Mapping Opportunity in California

Full Project Description

Introduction

California policymakers are contemplating state-level zoning reforms to address the mounting housing crisis.

How can reform efforts encourage more housing production in areas of opportunity in ways that could make California more inclusive and also help meet environmental goals by reducing commute distances?

Our organizations undertook this mapping effort to provide data and evidence-based framing around the types of neighborhood characteristics to consider when trying to achieve these goals. We drew on existing research and stakeholder feedback to create maps that are designed to help inform policy debates and community engagement around these critical issues.

However, it is important to note that these maps only address one element of current zoning reform debates—opportunity and employment patterns. Understanding how zoning reform could affect communities vulnerable to displacement or effectively calibrate inclusionary housing components are also important considerations that should be informed by their own stakeholder engagement and research process.

The Mapping Process

Our process for selecting indicators and creating a methodology for identifying high-opportunity places in the context of zoning reform proposals involved both:

- Consulting with dozens of stakeholders from different fields and parts of the state; and
- Reviewing the evidence on place-based indicators most associated with positive outcomes for families

Engaging Stakeholders from Across California

We conducted our outreach and stakeholder engagement process in two phases over the course of the project. In the first phase of outreach, we solicited input from approximately two dozen housing advocates and researchers from throughout the state. We asked for their perspectives on the key characteristics of high-opportunity areas in California, which policy priorities were important to consider in the selection of indicators, and any concerns they may have related to the potential effects of zoning reform policies in high-opportunities areas. In the second phase, we circulated preliminary drafts of our methodology and maps for their review and collected feedback.

Developing the Mapping Methodology

The primary unit of analysis is the census tract. An extensive literature exists demonstrating the importance of [neighborhood-level factors] in shaping access to opportunity and influencing [longer-term outcomes] along multiple dimensions, including education, employment, earnings, and physical and mental health.

To avoid flagging tracts for potential upzoning that have large land areas but small, diffuse population bases—areas that tend to be located on the metropolitan fringe or in rural parts of the state—we only analyze tracts that meet a population density threshold of at least 250 people per square mile. Of the state's 8,057 census tracts, 697 (or roughly 9 percent of the state's tracts) do not meet the population density floor and have been excluded from the analysis.[1]

Given the wide variations that exist across California's different housing and labor markets, all indicators are benchmarked to regions, defined here by their [Metropolitan Planning Organization] delineations. That means that each neighborhood is compared to its peers within its region to assess its relative performance on the range of indicators considered, rather than held to a uniform statewide standard.

Identifying Areas of Opportunity

This analysis includes six metrics that, together, seek to capture economic and educational conditions in a tract that influence opportunity and longer-term outcomes.

Three come from the 2013-2017 American Community Survey:

- Share of the population above 200% of the poverty line[2]
- Share of the population (25 years+) with a Bachelor's degree or higher
- Employment-to-population ratio for the population 20 to 60 years old (including both civilian employment and armed forces enlistment)

Three are derived from California Department of Education data:

- 4th grade reading proficiency (averaging for the three public schools closest to the population-weighted centroid of the tract)[3]
- Share of students not on Free and Reduced Price Meals (averaging for the three public elementary schools closest to the population-weighted centroid of the tract)

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[1] That does not mean that these larger, low-density tracts may not contain high-opportunity areas or be subject to housing policies that discourage production or limit inclusion. But the larger geographic scale of census tracts in these cases can make it difficult to target which areas within the tract might be suitable for zoning reform, particularly given environmental concerns about potentially increasing vehicle miles traveled in such areas. Moreover, sample size, data quality, and data availability diminish at units of geography smaller than the census tract, further complicating within-tract targeting in these areas.

[2] For tracts where more than 25 percent of the population are college or graduate students, this metric was calculated net of students to assess whether the remainder of the tract's population was lower poverty than the regional average.

[3] Reading scores are computed based on nearby public schools that serve 4th-graders, while Free and Reduced Price Lunch percentages are calculated based on nearby schools that serve any elementary-school students. Averages are weighted by enrollment in their respective schools.

- High school graduation rate (averaging for the three public high schools closest to the population-weighted centroid of the tract)

If a census tract registers as above the weighted regional average on at least four of these six indicators, it is flagged as “high-opportunity.”

Measuring Employment and Commute Patterns

Additional factors beyond opportunity could inform zoning reform efforts, depending on policy goals and priorities. For instance, considering proximity to jobs or efforts to shorten commute distances could advance environmental goals by reducing vehicle miles traveled and greenhouse gas emissions.

This analysis assesses employment—and its intersection with commute patterns and housing availability—in three ways that could factor into neighborhood identification strategies.

The first measure identifies areas that are relatively “jobs rich” for their region:

- *Jobs-Rich:* If the number of all jobs within 3 miles of the tract is greater than the median number of “nearby” jobs for the region, OR if the number of low- and moderate-wage jobs (jobs with wages below $40,000 a year) within 3 miles of the tract is greater than the median number of “nearby” low- and moderate-wage jobs for the region, the tract is flagged as a jobs-rich tract.[4]

The remaining two measures take different approaches to identifying tracts located in areas where building more housing could potentially reduce commute distances:

- *Long In-Commutes*: This measure captures tracts where workers are commuting in from longer-than-typical distances. If the median commute distance for all workers coming into the tract for work is longer than the typical commute distance for the region, OR if the median commute distance for low- and moderate-wage workers is longer than the regional median commute distance for low- and moderate-wage workers, the tract is flagged for commute distance.[5]
- *Jobs-Housing Mismatch:* This measure captures areas that perform relatively worse than their peers on the ratio of low- and moderate-wage workers to affordable rental units. Adapted from the methodology developed by Chris Benner and Alex Karner, we first calculate the number of low- and moderate-wage jobs within 3 miles of each tract and the number of rental units that rent for $1,000 a month or less (the affordable rent for households with annual incomes of $40,000) within that same radius.[6] If the ratio of jobs to housing is above the median for the region the tract is flagged for jobs-housing fit.

[4] The overlap between tracts that are flagged as jobs-rich based on all jobs versus based on low- and moderate-wage jobs is significant (they overlap in almost 90 percent of cases) but not absolute. Both measures are used to ensure that low- and moderate-wage jobs centers are not excluded from consideration.
[5] Again, both all workers and low/moderate-wage workers are assessed to ensure tracts that “import” low and moderate wage workers from greater distances are flagged, even if commute patterns for all workers do not outstrip the median for the region.
[6] Affordability is defined by households spending 30% of their monthly income or less on monthly housing costs.

To ensure we are not flagging tracts for Long In-Commutes or Jobs-Housing Mismatch that have relatively few jobs, we exempt any tracts that rank in the bottom 10% for the Jobs-Rich indicator in the region.

Considering the Intersections Between Opportunity, Jobs, and Commutes

Recognizing that different zoning reform efforts may prioritize policy goals in different ways, the interactive map allows users to map five scenarios. Each scenario requires a tract to meet the "high opportunity" criteria. Four consider how employment patterns intersect with areas of opportunity:

- *High-Opportunity* flags tracts that perform above the regional average on at least four of the six opportunity metrics assessed;
- *High-Opportunity + Jobs-Rich* flags tracts that meet the high opportunity criteria and also register above the regional median for number of jobs nearby;
- *High-Opportunity + Jobs-Housing Mismatch* flags tracts that meet the high opportunity criteria and also have a low/moderate wage jobs-to-affordable rental units ratio that is higher than typical for the region;
- *High-Opportunity + Long In-Commutes* flags tracts that meet the high opportunity criteria and have workers commuting in from longer-than-typical distances for their region;
- *High-Opportunity + Jobs-Rich, Jobs-Housing Mismatch, and/or Long In-Commutes* flags tracts that meet the high opportunity criteria and at least one of the employment-based measures.

Each scenario calibrates the list of selected tracts somewhat differently, depending on the policy goal prioritized. For instance, the last scenario, which combines the different dimensions analyzed by flagging high-opportunity tracts that are jobs-rich or where building more housing could potentially help shorten commute distances, selects roughly one-third of the state's census tracts. (See the Appendix for more detail.)

Additional Considerations

As noted above, this analysis focused solely on identifying areas where zoning reform efforts could encourage housing production in communities that would increase access to opportunity for more households (including lower-income households) and/or potentially reduce commuting distances. However, any production-focused strategy must also include consideration of the protections that would need to be in place to ensure that efforts to build more housing do not increase displacement pressures on low-income households and communities of color.

As other elements of the current policy discussion evolve, their outcomes should influence or supersede the selection strategies explored here. Those elements include, but are not necessarily limited to, the following considerations:

Transit Corridors

Policy goals for increasing housing production in transit-accessible tracts will likely look different than those for areas that are more car-dependent, and displacement concerns are likely to be greater.

What qualifies as an area within a transit corridor can be specified in different ways, depending on legislative language and design. But to provide a general sense of how the tracts identified in this analysis might overlap with transit corridors, we tagged a tract as a "transit corridor" neighborhood if at least half of the land area of the tract falls within ¼ mile of a high-frequency bus stop and/or within ½ mile of a high-quality transit stop (note that transit areas are approximate and may contain errors). While most of the tracts identified in this analysis fall outside of transit corridors, the overlap with transit is not insignificant. For instance, approximately 23% of the tracts identified in the High-Opportunity + Jobs-Rich, Jobs-Housing Mismatch, and/or Long In-Commutes analysis were also tagged as being in a transit corridor by our definition.

Communities Vulnerable to or Already Experiencing Displacement

Displacement pressures may be particularly pronounced in areas with high-quality transit access, but such pressures also exist beyond transit corridors. High-opportunity areas could also be at risk of displacing low-income households and communities of color if zoning reform efforts are not attuned to these vulnerabilities.

The methods used to identify vulnerable and gentrifying neighborhoods require their own dedicated process, grounded in research, stakeholder input, and community engagement.

Based on feedback we received from stakeholders, for our own internal testing purposes, we developed a preliminary analysis to identify areas with significant shares of low-income renters that had also experienced rapid increases in rents in recent years. Approximately 5% of tracts in our combined high-opportunity and any jobs metric scenario also met those two criteria. That preliminary analysis suggests that, if zoning reforms move forward in high-opportunity areas, those areas should also be thoroughly screened for displacement vulnerability, using a more extensive methodology developed through the kind of process suggested above.

About the Authors

To learn more about the institutions that undertook this analysis, visit:

The Haas Institute for a Fair and Inclusive Society: https://haasinstitute.berkeley.edu
The Urban Displacement Project: www.urbandisplacement.org
The Terner Center for Housing Innovation: www.ternercenter.berkeley.edu
The California Housing Partnership: www.chpc.net

Acknowledgements

Our deepest thanks to each of the stakeholders who generously offered their time, perspectives, and feedback throughout this project. And to the Chan Zuckerberg Initiative, whose support made this analysis possible.

Appendix

Tracts Mapped Under Different Scenarios, by Region

MPO	Total Tracts	Share of Tracts That Flag for: High-Opportunity	High-Opportunity + Jobs-Rich	High-Opportunity + Jobs-Housing Mismatch	High-Opportunity + Long In-Commutes	High-Opportunity + At Least One Jobs Measure
Butte County Association of Governments	51	29%	22%	22%	6%	27%
Fresno County Council of Governments	199	33%	13%	25%	12%	30%
Kern Council of Governments	151	28%	15%	20%	13%	24%
Kings County Association of Governments	27	33%	22%	22%	11%	33%
Madera County Transportation Commission	23	9%	4%	9%	9%	9%
Merced County Association of Governments	49	27%	12%	14%	14%	24%
MTC (Bay Area)	1,588	46%	27%	31%	17%	40%
Non-MPO Rural Areas	203	11%	8%	8%	7%	10%
Sacramento Area Council of Governments	521	41%	16%	27%	17%	33%
San Benito Council of Governments	11	18%	0%	0%	18%	18%
San Diego Association of Governments	628	45%	26%	35%	23%	42%
San Joaquin Council of Governments	139	29%	8%	17%	15%	23%
San Luis Obispo Council of Governments	54	41%	24%	19%	15%	26%
Santa Barbara County Association of Governments	90	43%	22%	32%	22%	38%
Santa Cruz County Regional Transportation Commission	53	57%	32%	32%	17%	47%
Shasta County Regional Transportation Planning Agency	48	31%	19%	21%	15%	31%
Southern California Association of Governments	3,956	40%	19%	30%	16%	35%
Stanislaus Council of Governments	94	38%	21%	26%	13%	31%
Association of Monterey Bay Area Governments	94	29%	16%	26%	10%	29%

Tulare County Association of Governments	78	27%	22%	21%	15%	23%
California	**8,057**	**40%**	**20%**	**29%**	**16%**	**35%**