaken the association. It is also unlikely that concerns over congestion or strain on public services account for the pattern, as these concerns should apply broadly across different housing markets, not disproportionately in high-cost areas. Finally, we find that the relationship between housing costs and opposition holds even among recent movers to expensive neighborhoods, making it unlikely that the pattern is driven by opposition gradually driving up local housing prices.

Instead, we argue that high prices screen for residents willing to pay a premium for the area’s physical character, making them less sensitive to price and more resistant to change. This attachment—often rooted in appreciation for the area’s appearance and atmosphere—helps explain why these residents are more likely to oppose new housing. Our survey data support this explanation: residents of high-cost areas are significantly more likely to express a desire to keep their neighborhoods unchanged and frequently cite this as a reason for opposing development in open-ended responses.

To further explore this selection mechanism, we conducted a preregistered survey experiment with 3,000 US respondents during the COVID-induced housing boom. This experiment allows us to observe how prospective movers respond to rising housing costs. Consistent with our expectations, shocks to housing prices filter out residents who are less attached to their local area, leaving behind those with a stronger desire to preserve its current character. Accordingly, we find that those most committed to preserving their neighborhood are the least likely to consider moving as prices rise, while less-attached residents are more willing to relocate.

Our findings have important implications for understanding the political roots of urban inequality and the persistent challenges of maintaining dynamism in cities. Rising housing costs do more than create affordability problems—they also reshape the social and political composition of urban areas. High-cost neighborhoods tend to attract residents with strong preferences for preserving local character, making them more likely to oppose new housing construction. This opposition reinforces barriers to development, often pushing growth into lower-cost ar-

eas where resistance is weaker (Hankinson and Magazinnik 2020) but where the economic benefits of new housing are more limited (Glaeser, Gyourko and Saks 2005*b*). The result is a self-reinforcing cycle: as prices rise, opposition hardens, supply is further constrained, and affordability worsens. Over time, this dynamic risks deepening spatial inequality, undermining economic productivity (Hsieh and Moretti 2019), and fueling political discontent (Ansell et al. 2021; Larsen et al. 2019), threatening the long-term vitality of the cities most central to national and global economies.

Nimbyism, Housing Cost and Local Opposition

New housing projects often face substantial local opposition. This resistance is especially visible in affluent and high-cost cities, where residents frequently mobilize through public hearings, legal appeals, and local planning boards (Einstein, Glick and Palmer 2019; Sahn 2024). As a result, much of what we know about local opposition comes from precisely these places—contexts where the stakes are highest, development pressures are most acute, and neighborhood change is particularly contested. Yet despite this focus, we know little about whether opposition is actually more common or more intense in high-cost areas, or whether these cities simply attract more scholarly, media, and political attention. In short, while opposition in expensive urban settings is highly salient, it is not necessarily representative—and systematic comparisons across neighborhoods or cities remain rare.

Instead, prior work on NIMBYism has primarily focused on the individual or project level. Studies have examined which kinds of developments provoke resistance, why opposition often aligns with self-interest, and when material concerns override ideological or symbolic commitments (Marble and Nall 2021; Wicki, Hofer and Kaufmann 2022; Wicki and Kaufmann 2022; Larsen, Nyholt et al. 2024*b*; Trounstine 2021). Other research has shown that opposition is more common among homeowners, older individuals, and white residents (Yoder 2020; Trounstine 2020). While these studies help explain who is most likely to oppose new development—and, by implication, where such opposition might cluster—they offer limited guidance on which broader contextual factors make resistance more likely or more intense.

In this paper, we highlight one such contextual factor: housing prices. While housing costs have been widely studied as a driver of political preferences and economic inequality (Ansell 2014; Larsen et al. 2019), their potential role in shaping opposition to new development has received surprisingly little attention. We argue that housing prices do not merely reflect broader market dynamics—they may also help structure political behavior by changing who lives in a given neighborhood and how committed they are to preserving it.

Why Housing Costs May Increase Local Opposition

At first glance, one might expect higher housing costs to increase demand for new construction as a way to alleviate pressure on prices. Economic theory supports this view: increasing supply should help reduce shortages and slow price growth (Glaeser, Gyourko and Saks 2005a). Yet this logic often breaks down in practice. Many citizens do not believe that new development lowers prices (Nall, Elmendorf and Oklobdzija 2024), and homeowners in particular may prefer policies that protect or increase the value of their own property (Fischel 2005). Public hearings in high-cost cities routinely reveal strong opposition to new development (Einstein, Glick and Palmer 2019; Sahn 2024).

In fact, paradoxically, higher housing costs may fuel stronger and more widespread opposition to new development. Existing explanations emphasize several mechanisms. High-cost areas tend to attract wealthier residents who are more politically active and better equipped to organize against local projects (Brady, Verba and Schlozman 1995; Einstein, Glick and Palmer 2019). Homeowners in these areas may also have a greater financial stake in preserving property values, making them more risk-averse and resistant to change (Fischel 2005). In addition, high-cost neighborhoods are often disproportionately white and politically conservative—groups that, on average, are more likely to resist changes they perceive as threats to community character or stability (Trounstine 2020).

In this paper, we seek both to establish and characterize the relationship between housing costs and local opposition, and to understand the mechanisms that give rise to it. In addition to the explanations above, we propose an alternative mechanism that focuses on how high housing prices themselves shape neighborhood composition.

Beyond attracting residents with higher socioeconomic status, high-cost areas also draw individuals who are willing to pay a premium to live in a particular place. As housing costs rise, remaining in—or moving to—an expensive neighborhood increasingly requires forgoing other economic opportunities. Who is willing to make that trade-off? We argue that high prices act as a selection mechanism, favoring residents with an inelastic demand for that specific place.

While such inelasticity may partly reflect practical considerations—such as job access or family ties—it can also signal a strong attachment to the area’s physical character. Over time, this self-selection process favors residents who place a high value on the look and feel of their surroundings, making them especially resistant to changes such as new development. As a result, high-cost areas may evolve into hubs for what we call local preservationists (Larsen, Nyholt et al. 2024*a*), motivated not only by property values or political preferences, but by a desire to preserve neighborhood character.

This filtering process applies to both newcomers and long-term residents. For renters, staying in a high-cost area entails accepting higher rents that crowd out other forms of consumption. For homeowners, it means forgoing the financial gains of selling and relocating to a lower-cost area, where accumulated equity could be redirected toward other investments or consumption. In both cases, high prices screen for residents who are especially committed to remaining in place.

Regardless of the underlying mechanism, it is important to first establish and characterize the relationship between housing costs and opposition. To the extent that opposition is more common in high-cost areas, the pattern is consequential in its own right. If rising prices are associated with stronger resistance to development—further restricting supply and driving prices even higher—this dynamic risks creating a self-reinforcing cycle (Glaeser, Gyourko and Saks 2005*a*; Glaeser and Cutler 2021).

Such a cycle may deepen spatial inequality. High-cost cities are often economic hubs, offering high productivity and access to opportunity (Ganong and Shoag 2017; Bertaud 2018). Yet if opposition is strongest precisely in these places, new development may be diverted to lower-cost regions with weaker labor markets and fewer public goods (Hsieh and Moretti 2019).

Over time, this pattern risks increasing economic segregation and constraining overall growth by limiting access to high-productivity urban centers.

Research Design

To study the relationship between housing costs and opposition to new development, we combine observational and experimental evidence across six countries. Our goal is twofold: first, to assess whether local housing costs are systematically associated with opposition to new development; and second, to understand why this relationship exists, and whether it reflects underlying selection processes tied to neighborhood composition.

We begin by leveraging cross-national survey data from six countries. We combine national surveys from the UK, Denmark, Sweden, Ireland, and the Netherlands—collected as part of the WEALTHPOL project (Ansell et al. 2022)—with a national survey of U.S. residents. These countries span a range of housing market institutions, offering variation in both market structures and political contexts. The WEALTHPOL surveys were fielded in 2022 using quota sampling from Kantar Consumer, with quotas on gender, age, and region (and on education in the Netherlands). The U.S. survey, conducted in October 2021, used quota sampling to match the population on age, education, race, and region.

We link survey responses to local housing cost data at the municipal level in Sweden, the Netherlands, and Ireland; the MSOA level in the UK; and the zip code level in Denmark and the U.S. All surveys include a measure of respondents' support or opposition to new housing in their local area. The U.S. survey further includes a broader set of items, including support for specific housing proposals and attitudes toward neighborhood change. Together, these data allow us to examine whether housing costs are associated with local opposition to new development, and whether this relationship is consistent across countries and measures.

To explore the mechanisms behind this relationship, we turn to additional modules in the U.S. survey. We assess whether the observed association can be explained by demographic characteristics, respondents' financial exposure to housing markets, and a desire to protect or preserve their neighborhood's existing character. We also examine which groups are most responsive to local housing prices, focusing in particular on recent movers to address concerns

about reverse causality. Finally, we analyze open-ended responses on why individuals oppose new housing, comparing rationales across high- and low-cost areas.

To directly test our novel theoretical mechanism—that rising housing costs select for residents who are especially motivated to preserve the character of their neighborhood—we fielded a preregistered survey experiment in the U.S. The experiment capitalizes on the sharp rise in housing prices during 2020–22 by presenting respondents with accurate but unexpected information about recent price increases in their area. We then assess whether individuals who express stronger preferences for neighborhood preservation are less willing to consider relocating. The experiment was conducted by YouGov in 2022 using quota sampling to match the U.S. population on age, education, race, and region.

While no single approach is sufficient on its own, the combination of cross-national observational data, detailed U.S. survey modules, and experimental evidence allows us to triangulate across methods. This multi-pronged design helps us assess not only whether opposition to new housing is more common in high-cost areas, but also why this pattern emerges—and for whom it is most pronounced.

Independent Variable: Housing Cost

Our key independent variable is local housing costs, which we measure using the price of homes sold in the respondent’s zip code, municipality, or metropolitan statistical area (MSA), depending on data availability.

Home prices do not directly reflect the average housing costs currently paid by residents. For homeowners, actual costs are shaped by mortgage payments and property taxes, while renters’ costs lag behind housing prices due to lease agreements (Gallin 2008). However, home prices serve as a widely recognized indicator of local housing market conditions and influence both perceptions of affordability and expectations about future costs. High housing prices can signal exclusivity, reinforce concerns about rising costs, and shape attitudes toward new development by influencing how people assess their own economic position and the desirability of maintaining neighborhood stability. Even for long-term homeowners with fixed costs, rising prices can shape preferences by affecting perceptions of home value, local demographic shifts,

and potential future costs for themselves or their children. Similarly, renters may view high housing prices as a precursor to future rent increases, reinforcing concerns about affordability and neighborhood change.

For the US, we estimate home prices at the zip-code level using data from Zillow, specifically the average price of homes sold in 2020.² For the five European countries, we use official national housing price statistics that offer the highest level of geographic granularity available. While price measurement methods differ slightly across countries, we focus on the most localized, transaction-based data available, ensuring comparability in capturing current housing costs. Additional details on data sources and processing are provided in Appendix A.

In the survey experiment conducted as part of our second U.S. survey, we manipulate respondents' perceptions of local housing costs by providing half of them with accurate information on home price changes in their MSA over the past 12 years (2010–2022). Due to the housing boom during the COVID-19 period (2020–2022), nearly all respondents in the treatment group receive information indicating substantial recent price increases. An example of the treatment and an overview of the information presented across MSAs are shown in Table 1. The basic premise of this experiment is that respondents may not be fully aware of the extent of these price increases. We test this by asking participants in both the control and treatment groups about their perceptions of housing price changes, and as detailed below, we are successful in leading respondents in the treatment group, on average, to perceive larger price increases than those in the control group.

We use local rather than national price trends to make the information more personally relevant, while relying on MSA-level data instead of zip codes to ensure that trends appear meaningful rather than overly volatile. Specifically, respondents are shown the Zillow Home Value Index, which reflects the typical value of homes in the 35th–65th percentile range. They also see price trends for top-tier (65th–95th percentile) and bottom-tier (5th–35th percentile) homes, allowing them to identify trends that align with their own housing situation. Additionally, they are presented with an estimate of the minimum income required to purchase a home

²Zip codes in the US cover approximately 10,000 people, making them roughly twice the size of a census tract. This provides the most detailed available measure of local housing costs while ensuring a sufficient number of transactions for reliable estimates. Examining smaller geographic units would introduce excessive volatility due to infrequent sales.

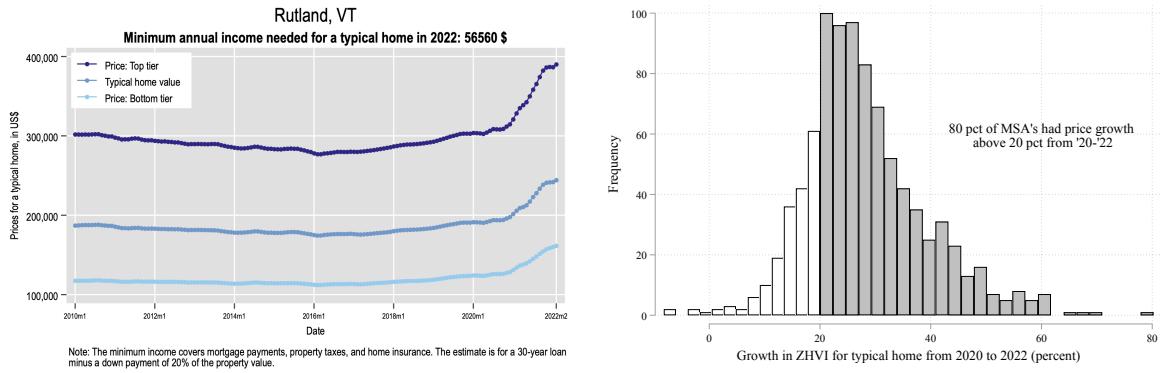


Figure 1: Left panel shows the treatment presented to residents from Rutland, Vermont. Right panel shows distribution of housing price changes across metropolitan statistical areas.

in their local area today, based on Zillow’s affordability calculations. This approach ensures that respondents can anchor their beliefs about housing costs in real-world trends, maximizing both the credibility and salience of the treatment.

Outcomes

Our primary outcome is *opposition to new housing development*. In both the existing European surveys and our original U.S. survey, we use responses to the following question: “*How much would you support or oppose more homes being built in your local area?*” Respondents answered on a five-point scale ranging from *strongly oppose* to *strongly support*. We classify *opponents* (1) as those who express any level of opposition, while *non-opponents* (0) include those who are neutral, supportive, or respond with “don’t know.” Across countries, approximately one in four respondents oppose new housing. Opposition is most widespread in the UK, where 40 pct. of respondents are opposed, and least widespread in Ireland and the Netherlands, where only 18 pct. oppose. Sweden, Denmark, and the U.S. fall between these extremes.

In our U.S. survey, we include multiple additional items that capture both general attitudes and reactions to specific development scenarios. First, respondents are asked an open-ended follow-up after reporting their level of support or opposition to new housing: “*You have answered that you [strongly] [support/oppose] more homes being built in your local area. We would like to know why you gave this answer.*” They are then presented with a free-text response box. This open-ended question allows us to analyze the justifications respondents provide for their views on local development.

Second, we include a broader attitudinal measure designed to capture preferences for preserving the status quo. Respondents are asked whether they agree or disagree with the statement: “*I would like my community to stay the way that it is.*” This item helps contextualize opposition to new housing by distinguishing general resistance to change from more targeted concerns about development.

Third, we incorporate a vignette-based measure that varies the features of a hypothetical development project. Respondents are told to “*imagine that your county is planning to permit a real estate development,*” and are randomly assigned to see different versions of the project. We manipulate four features: (1) distance from the respondent’s home (*1 mile vs. can be seen from your home*); (2) project type (*new homes similar in type and size to the respondent’s home vs. a mall with restaurants, shopping, and cultural activities*); (3) parking provision (*the development includes a large number of parking spaces, which should make parking easier*); and (4) a design cue (*the development is designed by an architect as a tribute to the neighborhood’s character*). Respondents then rate their support for the project on a seven-point scale from *strongly oppose* to *strongly support*. As before, we classify respondents as *opponents* (1) if they express any level of opposition, and as *non-opponents* (0) if they are neutral, supportive, or express no opinion.

Fourth and finally, in our U.S. survey experiment, we examine respondents’ *willingness to relocate* in response to local housing costs. As the primary experimental outcome, we ask: “*In the near future, would you consider moving to another city?*” Respondents who answer *Yes* or *Not sure* receive a follow-up: “*If you were to move, would you choose a city where housing costs are higher, about the same, or lower?*” Respondents who indicate a preference for a *lower-cost location* are coded as willing to relocate to a cheaper area (1). Those who say they would move to a place with *higher or similar costs*, or who answer *No* to the initial question, are coded as unwilling to relocate to a cheaper area (0).

The survey experiment also measure respondents’ attachment to their local area, specifically to its physical character—how it looks and feels. To assess this, we ask whether they agree or disagree with the following statements: “*I would like my community to stay the way that it is.*”,

“I like how my local area looks and feels.”, and “I would like to stay in my community for the rest of my life.”.

Citizen Opposition is Concentrated in Expensive Housing Markets

We begin by assessing whether there is a systematic relationship between local housing costs and citizen opposition to new development. The goal of this section is to establish the robustness of this relationship across countries and under different definitions of opposition. First, we analyze cross-national survey data to assess whether opposition to new housing is more common in high-cost areas across six countries. We then turn to the U.S. survey, which allows for a more detailed investigation using experimental measures, additional controls, and alternative indicators of opposition.

Cross-National Evidence

To facilitate consistent comparisons across countries and regions, we log-transform local housing prices and include regional fixed effects—U.S. states and NUTS 2 regions in the European cases. These steps ensure that our analysis compares areas relative to their broader regional context and accounts for differences in housing market scale and currency. Log-transforming prices allows us to interpret coefficients in percentage terms rather than absolute values, which is particularly useful when comparing housing markets across countries. We also control for population density (logged) to make sure that we are comparing areas where the prospect for new construction is relatively similar.

Figure 2 shows the relationship between local housing prices and opposition to new housing, using a binned scatterplot with a linear fit. The horizontal axis reflects the logged difference in housing prices relative to the regional average: a value of 0 corresponds to the regional mean, while +1 indicates an area where prices are approximately 2.7 times higher, and -1 indicates an area where prices are about 2.7 times lower (i.e., 63 pct. lower). The vertical axis shows opposition to new housing, also relative to the regional mean.

The results reveal a striking pattern: opposition to new housing increases with local housing costs. Moving from the 1st to the 99th percentile of within-region housing prices is asso-

ciated with a 13 percentage point increase in opposition. This effect is substantively meaningful—larger than the average difference between renters and homeowners, which is around 10 percentage points.

To assess the robustness of this relationship and explore cross-national variation, we estimate a series of country-specific linear regression models with and without demographic and economic controls. While the analyses presented here are primarily descriptive, they allow us to evaluate whether the observed patterns can be explained by differences in the characteristics of residents in more and less expensive areas. Specifically, we include controls for age, gender, homeownership, household income, and college education. In the U.S. models, we continue to also control for population density (in log terms), given the wider variation in urban form across states. The results from these models are presented in Table 1.

The findings confirm that there is a strong relationship between housing costs and opposition to new development across all six countries. Although effect sizes vary, the association is consistently positive. The relationship is most pronounced in Denmark but remains evident across all contexts. In the U.S., where the association is weakest, the estimated effect size is still approximately 75 pct. of the cross-country average.

Importantly, the inclusion of demographic controls does little to attenuate the relationship between housing costs and opposition. Factors such as homeownership, age, and income—central to many existing explanations of variation in opposition to housing (Yoder 2020; Einstein, Glick and Palmer 2019)—do not account for the patterns we observe. This suggests that the association is not merely a reflection of the socioeconomic composition of high-cost areas—an interpretation we return to in the sections that follow.

Taken together, these findings point to a broad and robust relationship between local housing prices and opposition to new development. The fact that this pattern holds across diverse national contexts suggests that it is not merely a byproduct of any one political or institutional setting, but instead reflects a more general feature of how housing markets shape citizen preferences.

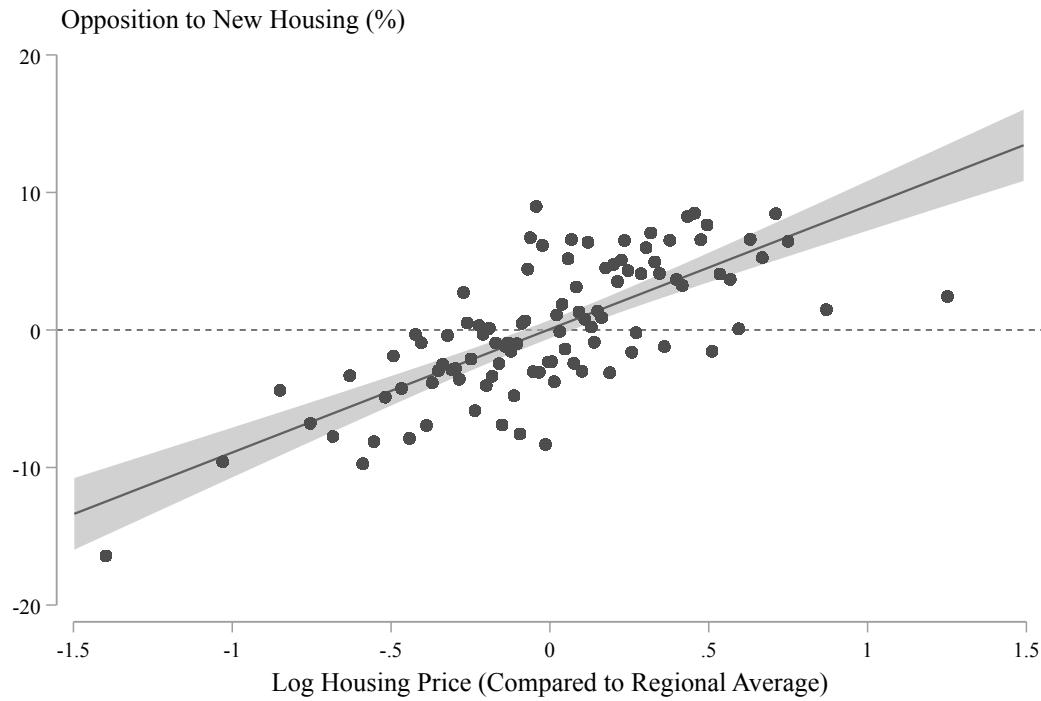


Figure 2: Local Housing Prices and Opposition to New Housing Dots are 100 binned grouped means. The solid line is a linear fit on the underlying data with a 95 pct. confidence interval.

Table 1: Is there a relationship between local housing prices and opposition to new housing?

	Baseline			Controls		
	β	se	n	β	se	n
All Countries	8.37	0.84	17682	8.08	0.92	14454
Denmark	11.58	3.10	903	10.78	3.31	903
Ireland	7.31	5.58	769	7.85	5.18	769
Netherlands	10.14	6.35	746	8.50	6.43	746
Sweden	8.50	3.33	786	7.78	3.47	786
UK	8.42	2.21	4723	8.90	2.24	4723
US	6.35	1.12	6527	7.90	1.16	6527

Notes: Linear regression estimates adjusted for region, age, gender, college education, and

Robustness: Different Outcomes and More Extensive Controls

To further test the robustness of the relationship between housing costs and opposition to new development, we examine additional outcome measures from our U.S. survey. This survey includes both a richer set of attitudinal items and an embedded experimental vignette, allowing us to assess whether the pattern holds across different ways of measuring opposition—and whether it is specific to housing.

We analyze three additional outcomes. The first is a broad attitudinal item capturing neighborhood preservation preferences: agreement with the statement, “I would like my community to stay the way that it is.” The second and third come from an experimental vignette in which respondents evaluate a proposed development project in their local area. Projects varied across multiple dimensions, including whether the development was residential or commercial. This allows us to test whether opposition in high-cost areas reflects a general resistance to development or a more targeted opposition to new housing.

Figure 3 visualizes the relationship between local housing prices and four outcomes using binned scatterplots with linear fits: (1) general opposition to new housing in the respondent’s area (the same outcome used in the comparative analysis above), (2) agreement with the preservationist attitude item, (3) opposition to a hypothetical residential development, and (4) opposition to a hypothetical commercial development. Similar to the cross-country comparison, both the housing cost measure and each outcome are adjusted for state fixed effects and local population density (logged), ensuring that the patterns are not simply driven by differences across states or between urban and rural areas. In each case, we find that respondents in higher-cost areas are much more likely to express opposition to change in their local area.

We then estimate a series of linear regression models for each outcome to assess whether the relationship between housing costs and opposition persists after accounting for a richer set of covariates. Results are presented in Table 2. Controls are added stepwise. First, we adjust for basic demographics (age, gender, race), which may shape both housing preferences and neighborhood context (Einstein, Palmer and Glick 2019). Next, we include socioeconomic status (income and education) to account for differences in material resources and political preferences. We then add household characteristics (household size, tenure in current residence, and

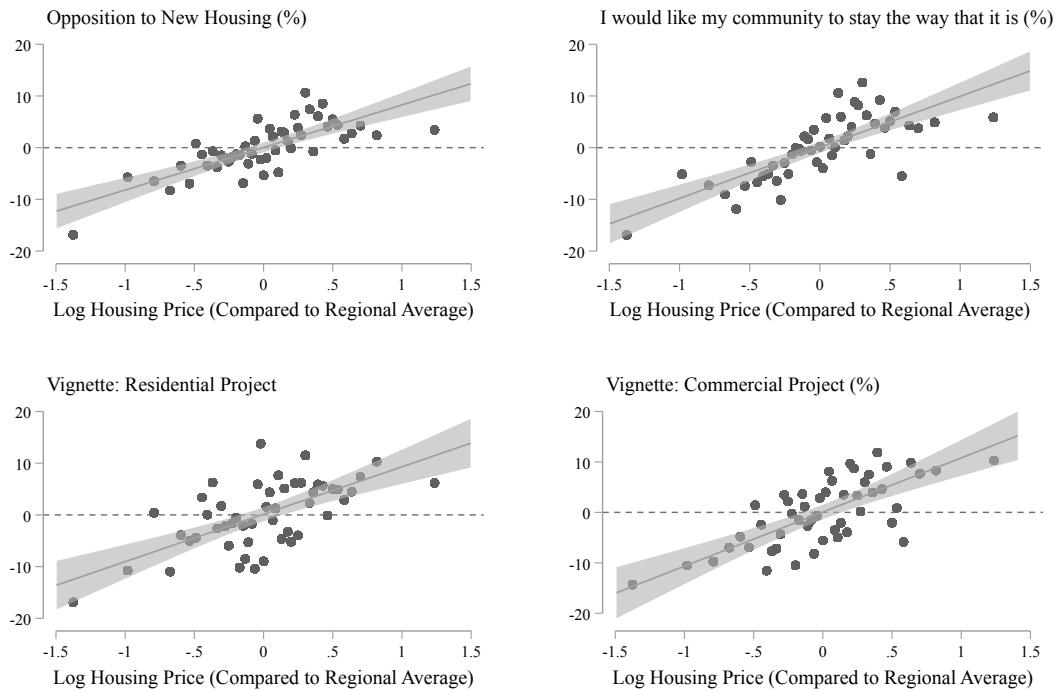


Figure 3: Binned scatterplots show the relationship between log housing prices (relative to the regional average) and four measures of opposition to development. The top panels display general opposition to new housing and agreement with a preservationist attitude. The bottom panels show opposition to hypothetical development projects from a vignette experiment: residential projects (left) and commercial projects (right). In all cases, opposition increases with local housing prices. Shaded areas indicate 95 pct. confidence intervals.

self-reported urban/suburban/rural location), which may influence both sensitivity to change and selection into particular neighborhoods. Partisanship is included to capture ideological predispositions toward development (de Benedictis-Kessner, Jones and Warshaw 2025). Finally, we refine the regional fixed effects by shifting from states to commuting zones and metropolitan statistical areas, allowing us to explore whether the relationship between housing costs and opposition to development holds *within* urban agglomerations.

While the strength of the association varies somewhat—models with more detailed geographic fixed effects tend to show slightly weaker relationships—the overall pattern remains clear: individuals in higher-cost areas are more likely to oppose new development. This association holds across multiple measures of opposition and remains robust after extensive adjustment for geography and population density.

Table 2: How Robust is the Relationship between Housing Cost and Opposition?

	Housing		Preserve		Residential		Commercial	
	β	se	β	se	β	se	β	se
Baseline	6.21	1.13	9.38	1.23	8.66	1.49	6.89	1.77
Age, Gender and Race	4.73	1.51	8.50	1.64	5.53	2.05	6.33	2.33
Income and Education	7.23	1.16	8.21	1.27	8.59	1.54	6.24	1.75
Household Characteristics	7.36	1.16	8.30	1.27	8.68	1.54	6.29	1.74
Partisanship	7.36	1.16	8.30	1.27	8.68	1.54	6.29	1.74
Commuting Zone FE	4.64	1.50	7.28	1.62	5.06	2.06	6.53	2.33
MSA FE	4.97	1.56	5.88	1.67	4.91	2.12	4.58	2.34

Notes: Linear regression estimates with stepwise controls. N = 7,117 in the first two columns. N = 3,430 (commercial) and N = 3,485 (residential) in the last two columns.

Why Does Opposition Go Hand in Hand with Higher Housing Cost?

There is a robust empirical relationship between local housing costs and opposition to new development. But what explains this pattern? One possibility is that the relationship reflects differences in the demographic composition of high- and low-cost areas—such as variation in race (Trounstine 2020), socioeconomic status (Einstein, Palmer and Glick 2019), or rates of home-ownership (Fischel 2001)—which may also influence local opposition. However, as shown in Table 2 above, the estimated partial correlation between housing costs and opposition remains strong and statistically significant even after adjusting for these demographic factors.

Another possibility is that opposition is driven by concerns about congestion or strain on public services. But if that were the case, we would expect such concerns to be relatively uniform across contexts, rather than concentrated in high-cost areas. Moreover, we explicitly control for local population density, ensuring that we are comparing areas where the addition of new housing would have a similar impact on crowding and infrastructure. These patterns suggest that neither demographic composition nor general concerns about service capacity are sufficient to explain the observed relationship between housing costs and opposition to development.

Since demographic composition does not appear to explain why local housing costs go hand in hand with opposition to new development, we focus on three alternative explanations. First, individuals in high-cost areas may have a greater financial stake in preserving property values, making them more risk-averse and resistant to change. Second, the relationship may reflect reverse causation—opposition to development itself could contribute to higher housing costs. Third, high-cost areas may selectively attract or retain residents who are more opposed to new housing.

To adjudicate between these explanations, we begin by analyzing respondents' stated justifications for opposing new housing, which show a much stronger emphasis on neighborhood preservation in higher-cost areas. We then test for evidence of reverse causation and financial self-interest by introducing additional controls, examining alternative outcomes, and exploring heterogeneity across subgroups. These analyses offer limited support for either mechanism. In contrast, the results are consistent with the idea that higher housing costs selectively attract or retain residents who are more preservationist in their outlook. To test this mechanism more directly, we conclude by using a survey experiment to assess how respondents' relocation preferences respond to increases in local housing costs.

Preservationist Justifications in High-Cost Areas

To further substantiate our findings, we also analyze respondents' self-reported reasoning through open-ended answers. In the US survey, all participants were invited to elaborate on their opposition to (or support for) new housing in an open text field. We use a large language model

(ChatGPT-4.1) to classify these responses based on whether they reflect local preservationist reasoning. Specifically, we prompt ChatGPT to assess whether a response expresses a desire to protect the existing physical or natural characteristics of the local area, excluding concerns about congestion, overcrowding, the type of people moving in, or purely economic factors unless tied to local character. The full prompt used for classification is provided in Appendix C.

ChatGPT has been shown to be an accurate and efficient substitute for human experts in annotating political text (Heseltine and Clemm von Hohenberg 2024). To further validate our use of this method, we assess whether ChatGPT’s classifications align with those of three human expert coders. We find that ChatGPT exhibits a high level of agreement with the human coders—comparable to the level of agreement among the human coders themselves. Details of this validation exercise are provided in Appendix C. Examples of reasoning classified as local preservationist include statements such as: “I like the make-up of my community already. It is a nice, quiet neighborhood with beautiful natural landscapes and parks,” “I love the old architecture,” and “Would change bucolic character.”

In Table 3, we examine whether respondents’ use of local preservationist arguments is associated with local house prices. We estimate three models. Model 1 includes all respondents, coding those who do not oppose new housing as non-preservationists by default. The results show that individuals in higher-priced areas are significantly more likely to use local preservationist arguments to justify their views on new housing.

To test whether this relationship holds specifically among opponents of new housing, we restrict the sample in Models 2 and 3. Model 2 includes only those who oppose housing and finds that, while opponents in more expensive areas are somewhat more likely to use local preservationist reasoning, the relationship is not statistically significant ($p = 0.2$). Model 3 further narrows the sample to opponents living in built-up areas, excluding rural residents whose opposition often reflects nature preservation. Here, we find an even stronger association: urban opponents are more likely to use local preservationist arguments in expensive areas, with the coefficient approaching conventional significance levels ($p = 0.1$).

Table 3: Do people express localist reasoning in more expensive areas?

	β	se
All	0.02	0.01
Oppose housing	0.03	0.02
Oppose housing in urban areas	0.04	0.03

Notes: Dependent variable is giving a localist reasoning. We code clearly localist attitudes as 1, and somewhat and not localist reasoning as 0. Linear regression estimates. All models include controls for density and state fixed effects. N = 7,802 (All), N = 1,734 (Oppose housing) and N= 2,000.

Limited Evidence for Economic Self-Interest

Citizens' desire to protect the value of their homes has long been identified as a central motivation for opposing new urban development projects in their own neighborhoods (Fischel 2001, 2005). This economic interest in preserving property values should, in principle, be widespread among homeowners. However, it is plausible that this concern becomes more salient when home prices are particularly high—potentially making homeowners in expensive areas more sensitive to perceived threats to their investment.

But economic self-interest among homeowners alone cannot explain the broader patterns of opposition we observe. As shown in Table 4, renters—who have neither home equity nor mortgage debt—also express significantly more opposition to urban development in high-cost areas. Even though the relationship is weaker, it is still clearly there. Moreover, the bottom row of the table shows that even when we control for homeowners' own stake in the local housing market—using the log of their self-reported home value and the log of their home equity (i.e., home value minus outstanding mortgage debt)—we continue to see marked differences between high and low cost areas. That is, individuals with similarly valued homes are more likely to oppose development when they live in an area where housing is typically more expensive. This pattern runs counter to the idea that the relationship between local housing costs and

opposition to development is primarily driven by differences in how heavily homeowners are invested in the local housing market.

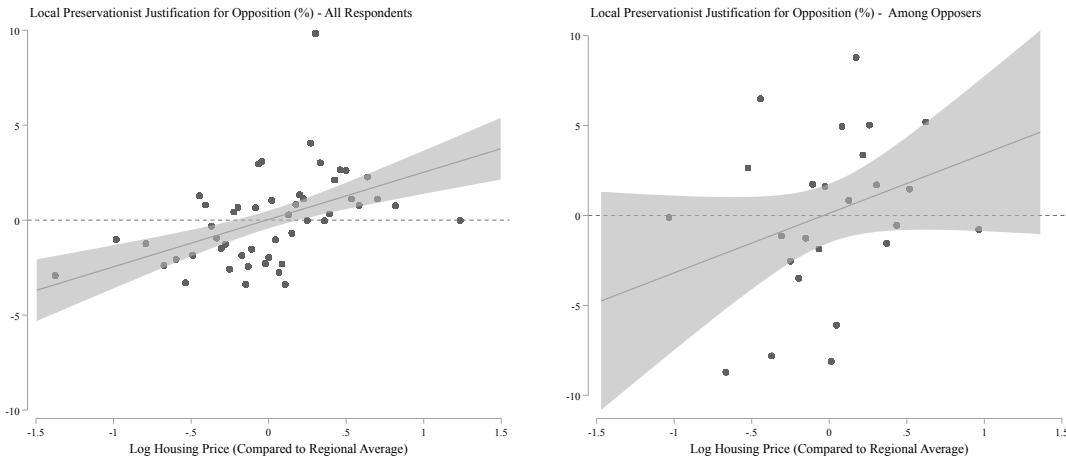


Figure 4: Local Housing Prices and the Use of Local Preservationist Justifications for Opposition in Open-Ended Answers. The graph on the left shows results for all respondents ($N= 7,802$); the graph on the right includes only respondents who said they oppose new housing ($N= 2,000$). The solid line is a linear fit on the underlying data with a 95 pct. confidence interval.

One possibility is that renters in high-cost areas are more likely to believe that new development will drive prices even higher, in line with common narratives around gentrification and displacement (for supporting evidence, see Hankinson 2018). To test this idea, we asked all respondents whether they believed the proposed development would cause housing prices in their local area to increase or decrease. We group together those who said prices would “increase a lot,” “increase,” or “increase somewhat,” and analyze whether this belief is more prevalent in areas with high housing costs.

Figure 5 presents the results. Among renters, we find no relationship between local housing prices and beliefs about the price effects of new development. For homeowners, there is a weak relationship in the opposite direction—those in more expensive areas are slightly *less* likely to believe that development will increase prices. Overall, nearly half of all respondents expect development to raise housing prices. But because this belief is relatively consistent across both low- and high-cost areas, it cannot explain why opposition to development varies so strongly with local housing prices.

Table 4: Relationship Between Local Housing Prices and Opposition by Housing Tenure

	Housing			Preserve			Residential			Commercial		
	β	se	β	se	n	β	se	n	β	se	n	
Renters	3.23	1.66	5.72	1.95	2601	5.03	2.29	1308	5.48	2.75	1291	
Owners	10.85	1.48	10.60	1.56	4599	10.56	1.94	2302	9.60	2.13	2296	
+ Home Value Controls	13.44	1.92	12.49	2.19	2781	11.43	2.76	1397	10.22	3.14	1379	

Notes: Linear regression estimates with full set of controls and state fixed effects. Controls for self-reported home value and equity in the last row.

Could Housing Costs Reflect Pre-Existing Anti-Development Attitudes?

One alternative explanation for the relationship between housing costs and opposition to new development is reverse causation: that some areas are more preservationist to begin with, and over time, their anti-development attitudes contribute to rising housing costs by constraining supply.

We do not rule out the possibility that the correlation identified above is in part driven by this dynamic. However, we find it unlikely that reverse causation alone accounts for the observed relationship. To assess this, Figure 6 presents an analysis interacting housing costs with time spent in the respondent’s current home. The idea is straightforward: if the correlation were primarily driven by long-term residents restricting supply and thereby increasing prices, the relationship should be strongest among those who have lived in the area for a longer period.

What we find instead is that the relationship between housing costs and opposition to new development is already present among those who have lived in their current home for less than two years. Since this group has not resided in the area long enough to influence housing supply, the most plausible explanation is that individuals with more preservationist attitudes are selecting into more expensive neighborhoods. The analysis includes the full set of control variables, except for home equity and home value, which are only available for homeowners.

That said, the effect of housing costs on opposition is somewhat larger among longer-term residents—those who have lived in their homes for more than five years. This could reflect some degree of reverse causation, in which anti-development preferences have influenced local prices. But it may also point to differences in how long-term residents relate to their neighborhoods. Those who stay longer may be more committed to the area and more invested in its

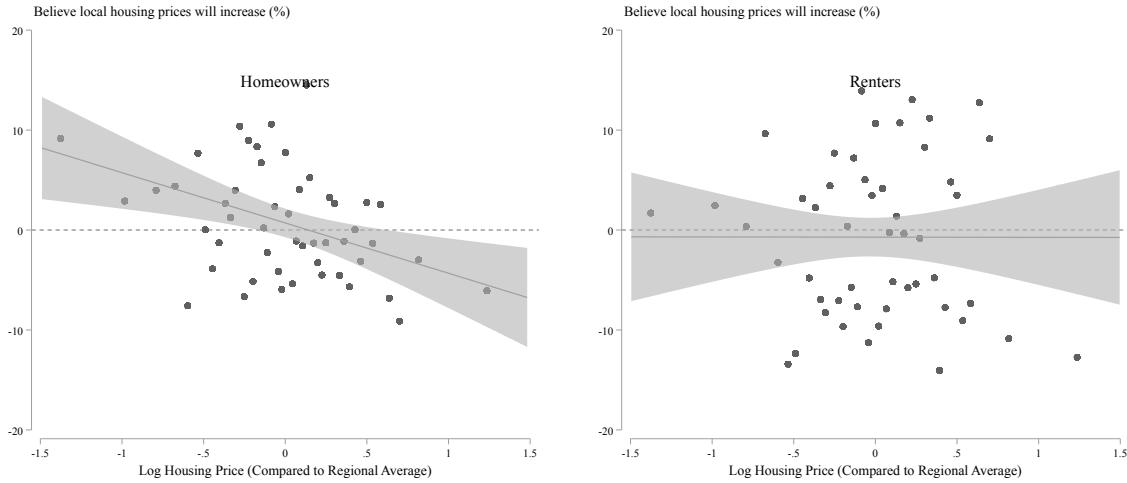


Figure 5: Beliefs about the Effect of a Hypothetical Development Project on Local Housing Prices, by Housing Tenure Binned scatterplots showing the relationship between local housing prices (log-transformed and centered on the regional average) and the share of respondents who believe a proposed urban development will increase housing prices. Results are shown separately for homeowners (left) and renters (right). Shaded areas represent 95 pct. confidence intervals around the fitted line.

current character, while recent arrivals may be more likely to move again if they find better or more affordable options. In either case, the fact that the housing cost-opposition link appears consistently across groups supports the view that this relationship is not solely the product of local preservationist areas becoming expensive over time.

Do Local Preservationist Select into High Cost Areas?

The analyses above have shown that citizen opposition to new development is consistently stronger in high-cost areas. This relationship is not readily explained by differences in demographic composition, reverse causation, or variation in the extent to which residents have a direct financial stake in the housing market. Instead, we find that residents in expensive areas are much more likely to oppose new housing on the grounds of maintaining the existing physical or natural character of their neighborhood.

In other words, high-cost areas tend to be home to individuals with strong local preservationist preferences and a marked attachment to the status quo. We have argued that this pattern is consistent with a selection-based explanation: those who place a high value on the look and feel of a particular area—local preservationists—are more willing to absorb rising housing

costs in order to remain in place. In contrast, those without strong preservationist attachments are more likely to relocate to less expensive areas when prices increase.

In this section, we test the selection mechanism more directly by analyzing how housing costs influence relocation preferences among individuals with varying levels of attachment to their neighborhood's physical character. To examine their behavior, we fielded a survey experiment in the spring of 2022, in which respondents were presented with information about housing price trends in their metropolitan area over the past 12 years. Given the sharp nationwide rise in housing prices following the COVID-19 pandemic (see Figure 1), nearly all respondents were exposed to a signal indicating substantial recent local price increases. We classify respondents as strong or weak local preservationists based on whether they scored above or below the median on a three-item scale measuring preferences for preserving the current character of their neighborhood.

Figure 7 presents the results of the survey experiment. The left panel shows that respondents in the treatment group—who received information about recent housing price trends—were 10 percentage points more likely to report that housing prices had “increased a lot” in their metropolitan area. This effect holds for both strong and weak local preservationists, serving as a manipulation check: although many respondents were already aware of recent price increases, the treatment still significantly influenced their perception of local housing market trends.³

The right panel of Figure 7 examines whether respondents express a desire to move to an area with lower housing costs. Among strong local preservationists, the treatment had no discernible effect. In contrast, weak local preservationists were 6 percentage points more likely to say they would prefer to relocate to a less expensive area. This difference-in-differences between strong and weak local preservationists is statistically significant ($p < .05$), providing support for the selection-based account: individuals with weaker preservationist preferences are more responsive to rising housing costs and more inclined to consider relocating as prices increase.

³Specifically, we examine the share selecting the response “Housing prices have increased a lot” to the question: “Would you say that the price of homes and apartments in your metropolitan area has increased or decreased from 2020 to 2022?” Other options included “Decreased a lot,” “Decreased somewhat,” “Have remained about the same,” and “Increased somewhat.” Using both linear and quantile regression, we also find a statistically significant treatment effect on the median and mean response to this question ($p < .01$).

Figure 8 provides further evidence in support of the selection-based account by showing that the treatment effect on relocation preferences is concentrated among weak local preservationists living in areas that experienced above-median housing price growth. We measure price growth using the relative difference in local housing prices between 2010 and 2022. This finding strengthens our confidence that it is the information about rising housing costs—conveyed through the treatment—that drives the observed effect. Respondents in high-growth areas received the most dramatic signal about local housing price increases (i.e., a graph with the steepest upward slope), and it is precisely among these respondents that we observe the strongest effect on willingness to relocate. This pattern reinforces the idea that weak local preservationists respond to rising housing costs by considering exit, while strong local preservationists—who place greater value on the specific character of their neighborhood—remain committed to staying in place.

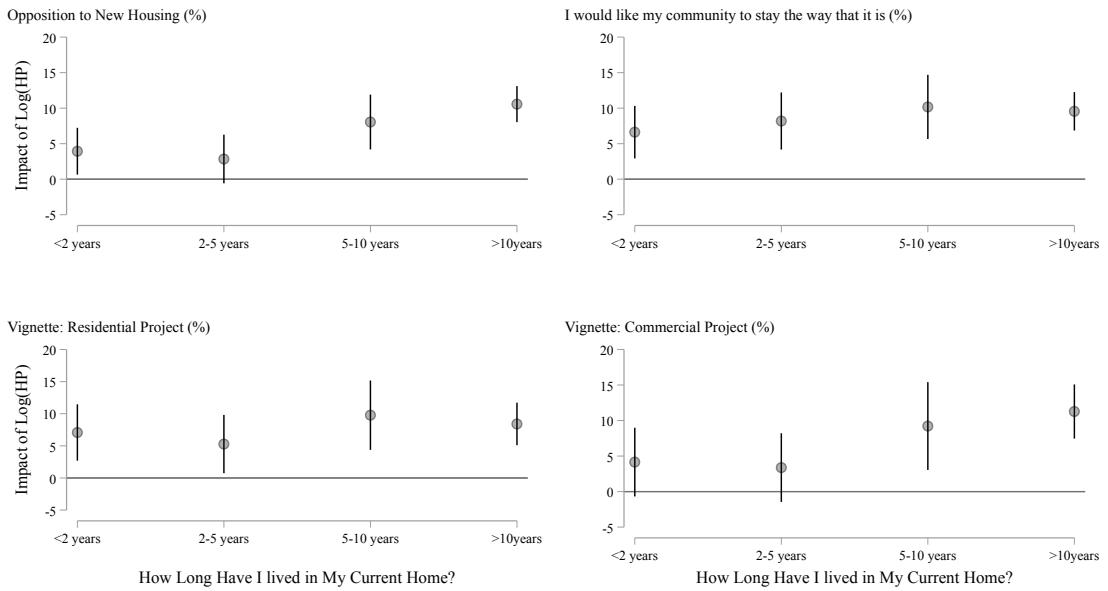


Figure 6: Length of Residence, Housing Costs and Opposition to Development and Community Change Each panel shows marginal effects of an increase in log housing prices by length of residence in the respondent's current home, estimated from interaction models with a full set of controls and state fixed effects. Outcomes include opposition to new housing, preference for maintaining the status quo, and opposition to hypothetical residential and commercial projects. Points indicate average marginal effects with 95 pct. confidence intervals.

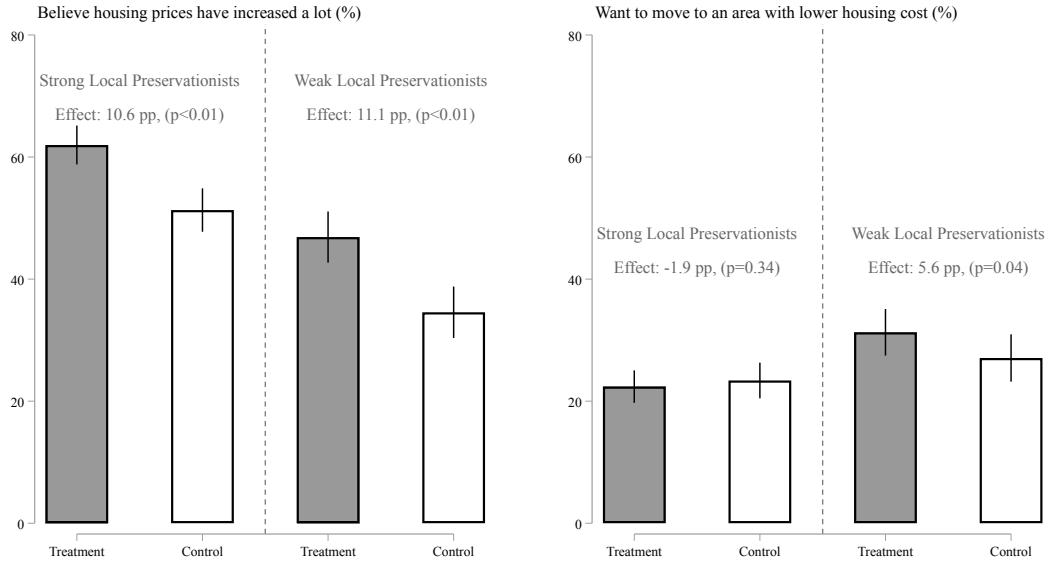


Figure 7: Local preservationists are less sensitive to housing price shocks. Bars represent mean response for treated and untreated respondents among strong local preservationists (who score above the median on the local preservationism scale) and weak local preservationists (who score below median). Spikes are 95 pct confidence intervals.

Is it truly local preservationism that shapes how people respond to rising housing costs, or could the difference be driven by some other characteristic correlated with these attitudes? To some extent, this distinction may not matter for the broader implications: regardless of whether it is preservationism itself or some associated trait (such as income) that drives the response, the outcome is the same—rising housing costs lead to the exit of individuals less committed to the local status quo, resulting in a population increasingly composed of strong local preservationists.

That said, we find no evidence that other observable factors—such as income, typical home value in the respondent’s area, housing tenure (i.e., whether the respondent rents or owns), education level, or length of residence—explain the difference in treatment effects between strong and weak local preservationists. Table 5 presents the treatment effects for each group, as well as the difference between them (i.e., the interaction effect), estimated from models that include interactions between treatment status and each control variable. These controls are added cumulatively, and across all specifications, the size of the gap between strong and weak local preservationists remains stable.

Taken together, these findings support the selection argument. Rising housing costs change the relocation intentions of individuals who are weak local preservationists—they are more likely to look for cheaper housing elsewhere—while strong local preservationists are largely unaffected. This mechanism helps explain why we observe more local preservationist attitudes, and in turn greater opposition to urban development, in areas with higher housing costs in our observational analyses.

Conclusion

In this article, we have shown that opposition to new housing is concentrated in places where housing costs are high. Across six countries, we document a consistent and robust relationship between local housing prices and opposition to new housing. This pattern holds across diverse political and institutional contexts, across multiple outcome measures, and persists after adjusting for demographic and socioeconomic factors.

Table 5: How Robust is the Difference between Localist and Non-Localist?

	Local Preservationists		Non-Preservationists		Difference		
	β	se	β	se	β	se	n
Baseline	-1.00	2.01	4.21	2.77	-5.21	3.43	2830
Log(Typical Home Value)	-1.00	2.02	4.18	2.77	-5.18	3.43	2830
Household Income	-0.11	2.14	5.29	2.92	-5.39	3.64	2516
Housing Tenure	0.31	2.17	5.30	2.94	-4.99	3.72	2516
Education	0.17	2.17	5.42	2.96	-5.25	3.75	2516
Years in Current Home	0.04	2.19	5.19	3.03	-5.15	3.82	2449

Notes: Estimated effect of treatment for strong and weak local preservationist including various controls interacted with the treatment variable. See Appendix for the full models.

To explain this pattern, we evaluate a range of potential mechanisms. The evidence does not support the idea that opposition is primarily driven by economic self-interest or concerns about rising prices. Opposition is not confined to homeowners—renters in expensive areas are also more likely to resist new development—and we find no systematic relationship between housing costs and beliefs about whether development will increase prices. Nor can demographic differences between low- and high-cost areas explain the pattern: controlling for income, wealth, race, education, and homeownership does not meaningfully attenuate the relationship. Reverse causality, where opposition drives up prices, is also unlikely, as the relationship holds even among recent movers to high-cost neighborhoods.

Instead, we find consistent support for a selection-based account: high-cost areas tend to attract and retain residents with a strong attachment to neighborhood character and a marked preference for preserving the status quo.

This dynamic helps explain why some of the world’s most prosperous and progressive cities struggle to address housing, transport, and climate challenges. Affordability crises push out those who might otherwise support change (Wetzstein 2017), while the residents who remain are often more committed to resisting change. The result is political deadlock—even in places where liberal residents broadly support affordable housing and public transit in principle (Dougherty 2020). By highlighting the role of residential sorting, our findings offer a new perspective on the political roots of that contradiction.

The findings also carry implications for housing policy. Approaches that seek to shift public opinion through appeals to affordability or economic growth may fail to engage with the preservationist motives that drive opposition in high-cost areas. Policies that dampen housing costs or reduce the extent of residential sorting—such as rent control, inclusionary zoning, or the expansion of non-market housing—may offer a more promising route by maintaining a broader mix of residents and preventing opposition from becoming entrenched.

Our evidence supports a selection mechanism, but we cannot directly observe how rising costs reshape preferences over time. Ideally, this would require panel data that tracks the same individuals across time, and includes fine-grained geographic information so that changing housing prices can be linked to changes in opinion. No such geolocated panel data currently

exist across the countries we study. Instead, we have relied on a combination of cross-sectional, observational, and experimental evidence to evaluate competing explanations and trace underlying mechanisms.

Finally, as we noted in the introduction, the link between housing costs and opposition risks generating a self-reinforcing cycle: as prices rise, opposition hardens, supply is constrained, and affordability worsens. Over time, this dynamic can transform open cities into exclusionary enclaves—economically vibrant but politically resistant to change. Moreover, high-cost areas are often where new housing is most needed, as they serve as economic hubs with high productivity and access to opportunity (Bertaud 2018). Yet if opposition is strongest precisely in these areas, development may be pushed into lower-cost regions where the economic gains from growth are more limited (Hsieh and Moretti 2019). This pattern risks compounding regional inequality and undermining the potential for social mobility(Ganong and Shoag 2017).

References

- Ansell, B and D Adler. 2019. “Housing and populism.” *West European Politics* 43(2).
- Ansell, Ben. 2014. “The political economy of ownership: Housing markets and the welfare state.” *American Political Science Review* pp. 383–402.
- Ansell, Ben, Frederik Hjorth, Jacob Nyrup and Martin Vinæs Larsen. 2021. “Sheltering Populists? House Prices and the Support for Populist Parties.” *Journal of Politics* Online first.
- Ansell, Ben, Laure Bokobza, Asli Cansunar, Mads Elkjaer, Matthias Haslberger and Jacob Nyrup. 2022. “WEALTHPOL Europe Survey Data.”.
- Bertaud, Alain. 2018. *Order without design: How markets shape cities*. MIT Press.
- Brady, Henry E, Sidney Verba and Kay Lehman Schlozman. 1995. “Beyond SES: A resource model of political participation.” *American political science review* 89(2):271–294.
- Broockman, David, Christopher S Elmendorf and Joshua Kalla. 2024. The Symbolic Politics of Housing. Technical report Center for Open Science.
- de Benedictis-Kessner, Justin, Daniel Jones and Christopher Warshaw. 2025. “How partisanship in cities influences housing policy.” *American Journal of Political Science* 69(1):64–77.

- de Benedictis-Kessner, Justin and Michael Hankinson. 2019. “Concentrated burdens: How self-interest and partisanship shape opinion on opioid treatment policy.” *American Political Science Review* 113(4):1078–1084.
- Dougherty, Conor. 2020. “California, mired in a housing crisis, rejects an effort to ease it.” *New York Times*, <https://www.nytimes.com/2020/01/30/business/economy/sb50-california-housing.html>.
- Einstein, Katherine Levine, David M Glick and Maxwell Palmer. 2019. *Neighborhood Defenders: Participatory Politics and America’s Housing Crisis*. Cambridge University Press.
- Einstein, Katherine Levine, Maxwell Palmer and David M Glick. 2019. “Who participates in local government? Evidence from meeting minutes.” *Perspectives on politics* 17(1):28–46.
- Fischel, W.A. 2015. *Zoning Rules!: The Economics of Land Use Regulation*. JHU Press.
- Fischel, William A. 2001. “Why are there NIMBYs?” *Land Economics* 77(1):144–152.
- Fischel, William A. 2005. *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-use Policies*. Harvard University Press.
- Fuller, Gregory W, Alison Johnston and Aidan Regan. 2020. “Housing prices and wealth inequality in Western Europe.” *West European Politics* 43(2):297–320.
- Gallin, Joshua. 2008. “The long-run relationship between house prices and rents.” *Real Estate Economics* 36(4):635–658.
- Ganong, Peter and Daniel Shoag. 2017. “Why has regional income convergence in the US declined?” *Journal of Urban Economics* 102:76–90.
- Glaeser, Edward. 2011. *Triumph of the City*. Pan Macmillan.
- Glaeser, Edward and David Cutler. 2021. *Survival of the City: Living and Thriving in an Age of Isolation*. Penguin.
- Glaeser, Edward L, Joseph Gyourko and Raven E Saks. 2005a. “Why have housing prices gone up?” *American Economic Review* 95(2):329–333.
- Glaeser, Edward L, Joseph Gyourko and Raven Saks. 2005b. “Why is Manhattan so expensive? Regulation and the rise in housing prices.” *The Journal of Law and Economics* 48(2):331–369.

- Hankinson, Michael. 2018. “When do renters behave like homeowners? High rent, price anxiety, and NIMBYism.” *American Political Science Review* 112(3):473–493.
- Hankinson, Michael and Asya Magazinnik. 2020. “The supply-equity trade-off: The effect of spatial representation on the local housing supply.” .
- Heseltine, Michael and Bernhard Clemm von Hohenberg. 2024. “Large language models as a substitute for human experts in annotating political text.” *Research & Politics* 11(1):20531680241236239.
- Hsieh, Chang-Tai and Enrico Moretti. 2019. “Housing constraints and spatial misallocation.” *American Economic Journal: Macroeconomics* 11(2):1–39.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. Vintage.
- Larsen, Martin Vinæs, Frederik Hjorth, Peter Thisted Dinesen and Kim Mannemar Sønderskov. 2019. “When do citizens respond politically to the local economy? Evidence from registry data on local housing markets.” *American Political Science Review* 113(2):499–516.
- Larsen, Martin Vinæs, Niels Nyholt et al. 2024a. “Understanding Nimbyism as Local Preservationism.” *Working Paper* .
- Larsen, Martin Vinæs, Niels Nyholt et al. 2024b. “Understanding Opposition to Apartment Buildings.” *Journal of Political Institutions and Political Economy* 5(1):29–46.
- Marble, William and Clayton Nall. 2021. “Where Self-interest Trumps ideology: Liberal Homeowners and Local Opposition to Housing Development.” *The Journal of Politics* 83(4):1747–1763.
- Nall, Clayton. 2015. “The political consequences of spatial policies: How interstate highways facilitated geographic polarization.” *The Journal of Politics* 77(2):394–406.
- Nall, Clayton, Christopher S Elmendorf and Stan Oklobdzija. 2024. “Folk economics and the persistence of political opposition to new housing.” Available at SSRN 4266459 .
- Ritchie, Hannah and Max Roser. 2018. “Urbanization.” *Our World in Data* .
<https://ourworldindata.org/urbanization>.
- Sahn, Alexander. 2021. “Racial Diversity and Exclusionary Zoning: Evidence from the Great Migration.” *Working Paper* .

- Sahn, Alexander. 2024. “Public comment and public policy.” *American Journal of Political Science*.
- Trounstine, Jessica. 2020. “The geography of inequality: How land use regulation produces segregation.” *American Political Science Review* 114(2):443–455.
- Trounstine, Jessica. 2021. “You Won’t be My Neighbor: Opposition to High Density Development.” *Urban Affairs Review* p. 10780874211065776.
- Wetzstein, Steffen. 2017. “The global urban housing affordability crisis.” *Urban Studies* 54(14):3159–3177.
- Wicki, Michael and David Kaufmann. 2022. “Accepting and resisting densification: The importance of project-related factors and the contextualizing role of neighbourhoods.” *Landscape and Urban Planning* 220:104350.
- Wicki, Michael, Katrin Hofer and David Kaufmann. 2022. “Planning instruments enhance the acceptance of urban densification.” *Proceedings of the National Academy of Sciences* 119(38):e2201780119.
- Yoder, Jesse. 2020. “Does Property Ownership Lead to Participation in Local Politics? Evidence from Property Records and Meeting Minutes.” *American Political Science Review* 114(4):1213–1229.

Appendix: For Online Publication

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A Comparative analysis

To supplement the analysis from the US, we run similar analyses as the one found in Figure 2 in five other developed democracies. These are Denmark, Ireland, the Netherlands, Sweden, and the United Kingdom. In the following, we describe the data used in the analysis.

A.1 Opposition to new housing

The data on opposition to new housing stems from three different surveys conducted as a part of the WEALTHPOL-project (Ansell et al. 2022).

The project conducted one survey (WEALTHPOL Europe Survey) which was rolled out in 7 European countries in the Spring of 2022 by the WEALTHPOL team together with Kantar. The countries are Denmark, Sweden, Ireland, Germany, Netherlands, France, Italy. We are unable to find detailed data on house prices for France, Germany, and Italy, and these countries are therefore excluded from the analysis. The question on opposition to new developments is *Thinking about new housing in your local area. How much would you support or oppose more homes being built in your local area?*, and the respondents could answer one of four categories, 1. Strongly oppose, 2. Somewhat oppose, 3. Somewhat support, and 4. Strongly support. We code 1 and 2 as opposing new housing being built.

In addition, the project conducted two surveys in England and Wales (Elkjaer et al. 2024). The first survey was conducted by YouGov in May and June 2021, using their nationally representative online panel, and included 3,186 adults living in England and Wales. The second was also conducted by YouGov survey in the fall of 2022, again using their nationally representative online panel but this time sampling 3,592 adults living in the United Kingdom. In the analyses we combine the two surveys and run analyses on the full sample. The results are practically identical if we run the analyses on the two surveys separately. The question to measure opposition to new housing in both surveys was *Thinking about new housing in your local area. How much would you support or oppose more homes being built in your local area?*, and the respondents could answer one of five categories, 1. Strongly support, 2. Somewhat support, 3. Neither support nor oppose, 4. Somewhat oppose, and 5. Strongly oppose. We code 4 and 5 as opposing new housing being built.

Descriptive statistics for the surveys are found below.

Table A1: Descriptive statistics

Country	N	Answered Q on opposition	% who oppose new housing	N regions
Denmark	1280	1120	30 %	5
Ireland	1249	1157	18.6 %	4
Netherlands	1216	1070	18 %	6
Sweden	1259	1128	34.3 %	5
United Kingdom (round 1)	3186	3186	37.8 %	10
United Kingdom (round 2)	3592	3592	39.9 %	12

A.2 Data on house prices

Denmark

We use data from the Danish Mortgage Bank Federation, Realkreditforeningen. This data contains quarterly information about the average price per square-meter for both apartments

and single family homes at the zip code level. We use the data for 2020-2021. We calculate an average for both types of housing by multiplying the number of sold units for each type with the average price for each type. This number is then divided with the total sum of sold units.

Ireland

We use data from the Residential Property Price Index (RPPI) for July 2022, released by the Central Statistics Office on Wednesday (14 September). The index contains data on the median price of a dwelling purchased (in EUR) in the 12 months to July 2022 for the 139 Eircodes in Ireland.

The Netherlands

We use data from Statistics Netherlands on the average purchase prices of existing own homes by municipality in 2022 (in EUR). The identifier for the statistics is 83625ENG. There are 728 municipalities in the dataset.

Sweden

We use data provided by Svensk Mäklarstatistik AB. This data contains information about the average price per square-meter for both apartments and villas on the municipal level in 2022. There are 290 municipalities in the dataset.

The United Kingdom

We use the *House price statistics for small areas in England and Wales* provided by the Office for National Statistics. We use the mean price for the Year ending Mar 2020 paid by the Middle layer Super Output Areas (MSOA). There is data on 7,201 MSOA's.

A.3 Regression results

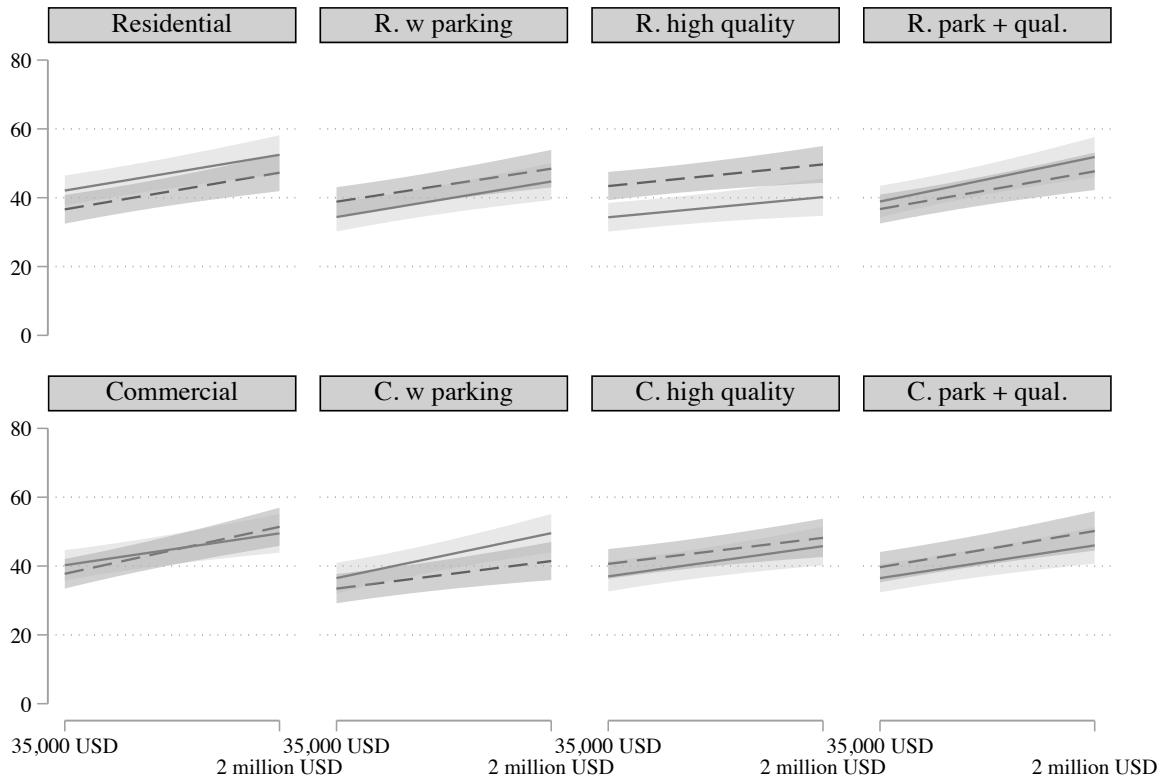
Table A2: Comparative analysis

Model:	Denmark		Sweden		Ireland		The Netherlands		United Kingdom		United Kingdom (w.o. London)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
log(Houseoprices)	0.12*** (0.02)	0.14** (0.03)	0.09* (0.04)	0.07 (0.05)	0.06** (0.01)	0.13*** (0.02)	0.04 (0.03)	0.05* (0.02)	0.10** (0.04)	0.10** (0.04)	0.13*** (0.03)	0.12** (0.04)
Renter		0.29 (0.52)		-0.45 (0.68)		2.1*** (0.10)		0.56 (1.5)		0.28 (0.35)		-0.05 (0.26)
log(Houseoprices) × Renter		-0.04 (0.05)		0.04 (0.07)		-0.18*** (0.008)		-0.05 (0.12)		-0.03 (0.03)		-0.007 (0.02)
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,008	1,008	850	850	818	818	917	917	6,271	6,271	5,526	5,526
R ²	0.02415	0.02781	0.04053	0.04112	0.02381	0.05453	0.01313	0.02339	0.01422	0.03410	0.01302	0.02904

Dependent variable is opposition to new housing. Region clustered standard-errors in parentheses. Signif. Codes: ***p .01, **p .05, *p .10

B Robustness Across Project type Conditions

This relationship is not limited to any of the $(2 \times 2 \times 2 \times 2 =)$ 16 different types of urban development project that we presented to respondents. As can be seen from Figure B1, while there is some variation in the strength of the relationship, we find a statistically significant positive relationship in all 16 cases. The differences in effect size across type of development project are not jointly statistically significant ($p > .7$). Moreover, we find no evidence that providing more information about the development project, i.e., providing cues about the project's quality or effects on parking, reduce the strength of the relationship between local housing cost and opposition to the project. This suggest that differences in opposition to urban development is not the result of those in cheaper housing markets expecting the project to be of higher quality than those in expensive housing markets. If such differences in expectations were driving the relationship, we should expect cues about the project's content to weaken the relationship between home values and opposition to the project.



Solid: 'Within 1 mile', Dashed: 'Can be seen from your home'.

Figure B1: The relationship between housing prices and and citizen opposition does not depend on the type of urban development project. The relationship between housing prices and citizen opposition across the 16 different project types respondents were presented with. The solid lines and shaded areas represent a linear fits with a 95 pct. confidence interval. The estimated relationships are from a linear probability model controlling for the log of density and state fixed effects.

C Content analysis using ChatGPT

Large Language Models, and especially ChatGPT, have quickly gained prominence as a tool for large-scale analysis of political text. It has been shown to be accurate and cost-efficient for annotating political text (Heseltine and Clemm von Hohenberg 2024). In comparison, other methods, such as manual coding or supervised machine learning, require more manual work and are not necessarily more precise. Therefore, we use ChatGPT version 4.0 to code open text responses from the US survey. In the following, we describe the method and show that it performs comparable to human coders in terms of accuracy.

C.1 Description of the method

To classify the reasons for opposing new housing, we first filtered the data, so we only kept those who oppose building more housing in their community, meaning that they answered *4. Oppose* and *5. Strongly oppose* on *Think about new housing in your community. Would you support or oppose building more homes in your community?*. This left us with 2,051 respondents.

All respondents (both those who opposed and supported new housing) were then asked *You have answered that you [INSERT ANSWER] the building of new homes in your community. We would like to know why you gave this answer.*

We then developed a prompt through an iterative process in which we increased precision by testing different prompts until we reached an acceptable Krippendorff alpha reliability estimate (over $\alpha > 0.7$). We did so by randomly selecting 100 answers which were coded by three human coders and ChatGPT, using their API. Next, we calculated the level of agreement. The final prompt was as follows:

A person provides the following reason for opposing new homes in their community: [INSERT ANSWER]. Localism is defined as "attitudes, beliefs, or actions aimed at protecting and maintaining the existing physical or natural characteristics of a specific locality". Thus, congestion of public services, overcrowding, the type of people, and economic considerations in itself should not be considered localist. Statements mentioning overcrowding or an excess of housing without reference to preserving local characteristics should not be coded as localist. Can the reasoning be described as localist? Choose from one of the following three options: "1. Clearly localist", "2. Somewhat localist", "3. Not localist". If the reason cannot be classified assign "4. NA". Only provide the chosen classification in your answer.

C.2 Accuracy Measures

It is difficult to code whether a person uses localist preservationist reasoning compared to coding whether a statement is negative or positive, or classifying whether a text concerns a specific topic. Localist preservationist reasoning is not a commonly established term, and therefore the ChatGPT and the human coders have little prior knowledge about the concept. Thus, we should not expect complete agreement. Below, we test agreement between coders and ChatGPT and find that the agreement generally is high.

References for the appendix

Ansell, Ben, Laure Bokobza, Asli Cansunar, Mads Elkjaer, Matthias Haslberger and Jacob Nyrup. 2022. "WEALTHPOL Europe Survey Data."

	ChatGPT	Coder 1	Coder 2	coder 3
ChatGPT	1.00	0.71	0.63	0.64
Coder 1 (Martin)	0.71	1.00	0.76	0.75
Coder 2 (Jacob)	0.63	0.76	1.00	0.71
Coder 3 (Niels)	0.64	0.75	0.71	1.00

Elkjaer, Mads, Ben Ansell, Laure Bokobza, Asli Cansunar, Matthias Haslberger and Jacob Nyrup. 2024. “Why is it so hard to counteract wealth inequality? Evidence from England and Wales.” *Forthcoming in World Politics* .

Heseltine, Michael and Bernhard Clemm von Hohenberg. 2024. “Large language models as a substitute for human experts in annotating political text.” *Research & Politics* 11(1):20531680241236239.