

**Learning from Land Use Reforms:
Housing Outcomes and Regulatory Change**

California's Strengthened Housing Element Law: Early Evidence on Higher Housing Targets and Rezoning?

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Abstract

This article examines California's strengthened housing planning system as an example of land use reform impacts and intergovernmental conflict around housing policy. For the first time in its 50-year history, the state's plan mandate set local government housing targets for the 2021 through 2029 planning period higher than many municipalities' existing zoned capacity for new housing. Using administrative and census data, we describe changes in housing targets and changes in the housing plans cities have made in response. We analyze rezoning commitments in those plans, focusing on the 209 municipalities in southern California, especially the 93 housing plans deemed compliant by the state as of February 10, 2023. These municipalities, which represent less than one-third of the state's population, have already committed to over 10 times the amount of rezoning than in the previous planning period (in 2014). Using regressions with different measures of targets and rezonings, we find that larger increases in a city's housing target are associated with more rezoning and that increases in targets that require land zoned for multifamily housing have a stronger association. This assessment is important not only for the state's 40 million residents, but also for national discussions about state-level intervention in local housing planning. Existing evidence suggests that state affordable housing appeals systems have been more effective than plan mandates, yet mandates have not been aggressively implemented until now. We also assess the actions by presumably exclusionary cities: those with more expensive housing, non-Hispanic White residents, homeowners, and elderly residents than the rest of the region. The results confirm that these cities had received relatively low targets previously, but do not differ in their rates of rezoning.

Introduction

Federal and state governments in the United States have a long-standing interest in compelling jurisdictions with expensive housing, which tend to be more affluent and more homogeneous than their regions, to allow more housing production. This interest arises from a desire to increase affordability, advance racial integration, and foster equality of opportunity. Specific approaches to this problem have varied across the country, but to date the results have been mixed at best.

On paper, local governments are creatures of the state and subject to the higher government's will. In practice, higher levels of government find it exceedingly difficult to change the behavior of local ones, at least with respect to land use. State laws designed to change local behavior are sometimes written poorly and other times written well but watered down—all state representatives are also local residents—so states rarely bring the full force of their authority to bear on localities. Even well-designed and strong laws are often unevenly enforced. Local governments that fail to comply with state housing laws may face few consequences, and often it is the same affluent communities these laws target that are also best able to evade or circumvent them.¹ The result is initiatives undertaken with great fanfare that deliver little of substance. Massachusetts' anti-snob zoning ordinance, for example, was passed in 1969 with the intent of eventually having every city and town in the state offer 10 percent of its housing stock as affordable. More than 40 years later, only 39 of the state's 351 municipalities had reached that benchmark.²

This article examines California's recent attempts to override local opposition. Specifically, we study reforms passed in 2017 and 2018 that were designed to give more teeth to the state's ineffective and complicated "fair share" housing planning system. Under California's long-standing system (described in detail below), local governments were required to plan for projected housing growth for households at a range of income levels. In theory, the system would ensure that every jurisdiction contributed enough housing (including affordable housing) to meet regional needs. In practice, the system was almost entirely ineffective.

1. Huixin Zheng et al., "Accessibility, Affordability, and the Allocation of Housing Targets to California's Local Governments," UC Office of the President: University of California Institute of Transportation Studies, 2021, <https://doi.org/10.7922/g20poxbv>.

2. Lynn M. Fisher and Nicholas J. Marantz, "Can State Law Combat Exclusionary Zoning? Evidence from Massachusetts," *Urban Studies* 52, no. 6 (May 1, 2015): 1071–89, <https://doi.org/10.1177/0042098014534906>.

The reforms we study identified and sought to correct three fundamental flaws in the existing system: a low total target for statewide housing growth, an inequitable and often unrealistic allocation of that total across local jurisdictions, and a plan update process that all but invited strategic behavior by allowing local governments to submit highly unrealistic plans for growth. As we will show, the first two flaws facilitated the third. The process that held down the total number of housing units for which jurisdictions needed to plan directly enabled the strategic behavior in that local planning. Reforming the system to generate a higher initial number made evasion more difficult.

We wish to emphasize that point. Targets for *total* housing production are rarely part of state housing policies.³ The two most widely known fair share policies—in New Jersey and Massachusetts—focus on subsidized units. California, by contrast, has long required that its cities plan for a total amount of housing, which includes market-rate and subsidized units; before reform, however, those targets were low. In the planning cycle that immediately preceded the 2017 reforms, for example, the statewide target for housing growth—despite occurring during a period of massive economic expansion—was one million units, many of which were allocated to places with low demand for housing.⁴ Many affluent cities near job centers received low housing targets, whereas low-demand cities in outlying parts of metropolitan areas were expected to plan for thousands of units.

After the reform, the total target jumped to 2.5 million housing units, and compared to previous planning cycles, regional governments allocated larger shares to affluent jurisdictions. Those higher targets, combined with increased state scrutiny of how cities plan to meet them and new consequences for failing to do so, have changed housing planning in the nation's largest and least affordable state.

This article has two empirical components, both of which examine cities in southern California. First, we describe the recently adopted and certified housing plans under the reformed system. Our focus here is on whether the new system prompted more cities to rezone. Some jurisdictions could demonstrate to the state that their existing zoning provided sufficient capacity to meet their new housing targets. Cities that could not demonstrate as much would need to rezone land to be in compliance. If localities do not have to rezone,

3. Christopher S. Elmendorf, "Beyond the Double Veto: Land Use Plans as Preemptive Intergovernmental Contracts," *Social Science Research Network*, December 1, 2019, <https://doi.org/10.2139/ssrn.3256857>.

4. Paavo Monkkonen and Spike Friedman, "Not Nearly Enough: California Lacks Capacity to Meet Lofty Housing Goals," *UCLA: The Ralph and Goldy Lewis Center for Regional Policy Studies*, February 2019, <https://escholarship.org/uc/item/7t335284>.

the planning mandate will continue to have no impact on housing production. To assess the relationship between the reformed housing targets and rezoning, we create an accurate measure of the change in housing targets standardized across cities.

Our second empirical exercise is to test the idea that more exclusionary cities were able, even in the face of those reforms, to evade the state mandates and maintain their regulatory barriers to housing (that is, avoid rezoning). We do so by measuring the association between rezoning and a series of characteristics commonly associated with regulatory exclusion: high incomes, high housing values, and larger shares of the population that are elderly and White. Doing so allows us to assess whether those cities are systematically engaging in less rezoning.

Because only half of the cities in southern California have had their plans certified (in many cases because the State found them inadequate), we also test whether these places differ on average from cities without certified plans.

In the next sections of the article, we review literature on the effectiveness of plan mandates, describe California's planning system, and summarize recent changes to it. The article then describes the challenges of assessing impact through a review of housing plans, how we dealt with these challenges, and what we can say about the 2021 through 2029 housing plans. We then turn to our empirical analysis, and conclude.

Principal-Agent Problems and California's Housing Element System

This article contributes to the broad literature on housing affordability and exclusionary local jurisdictions and also to the smaller literature on state housing laws and plan mandates—state-level efforts to direct local planning actions. Plan mandates can address housing permitting, but they may also be focused on issues such as wetlands protection, transportation behavior, or other areas in which state officials believe that local incentives might be at odds with the state's broader interests. In this case, it may be in an individual city's interest to block housing production, but an absence of housing undermines the state economy.

Some state housing laws take the form of ad hoc actions: California and Massachusetts, for example, both require local governments to offer regulatory relief for developments that include affordable housing. Other laws are more expansive and baked into the local planning process. At least 15 U.S. states require local governments to adopt a comprehensive plan to govern land use development.⁵ Some states—such as California, Florida, Oregon, and Washington—require local municipalities to plan for the development of new market-rate and subsidized housing. Expectations and requirements for plan content vary dramatically, as does how state agencies supervise local planning.

The research on the efficacy and impact of state planning mandates is mixed. Decades into their existence, the affordable housing laws in Massachusetts and California have produced thousands of units.⁶ On the other hand, in most localities in both states, developers have never actually used those laws; the affordable units created by those statutes are concentrated in a handful of places. Arguments about comprehensive planning take a similar form: some scholars argue that comprehensive planning mandates improve the

5. OECD, "The Governance of Land Use: Country Fact Sheet United States," 2017, <https://www.oecd.org/regional/regional-policy/land-use-United-States.pdf>.

6. Assessing direct connections to housing production is hard for plan mandate approaches. For an example of comparative research on affordable housing appeals systems, see Nicholas J. Marantz and Huixin Zheng, "State Affordable Housing Appeals Systems and Access to Opportunity: Evidence From the Northeastern United States," *Housing Policy Debate* 30, no. 3 (March 23, 2020): 370–95, <https://doi.org/10.1080/10511482.2020.1712612>.

quality of local planning and the management of urban development generally,⁷ whereas others contend that such mandates have little practical effect for most municipalities.⁸

More relevant for our purposes are studies that examine how well plan mandates are implemented. In a review, Burby et al. point to the three elements that lead to effective plan mandate implementation: a strong commitment by the state, clarity in monitoring and enforcement bureaucracy, and incentives to participate and enforcement actions for failing to comply.⁹

Those criteria hint at the situation's broader contours. Any attempt by a state to compel local action faces a principal-agent problem. A state wants a locality to do something, but in many cases—especially in housing policy—both that outcome and the locality's effort are hard to observe. The outcome is hard to observe because the state cannot *mandate* housing production. Housing units are easy to count, but the biggest determinant of housing production, all things being equal, is demand, which is something localities have little control over. What the state (the principal) wants, then, is for a locality (the agent) to make it easier for developers to build housing *if* demand exists. A local government's conduciveness to housing production, however, is much harder to measure than housing production itself. Even if a state prohibits particular local restrictions (e.g., it says no localities can ban apartments), states have a hard time observing all the ways that local governments regulate development. The diverging priorities of the state and its localities make it difficult for states to measure progress toward housing production and fair housing goals and create incentives for localities to obfuscate that progress.

In theory, a principal-agent problem can be mitigated if the principal clearly defines the desired outcome and aligns accurate measures of effort with guaranteed consequences. Conversely, principal-agent problems can be exacerbated if effort is not accurately measured or if low levels of effort are not penalized, which, as we will show, California did for decades. Prior to reform, the statewide housing mandate process conflated low effort with low demand and thereby rewarded low levels of effort.

7. Raymond J. Burby et al., "Is State-Mandated Planning Effective?," *Land Use Law & Zoning Digest* 45, no. 10 (October 1, 1993): 3–9, <https://doi.org/10.1080/00947598.1993.10395815>; Hee-Jung Jun, "The Link Between Local Comprehensive Plans and Housing Affordability: A Comparative Study of the Atlanta and Detroit Metropolitan Areas," *Journal of the American Planning Association* 83, no. 3 (July 12, 2017): 249–61, <https://doi.org/10.1080/01944363.2017.1321496>.

8. Ming Yin and Jian Sun, "The Impacts of State Growth Management Programs on Urban Sprawl in the 1990s," *Journal of Urban Affairs* 29, no. 2 (May 1, 2007): 149–79, <https://doi.org/10.1111/j.1467-9906.2007.00332.x>; Robert E. Deyle, Tim Chapin, and Earl W. Baker, "The Proof of the Planning Is in the Platting: An Evaluation of Florida's Hurricane Exposure Mitigation Planning Mandate," *Journal of the American Planning Association* 74, no. 3 (July 23, 2008): 349–70, <https://doi.org/10.1080/01944360802229612>; Gene Bunnell and Edward Jepson, "The Effect of Mandated Planning on Plan Quality," *Journal of the American Planning Association* 77, no. 4 (October 18, 2011): 338–53, <https://doi.org/10.1080/01944363.2011.619951>.

9. Burby et al., "Is State-Mandated Planning Effective?"

How Does California's Housing Element Process Work?

The state-level housing planning framework in California, called the Regional Housing Needs Assessment or the Regional Housing Needs Allocation (shortened either way to RHNA), consists of three planning exercises. In the first exercise, the state, in cooperation with regional councils of government,¹⁰ determines regional housing needs on the basis of projections of household growth. Those needs are divided into housing that is affordable to households of different incomes, including low, moderate, and above-moderate income.¹¹

In the second exercise, each regional government then allocates the regional housing targets to its constituent local governments.¹² The third exercise involves each local government, in turn, incorporating those targets into the housing element of its general plan. All California local governments must have a general plan, which can be thought of as a blueprint for a community's vision of its growth, divided into seven or more elements—including a housing element.¹³ After the local government receives its housing target, it must update the housing element of its general plan and demonstrate in that element that the city can accommodate its targeted number of units.

The housing element must demonstrate to the state's department of housing and community development (HCD) that the jurisdiction has the capacity, within its existing zoning, to not just meet but exceed its targets.^{14 15} Jurisdictions must identify specific parcels zoned as residential on which new housing could be built. To satisfy the requirements for low-income housing, parcels must have certain size and permitted density characteristics, depending on the type of city. For example, in metropolitan areas, parcels must be larger than one-half acre and zoned for housing at 30 dwelling units per acre to satisfy the capacity for low-income housing.

10. California's councils of government take various forms, as some are also Metropolitan Planning Organizations. Eight councils of government represent more than 10 jurisdictions, and the largest three councils of government represent 197, 101, and 29 jurisdictions, respectively.

11. In the recent RHNA process, roughly 40 percent of housing needs are for low-income households. Affluent cities get a larger share of low-income housing as a target.

12. Cal. Gov. Code S 65584.05

13. Cal. Gov. Code S 65580 et. seq.

14. Christopher S. Elmendorf et al., "I Would, If Only I Could' How Cities Can Use California's Housing Element Law to Overcome Neighborhood Resistance to New Housing," *Social Science Research Network*, December 14, 2020, <https://doi.org/10.2139/ssrn.3889771>.

15. In addition, the housing element must contain other required chapters in which local governments analyze housing needs, identify potential constraints to housing production, and develop programs to address those needs and constraints.

A hypothetical example might make the RHNA process more concrete. The first exercise might determine that the San Francisco Bay Area needs room for 300,000 housing units, the second might involve the Bay Area's regional government assigning 10,000 of those units to the City of Oakland, and the third might involve Oakland planners demonstrating that their city's existing zoning can easily accommodate those 10,000 additional units. That demonstration would typically involve identifying sites in the city that could hold more units (vacant lots, parcels ripe for redevelopment, and so on).

If a city's existing zoning code lacks sufficient capacity for the additional housing units the regional plan has allocated to it, however, the government must commit to rezoning land to create space for the new units. The government in this case must list sites that will be rezoned within one to three years, although because the housing element is part of the general plan, the densities reported in sites' inventories are effectively changes to municipal rules. For the majority of local governments, the RHNA process repeats every eight years, and the housing targets are for production during that period.

The Effectiveness of California's State Housing Planning

Historically, the process described above has not worked. Although the state tried to strengthen regulation over time, the RHNA process consistently failed to encourage housing production.¹⁶ A comprehensive study from 2005 presented strong evidence that the process did not matter: municipalities in compliance with RHNA were no more likely to produce new housing than noncompliant cities.¹⁷ ¹⁸ Importantly, the RHNA process has also not noticeably or measurably reduced exclusionary land use regulation in California cities. Such a reduction is the primary mechanism through which RHNA would help increase production of both market-rate and subsidized housing. As we will describe, unless cities change their zoning or housing project review processes as a result of the housing element law, its impact will be minimal.

16. William C. Baer, "California's Fair-Share Housing 1967–2004: The Planning Approach," *Journal of Planning History*, February 1, 2008, <https://doi.org/10.1177/1538513207307429>.

17. Paul H. Lewis, "Can State Review of Local Planning Increase Housing Production?," *Housing Policy Debate*, January 1, 2005, <https://doi.org/10.1080/10511482.2005.9521539>.

18. Other studies offer a more optimistic assessment but are based on small, non-random samples and find what are likely to be spurious correlations, such as Darrel Ramsey-Musolf, "Evaluating California's Housing Element Law, Housing Equity, and Housing Production (1990–2007)," *Housing Policy Debate* 26, no. 3 (May 13, 2016): 488–516, <https://doi.org/10.1080/10511482.2015.1128960>; and Darrel Ramsey-Musolf, "According to the Plan: Testing the Influence of Housing Plan Quality on Low-Income Housing Production," *Urban Science* 2, no. 1 (December 22, 2017): 1, <https://doi.org/10.3390/urbansci2010001>.

Three deficiencies have dulled RHNA's impact; each exacerbates the state-local principal-agent problem.

First, the planning exercises that determined housing needs were flawed at multiple stages. The state's process for producing top-line regional numbers systematically underestimated housing need by relying primarily on projected population growth and ignoring existing conditions that might indicate unmet housing demand, such as overcrowding, high rent burdens, and job growth. The state also treated increasing household sizes as an indicator of decreasing housing need, when, in fact, the opposite was likely true: high housing prices, resulting from scarcity, were creating higher occupancy in the state's housing units.

Once regional housing needs were established, moreover, the process for allocating them across jurisdictions rewarded rather than penalized efforts to block housing construction. The regional governments (which are composed of, and heavily influenced by, local governments) made allocations based on projections of future growth. But future growth was estimated only by referring to past growth, not by any metric of demand, such as price levels or appreciation.¹⁹ That approach implicitly rewarded expensive cities that had successfully used land use regulation to stop new construction. Those cities, with low past growth but high present demand, should have been a prime target for RHNA allocations. Instead, RHNA offered them an escape valve by virtue of the very behavior it ostensibly sought to curb. Whiter and more expensive jurisdictions received lower housing allocations,²⁰ and jurisdictions with more vacant land (a sign of lower demand) got higher allocations. Low effort was rewarded with lower expectations.²¹

Again, an example might help illustrate the problem. In the fifth RHNA cycle, Beverly Hills, an affluent municipality of approximately 30,000 people in close proximity to the region's major job centers, received a housing target of just three new units. By contrast, the city of Coachella, a lower-income municipality of approximately 40,000 people located hours into the desert (about as far from the region's job centers as possible), received a housing target of 6,771 new units.

19. Paavo Monkkonen, Michael Manville, and Spike Friedman, "A Flawed Law: Reforming California's Housing Element," *UCLA Lewis Center for Regional Policy Studies Policy Brief*, 2019, <https://www.lewis.ucla.edu/research/flawed-law-reforming-california-housing-element/>.

20. Heather Bromfield and Eli K. Moore, "Unfair Shares: Racial Disparities and the Regional Housing Needs Allocation Process in the Bay Area," *Haas Institute for a Fair and Inclusive Society, University of California, Berkeley, Research Brief*, August 23, 2017, https://belonging.berkeley.edu/sites/default/files/haasinstitute_unfairshares_rhnabayarea_publish.pdf.

21. Monkkonen and Friedman, "Not Nearly Enough: California Lacks Capacity to Meet Lofty Housing Goals"; Darrel Ramsey-Musolf, "The Efficacy of Allocating Housing Growth in the Los Angeles Region (2006–2014)," *Urban Science* 4, no. 3 (September 1, 2020): 43, <https://doi.org/10.3390/urbansci4030043>; Zheng et al., "Accessibility, Affordability, and the Allocation of Housing Targets to California's Local Governments."

The RHNA process's second flaw was that local jurisdictions, once they received their allocations, used faulty and perhaps disingenuous site selection processes to demonstrate the capacity to accommodate them. Recall that, a city that wishes to avoid rezoning had to show it had either ample vacant land or many sites that were likely to be redeveloped. More expensive cities tend to have little vacant land, so they often complied with RHNA by submitting inventories of sites they said were likely to be redeveloped. Many of those inventories strained credulity. Cities offered up sites that held recently built commercial uses, extremely steep slopes, and, on one occasion, a city hall.²² Whether those submissions were errors or lies is debatable, but the overall result was that sites listed as likely to hold new housing almost never, in practice, ended up holding new housing. One study found that only 10 percent of the sites listed in the Bay Area's fifth-cycle housing elements as likely to be redeveloped were, in fact, developed between 2015 and 2022. Indeed, most housing constructed in California cities during the cycle was built on sites not listed in the housing element—a testament to how inaccurate the planning process has been.²³

The third flaw in RHNA was that enforcement and consequences were weak. In principle (again), state oversight should stop cities from submitting housing elements with sites that are unlikely to be developed. Effective enforcement, however, requires considerable local knowledge, and the state agency responsible for reviewing housing elements and site inventories had been inadequately staffed, making state oversight weak.

The inefficacy of the RHNA process was not by design. The problem, rather, was that RHNA was designed in a different era. When the RHNA system began, almost every city in California had substantial amounts of vacant land, which made growth politics less explosive and also made site selection more transparent and easier to verify.

Today, however, vacant land is less evenly distributed and is a sign of low demand. As such, a city with a lot of vacant land can comply with its RHNA sites requirement, regardless of whether it wants or is likely to get more housing. It can do so by pointing to its vacant land as capacity for housing development. A higher-demand city with little vacant land, though, faces two paths toward compliance. First, it can rezone its land for more intensive development. Rezoning ensures compliance but also invites new housing development. If the city wishes to comply but *avoid* new housing development, it must take a second

22. Jeff Collins, "Southern California Housing Plans Contain 'Fake Sites,' Lack Analysis, Critics Say," *Orange County Register*, May 9, 2022, <https://www.ocregister.com/2022/05/08/southern-california-housing-plans-contain-fake-sites-lack-analysis-critics-say/>.

23. Sidharth Kapur et al., "What Gets Built on Sites That Cities 'Make Available' for Housing?," *UCLA Lewis Center for Regional Policy Studies Policy Brief*, 2021, <https://escholarship.org/uc/item/6786z5j9>.

option: argue (honestly or not) that it has enough existing sites ripe for redevelopment to meet its allocation. Because many high-demand cities would prefer to avoid development, they take the second option and behave strategically.

Two factors have enabled this strategic behavior: lax state oversight and a low total target. The latter is easier to fix than the former. Oversight is labor intensive, and predictions of future development are intrinsically debatable. A big target, in contrast, has self-enforcing properties. Each city has only so many available sites that are likely to redevelop and only so many more that can plausibly be labeled as such (even in bad faith). As the target rises, cities that are built out according to their own zoning will, as a matter of math, be forced to rezone.

Reforms Affecting the Current Planning Period

Laws passed in 2017 and 2018 changed California's housing planning system in at least four substantial ways: the size of regional housing targets, the allocation of those targets to local jurisdictions, the requirements placed on local governments to demonstrate their ability to accommodate those targets, and the scrutiny with which the state agency was to review local plans. We briefly describe each law.

First, Senate Bill 828 (2018) led to higher regional targets for housing production. This bill also moved the projection process away from its sole reliance on projected household growth²⁴ and required government demographers to also consider existing housing needs.²⁵ In high-priced areas, the impact of this change was significant: in the two southern California regions, overall regional housing targets nearly tripled.

Second, Assembly Bill 1771 (2018) reformed the way regional governments allocate regional housing targets to their constituent jurisdictions. Regional governments were previously allowed to develop their own methodology for allocating housing targets to local governments with little oversight. AB 1771 requires regional governments to allocate the regional target to cities and counties in a way that advances specified objectives, such as increasing housing supply; increasing the mix of housing types, tenure, and affordability; and doing so in an equitable manner. Regional councils of government interpreted those instructions differently, but most used a combination of proximity to employment, transit access,

24. Christopher S. Elmendorf et al., "Making It Work: Legal Foundations for Administrative Reform of California's Housing Framework," *Social Science Research Network*, May 2, 2020, <https://doi.org/10.2139/ssrn.3500139>.

25. The bill left some openness to specific measures of existing housing needs but listed overcrowding and cost burden as factors. For details, see https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB828.

and some consideration of equity (for example, average income) in allocating targets to local governments. The result was that municipalities that had previously received housing targets of a handful or a few hundred units had targets of several thousand units.²⁶ To return to previous examples, Beverly Hills' target for the 2021 through 2029 planning period was 3,104 units, an increase of roughly 1000 percent. The city of Coachella's target was 7,886, still much larger than that of Beverly Hills but an increase of 115 percent.

Third, Assembly Bill 1397 (2017) increased the level of evidence, analysis, and infrastructure necessary for a local government to justify designating a parcel as a site for future housing production in its housing plan. As discussed earlier, jurisdictions had been allowed to include housing sites on the basis of a "potential for redevelopment," with no evidence. In the current planning period, jurisdictions are required to show that their sites have "realistic" and near-term feasibility for redevelopment on the basis of past experiences with conversion of similar uses, a given use's current market demand, and existing leases. Jurisdictions meeting more than one-half of their lower-income housing targets on non-vacant sites were required to make evidence-based findings that existing uses were "likely to be discontinued" during the planning period. Jurisdictions had to assess infrastructure on a site-by-site basis, and all sites needed to be served by suitable utilities or be included in a program dedicated to expanding infrastructure service. Lower-income sites were generally limited to parcels with sizes between 0.5 and 10 acres to match the size of actual projects.

In addition, SB 166 (2017) required that, as on-the-ground conditions change, jurisdictions maintain adequate capacity to meet remaining housing targets for each income level throughout the cycle. For example, if a site identified for lower-income housing production is developed for above-moderate units, a jurisdiction must either already have identified additional lower-income capacity or must find a new site with proper zoning within 180 days. In effect, that necessitated that jurisdictions provide more capacity than their baseline targets to avoid rezoning multiple times throughout the planning period.

26. Roughly 10 percent of the jurisdictions in southern California got lower targets in 2021 than in 2014.

Finally, the reforms also gave HCD greater oversight authority. HCD gained the power to issue standards, protocols, and binding requirements on local governments to collect, report, and analyze data on how, for example, cities determine a site's development potential.²⁷ That reform is important because it reduces the information asymmetry between the principal and the agent and makes the job of state reviewers achievable. For example, one practical change is that cities must now submit an Excel form with detailed information on the sites they identify as likely to hold new housing and sites designated for rezoning. Previously, cities submitted that information in inconsistent and hard-to-use formats.

Did the combination of reforms work? If they did, one would expect to see that local government housing plans proposed rezoning land to allow more housing and also a relationship between the increase in a municipalities' housing target and their rezoning activity.

Research Design and Data

Our analysis has two goals: accurately describe the plans adopted under the new rules and determine if cities that received larger new housing targets proposed more rezoning. In the latter goal, our empirical approach emphasizes municipalities in southern California because the state staggers the timeline of the housing element process such that jurisdictions in northern California start their update process a year after those in southern California. Southern California, as a result, offers a large number of cities for whom the state has made determinations; northern California, at the time of this writing, does not.

We start by defining some terms. The state gave each city a number of housing units to plan for in 2014 and 2021. To meet that target, cities must show the state their "total capacity" for new housing. This total consists of "existing capacity" (the number of units that could be built on vacant and underdeveloped sites under current zoning) and, potentially, "rezoned capacity" (the amount of housing allowed as a result of rezoning).

27. Elmendorf et al., "Making It Work: Legal Foundations for Administrative Reform of California's Housing Framework."

Our main outcome variable is rezoned capacity—essentially, the number of units the city commits to through rezoning.²⁸ Analyzing this metric is not the only way one could assess the impact of RHNA reforms. An alternative, for example, would be to calculate the capacity for growth relative to housing targets. The problem with this approach is that it includes existing capacity in the form of housing capacity from vacant or underdeveloped parcels. Such existing capacity, as we have noted, has traditionally been an unreliable guide to development and more importantly does not indicate a change in a jurisdiction's total potential stock of housing. The total potential stock only changes as a result of rezoning land to allow residential use or to allow more density.

For that reason, our approach is preferable; it examines how often cities were able to rely on existing capacity (for example, to rezone as little as possible in spite of new laws) and how often reforms forced them to change their land use plans. The absolute number of units rezoned in a municipality depends, in part, on its size, so we create a standardized dependent variable. We consider both the share of a city's total capacity that will come from rezonings and the share of a city's total 2021 housing target.

The treatment variable of interest, therefore, is a measure of policy change: the ratio of a city's 2021 target to its 2014 target. The policy mechanism we are hypothesizing, moreover, is rooted in a change in the total target, not in the level of the target or its size relative to some static indicator, such as the existing housing stock. A city assigned 1,000 more units in the reform cycle than it had been assigned in the previous cycle probably faces pressure to rezone. A city assigned 1,000 units may or may not face such pressure. For that reason, our analysis focuses on the increase in targets rather than the targets themselves.

We run two sets of models to test the hypotheses about the impact of the planning reforms and the role of city characteristics. The first set is composed of logistic regression models, which test whether a city rezoned at all, and the second uses ordinary least squares models to assess how much cities rezoned, both as a function of their relative increase in housing targets and as city characteristics, such as population size, median home value, share White, share older than 65 years old, and share homeowners. Our underlying theory is that local governments differ in both the level of land use regulation they have and the level of political pressure they face to resist changing their existing land use patterns.

28. Not only does listing sites for rezoning represent a commitment to changing the city's zoning ordinance but the density listed in the housing element can be the basis for entitlement applications by developers from the moment the housing element is adopted. For more on this topic, see Elmendorf et al., "I Would, If Only I Could' How Cities Can Use California's Housing Element Law to Overcome Neighborhood Resistance to New Housing."

On the basis of the extant literature on opposition to new housing, we hypothesize that jurisdictions where more residents are older, White, higher income, and more likely to be homeowners will be less likely to rezone in response to higher housing targets.²⁹

Data on Housing Targets, Plans, and City Characteristics

This study relies on census and administrative data for cities in southern California.³⁰ Housing targets are available on regional government websites,³¹ and data on local governments' plans are taken from the plans themselves. We triangulate three sources of data on housing element sites: the plans on local government websites, the electronic sites' inventory forms that cities are required to submit to the California Department of Housing and Community Development (HCD), and a new Department of General Services/HCD website that uses data from electronic sites' forms to map housing element sites.³²

We obtained Excel forms directly from the California HCD. They consist of two tables: one that lists parcels on which housing could be developed today, both because they are zoned residential and are vacant or underused, and one that lists parcels that the city has committed to rezoning. In both tables, the local government records information about the parcels, including their size, density regulations, and estimates of the number of units of housing they would hold if developed. We sum these unit estimates for both tables.

We note that our measure of rezoned capacity is imperfect, with the potential for both simultaneously overestimating and underestimating the total amount of new capacity a city creates in its housing element. The overestimates occur because HCD considers all sites with use or density changes to be “rezoned,” regardless of their capacity before zoning changes. That means HCD would consider a site zoned for seven units rezoned to accommodate 15 units to be 15 rezoning units. Jurisdictions are not required to report previous capacity of sites, so we assume that all units on rezoned sites are *rezoned* capacity, just

29. Katherine Levine Einstein, David M. Glick, and Maxwell Palmer, *Neighborhood Defenders: Participatory Politics and America's Housing Crisis* (Cambridge University Press, 2019).

30. County governments are responsible for developing a housing element for their unincorporated lands, but we exclude them from this study because of their distinct political organization and land pressures compared to city governments. Also excluded are small municipalities outside metropolitan statistical areas because the housing development pressures they face are substantially different from those in metropolitan areas.

31. The Southern California Association of Governments (SCAG) website is <https://scag.ca.gov/rhna>, and the San Diego Association of Governments (SANDAG) website is <https://www.sandag.org/projects-and-programs/regional-initiatives/housing-and-land-use/regional-housing-needs-assessment>. The current planning period for the 197 jurisdictions in the six-county SCAG is 2021 through 2029. The 19 jurisdictions in SANDAG initiated their process six months before the rest of Southern California.

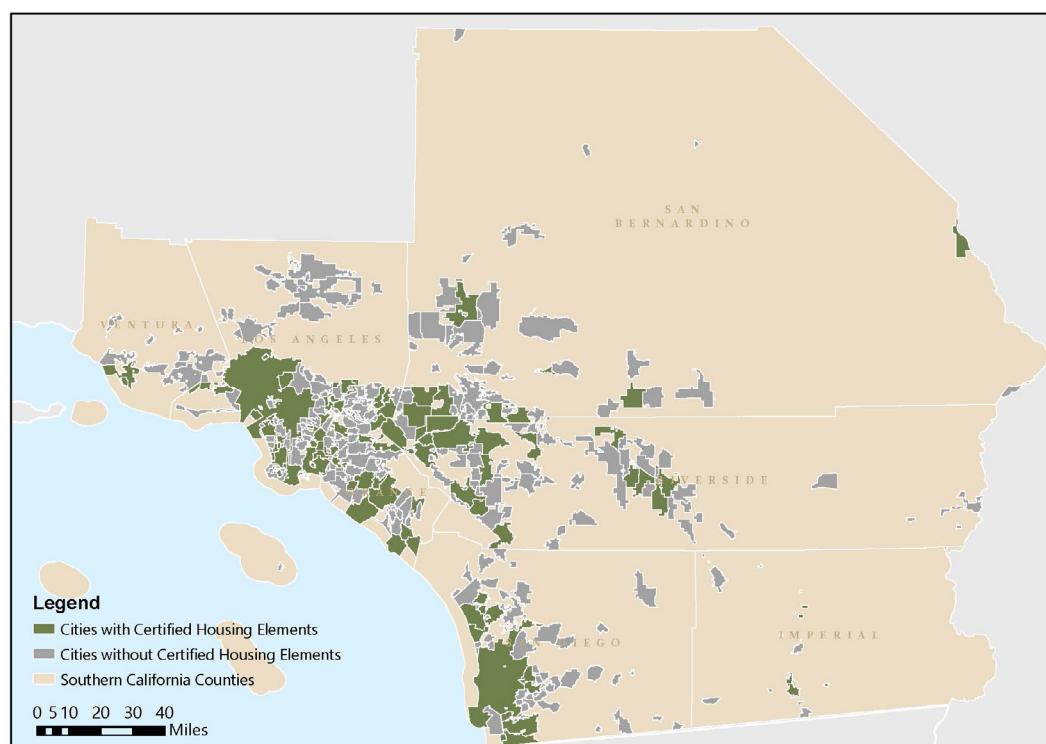
32. The website is here: <https://experience.arcgis.com/experience/670e112e04ae415e9755f2d65fded76c/>. Where possible, we ensure data quality by checking all three sources.

as HCD does. Fortunately for accuracy's sake, a scan of sites in cities that report previous uses in Table B reveals that most rezoned sites were previously non-residential uses thus the rezoned capacity is all new.

On the other hand, HCD's information underestimates the amount of capacity created through rezoning because it only includes sites listed in the inventory, even if a city proposes zoning changes beyond these properties. Sites inventories represent the properties most likely to develop, but zoning changes often apply to many more properties than are listed. Additionally, site capacities are typically not estimated at their maximum allowed—they are adjusted downward to match historical development trends. Finally, cities may implement other zoning reforms (e.g. removal of parking standards) that functionally result in more residential potential, but aren't required to be quantified on a site-by-site basis to HCD.

With these limitations in mind, we use the rezoned site capacity that cities reported to HCD as an effective proxy for estimating the magnitude of zoning changes across the state. Exhibit 1 shows the location of our sample of 93 municipalities with compliant housing elements as of February 10, 2023, on a map of southern California.

Exhibit 1. Southern California Cities with Certified Housing Elements as of February 10, 2022



Source: Map created by Chanaporn Tohsuwanwanich with data from authors

Results

This section first describes the new housing targets faced by local governments state-wide. The discussion then shifts to southern California and examines the challenge local governments faced in preparing compliant housing plans and the differences between local governments that had a compliant housing element by February 10, 2023 (our sample of municipalities), and those that did not. Finally, we present an overall description of the scale of local rezoning action, assess differences in municipalities' plans to meet housing targets, and test hypotheses predicting more or less rezoning based on higher targets and characteristics of cities.

How Large Are the New Housing Targets?

The statewide housing target of roughly 2.5 million units for the sixth-cycle planning period³³ is 2.5 times larger than that of the 2014 through 2021 fifth cycle (about one million units). This comparison, moreover, arguably underestimates the difference between the two cycles because the planning system allocated units in the sixth cycle to cities in a very different manner. In the fifth cycle, most cities in southern California got targets based on their estimation of growth over the next eight years. Many of those million units required no action by local governments or reflected vacant land in far-flung locations less likely to be redeveloped. In the sixth cycle, by contrast, more of the 2.5 million units targeted may require meaningful action because the targeted cities often are built out according to their zoning. Indeed, the state gave many local governments targets that far exceeded cities' stated capacity for new housing from eight years earlier.

33. The dates of the eight-year planning period differ by region to stagger the review work of the state agency. For most southern California jurisdictions, the sixth-cycle period is 2021 through 2029 and the fifth cycle was 2014 through 2021. San Diego County's period is 2020 through 2028, and the Bay Area Association of Governments is 2023 through 2031.

Exhibit 2 shows how big a challenge the new housing targets represent. This exhibit is not restricted to southern California and uses data from the more than 400 municipalities that make up the state's large urban regions. Whereas the median city's target (like the state's) grew by 2.5 times, for the city at the 75th percentile, the target grew by more than five times.

Exhibit 2. Sixth-Cycle Housing Targets in Context, Municipalities in Eight Major California Regions

Variables	25th Percentile	Median	75th Percentile
Ratio of sixth-cycle target to fifth-cycle target	1.42	2.58	5.09
Ratio of sixth-cycle target to fifth-cycle total capacity	0.57	1.22	2.48
Ratio of sixth-cycle target to 2021 housing units	0.09	0.15	0.22

Notes: N=408. Planning periods differ across regions; they are staggered so the state agency does not have to review hundreds of plans at the same time.
Source: Nine regional government websites

On average, those targets were also larger than cities' stated capacity for new housing in 2014, indicating that the average city cannot rely on its preexisting capacity. That statement was not true for all cities, however; the second row shows that well over 25 percent of municipalities received *lower* targets than their stated capacity in 2014. Nonetheless, many cities received substantially higher targets than their capacity, as reflected in the 75th percentile city, which received a target about 2.5 times its 2014 capacity.

Another way to illustrate the changes is to present them as a share of existing housing stock. The median jurisdiction received a housing target equivalent to 15 percent of its existing housing units, and one-fourth received an allocation that was equivalent to 22 percent. For context, California consistently built more than 250,000 units per year in the 1960s and 1970s, equivalent to adding as much as 30 percent or more of its stock over an eight year period. In recent years, California has been adding slightly more than 100,000 units per year; that rate of production in an eight year period represents only six percent of its stock.³⁴

34. For data on housing production in California, see <https://statewide-housing-plan-cahcd.hub.arcgis.com/>.

What Kinds of Cities Received Larger Targets?

We now turn to the 210 municipalities in southern California. Exhibit 3 presents the correlations between select city characteristics and measures of the 2021 housing targets and the increase in targets compared with 2014. Housing targets in 2021, relative to existing stock, were higher for larger municipalities and in places with lower home values and lower shares of White and older residents. All of those findings are consistent with the idea that places presumably resistant to growth continue to successfully game the system and receive relatively lower targets.

Exhibit 3. Size of Housing Targets According to Select Municipal Characteristics (205 municipalities)

Variable	2021 Target/ Housing Stock	2021 Target/ 2014 Target (log)	2021 Low-Income Target/2014 Low- Income Target (log)
Population (log)	0.29	- 0.01	- 0.01
Housing Density (log)	- 0.02	0.34	0.35
Median Home Value (log)	- 0.30	0.38	0.47
Renters (%)	0.09	0.04	- 0.01
White population (%)	- 0.44	0.12	0.17
Black population (%)	0.13	- 0.03	- 0.05
Asian population (%)	0.16	0.25	0.28
Hispanic population (%)	0.31	- 0.25	- 0.32
Population older than 65 (%)	- 0.25	0.25	0.26

Source: U.S. Census Bureau, 2015.

On the other hand, exhibit 3 also shows that the increase in housing targets was larger in places with high home values and with more White residents and residents older than 65 years old. In addition, higher-density municipalities and those with more Asian residents saw larger increases. When calculating increases in targets for low-income housing, correlations are in the same direction but slightly higher. Put differently, traditionally exclusionary municipalities continue to have relatively lower targets, but the recent reforms have successfully shifted course, and targets for those places have increased substantially.

Are Cities with Compliant Plans Different?

One indicator of the scale of changes to the planning system is the widespread difficulty jurisdictions have had in getting their housing plans approved by the state government's implementing agency. The deadline for local governments in southern California to have a compliant housing element was October 15, 2021. But a full year later, only one-third of the region's 197 cities and counties were in compliance. Five jurisdictions had not yet even submitted a housing element to the state for review by October 2022.

Before focusing on the 93 compliant plans as of February 10, 2023, we examine how they differ from those out of compliance. A substantial majority of jurisdictions in southern California were more than one year late in getting their housing plans certified by HCD. Roughly one-half of the jurisdictions in San Diego County, which began its update process six months before the rest of the region, are still not compliant.

We examine whether the jurisdictions that have approved plans differ in some way from those that do not. Using a logistic regression³⁵ model and data on the 209 southern California municipalities, we assess the probability of being compliant as a function of seven factors: cities' targets as a share of existing stock, the increase in targets, population, home values, share White, share homeowners, and share elderly. We find that only two factors are statistically significant in predicting compliance: the increase in housing targets and city size. Jurisdictions with larger increases are less likely to be compliant, and larger cities are more likely to be compliant. Those results likely reflect large jurisdictions' greater administrative capacity and the more substantial political challenges of compliance when faced with a larger growth target.

The Scale of Local Action

The most relevant outcome of the RHNA process is the volume of rezoning by local governments. As described previously, local housing plans must show to the state that a jurisdiction has a sufficient number of potential sites for housing development to accommodate its numerical housing target. If they cannot find parcels zoned for housing with development potential, they must commit to rezoning land to allow residential development or increase permitted densities to create that space within one to three years. In the previous planning period (roughly 2014 through 2021), jurisdictions across the entire state committed to only 35,430 units of rezonings to comply with RHNA (personal communication, HCD). Moreover,

35. Results of the logistic regression are available upon request.

most of those rezonings were not in high-demand communities and were rezonings of vacant land. Those fifth-cycle rezonings mostly did not create redevelopment opportunities in cities that believed themselves to be built out. For example, three jurisdictions—Riverside County, Kern County, and the City of Coachella—made up nearly one-half of the state's rezoning count. All are places far from job centers.

By contrast, our summary analysis of planned rezonings in the first 93 certified housing elements for 2021 through 2029 finds over 500,000 units on rezoned sites—roughly half of which are in the City of Los Angeles. The City of Los Angeles' housing element outlines a plan that will rezone for a minimum of 250,000 units but considers a potential rezoning of up to 1.5 million units (City of Los Angeles, 2021). These cities with compliant local housing elements represent less than one-third of the state's population. Considering that the majority of the state has yet to finalize its plans, the housing planning process in California has much more potential than ever before.

Not only is the overall volume of rezoning important, it is also spread across many jurisdictions. The data used in this study roughly two-thirds of the jurisdictions with certified plans committed to rezoning some land in response to RHNA requirements. And because the regional governments allocated housing targets to higher-demand cities than in previous cycles, we see a positive correlation between the extent of rezoning and housing costs—unlike during the previous cycle, in which localities far from job centers did most of the rezoning.

Do Cities with Larger Increases in Targets Rezone More?

To more directly assess the connection between increases in housing targets and rezoning, we will now focus on the 93 municipalities with compliant plans. Exhibit 4 presents descriptive characteristics for this sample of municipalities.

Exhibit 4. Descriptive Statistics for Housing Plans and City Characteristics (93 cities)

Variable	Median	Mean	Std. Dev.
Housing Plan Characteristics			
Any rezoning (I,O)	1	0.65	0.48
Rezoning units/Total capacity	0.34	0.41	0.40
Rezoning units/2021 target	0.40	0.54	0.76
2021 target/2014 target (total units in thousands)	2.80	39.98	218.99
2021 target/2014 target (low-income units in thousands)	2.95	27.67	145.59
City Characteristics			
Population (000s)	55	134	425
Median home value (000s of \$)	\$573	\$630	\$314
Share of population White non-Hispanic	32%	35%	22%
Share of households that are homeowners	60%	58%	15%
Share of population older than 65	14%	15%	6%

Std. Dev. = standard deviation.

Source: U.S. Census Bureau, 2015; and data from California HCD.

The outcome of interest is rezonings, and we use two different denominators to standardize the number of units in proposed rezonings across cities: the city's total capacity for new housing, including rezoning, and the 2021 housing target. For the median city, rezoning represents 36 percent of the total capacity for new housing and 37 percent of its target.

Our treatment measures are the increase in a city's housing target, measured by the ratio of its total 2021 target to its total 2014 target, and the increase in its target for low-income housing specifically. We use the increase in low-income targets separately because the rules cities face for satisfying those targets are more restrictive. They must identify larger sites with zoning at a prescribed minimum density threshold (for example, 30 dwelling units per acre in urban areas), whereas sites to meet targets for moderate- and above-moderate-income housing can be any size and density. Moreover, the aforementioned equity adjustments made in the regional allocation of targets gave slightly higher targets for low-income housing to more affluent cities, so we anticipate that the regional allocation will have a slightly larger impact than the change in the total target.

First, we assess correlations between these measures of plans, targets, and city characteristics individually to identify relationships. Then, we run a regression to test the hypothesis that higher housing targets are associated with more rezonings even when controlling for characteristics of the municipalities that are correlated with rezonings and housing targets.

Exhibit 5 reports bivariate correlations between measures derived from housing plans and municipal characteristics. The correlations between changes in targets and rezonings are positive and strong. The correlations between demographic characteristics of cities and their rezoning plans or change in targets are not statistically significant, meaning that even without controlling for other variables, cities with more homeowners or White and older residents did not systematically differ in their rezoning activity.

Exhibit 5. Correlations Between Housing Plan Measures and Municipality Characteristics (93 Certified Housing Elements)

Variables	Any Rezoning?	Rezoning/ Capacity	Rezoning/ Target	Total Target 2021/2014 (log)	Low-Income Target 2021/2014 (log)
Rezoning units/Capacity 2021	0.87**	1.00**			
Rezoning units/Target 2021	0.87**	0.95**	1.00**		
Total target 2021/2014 (log)	0.38**	0.43**	0.38**	1.00**	
Low-income target 2021/2014 (log)	0.42**	0.49**	0.43**	0.97**	1.00**
Population (log)	0.21*	0.13	0.13	- 0.02	- 0.04
Median home value (log)	0.20*	0.28*	0.28*	0.19	0.30*
White Non-Hispanic (%)	- 0.18	- 0.07	- 0.05	- 0.18	- 0.07
Homeowners (%)	- 0.05	0.04	- 0.01	- 0.12	- 0.03
Older than 65 (%)	- 0.08	0.00	0.00	0.06	0.12

Notes: N=93. Spearman correlation coefficients. * and ** indicate significance at the 0.01 and 0.05 levels, respectively.
Source: Authors with U.S. Census Bureau, 2015; and data from California HCD.

Exhibit 5 shows that places with higher home values committed to more rezonings and had higher targets, presumably because they are more likely to be built out according to their existing zoning. Because higher-demand (more expensive) cities cannot find existing capacity in their zoning, they need to rezone. This finding especially reinforces the need for a statewide planning process to provoke zoning reform, because it creates much more potential for new production in higher-demand areas. Housing target increases are also significantly larger for cities with higher home values.

Now we turn to the results of our regressions in exhibit 6, which present the results of six models in which we vary three measures of rezonings and two measures of the change in targets (overall targets and targets specific to low-income housing). Models 1 and 2 are logistic regression models that assess the probability of a city doing any rezoning, so the dependent variable is a yes (1) or no (0). Models 3 and 4 are ordinary least squares (OLS) regressions using rezonings as a share of total capacity, and Models 5 and 6 are also OLS using rezonings as a share of the target. All models include county fixed effects and a dummy variable indicating whether the city's housing element is compliant.

Exhibit 6. Regression Results: Rezoning and Housing Target Increase

Variables	Model 1 Logit: DV= Rezoning (Y/N)	Model 2 Logit: DV= Rezoning (Y/N)	Model 3 OLS: DV = (Rezoning/ Capacity)	Model 4 OLS: DV = (Rezoning/ Capacity)	Model 5 OLS: DV = (Rezoning/ Target)	Model 6 OLS: DV = (Rezoning/ Target)
Target 2021/2014 (log)	0.767** (0.374)		0.097*** (0.029)		0.203*** (0.055)	
Low-income target 2021/2014 (log)		0.913** (0.417)		0.113*** (0.032)		0.238*** (0.060)
Population (log)	0.756** (0.363)	0.704* (0.360)	0.059 (0.046)	0.050 (0.045)	0.113 (0.085)	0.096 (0.085)
Median home value (log)	0.620 (1.075)	0.298 (1.107)	- 0.002 (0.135)	- 0.051 (0.137)	0.094 (0.253)	- 0.012 (0.256)
Non-Hispanic White (%)	0.004 (0.022)	0.005 (0.022)	0.002 (0.003)	0.002 (0.003)	0.012** (0.005)	0.012** (0.005)
Homeowners (%)	0.035 (0.026)	0.031 (0.026)	0.007** (0.003)	0.006* (0.003)	0.009 (0.006)	0.007 (0.006)
Older than 65 (%)	- 0.091 (0.063)	- 0.096 (0.063)	- 0.014* (0.008)	- 0.015* (0.008)	- 0.027* (0.015)	- 0.029* (0.015)
Constant	- 17.220 (12.887)	- 12.611 (13.251)	- 0.698 (1.581)	0.0197 (1.613)	- 2.537 (2.963)	- 1.005 (3.014)
Observations	92	92	92	92	92	92
(Pseudo) R-squared	0.30	0.31	0.31	0.31	0.34	0.36

DV = Dependent variable. OLS = Ordinary least squares.

Notes: Models include county fixed effects. Standard errors in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

The results of the first two models show that only two variables—a larger increase in housing targets and a larger population—predict a city engaging in rezoning. The coefficients suggest that doubling the housing target makes a city 2.5 times more likely to rezone, and doubling the population makes it twice as likely it will rezone. As an example, the median city had a 64 percent chance of engaging in rezoning. A 1-standard-deviation-increase in its target would lead to an 84 percent chance of rezoning, and a 1-standard-deviation-increase in its population size leads to a 76 percent chance. The mechanism for larger targets to provoke rezoning is clear, and research shows that the politics of larger cities are more amenable to new housing.³⁶

36. Nicholas J. Marantz and Paul H. Lewis, "Jurisdictional Size and Residential Development: Are Large-Scale Local Governments More Receptive to Multifamily Housing?," *Urban Affairs Review*, 2022, 732–66, <https://doi.org/10.1177/1078087420988598>.

Higher housing targets are also statistically significantly associated with more rezoning, and the coefficients are twice as large when measuring rezonings relative to housing targets compared with using a city's capacity. For example, doubling the overall housing target is associated with a 10 percentage point increase in rezonings as a share of capacity and a 20 percentage point increase in rezonings as a share of a city's target.³⁷ That difference likely results from cities expressing more capacity than their targets if they do not have to rezone; being ambitious in identifying capacity is easier if it does not involve changing zoning and simply requires cataloging more available sites.

The associations between target increase and rezoning are slightly larger if we use the increase in low-income targets rather than total targets as the treatment variable. Doubling the low-income target is associated with 11 and 24 percentage points more rezoning as a share of capacity and target. As mentioned, low-income sites must have certain characteristics—most importantly, a minimum density threshold. Given the scarcity of parcels zoned for higher density, larger low-income targets spur more change.

In a few of the models, the coefficients for share White and share homeowner attain slight significance and are positive, whereas the share older than 65 is associated with less rezoning. The coefficients represent the increase or decrease in share of capacity or target rezoned for a one percent increase in the city's population. For example, model 3 shows that a one percent increase in the share of city who are homeowners is associated with a 0.7 percent increase in the share of a city's capacity met with rezoning. It also shows that a one percent increase in the share of a city who are older than 65 years old is associated with 1.4 percent less rezoning as a share of capacity.

Given the low significance levels, however, it is hard to make strong claims about the complicated interaction between previous success in gaming the system to get low targets, buildout according to local zoning, and NIMBY ("not in my backyard") characteristics that correlate with one another. An encouraging finding is that cities with NIMBY characteristics are not systematically rezoning less. With more data as more cities complete their housing elements, those relationships will be easier to untangle.³⁸

37. To allay potential concerns about interpretation challenges when using the 2021 target to standardize rezonings, we note that the correlation between 2021 targets and the change in rezonings between 2014 and 2021 (the treatment variable) is almost zero (0.02).

38. We also ran the same regression analysis with a larger sample of cities (an additional 32 cities) that have completed their housing elements and have sites inventory data available, but are not certified by the state. The results of those models are reported in an appendix exhibit. The changes in targets have smaller coefficients but are still significant, and the other coefficients display some differences. We prefer the models using the smaller sample of certified housing elements because the uncertified elements may change.

Conclusion

This article describes the outcomes of reforms to California's housing planning process. Reform legislation in 2017 and 2018 changed the nature and intensity of a planning process that occurs every eight years. Southern California municipalities received substantially higher housing growth targets in 2021 than they had previously, and we evaluate the way they accommodate those targets. We focus on how much potential for new housing those municipalities created through rezoning land for residential use or for higher density.

We find that cities were more likely to change their local zoning in 2021 compared with 2014—and to do so more dramatically. The 93 (of more than 209) southern California cities that have compliant housing elements have committed to more than 500,000 units of rezonings, compared with fewer than 50,000 in the whole state in 2014. Moreover, those commitments to rezoning are happening in cities with relatively high housing values, which means housing is more likely to be built. For those cities with certified housing elements, higher housing targets were significantly associated with more rezoning, especially higher targets for low-income housing.

We also find that the characteristics associated with NIMBYism play a predictable role in the determination of housing targets but not in models of rezoning. Cities with higher housing values and more White homeowners get relatively lower targets than cities with fewer Whites and lower housing costs but react no differently to them—or, in some cases, rezone more—than other cities. In other words, although the planning system still treats those cities differently in setting targets, it is forcing cities to meet targets in land use plans through rezoning. We take this finding as evidence that the legislative reforms have spurred action and accountability among California cities in how they plan for housing. In particular, higher total housing targets seem to have stifled some of the previously existing strategic behavior.

Yet problems with the system remain. California's housing element process is expensive (in terms of money spent on consultants and plan preparation and of people's time) and slow (the process has been underway for several years, and no new housing has been built as a result), and rules seem to continue to be administered unequally across places.³⁹ Moreover, rezoning is not yet permitting the needed housing, although it is a first and necessary step.

39. Collins, "Southern California Housing Plans Contain 'Fake Sites,' Lack Analysis, Critics Say."

Finally, housing targets within regions have been increasingly assigned to cities with high prices and near jobs—such as Beverly Hills—as a relative matter. Despite that improvement, many cities that should probably not be pressured to grow from an environmental or affordability perspective—such as Coachella—are still receiving larger targets than places where the impact of rezoning would be greatest. One resolution to that problem would be to shift toward a system that explicitly considers the probability of housing development in regional decisions about where targets are assigned.⁴⁰ For any parcel of land, analysts can use data to estimate how likely it is to be redeveloped, as Los Angeles did in its housing element.⁴¹ Then regional targets could be assigned on the basis of where redevelopment is most likely—which is much higher in Beverly Hills than in Coachella. This approach could relieve pressure on lower-income cities and reduce the local staffing costs of the process.

Finally, this study recalibrates the debate between the plan mandate approach to land use interventions compared with state governments more directly preempting local control over land use in strategic locations or creating affordable housing appeals systems. As already noted, California's plan mandate system had historically proven ineffective. But if recent reforms indeed prove successful, as this research indicates, plan mandates may offer at least some advantages over alternative state land use strategies and can be complementary to them. That is, plan mandates set goals for local governments but include residents in a community-based process of deciding where growth should occur. We see a tradeoff between the potential for increased local participation in zoning decisions and concurrent political acceptance of the process, and the possibility of planning decisions that compromise environmental sustainability and social integration. How that process will unfold a priori is not yet clear, and measuring political acceptance is challenging; thus, a useful next step for future research will be to assess where rezonings are occurring in cities, spatially, compared with what a more top-down approach would have yielded, according to some objective criteria.

40. Christopher S. Elmendorf et al., "Superintending Local Constraints on Housing Development: How California Can Do It Better," *Social Science Research Network*, July 8, 2020, <https://doi.org/10.2139/ssrn.3614085>.

41. "2021-2029 Housing Element | Los Angeles City Planning," n.d., <https://planning.lacity.org/plans-policies/housing-element>.

Appendix Table. Replication of Models in Exhibit 6 Using a Larger Sample of Cities (125) that Includes Data from Complete but Uncertified Housing Elements

Variables	Model 1 Logit: DV= Rezoning (Y/N)	Model 2 Logit: DV= Rezoning (Y/N)	Model 3 OLS: DV = (Rezoning Capacity)	Model 4 OLS: DV = (Rezoning/ Capacity)	Model 5 OLS: DV = (Rezoning/ Target)	Model 6 OLS: DV = (Rezoning/ Target)
Target 2021 / 2014 (log)	0.328*		0.066***		0.115***	
	(0.187)		(0.023)		(0.040)	
Low-income target 2021/2014 (log)		0.494**		0.086***		0.151***
		(0.226)		(0.026)		(0.045)
Population (log)	0.190	0.188	0.008	0.005	0.058	0.052
	(0.237)	(0.239)	(0.038)	(0.037)	(0.065)	(0.065)
Median Home Value (log)	1.666**	1.377*	0.146	0.096	0.151	0.064
	(0.729)	(0.756)	(0.104)	(0.106)	(0.179)	(0.183)
Non-Hispanic White (%)	- 0.028*	- 0.026	- 0.002	- 0.002	0.005	0.006
	(0.016)	(0.016)	(0.002)	(0.002)	(0.004)	(0.004)
Homeowners (%)	1.431	1.368	0.566**	0.549**	0.736	0.706
	(1.837)	(1.843)	(0.282)	(0.276)	(0.488)	(0.478)
Older than 65 (%)	0.006	0.001	- 0.003	- 0.004	- 0.010	- 0.01
	(0.039)	(0.040)	(0.006)	(0.006)	(0.011)	(0.011)
Certified (Y/N)	0.429	0.523	0.0716	0.0817	0.261*	0.278**
	(0.510)	(0.520)	(0.0797)	(0.0789)	(0.138)	(0.137)
Constant	- 24.63***	- 21.13**	- 2.139	- 1.502	- 2.990	- 1.881
	(9.495)	(9.792)	(1.307)	(1.330)	(2.264)	(2.303)
Observations	125	125	125	125	125	125
(Pseudo) R-squared						

DV = Dependent variable. OLS = Ordinary least squares.

Notes: Models include county fixed effects. Standard errors in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.



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