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SUPPLEMENTAL AGENDA MATERIAL for Supplemental Packet 1

Meeting Date: **February 14, 2022**

Item Number: **13**

Item Description: **Citywide Affordable Housing Requirements**

Submitted by: **Councilmember Taplin & Councilmember Humbert**

RECOMMENDATION:

1. Amend Ordinance No. 7,853–N.S. to build upon the exemption for projects with fewer than five units, with an additional exemption for any project between 5 and 8 units that is composed entirely units sized to be more efficient and naturally affordable and which meet any of the following standards:
    a. Studios of 350 square feet or less
    b. 1-bedrooms of 450 square feet or less
    c. 2-bedrooms of 650 square feet or less
    d. 3-bedrooms of 800 square feet or less
2. Rescind and replace Resolution No. 70,668–N.S. to:
    a. Seek to optimize the in-lieu fee discount applied to projects with less than 12,000 residential square feet (rsf) and include an analysis in the upcoming feasibility study of how the fee could be discounted to further incentivize the production of missing middle housing, including additional incentives for increased affordability, with an estimate of the number of missing middle units that the City could reasonably expect to produce at different fee levels.

    In the interim, for projects of less than 12,000 rsf, apply the per square foot fee discounts approved at the January 17th, 2023 City Council Meeting, with the exception of the existing and modified exemptions outlined above; and

    b. Examine the impact of both square footage and unit numbers in studying likely impacts of fees on smaller projects. Expedite the completion of the next feasibility study to determine the level at which in-lieu fees for smaller projects are financially feasible and encourage widespread production of missing middle housing.

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RATIONALE FOR RECOMMENDATION

Increasing missing-middle housing production citywide is a top priority for the City's housing policy, and was identified as a program for Affirmatively Furthering Fair Housing in Berkeley's Housing Element Update because single-family zoning continues to perpetuate segregation, exclusion, and economic inequality. "Missing middle" multifamily buildings are more affordable by design than single-family homes, but high land and development costs in the San Francisco Bay Area present a challenge to their financial feasibility, particularly with historically high inflation and volatility in construction costs.

The marginal financial feasibility of missing middle housing is evidenced by market analyses of four-unit development and Senate Bill 9 lot splits by Monkkonen et al (2020) and Metcalf et al (2021), respectively (see Attachments 3 and 4). Metcalf et al (2021) estimated that SB-9 would add a total of just 25,000 new market-feasible units to eligible parcels in the entirety of Alameda County. (For perspective, this represents only a 4% increase in Alameda County's housing stock, even with full realization of all SB 9 enabled units.) However, the authors also found that "a 10 percent decrease in construction costs could increase the amount of market-feasible units by 5 percent." The researchers thus concluded: "Local and state policymakers should therefore also consider policies that could help reduce the costs of production to enable policies such as SB 9 to work more effectively in more places."

According to the City Manager's report on this item, the exact opposite is occurring.The California Construction Cost Index has risen by more than 10% and even outpaced the rise in the Consumer Price Index, which peaked at 9% in the summer of 2022. The supplemental proposal in Item 13b would exacerbate these cost increases by eliminating fee relief for many missing middle projects and by doing so without a feasibility analysis—which housing and anti-displacement experts explicitly warned against doing in 2017.[1]

Limiting small infill housing production through high fees has significant implications for racial equity, as homeowners of color are already less likely to have the access to credit instruments and/or liquid savings needed to build an ADU or otherwise expand their property.[2] Seattle resident Anita Adams is suing the City over their Mandatory Housing Affordability policy, which is charging the Adams household $77,000 in affordable housing in-lieu fees for permitting a 4-bedroom expansion to their house. Ironically, as one of the last remaining Black families in the neighborhood, the Adams family had taken out a second mortgage to finance the project in order to provide housing for their adult children. Thus, misaligned affordable housing incentives can perversely contribute to outcomes that increase housing insecurity.[3]

The fact that missing middle projects represent an extremely small proportion of Berkeley's new housing stock is a strong indication that even with the existing fee relief (which 13b proposes to eliminate) we do not currently have well-aligned incentives for missing middle housing. The supplemental proposal in Item 13b risks virtually eliminating this much-needed source of new housing supply without any justifying data.

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[1] Droste, L. et al. (2017). Opinion: Sounding the alarm on Berkeley's housing proposals. *Berkeleyside*. Retrieved from https://www.berkeleyside.org/2017/06/09/opinion-sounding-alarm-berkeleys-housing-proposals

[2] Greenberg, J. et al (2022). ADUs for All: Breaking Down Barriers to Racial and Economic Equity in Accessory Dwelling Unit Construction. *UC Berkeley Terner Center.* Retrieved from https://ternercenter.berkeley.edu/research-and-policy/adu-equity-barriers/

[3] Taylor, S.G. (2022, Dec. 16). Central District couple sues Seattle over affordable housing program. *Seattle Times.* Retrieved from https://www.seattletimes.com/seattle-news/central-district-couple-sues-seattle-over-affordable-housing-program/

Given that the rate of financial return on missing-middle housing may still be too marginal for this housing type to substantially contribute to meeting Berkeley's overall and low-income housing needs, this supplemental proposes amending the previous resolution to recommend that the feasibility study examine options for and the efficacy of additional incentives for creating missing middle projects, especially those with more compact, naturally affordable units.

ATTACHMENTS

1. Revised Ordinance
2. Resolution
3. Monkkonen, et al. (2020). One to Four: The Market Potential of Fourplexes in California's Single-Family Neighborhoods. *UCLA Working Paper Series.*
4. Metcalf, et al. (2021). Will Allowing Duplexes and Lot Splits on Parcels Zoned for Single-Family Create New Homes? *UC Berkeley Terner Center.*

ORDINANCE NO. -N.S.
AFFORDABLE HOUSING REQUIREMENTS; AMENDING BERKELEY MUNICIPAL CODE TITLES 22 AND 23

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Berkeley Municipal Code Section 22.20.065, and Section 23.312.040(A)(6) are hereby repealed.

Section 2. That Berkeley Municipal Code Chapter 23.328 is repealed and re-enacted to read as follows:

23.328.010 Findings and Purpose.

A. The State of California has established a Regional Housing Needs Allocation (RHNA) process under which it allocates a "fair share" of the regional housing need, updated periodically, to each local jurisdiction. The "fair share" allocated to Berkeley increased significantly based on the regional housing needs determination finalized in late 2021. The sixth cycle of the RHNA for the San Francisco Bay Area allocates to Berkeley a "fair share" that calls for adequate sites for 8,934 housing units for the period from 2023 to 2031, including sites for 2,446 Very Low-Income units, 1,408 Low Income units, and 1,416 Moderate Income units. Under the state Housing Element Law, the City must update its Housing Element to provide adequate sites for its updated "fair share" allocation by 2023.

B. The Bay Area suffers from a shortage of affordable housing. As the Bay Area region experiences increased economic growth and a high demand for housing, housing prices continue to rise, which leads to displacement of low income residents and exacerbates the shelter crisis that has led to unacceptably high rates of homelessness in the City of Berkeley and the Bay Area region.

C. In 1990, the City established the Housing Trust Fund program to pool available funding for affordable housing development. The Housing Trust Fund program is funded by federal, state, and local revenues, including by in-lieu and mitigation fees paid by developers of market-rate housing projects under the City's existing affordable housing ordinances.

D. The City Council hereby finds that there is a legitimate public interest in the provision of affordable housing to address the crises of displacement, homelessness, and lack of housing affordability in the City, and that there is a significant and increasing need for affordable housing in the City to meet the City's regional share of housing needs under the California Housing Element Law.

E. The City Council further finds that the public interest would best be served if new affordable housing were integrated into new market-rate residential developments to facilitate economically diverse housing, while also providing alternative options to the on-site construction

of affordable housing such as the payment of fees to replenish the City's Housing Trust Fund program and allowing for the construction of affordable housing on land dedicated by market-rate housing developers.

F. The City Council intends that this Ordinance be construed as an amendment to the City's existing affordability requirements, and that the repeal and re-enactment of any requirement shall not be construed to relieve a party of any outstanding obligation to comply with the requirements applicable to any previously approved Housing Development Project.

23.328.020 Definitions.

A. "Affordable Unit" means a Residential Unit that is in perpetuity affordable to Very Low Income Households or Lower-Income Households, as defined in California Health and Safety Code sections 50052.5 and 50053.

B. "Affordable Housing Compliance Plan" means an enforceable commitment by an Applicant to comply with the requirements of this Chapter that identifies the number and type of Affordable Units, the amount of In-Lieu Fees, and/or the parcels of land (or portions thereof) that will be provided and/or paid by the Applicant to comply with those requirements.

C. "AMI" means the area median income applicable to the City of Berkeley, as defined by the U.S. Department of Housing and Urban Development, or its successor provision, or as established by the City of Berkeley in the event that such median income figures are no longer published by the U.S. Department of Housing and Urban Development.

D. "Applicant" means any individual, person, firm, partnership, association, joint venture, corporation, entity, combination of entities or authorized representative thereof, who applies to the City for any Housing Development Project.

E. "Housing Development Project" means a development project, including a Mixed- Use Residential project (as defined in 23.502.020(M)(13), involving the new construction of at least one Residential Unit. Projects with one or more buildings or projects including multiple contiguous parcels under common ownership shall be considered as a sole Housing Development Project and not as individual projects.

F. "Housing Trust Fund" means the program to finance low and moderate-income housing established by Resolution No. 55,504-N.S., or any successor fund established for the same purpose.

G. "Lower-Income Household" means a household whose income does not exceed the low-income limits applicable to Alameda County, as defined in California Health and Safety Code section 50079.5 and published annually pursuant to Title 25 of the California Code of Regulations, Section 6932 (or its successor provision) by the California Department of Housing and Community Development.

H. "Regulatory Agreement and Declaration of Restrictive Covenants" means, for the purposes of this Chapter, a legally binding agreement recorded against the property to codify the requirements and conditions of a Housing Development Project providing Affordable Units.

I. “Residential Unit” means, for purposes of this Chapter, any Dwelling Unit, any Live/Work Unit, or any bedroom of a Group Living Accommodation (GLA) except a GLA in a University-recognized fraternity, sorority or co-op; provided, however, that for purposes of this Chapter, “Residential Unit” shall not include any Accessory Dwelling Unit or Junior Accessory Dwelling Unit.

J. "Very Low-Income Household" means a household whose income is no more than 50% of AMI, as defined in California Health and Safety Code section 50105.

23.328.030 Affordable Housing Requirements.

A. Requirement to Construct Affordable Units

1. Except as otherwise provided in this Chapter, no permit for the construction of any Housing Development Project shall be issued unless at least 20% of the Residential Units are Affordable Units. When the calculation results in a fractional unit, an Applicant will round up to the nearest whole unit. The Affordable Units shall have the same proportion of unit types (i.e., number of bedrooms) and average size as the market rate units (provided, however, that no Affordable Unit may have more than three bedrooms).

2. In lieu of providing Affordable Units pursuant to Paragraph 1, an Applicant may propose an alternative mix of unit-types to comply with this Chapter by providing Affordable Units that comprise at least 20% of the applicable "Floor Area, Gross” of the Housing Development Project as defined in section 23.328.030(B)(2) in order to achieve a mix of Affordable Units including two- bedroom or three-bedroom units. The City Manager or their designee may approve the proposed alternative mix of unit- types that meet the requirements of this section.

3. Affordable Units shall be (a) reasonably dispersed throughout the Housing Development Project; and (b) comparable to other Residential Units in the Housing Development Project in terms of appearance, materials, and finish quality. Residents of Affordable Units shall have access to the same common areas and amenities that are available to residents of other Residential Units in the Housing Development Project.

4. The City Manager or their designee shall adopt rules and regulations (a) establishing the affordable sales price or affordable rent for each Affordable Unit, consistent with the requirements of Health and Safety Code sections 50052.5 and 50053; and (b) ensuring that Affordable Units are sold or rented to Very Low Income and Lower Income Households, consistent with the requirements of this Chapter.

5. Rental Units.

a. At least 50% of the required Affordable Units in the Housing Development Project shall be offered at a rent that is affordable to Very Low-Income Households, up to a maximum requirement of 10% of the total units in the Housing Development Project if the project provides more Affordable Units than are otherwise required by this Chapter.

b. In determining whether a unit is affordable to Very Low Income or Low Income Households, maximum allowable rent for any affordable unit shall be reduced by an amount equal to the value of the City-published utility allowance provided for Tenant-paid utilities and any other mandatory fee imposed by the property owner as a condition of tenancy.

c. Any percentage increase in rent of an occupied Affordable Unit shall not exceed the lesser of 65% of the increase in the Consumer Price Index for All Urban Consumers (CPI-U) in the San Francisco-Oakland-San Jose region as reported and published by the U.S. Department of Labor, Bureau of Labor Statistics, for the twelve-month period ending the previous December 31, or 65% of the percentage increase in AMI for the same calendar year. In no event, however, shall the allowable annual adjustment be less than zero (0%) or greater than seven percent (7%).

d. Affordable Units designated for Very Low Income Households shall be offered for rent to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f), the Shelter Plus Care Program (42 U.S.C. Section 11403 et. seq.), or any similar state or federally funded rent subsidy program prior to being offered to other potential tenants. The Council may establish related program requirements by resolution.

e. The owner of any Affordable Unit offered for rent must report to the City annually the occupancy and rents charged for each Affordable Unit, and any other information required pursuant to rules and regulations adopted by the City Manager or their designee.

6. Ownership Units. Inclusionary units in ownership projects shall be sold at a price that is affordable to an appropriate-sized household whose income is no more than 80 percent of the AMI.

7. All Affordable Units shall be subject to a recorded affordability restriction requiring in perpetuity that each Affordable Unit be sold at an affordable sales price or offered for rent at an affordable rent, as defined in this Chapter.

8. Affordable Live/Work Units shall be proactively marketed by the Applicant and/or owner to income-eligible persons performing a work activity permitted in the district where the project is located whose type of work causes them to have a requirement for a space larger in size than typically found in residential units.

9. An Affordable Unit that is constructed to qualify for a density bonus under Government Code section 65915 that otherwise meets the requirements of this Chapter shall qualify as an Affordable Unit under this Chapter.

B. Option to Pay In-Lieu Fee

1. In lieu of providing some or all of the Affordable Units required under this Chapter (including any fractional units), an Applicant may elect to pay a fee, the amount of which the City Council may establish by resolution (“In-Lieu Fee”). The City Council may by resolution differentiate among types, classes, and locations of Housing Development Projects to the extent permitted by law; may establish separate fees and criteria for the provision of units that are affordable to Very Low Income Households and units that are

affordable to Low Income Households; and may establish the method for calculation of the In-Lieu Fee.

2. In-Lieu Fees shall be applied to the "Floor Area, Gross" (as defined by BMC Section 23.106.030) of a Housing Development Project. However, in a mixed-use project, the fee shall not be assessed on any "Floor Area, Leasable" (as defined by BMC section 23.106.040), nor on any common areas that exclusively serve a non-residential use. For Live/Work units, the In-Lieu Fee shall be applied to the "Floor Area, Gross" that is designated as non-workspace in the zoning permit approvals consistent with BMC section 23.312.040.

3. In-Lieu Fees shall be estimated as part of the preliminary Affordable Housing Compliance Plan and finalized at the time of building permit issuance, consistent with the final Affordable Housing Compliance Plan.

4. In-Lieu Fees shall be paid prior to the issuance of the first Certificate of Occupancy, or if no Certificate of Occupancy is required, prior to the initial occupancy of the Housing Development Project.

5. Up to 15% of In-Lieu Fees collected may be used to pay for administration of the In-Lieu Fee or the Housing Trust Fund program. At least 85% of In-Lieu Fees collected shall be deposited into the City's Housing Trust Fund program.

C. Option to Dedicate Land

1. At the discretion of the City Manager or their designee, the requirements of this Chapter may be satisfied by the dedication of land in lieu of constructing Affordable Units within the Housing Development Project if the City Manager or their designee determines that all of the following criteria have been met:

a. Marketable title to the site is transferred to the City, or an affordable housing developer approved by the City, prior to issuance of building permit of the Housing Development Project pursuant to an agreement between the Applicant and the City.

b. The site has a General Plan designation that authorizes residential uses and is zoned for residential development at a density to accommodate at least the number of Affordable Units that would otherwise be required under Paragraph A.

c. The site is suitable for development of the Affordable Units, taking into consideration its configuration, physical characteristics, location, access, adjacent uses, and applicable development standards and other relevant planning and development criteria including, but not limited to, factors such as the cost of construction or development arising from the nature, condition, or location of the site.

d. Infrastructure to serve the dedicated site, including, but not limited to, streets and public utilities, are available at the property line and have adequate capacity to serve the maximum allowable residential density permitted under zoning regulations.

e. The site has been evaluated for the presence of hazardous materials and for the presence of geological hazards and all such hazards are or will be mitigated to the satisfaction of the City prior to acceptance of the site by the City.

f. The value of the site upon the date of dedication is equal to or greater than the in-lieu fee that would otherwise be required under Paragraph A. The value of the site shall be determined pursuant to the program guidelines approved by the City Manager or their designee.

2. The City shall solicit proposals from affordable housing developers to construct restricted income units on the site dedicated to the City, but if the City is unable to obtain a qualified affordable housing developer to construct a viable affordable housing development on the property within two years of its solicitation or to commence construction within five years, the City may sell, transfer, lease, or otherwise dispose of the dedicated site for any purpose. Any funds collected as the result of a sale, transfer, lease, or other disposition of sites dedicated to the City shall be deposited into a fund designated for use in the City's Housing Trust Fund program.

23.328.040 Waiver or Modification of Affordable Housing Requirements.

A. The City Manager or their designee may waive or modify up to fifty percent of the requirements of this Chapter at their sole discretion where any of the following conditions are established:

1. A project providing low- or moderate-income housing is funded in whole or in part by the City's Housing Trust Fund program;

2. The implementation of the requirements of this Chapter would violate the rights of any person under the California or United States Constitutions, any federal law, or any state law governing a matter of statewide concern and applicable to a charter city; or

3. The benefits of the project to the City outweigh the detriment of foregoing the provision of Affordable Housing or the contribution of In-Lieu fees to the Housing Trust Fund program. In weighing the benefits and detriment to the City, the following factors may be considered:

a. The impact of the requirements of this Chapter on the feasibility of a Housing Development Project;

b. Other economically beneficial uses of the Applicant's property;

c. The burdens the Housing Development Project places on the City in terms of increased demand for affordable housing, childcare, public facilities or

amenities, or other impacts which reasonably may be anticipated to be generated by or attributable to the Housing Development Project; and

d. The impact on the Housing Trust Fund program of foregoing the payment of any In-Lieu fee that would otherwise be made.

B. Waivers or modifications greater than fifty percent of the amount which otherwise would be required by this Chapter shall be subject to the approval of City Council.

C. The Applicant shall bear the burden of proof to establish eligibility for a waiver or modification of the requirements of this Chapter.

23.328.050 Implementation.

A. The Applicant for any Use Permit or Zoning Certificate for a Housing Development Project shall submit a preliminary Affordable Housing Compliance Plan to the Zoning Officer at the time of application. The preliminary Affordable Housing Compliance Plan shall be incorporated as a condition of approval of any Use Permit or Zoning Certificate issued to the Applicant. No building permit may be issued for the project until the final Affordable Housing Compliance Plan is approved.

B. The Applicant must execute a Regulatory Agreement and Declaration of Restrictive Covenants to regulate all Affordable Units provided in a Housing Development Project. No building permit may be issued for the project until the Regulatory Agreement and Declaration of Restrictive Covenants are executed.

C. The Affordable Housing Compliance Plan and/or Regulatory Agreement and Declaration of Restrictive Covenants may be amended administratively, provided that the Zoning Officer finds them to be in full compliance with the provisions of this ordinance and State law, prior to issuance of Certificate of Occupancy.

D. The City Manager or their designee may promulgate additional rules and regulations consistent with the requirements of this Chapter.

E. The City Council may by resolution establish fees for the implementation and administration of this Chapter and may establish administrative penalties for violations of this Chapter.

F. Exemptions. The following types of Housing Development Projects and Residential Units are exempt from this Chapter.

1. A Housing Development Project for which either a building permit was issued on or before April 1, 2023 or a preliminary application including all of the information required by subdivision (a) of California Government Code section 65941.1 was submitted on or before April 1, 2023 shall be subject to this Chapter's requirements that were in place as of the preliminary application's submittal date but shall otherwise be exempt from this Chapter. This exemption shall expire upon the occurrence of any of the circumstances defined in paragraphs (2), (6), or (7) of subdivision (o) of California

Government Code section 65589.5 or in subdivision (d) of California Government Code section 65941.

2. A Housing Development Project with fewer than five Residential Units, unless it is part of a larger Housing Development Project. This exemption shall expire on April 1, 2025.

3. A Residential Unit that replaces a unit existing as of April 1, 2023 that has been destroyed by fire, earthquake or other disaster, or that was previously subject to a mitigation fee or inclusionary housing requirement.

4. A Residential Unit existing as of April 1, 2023 that is expanded, renovated, or Rehabilitated.

5. Any project with eight or fewer Residential Units, provided that the project is not part of a larger Housing Development Project and all units within the project are any one of the following:

a. A studio unit with a floor area of 350 square feet or less
b. A 1-bedroom unit with a floor area of 450 square feet or less
c. A 2-bedroom unit with a floor area of 650 square feet or less
d. A 3-bedroom unit with a floor area of 800 square feet or less

Section 3. The Berkeley Municipal Code Section 23.330.070 is hereby amended to read as follows:

23.330.070 Qualifying Units.
Qualifying units must meet the standards set forth in Chapter 23.328 (Affordable Housing Requirements).

Section 4. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

RESOLUTION NO. _____

ADOPTING REGULATIONS FOR VOUCHER PROGRAM AND ESTABLISHING AN IN-LIEU FEE TO SUPPORT THE PROVISION OF AFFORDABLE HOUSING PURSUANT TO BERKELEY MUNICIPAL CODE CHAPTER 23.328 AND RESCINDING RESOLUTION 70,668-N.S N.S.

WHEREAS, Berkeley Municipal Code ("BMC") Chapter 23.328 establishes a requirement that 20% of Residential Units (as defined) in market-rate developments be offered for rent or sale at affordable rents or prices, as defined ("Affordable Units"); and

WHEREAS, BMC Chapter 23.328 authorizes the City Council to establish by resolution preferences for renting Affordable Units offered for rent to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f), the Shelter Plus Care Program (42 U.S.C. Section 11403 et. seq.), or similar state or federally funded rent subsidy programs; and

WHEREAS, BMC Chapter 23.328 authorizes developers of market-rate housing to pay a fee in lieu of complying with the requirement to provide on-site affordable housing ("In-Lieu Fee"); and

WHEREAS, BMC Chapter 23.328 authorizes the City Council to establish the In-Lieu Fee by resolution, and further authorizes the Council to differentiate among types, classes, and locations of Housing Development Projects to the extent permitted by law; to establish separate fees and criteria for the provision of units that are affordable to Very Low Income Households and units that are affordable to Low Income Households; and to establish the method for calculating the In-Lieu Fee; and

WHEREAS, the City retained Street Level Advisors to provide analysis and recommendations for updating the City's affordable housing requirements, the scope of which included a financial feasibility study of the City's affordable housing mitigation fees; and

WHEREAS, Street Level Advisors prepared a Financial Feasibility Analysis dated April 27, 2021, which determined that an In-Lieu Fee of $45 per square foot of the residential Gross Floor Area (as defined in BMC Section 23.106.030) would be financially feasible; and

WHEREAS, Street Level Advisors recommended certain modifications to the fee that would not adversely impact the financial feasibility of housing development projects, such as charging a lower / tiered fee for smaller projects; and

WHEREAS Street Level advisors identified an equivalent rate if the In-Lieu fee were to be calculated based on an assumed 80/20 ratio of gross and net square feet of residential area in typical housing development projects of $56.25 per square foot of Residential Unit Floor Area~~.~~; and

WHEREAS the City of Berkeley desires to dramatically increase the production of missing middle housing, missing middle housing currently comprises only a small proportion of Berkeley's new housing stock, and high costs and low financial returns are major contributors to the lack of missing middle housing production;

WHEREAS, this Resolution supersedes Resolution No. 70,668-N.S.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley as follows:

1. All Affordable Units shall be offered to tenants in accordance with Council-adopted eligibility preference criteria. All Very Low-Income Units, comprising a portion of the Affordable Units authorized and provided for by BMC Chapter 23.328, must be offered to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f) or the Shelter Plus Care Program (42 U.S.C. Section 11403 et. seq.) before being marketed to other income-eligible households. The allocations shall be divided equally between the Section 8 Program (50%) and the Shelter Plus Care Program (50%). The majority of the Very Low-Income units shall be designated for the Shelter Plus Care Program when there is an uneven number of units.

2. The initial In-Lieu Fee authorized and provided for by BMC Chapter 23.328 shall be $56.25 per square foot of the Residential Unit Floor Area) of a Housing Development Project (as defined in BMC Chapter 23.328) and shall be automatically increased biennially based on changes to the California Construction Cost Index unless otherwise provided for by BMC Chapter 23.328 or by this Resolution.

3. Housing Development Projects subject to BMC Chapter 23.328 may provide less than the required number of Affordable Units in the Housing Development Project and pay a proportionately reduced In-Lieu Fee, calculated as follows: the fee per square foot multiplied by the total Residential Unit Floor Area of a Housing Development Project, multiplied by the percentage of the applicable requirement remaining after accounting for any on-site Affordable Units provided. Projects that provide no on-site Affordable Units will have an applicable requirement multiplier of one.

4. For Housing Development Projects of less than 12,000 square feet of Residential Unit Floor Area, the In-Lieu Fee shall be calculated as follows:

Residential Unit Floor Area	Fee per Square Foot
>12,000	$56.25
11,000-11,999	$53.75
10,000-10,999	$51.25
9,000-9,999	$48.75
8,000-8,999	$46.25
7,000-7,999	$43.75
6,000-6,999	$41.25
5,000-5,999	$38.75
4,000-4,999	$36.25

3,000-3,999	$33.75
2,000-2,999	$31.25
1,000-1,999	$28.75
<1,000	$26.25

5. The City Council directs the Planning Department, City Manager's Office, and any hired consultants to ensure that the planned Affordable Housing Mitigation Fee feasibility study includes an analysis of how reduced impact fees and/or other incentives could impact that production of missing middle housing.

BE IT FURTHER RESOLVED, Resolution No. 68,074-N.S. is hereby rescinded and is of no force or effect on any Housing Development Project that obtains a building permit after the effective date of this resolution, but shall continue to apply to those projects that were approved and subject to its provisions or the provisions of predecessor resolutions and ordinances addressing the same subject matter.

BE IT FURTHER RESOLVED, the rescission of Resolution No. 70,668-N.S and this Resolution shall be effective upon the effective date of contemporaneously adopted amendments to BMC Chapter 23.328.

Working Paper Series

One to Four: The Market Potential of Fourplexes in California's Single-Family Neighborhoods

Paavo Monkkonen

Ian Carlton

Kate Macfarlane

June 2020

UCLA Lewis Center for Regional Policy Studies

About the UCLA Lewis Center

The Ralph & Goldy Lewis Center for Regional Policy Studies advances research on how people live, move, and work in the Los Angeles region, with a focus on policies and interventions that provide paths out of poverty. Since 1989, Lewis Center scholars and staff have produced high-quality research, programs and events, and accessible publications for policymakers, officials, students, opinion leaders, and the public. The Lewis Center leverages research grants from affiliated scholars to create a diverse research portfolio.

About the Authors

Paavo Monkkonen is associate professor of urban planning and public policy at UCLA Luskin School of Public Affairs.

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Highlights

- The State of California seeks to increase housing production by regulating the number of homes local zoning allows, yet the market feasibility of delivering units under more expansive zoning is rarely acknowledged and mostly unanalyzed.
- New guidelines from the Department of Housing and Community Development emphasize the need to assess realistic capacity of sites, including the feasibility of new housing development during the upcoming planning period.
- One statewide policy push is to allow three- and fourplexes in single-family zones. To assess the impact of this zoning change, we analyze the market feasibility of homebuilding under fourplex zoning on the 6.8 million parcels with single-family homes built in California prior to 2005.
- We find that at present, there is potential for 1.5 million new units in the form of accessory dwelling units and juniors, but that allowing fourplexes on these sites would nearly double this number, creating market-feasible potential for 1.2 million additional new homes.
- Even though fourplex production would be the most profitable use for only a small fraction of *parcels*, it leads to a substantial unit production by quadrupling density on a given site.
- We also estimate that increasing development options through fourplex zoning will dramatically reduce mansionization, by making the most profitable redevelopment option for a single-family parcel something other than replacing the single-family home with a larger one.
- Our analysis emphasizes how the increase in market-feasible housing enabled by allowing fourplexes varies across regions and municipalities. For example, in some cities over 250 additional units become feasible per 1,000 parcels whereas in others fewer than 100 would be enabled by fourplex zoning.
- Cities also differ in terms of how many *parcels* become newly feasible for redevelopment. For some cities additional units are feasible on new parcels, whereas for others larger projects pencil on parcels where some redevelopment was already feasible.

Introduction

The State of California has recently sought to address its housing shortage by expanding the number of homes local zoning allows in different neighborhoods. One avenue has been quite direct: state law now requires cities to allow Accessory Dwelling Units (ADUs) and Junior ADUs in single-family neighborhoods. Another avenue is more complex: cities are required to update their Housing Elements every eight years to allow for an increasing number of homes, and must rezone if their existing zoning does not have sufficient space. However, the market feasibility of delivering units under new zoning rules remains underemphasized and unanalyzed by the state.

The lack of this kind of information hinders policy discussions over zoning reform. Previous Lewis Center briefs argue that the state planning process for housing pushes for more zoning in the wrong places and our analysis of cities' 'zoning capacity' shows it is insufficient and in the wrong parts of the state. But beyond an assessment of where there is zoning, we also have a limited understanding of what happens when zoning is made more permissive. This is partly because local governments have been making zoning more restrictive for so many decades, but it is also because municipal zoning codes are varied and complex.

Credible projections of the impacts of changes to zoning on eventual housing production — even if they are based on several strong assumptions — will improve the quality of public debate and policy outcomes. Moreover, new guidelines from the Department of Housing and Community Development emphasize the need to assess realistic capacity of sites, including the feasibility of new housing development based on evidence. Establishing a framework for estimating the production effects of zoning changes is important if we are to refine the quality of estimates over time.

In this brief, we present an estimate of the market-feasible new home production on the state's stock of single-family parcels if the state were to allow fourplexes on all these parcels, and characterize how the impacts of this change vary across regions and cities. We do this in response to legislative efforts to allow this type of housing more broadly. Another summary of this collaboration between UrbanFootprint and MapCraft has also been published here.

We first describe the way zoning changes will eventually result in new homes, using the metaphor of a production funnel. Then, we define market feasibility and our methodology. Last, we highlight the major findings from the analysis. There are, of course, many caveats associated with this sort of analysis. But existing projections of how zoning reform can increase statewide housing production are limited, which means this work contributes substantially to public discussion of state-level zoning reform policies.

Numerous housing bills introduced in the 2020 legislative session related to small-scale housing development, including Assembly Bill 3040, which focuses on the Regional Housing Needs Assessment (RHNA) process and was the primary inspiration for this policy brief.

- AB 3040: Gives RHNA credits for older single-family homes zoned for fourplexes
- SB 1120: Requires two-unit housing developments to be considered ministerially
- AB 3155: Streamlines missing middle housing approvals
- SB 902: Establishes duplex zoning statewide and provides CEQA exemptions
- SB 592: Clarifies that ADUs are protected by the Housing Accountability Act
- AB 1924: Requires fees to be assessed on a per-square-foot basis
- AB 725: Requires distinct housing formats to qualify for RHNA credits

The Production Funnel: One Way to Think about the Impacts of Zoning Reform

The zoning code is the set of rules that dictates what kind and how many homes can be built on any given piece of land. In most of California's highest demand cities, zoning prohibitions are the primary reason housing is not being built. Zoning, however, is only the first step in a path that shapes whether and how much housing is built on a given site. **Figure 1** is a diagram of a 'production funnel', a stylized way to think about how increasing (or decreasing) zoning rules eventually determine housing production.

After a parcel's zoning shapes what can be legally built, the second step in the funnel is market feasibility. In brief, is it profitable to build housing there? What kind? Developers will not (usually) build new housing of a particular type unless there is demand for it in a neighborhood, and property sellers will typically sell their land to the highest bidder. Developers do not maximize the number of units zoning allows, but build the most profitable type of housing, which can be less than is permitted.

But in order for a developer to build these homes, they must be able to acquire a site. Thus the third level of the funnel refers to the rate at which properties are sold. Even where there is allowable zoning and market demand, only a small portion of the market-feasible developments are likely to be delivered in part because property transacts infrequently.

The final stage is actual housing production. Even where there is permissive zoning, the next level is market feasible, and sites are being sold, housing may not be produced. Development can be inhibited by local regulations outside of zoning that also govern the development process, capital availability, labor capacity, market absorption and changing preferences, and other issues specific to developers themselves. The result of the processes the funnel describes is that millions of market-feasible opportunities may yield relatively few built units, perhaps just a few thousand units every year.

Figure 1: Simplified Production Funnel

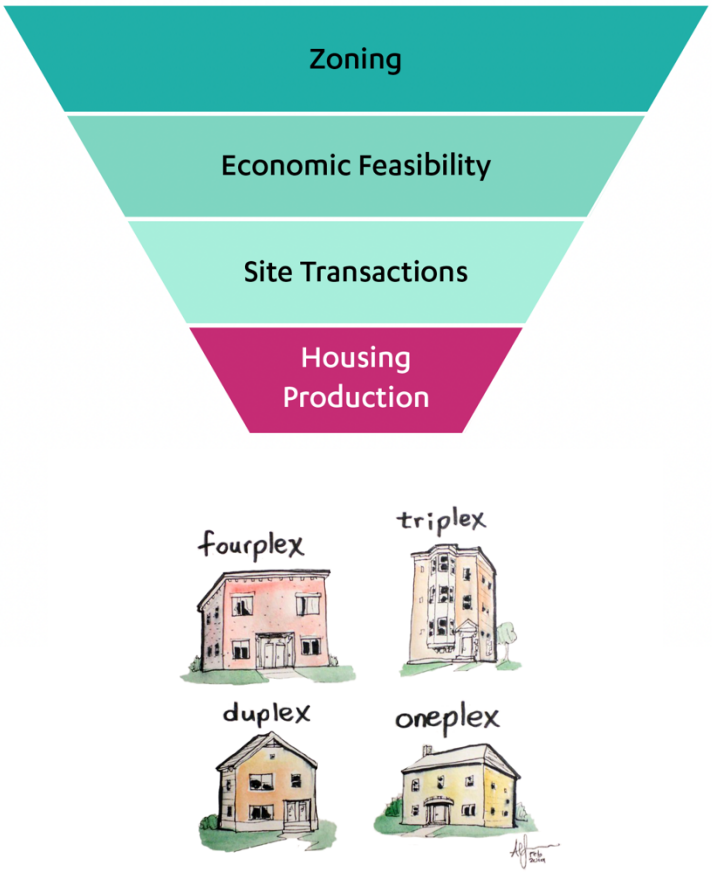


Illustration by Alfred Twu

Methodology

We considered market-feasible housing capacity on the 6.8 million parcels in California that currently have a single-family home built prior to 2005. We used MapCraft's Lab analysis tool to determine what types and scales of housing development would be feasible with an approach that considers construction costs, market demand, financing, land use policies, and individual parcel characteristics.

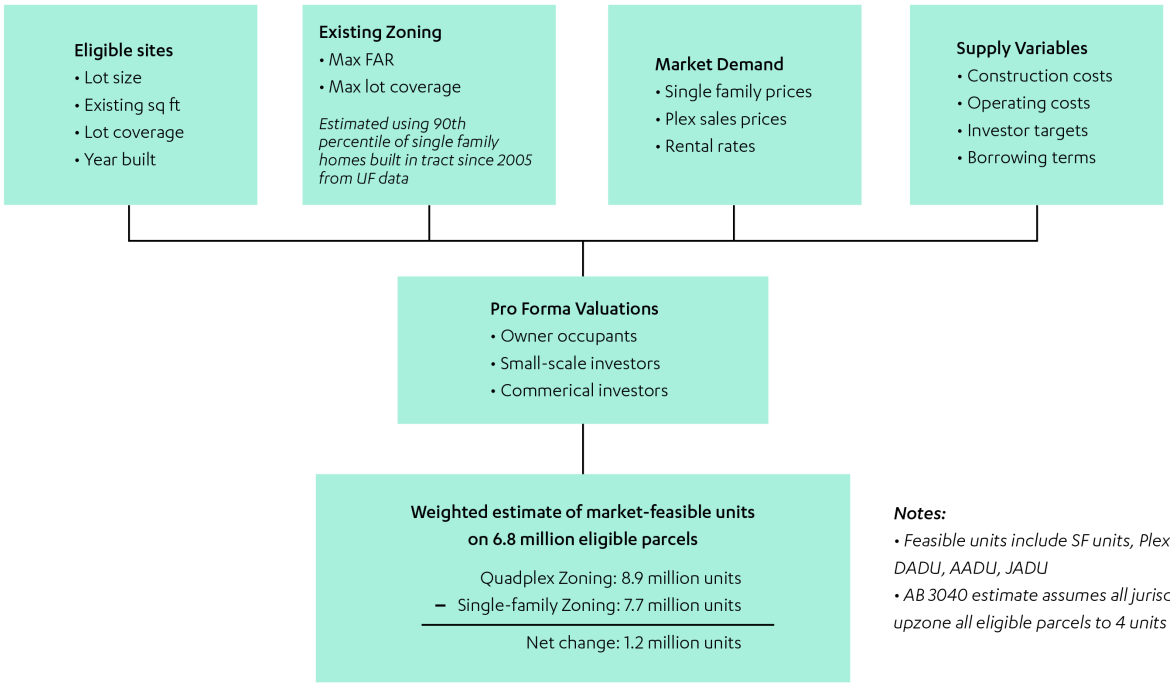
The evaluation relies on parcel data analyzed by UrbanFootprint. UrbanFootprint's parcel dataset includes all counties in California with populations greater than 45,000 people. For the purposes of this evaluation, all properties with single-family detached land use were assumed to currently have exactly one existing unit (i.e., no accessory dwelling units (ADUs)) and single-family zoning that limited redevelopment. To support this assumption, UrbanFootprint scanned zoning in a sample of cities, finding that the vast majority of parcels with single-family homes are zoned for single family. Consistent with the eligibility criteria of AB 3040, one of the many state bills that would lead to upzoning, we excluded single-family parcels with structures built since 2005 from the analysis.

UrbanFootprint's parcel data includes information on each lot and the single-family homes on those lots. In combination with tax assessor data, we estimated the value of each existing single-family property.

To compute snapshots of market feasibility on every relevant parcel, both under current policies and proposed policies, MapCraft relies on typical development pencil out models, which are financial evaluations conducted by developers to assess an investment's viability early in the development process. MapCraft's models of small-scale development contemplate financial feasibility from the perspectives of owner-occupants, owner-occupant landlords, small-scale investors, and commercial investors, with market-feasible unit potential based on a probabilistic blend of all possible development options. Financial expectations of investors and lending terms are based on conversations with industry professionals and are updated by MapCraft regularly.

MapCraft's financial calculations incorporate data and assumptions about current rents, sales prices, construction costs, and investors' expected return rates, and are validated by ECONorthwest, a West Coast economics consultancy. MapCraft's market demand information relies on multiple sources, including CoStar, Zillow, tax assessors, U.S. Census, and transaction records. MapCraft's construction cost information is based on interviews and costs are localized based on RS Means. Finally, the modeling relies on assumptions about parking requirements, typical unit sizes, and other factors that inform development. Economic & Planning Systems and the UC Berkeley's Terner Center also gave input in developing our approach and assumptions.

Figure 2: MapCraft's Feasibility Assessment of all AB 3040-eligible Parcels Identified by Urban Footprint



Our business-as-usual scenario evaluates development feasibility for a variety of development options under single-family zoning, while the alternative policy scenario considers the additional set of development options allowed under fourplex zoning. Notably, the number of options available under single-family zoning is greater than a single-family home because California state law requires that jurisdictions allow ADUs and junior ADUs.

Table 1: Development Options Analyzed

Options under single-family zoning (business-as-usual policy context)	Options with fourplex zoning
Do nothing — Existing single-family structure remains	All options available under single-family zoning, plus:
Add Detached ADU (DADU)	Convert existing house to duplex, threeplex, or fourplex
Build Attached ADU	Add DADU and convert existing house to duplex, threeplex, or fourplex
Add DADU + Junior ADU	Add addition, then convert house to duplex, threeplex, or fourplex
Tear down and build new SFR (i.e., McMansion)	Tear down and build new duplex, threeplex, or fourplex

To be realistic about the policy constraints that limit development, we rely on coarse zoning-like limitations interpolated from recently built houses in each tract. We assumed that developments on a parcel would need to conform to the 90th percentile of height, FAR, and lot coverage of other recently built homes in the same census tract. In other words, we assumed that plexes would be held to the same bulk restrictions as new single-family homes.

Small parcels could also inhibit additional development in spite of relaxed zoning, particularly for the construction of larger buildings. Further, combining multiple parcels into a single lot to allow for denser new development, where financially feasible, is complex in practice and less likely to occur than development on a pre-existing parcel. These factors were incorporated into our analysis.

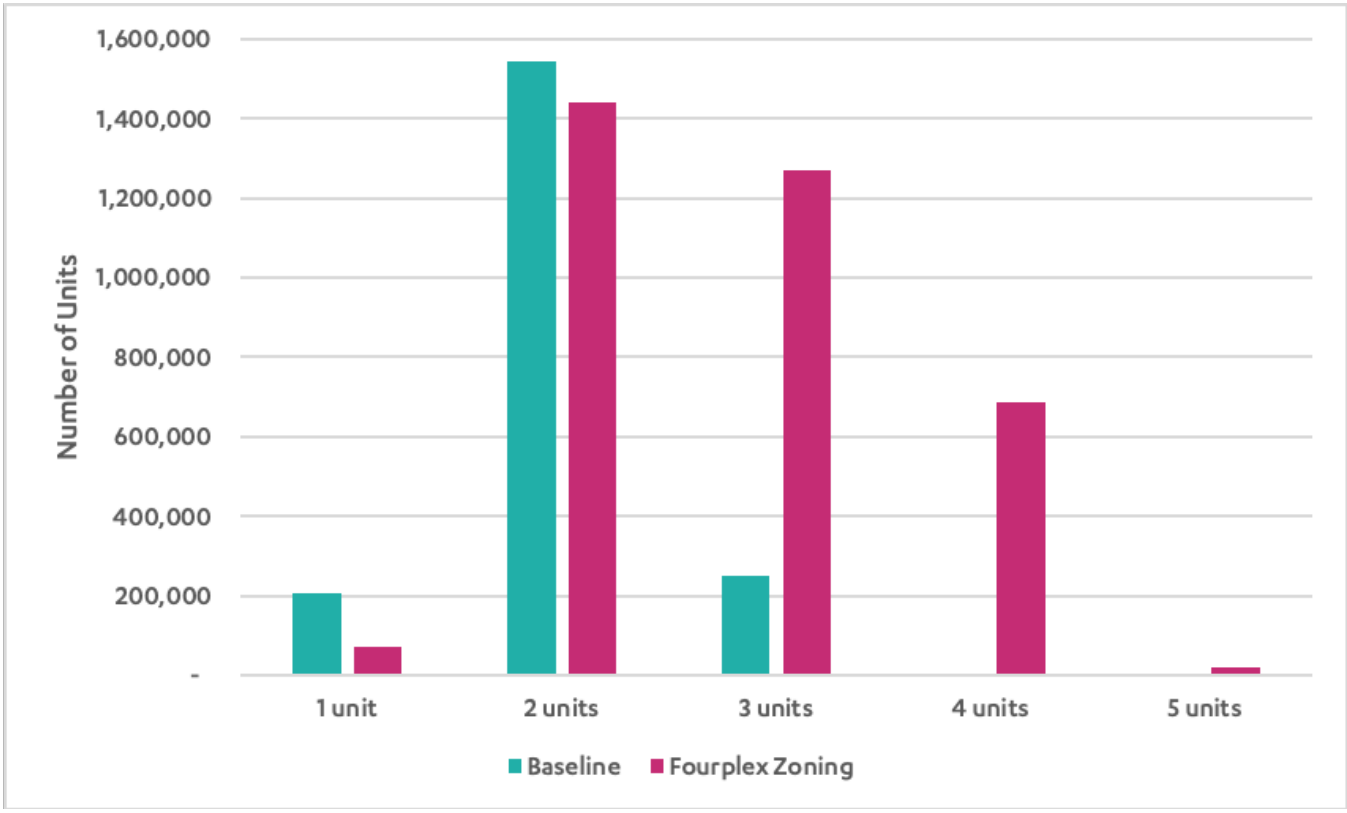
Ultimately, MapCraft's analysis of the eligible parcels identified by UrbanFootprint gives a sense of the likelihood that the different development options are pursued on a given site. The weighted average results of all the options result in a number of units that is somewhere between one unit (the existing single-family remains or is replaced by another single-family home) and five units (a fourplex and ADU are constructed).

Findings: How Many New Units Would Fourplex Zoning Unlock? Where?

The analysis of market-feasible production on the 6.8 million parcels with single-family homes built in California prior to 2005 under existing laws, which permit an accessory dwelling unit (ADU) and a junior ADU reveals that there is potential for roughly 1.8 million new units now. Roughly 85% of these are single-family homes where building an ADU pencils out according to costs and rents, and the remainder are those where adding both an ADU and JADU are profitable.

Changing zoning to allow fourplexes on these sites would nearly double the market-feasible potential for housing. It would add market-feasible potential for 1.2 million new homes, in a scenario that does not change local restrictions on the bulk of new buildings. That is, the new buildings would be the same size as recently built single-family homes although they would house many more people. **Figure 3** presents these calculations by the unit size of new buildings before and after the zoning reform.

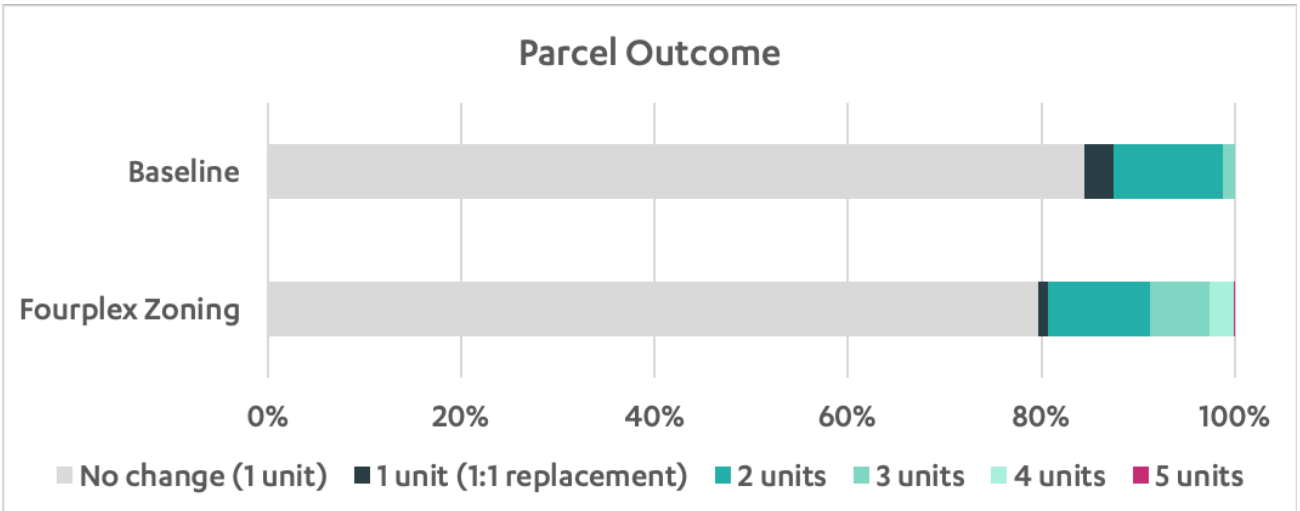
Figure 3. Estimates of Market-Feasible New Units Now and With Fourplex Zoning



Of the roughly 700,000 market-feasible 2-unit projects, we estimate that about 40% would be a house with an ADU, while the remaining 60% would be duplexes. For parcels with three units, we estimate that triplex is by far the most likely development outcome (93% of parcels) rather than a duplex with an ADU.

An important side benefit of increasing development options with fourplex zoning is reducing the likelihood that development on a given parcel will be a one-for-one replacement of an older single-family home with a new one, a phenomenon known as mansionization. New, large single-family homes in urban neighborhoods with high job accessibility are an inefficient land use and we project that a shift to fourplex zoning will reduce the profitability of mansionization substantially — from about 200,000 market-feasible units at present to 50,000.

Figure 4. Estimates of Market-Feasible *Parcels* Now and With Fourplex Zoning



We estimate that many of the newly feasible market-feasible *units* would be in fourplexes. Fourplexes, however, would be the most profitable use for only a small fraction of *parcels*. **Figure 4** demonstrates this by showing the estimated market-feasible outcome for all 6.8 million parcels. It is important because it reinforces the fact that the vast majority of single-family parcels we evaluated do not have a profitable redevelopment option currently — or under fourplex zoning.

Regional Variation

Given that the demand for housing differs dramatically across cities and neighborhoods and construction costs do not, we expect to see a larger impact of zoning reform in places with higher rents and prices. The detailed impacts of allowing fourplexes in single-family neighborhoods, however, are nuanced. In some places, for example, it will remain more profitable to replace a single-family home with a much larger single-family home than a fourplex rental. Our analysis considers all potential redevelopment configurations. We find substantial differences across cities in how much redevelopment is market-feasible and what kinds of redevelopment are most profitable.

Figure 5. Estimates of Market-Feasible New Units Now and Under Fourplex Zoning, Select Cities (Ordered by Net New Market-Feasible Units)

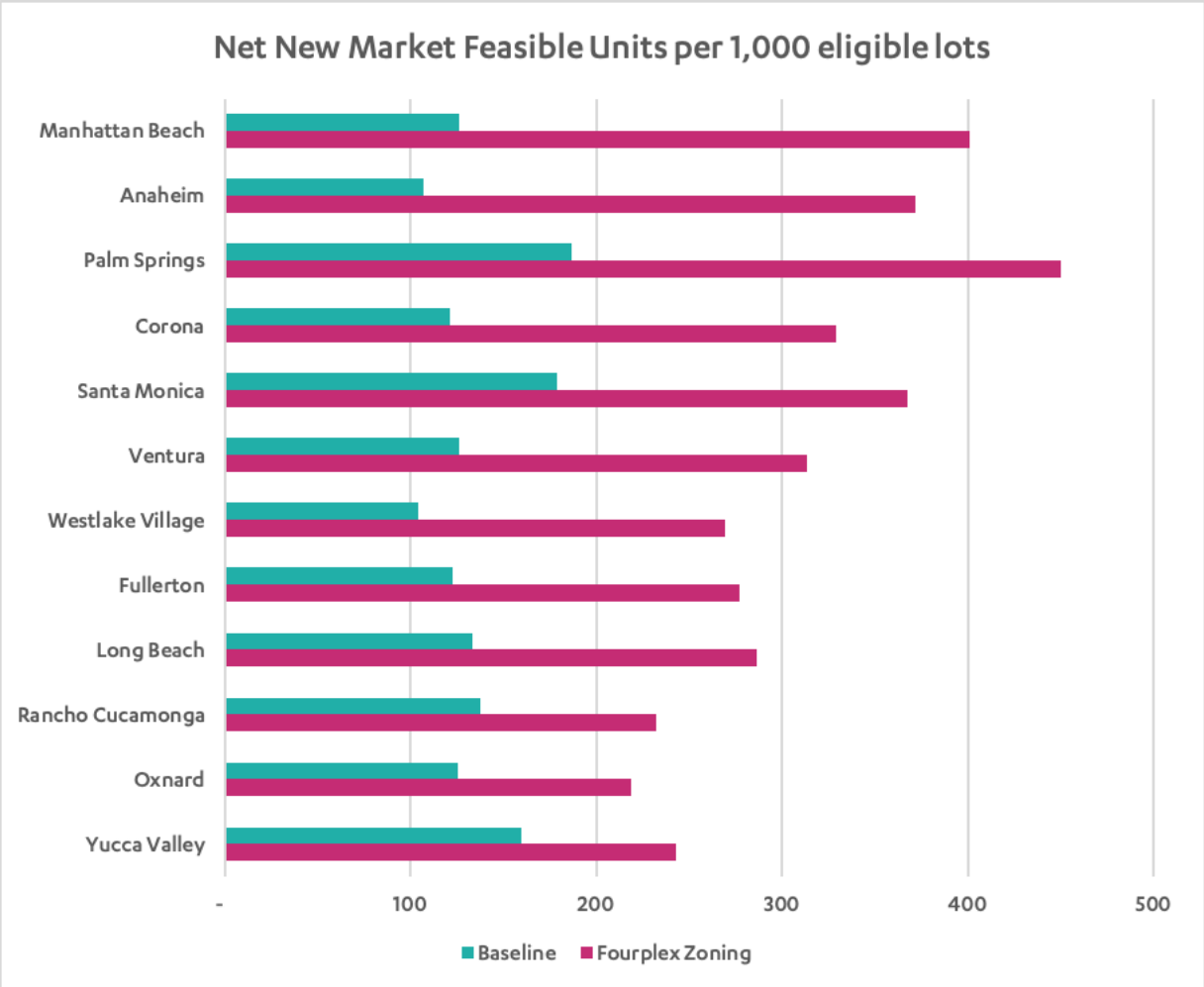
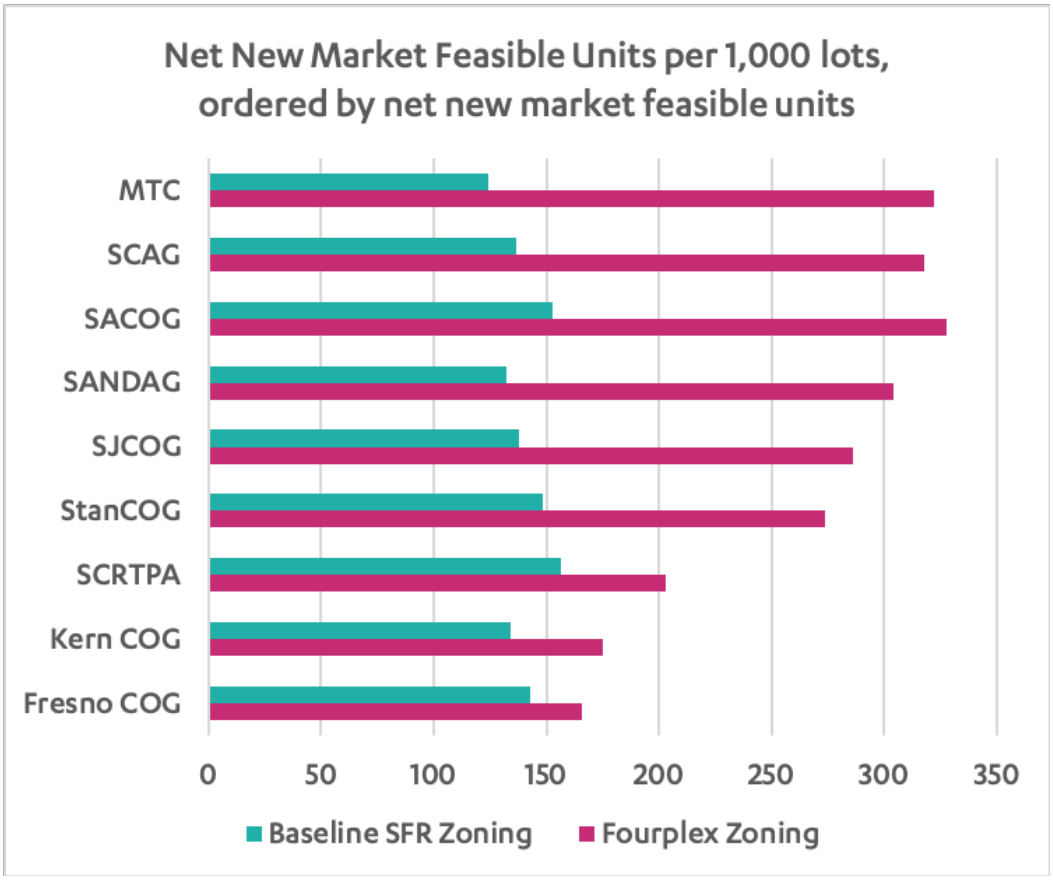


Figure 5 shows the estimates of market-feasible unit production (per 1,000 parcels) for a selection of Southern California cities. The baseline considers the various ADU and JADU options, while the fourplex scenario assesses feasibility of three and four units plus ADUs. The cities are ranked by the estimated impact of fourplex zoning — in Manhattan Beach and Anaheim it would create more than 250 newly feasible units per 1,000 parcels whereas in Oxnard or Rancho Cucamonga fewer than 100. This ranking roughly matches market potential after the zoning change, but much less with market-feasible production at baseline. Anaheim, for example, has some of the least potential for new homes of these cities now, but with fourplex zoning, it moves to be nearly the highest potential.

The levels of market-feasible production are not simply a function of rents — as this brief describes, they reflect the differences between rents and prices, as well as a proxy for local regulations on the bulk of single-family dwellings. Thus, although Santa Monica has a similar estimated unit change with fourplex zoning as Corona, the way this plays out is very different. Santa Monica currently has a large number of parcels on which replacement of a single-family home with a new one is market-feasible, so fourplex zoning doesn't substantially increase the

number parcels for which redevelopment is profitable. Instead, it shifts the more profitable outcome to projects with more units. On the other hand, fourplex zoning in Corona would create profitable redevelopment on many more parcels than presently have market-feasible options. Detailed numbers by changes in market feasibility by unit-count are presented in Appendix Table 1.

Figure 6. Estimates of Market-Feasible New Units Now and Under Fourplex Zoning, Select Regions (Ordered by Net New Market-Feasible Units)



The differential impacts of fourplex zoning across regions are less complex than differences between cities. **Figure 6**, which shows market-feasible units now (baseline) and after fourplex zoning for the nine largest urban regions in the state, tells a simple story. Impacts are substantial and similar for the more expensive coastal markets, where market-feasible production would more than double. They are much less pronounced in many of the central valley regions. In Fresno County, for example, we estimate that the number of market-feasible units would increase by less than a fifth.

Differences in expected market feasibility between different kinds of projects do vary within the coastal regions. For example, many parcels in SACOG where a two-unit project is now the most profitable option, shift to a three or four-unit project. In the Bay Area, on many parcels where a replacement single-family is currently the more

profitable option, a three or four-unit project becomes more probable if it were allowed. Appendix Table 2 presents market feasibility by the unit size of projects.

Conclusion: State Housing Policy and Planning Needs Market Analysis

This brief presents estimates of the changes in market-feasible housing production if fourplexes were to be allowed in single-family neighborhoods. The California Legislature is considering several bills that attempt to increase housing production by expanding how many homes are allowed on single-family parcels, yet the impact of these zoning changes are uncertain. The market feasibility of delivering units under increasingly permissive zoning has not received sufficient attention, and this hinders policy development.

Moreover, until recently the planning processes under the state's Housing Element Law ignored the market reality of where homebuilding is most likely to occur. The law requires cities and counties to update the housing element of their general plan to accommodate a target number of housing units during the subsequent eight years. Yet jurisdictions were traditionally required to only demonstrate a marginally higher zoned capacity — a quantification of how much new housing *could* legally be built on vacant or underutilized parcels — than this housing need. This process implicitly assumed that all vacant and underutilized parcels in the city will be built out during the next eight years, which to our knowledge has never happened. New HCD guidelines, fortunately, begin to emphasize the need to demonstrate the realistic capacity of sites, including the market feasibility of development actually occurring.

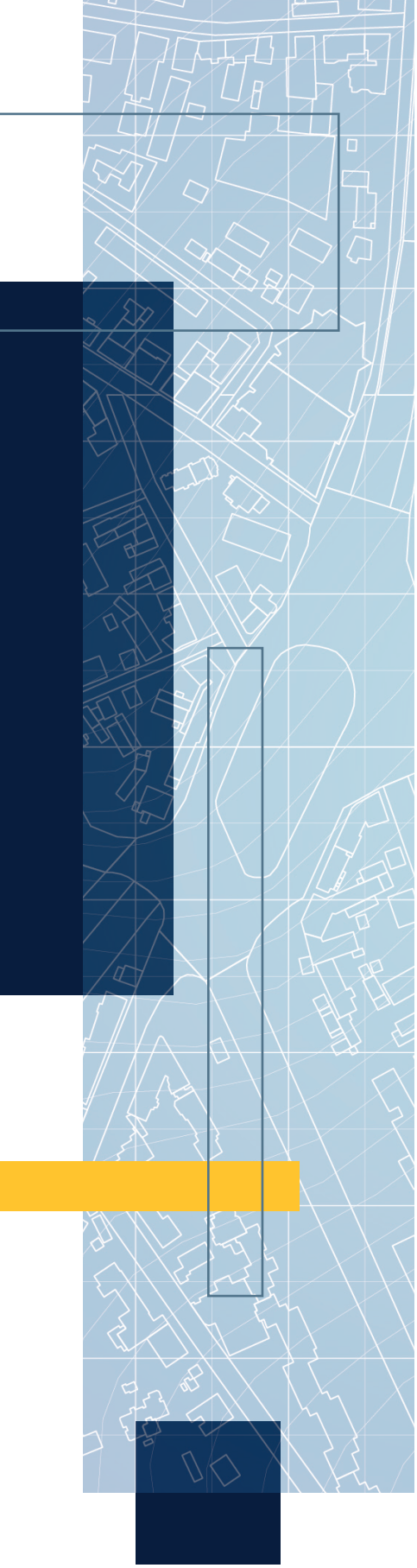
This brief presents an estimate of market-feasible housing production under fourplex zoning and compares it to a current baseline. Our main finding that allowing fourplexes on the 6.8 million parcels that currently have a single-family home built before 2005 would create the market-feasible potential for 1.2 million additional new homes — not the 20.4 million homes (three additional units per parcel) that a complete build-out implies. An additional contribution of the analysis is that state ADU and Junior ADU legislation has created the market-feasible potential for nearly 1.5 million new units. The comparison of differential impacts on housing production in selected cities underscores the importance of better incorporating development probabilities into state housing planning.

Appendix Table 1. Change in market-feasible units under fourplex zoning per 1,000 eligible parcels, Select Southern California Cities

	No Change	1 Unit	2 Units	3 units	4 units	5 units	Total Net New Feasible Units
Manhattan Beach	-81	-49	34	252	115	4	275
Anaheim	-93	-27	16	236	131	2	265
Palm Springs	-58	-44	-32	231	165	2	263
Corona	-86	-5	7	176	113	3	208
Santa Monica	-8	-63	-38	194	101	4	189
Ventura	-46	-31	-13	171	105	1	187
Westlake Village	-24	-40	-15	135	105	5	165
Fullerton	-22	-38	-24	151	86	2	154
Long Beach	-45	-22	-4	155	68	0	153
Rancho Cucamonga	-15	-11	-53	103	68	2	95
Oxnard	-25	-8	-26	98	54	1	93
Yucca Valley	-17	0	-59	76	81	2	83

Appendix Table 2. Change in market-feasible units under fourplex zoning per 1,000 eligible parcels, Select regions

	No Change	1 Unit	2 Units	3 units	4 units	5 units	Total Net New Feasible Units
SCAG	-53	-22	-11	164	102	2	182
MTC	-51	-32	-6	171	114	2	198
SACOG	-56	-7	-39	154	119	4	175
SANDAG	-45	-21	-21	150	107	3	172
Fresno COG	-5	0	-14	21	20	2	23
Kern COG	-14	0	-11	38	27	2	41
SJCOG	-59	-1	-12	134	83	2	148
StanCOG	-51	0	-12	123	64	1	125
SCRTPA	-13	0	-19	36	40	2	46



TERNER CENTER FOR HOUSING INNOVATION
UC BERKELEY

A TERNER CENTER REPORT - JULY 2021

Will Allowing Duplexes and Lot Splits on Parcels Zoned for Single-Family Create New Homes?

Assessing the Viability of New Housing Supply Under California's Senate Bill 9

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Introduction

In recent years, California lawmakers have proposed a number of legislative changes to address the state's ongoing housing shortage and affordability crisis. While the most ambitious of these efforts have not passed, momentum has increased around one solution in particular: legislation to allow modest increases in smaller-sized units in existing single-family neighborhoods. In 2020, Senate Bill 1120—which would have allowed for up to four new homes on existing single-family parcels—passed both the California Assembly and Senate, but fell short of becoming law as time ran out at the end of the session. This year, Senate President Pro Tempore Toni Atkins has introduced Senate Bill 9 (SB 9), which proposes a similar policy shift. SB 9 has now passed through the State Senate and is under discussion in the State Assembly; if approved by the Assembly, it may be poised to be the most significant housing bill coming out of California's current legislative session.

SB 9 has potential to expand the supply of smaller-scaled housing, particularly in higher-resourced, single-family neighborhoods. In this way, SB 9 builds on recent state legislation that opened up access to accessory dwelling units (ADUs) for virtually all California single-family parcels. What distinguishes SB 9 is that it allows for the development of new, for-sale homes, either on a newly subdivided lot or through the conversion of existing single-family homes into multiple units. This ability to create duplexes and/or split the lot and convey new units with a distinct title would allow property owners to pursue a wider range of financing options than are available for ADU construction to build these new homes.[1] In so doing, SB 9 could open up new homeownership opportunities at more attainable price points for prospective purchasers, who would be able to apply for a traditional mortgage to buy the home.

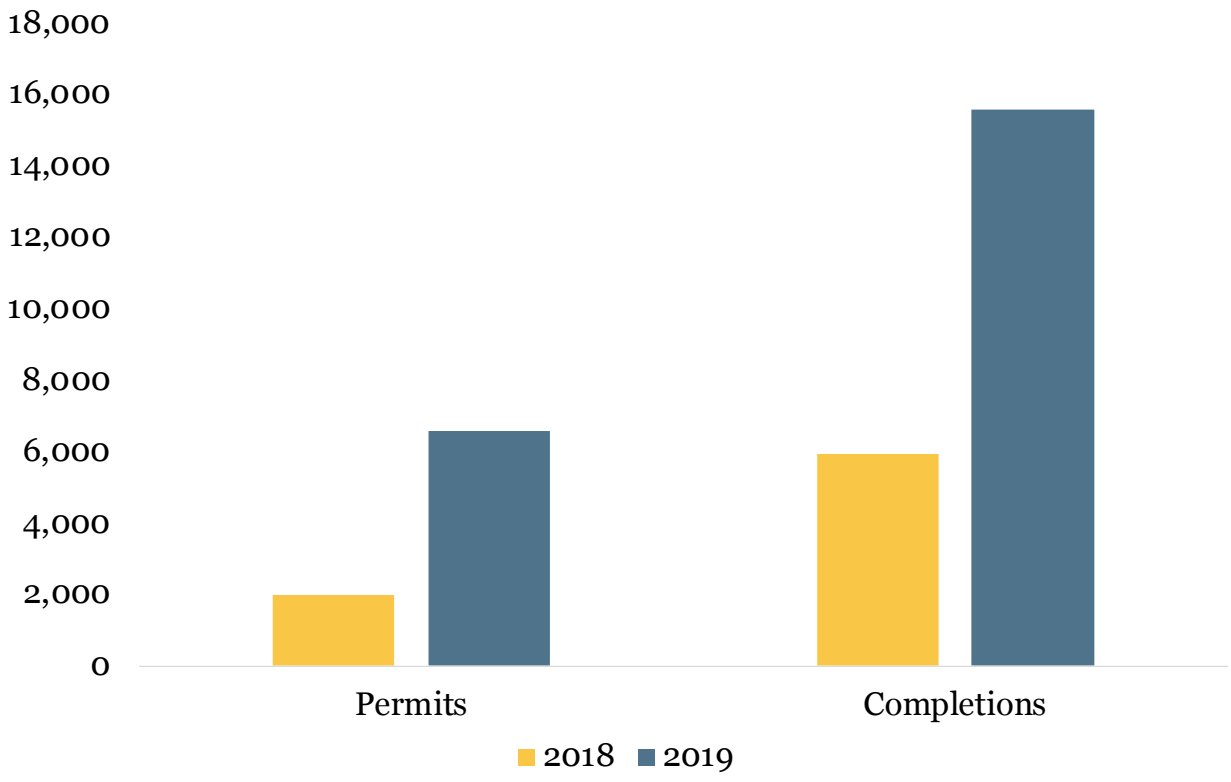
Yet, the likelihood of creating new housing and homeownership opportunities as a result of SB 9 largely depends on local context. While Senate Bill 9 does not apply to single-family parcels in historic districts, fire hazard zones, and rural areas, local market prices and development costs play a large role in determining where there is financial viability for the addition of new homes. Moreover, physical constraints, such as small lot sizes and other local regulations, can limit the number of new homes built as a result of this bill. To assess the potential impact of SB 9 on new housing supply, this analysis assesses the market feasibility of new homes as allowed by the current version of the Bill (as of July 2021).[2]

This analysis finds that SB 9's primary impact will be to unlock incrementally more units on parcels that are already financially feasible under existing law, typically through the simple subdivision of an existing structure. Relatively few new single-family parcels are expected to become financially feasible for added units as a direct consequence of this bill. While this analysis does not attempt to measure the actual rate of uptake for adding new units to single-family parcels, it is reasonable to assume that SB 9 will modestly accelerate the addition of new units relative to the status quo by facilitating access to conventional mortgage products for multiple households able to purchase homes on newly subdivided single-family parcels.

Background

California's recent housing laws have largely failed to unlock significant housing production changes that would ease the ongoing housing and homelessness crisis. One of the state's more effective housing solutions has been recent laws removing barriers to the construction and financing of ADUs. In 2016, Senate Bill 1069 and Assembly Bill 2299 expanded the ability of homeowners to build ADUs and Junior ADUs (JADUs). Subsequent legislation (Assembly Bill 68, Assembly Bill 881, Senate Bill 13) removed other barriers to ADU development, including lowering impact fees and removing owner occupancy requirements. The impacts of this legislation are already apparent throughout the state. Published state data demonstrates that the initial 2017 ADU law had immediate impacts: California jurisdictions went from issuing 5,911 ADU permits in 2018 to 15,571 in 2019, with ADU completions following a similar upward trend, more than tripling over the same period (from 1,984 to 6,668 units) (Figure 1).[3] The ADU laws that took effect in 2019 allowing two ADUs on single-family parcels and more on multi-family parcels are already having a significant impact on gently adding density across the state in single- and multi-family properties. In early 2021, the City of Los Angeles reports processing upwards of 20,000 ADUs where ADUs make up nearly 40 percent of all housing building permits, and the City of San Jose reports that ADUs make up 38 percent of all housing building permits.[4] This progress signals the significance of easing approvals and barriers to smaller-scale, infill development in low-density areas.

Figure 1. ADU Permits and Completions in California, 2018 and 2019



Source: Chapple, K., et. al. (2020). "Reaching California's ADU Potential: Progress to Date and the Need for ADU Finance." Retrieved from: https://ternercenter.berkeley.edu/wp-content/uploads/2020/12/ADU-Brief-2020.pdf.

The early success of recent ADU legislation has prompted lawmakers to examine similar policies that would incrementally unlock more homes in low-density urban infill neighborhoods where the housing crisis is particularly acute. Such policies would also align with state climate change policies encouraging additional homes near jobs and services to reduce vehicle miles travelled. Last year, SB 1120 proposed allowing up to four units in single-family-zoned parcels throughout the state. Analysis by the Terner Center of SB 1120 found that nearly six million single-family parcels statewide would theoretically be eligible, a significant expansion of buildable area in California.[5] For example, if just 5 percent of those parcels created new two-unit structures as a result of SB 1120, that would have resulted in 597,706 new homes. That's more than five times the number of new homes that have been built in California annually since 2015.[6] However, in a session marked by the disruptions related to the COVID-19 pandemic, SB1120 ran out of time to be sent to the governor's desk, despite passing both the Assembly and the Senate.

SB 9 was introduced with nearly identical language to its predecessor, SB 1120, but as the bill has progressed through the legislative process, some important changes have been made. Most notably, properties that have developed an ADU are not eligible for the density or lot split provisions of SB 9, and jurisdictions would have the option of imposing owner-occupancy requirements for lot split applicants, where the applicant would have to make one of the units on the site their primary residence for at least one year. This owner-occupancy provision has been added to address concerns that current homeowners could be incentivized to sell to private entities interested in speculative investment on single-family parcels and to encourage use of the law to create more opportunities for California families to buy a home. The provisions also ensure the law cannot be used to divide homes occupied by renters as a measure to prevent displacement. Other new provisions have made the legislation potentially more impactful. For example, SB 9 allows more flexibility in how the lot is split. SB1120 required that both newly created lots be of equal size, potentially limiting the number of instances where new homes would be feasible. New language in SB 9 requires that one of the newly created parcels only needs to be more than 40 percent of the original parcel size. Table 1 summarizes the key provisions of SB 9 as of July 2021.

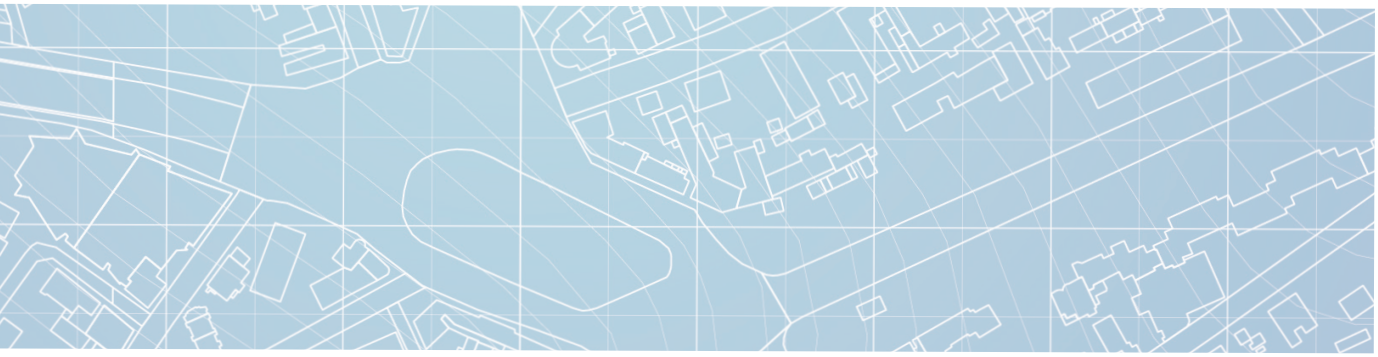


Table 1: Eligibility Criteria Proposed for Split Lots Under SB 9

Location
• The parcel, lot, or development must be located in a single-family residential zone. • The parcel cannot not be located in a historic district or be a historic property itself (as defined by the state or local county or city). • The parcel cannot be located in a high fire zone area. • The parcel must be in a city whose boundaries include some portion of an urbanized area or urban cluster as designated by the U.S. Census Bureau. • If the parcel lies in an unincorporated area, then the parcel at stake must be a legal parcel wholly within the boundaries of an urbanized area/cluster.
Parcel Size
• The parcel must be a minimum of 2,400 square feet in size. • The newly created parcel as a result of a lot split may not be smaller than 40 percent of the lot area of the original parcel. • A locality cannot impose any standards that would preclude the construction of up to two units or physically precluding either of the two units from being at least 800 square feet in floor area. • A side and rear setback of up to four feet is allowed.
Anti-Displacement
• The lot split cannot require the demolition or alteration of a housing unit currently serving moderate-, low- or very-low income household(s) or a rent-controlled unit. • The lot split cannot result in the demolition or alteration of housing that has been occupied by a tenant in the last three years or where an owner has used the Ellis Act to remove a rental unit from the market within the last 15 years. • A jurisdiction may impose an owner-occupancy restriction for lot splits, where the applicant must intend to occupy one of the housing units as their principal residence for a minimum of one year from the date of the approval of the urban lot split.
Other
• The parcel cannot have been created from a previous lot split as provided by this policy. • The same person (or another party acting on their behalf) cannot perform a lot split on adjacent lots.

Methodology

It is unrealistic to assume that under SB 9, every single-family lot would be split, or that every existing single-family home would be demolished and replaced with four new units. For example, some lots may be too small, have other existing structures or ADUs, have a history of being rented, or other physical conditions that prevent changes. Some owners may have no interest in developing their property. And finally, even if a property owner is interested in pursuing new development on their land, trying to recoup this investment with market-rate rental or sales will prove financially infeasible in many instances. To develop a better estimate of the potential impact of SB 9 on new supply, we conducted an analysis of how many new homes would be both physically eligible and financially feasible as a result of SB 9, as well as what types of development would be most likely, taking into account on-the-ground market dynamics.

We partnered with MapCraft Labs, which developed a financial feasibility model to assess market-feasible housing capacity on existing parcels with detached single-family homes. The base layer for the analysis is a parcel dataset from UrbanFootprint which includes all counties in California with populations greater than 45,000 people, and covers homes built prior to 2020.[7] This dataset includes roughly 7.5 million single-family parcels across the state. We used MapCraft's Lab analysis tool to determine what types and scales of housing development would be feasible with an approach that considers construction costs, market demand, financing, land use policies, and individual parcel characteristics.

To inform our model, several assumptions were made about market conditions and trends. For example, all properties with single-family detached land uses were assumed to conform to zoning and currently have exactly one existing unit (e.g., no ADUs). In combination with tax assessor data, we estimated the value of each existing single-family property on those parcels. MapCraft calculates standard development "pencil out" models to compute snapshots of market feasibility on every relevant parcel, both under current policies and as proposed in SB 9. These models are based on the financial evaluations conducted by developers to assess an investment's viability early in the development process by balancing the cost of developing the site with expected rental or sale income.[8] MapCraft's models of small-scale development look at financial feasibility from the perspectives of owner-occupants, owner-occupant landlords, small-scale investors, and commercial investors, with market-feasible unit potential based on a probabilistic blend of all possible development options. Financial expectations of investors and lending terms are based on conversations with industry professionals and are updated by MapCraft regularly.

MapCraft's calculations incorporate data and assumptions about current rents, sales prices, construction costs, and investors' expected return on investment rates, and are validated by ECONorthwest, a West Coast economics consultancy. MapCraft's market demand information relies on multiple sources, including CoStar, Zillow, tax assessors, U.S. Census, and transaction records. MapCraft's construction cost information is based on interviews and RS Means. Finally, the modeling relies on

assumptions about parking requirements based on previous Terner Center research, typical unit sizes, and other factors that inform development.[9]

The provisions of SB 9 would allow for a variety of development options. For this analysis we examined the most likely development scenarios as shown in Appendix B. Our business-as-usual scenario evaluates development feasibility for housing supply changes currently permissible under single-family zoning, while the alternative policy scenario considers the additional set of development options allowed under SB 9. For example, under the business-as-usual scenario, a homeowner may decide to build an ADU but would only be able to split the parcel into two lots, each with two homes, under the alternative policy scenario allowed under SB 9.

Our estimates also account for the fact that SB 9 includes anti-displacement language that prohibits alteration or demolition of renter-occupied homes. To approximate this, we used the percentage of single-family home rentals in each census tract (as determined by ACS data) to discount results for development outcomes that alter or demolish the existing structure.

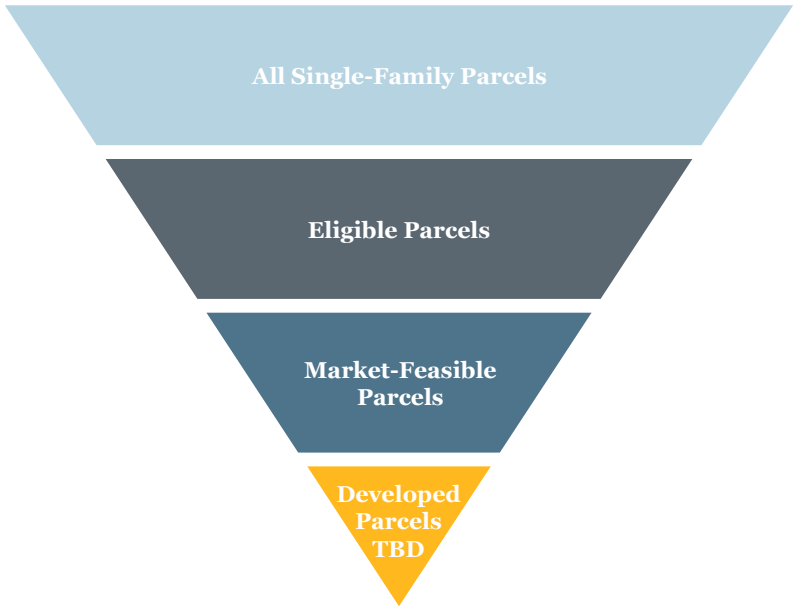
We also examined the potential impacts of owner-occupancy requirements by removing financial scenarios that assume all the new units are rentals, as well as development scenarios that require demolition of an existing structure. In addition, we assumed that owners received a 25 percent discount for the unit they occupied in split lot development scenarios.

Market-feasible capacity is not a forecast of future production.

While this analysis identifies the number of market-feasible units, in most cases these market-feasible units will take years to be developed, and some may never get built. This analysis considers the market feasibility of redevelopment on each eligible single-family parcel in isolation, and assumes that every property owner is maximizing the economic potential of their lot. However, that is not the case for several reasons.

First, the most economically feasible use does not consider the motivations and preferences of individual property owners. Any change in use requires the cooperation of the owner, either to sell the site or to redevelop it themselves. The economics

Figure 2: Production Funnel



may suggest that the highest value of a house may be to tear it down and rebuild it into a much larger house, but if a homeowner prefers a small house or the existing architecture, they're not going to rebuild. Converting a house to a duplex and renting out half may be most profitable for a homeowner, but that will not happen if that homeowner is uninterested in living more closely with others in what was formerly "their" space or in becoming a landlord or homeseller. Even when a property owner does wish to redevelop their site, they may lack the upfront capital and sophistication to initiate the process; and then may be unable to access financing due to a low credit score or other underwriting barrier.

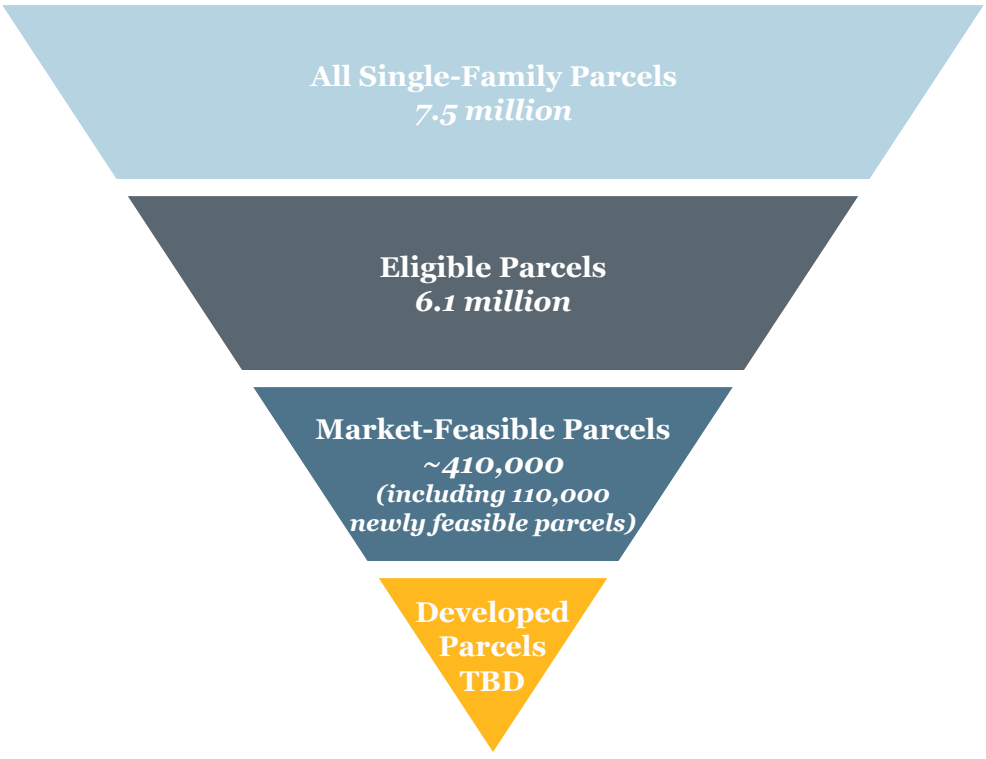
In addition, redevelopment does not happen instantaneously; it requires homeowner awareness and interest, available construction industry capacity, a suitable financing ecosystem and viable routinized business models for development in order to proceed. State ADU laws, for example, have taken several years to ramp up as awareness, delivery models, industry and local agency capacity have adapted to law changes. It is reasonable to assume that it may take years for that capacity to fully emerge in California if SB 9 becomes law.

Findings

SB 9 could enable the creation of over 700,000 new homes that would otherwise not be market feasible.

Under our business-as-usual scenario, we estimate 1,800,000 new ADUS/JADUS are currently market-feasible and could be built under today's zoning laws across California's 7,500,000 existing single-family housing parcels. With SB 9, we estimate that approximately 700,000 additional new units would become market-feasible, representing a 40 percent percent increase in existing development potential across California's single-family housing parcels.

Figure 3: Parcel Development Funnel (Total Numbers)



SB 9 would enable the development of more units on 410,000 single-family parcels, of which only 110,000 parcels would become newly feasible.

Overall, SB 9 would change the development feasibility of a relatively small number of parcels. First, the conditions stipulated by the legislation limit the number of parcels that can utilize the bill's provisions, as illustrated in Figure 3. For example, the bill's current limitations on new development in high fire hazard areas, historic districts, non-urbanized areas, and existing renter homes removes approximately 1.4 million existing single-family homes from consideration.[10] Of the 6.1 million remaining parcels, the majority would not be affected because of an absence of physical capacity or financial feasibility. However, on 5.4 percent of current single-family parcels, SB 9 would enable new development. For 110,000 single-family parcels (1.5 percent of total single-family parcels), SB 9 would enable new development where none was financially feasible before, and for another 300,000 parcels, SB 9 would allow for more units than under our business-as-usual scenario.

For the majority of single-family properties, we find the most financially viable outcome is not to pursue any development whatsoever, both under our business-as-usual scenario and under our SB 9 scenario.

Under our assumptions about today's regulations, market conditions, and development alternatives, we found that doing nothing was the most likely option for California's single-family parcels: development is not feasible for 80 percent of parcels (Figure 4). If SB 9 passed, 110,000 parcels would be newly developable, causing the share of infeasible parcels to tick down slightly to 78 percent. The primary benefit of SB 9 comes from allowing slightly more units on parcels where development already makes sense and in opening up any added units to homeownership opportunities through the ability to legally subdivide those parcels.

Figure 4. Likely Parcel Feasibility By Number of Feasible Units

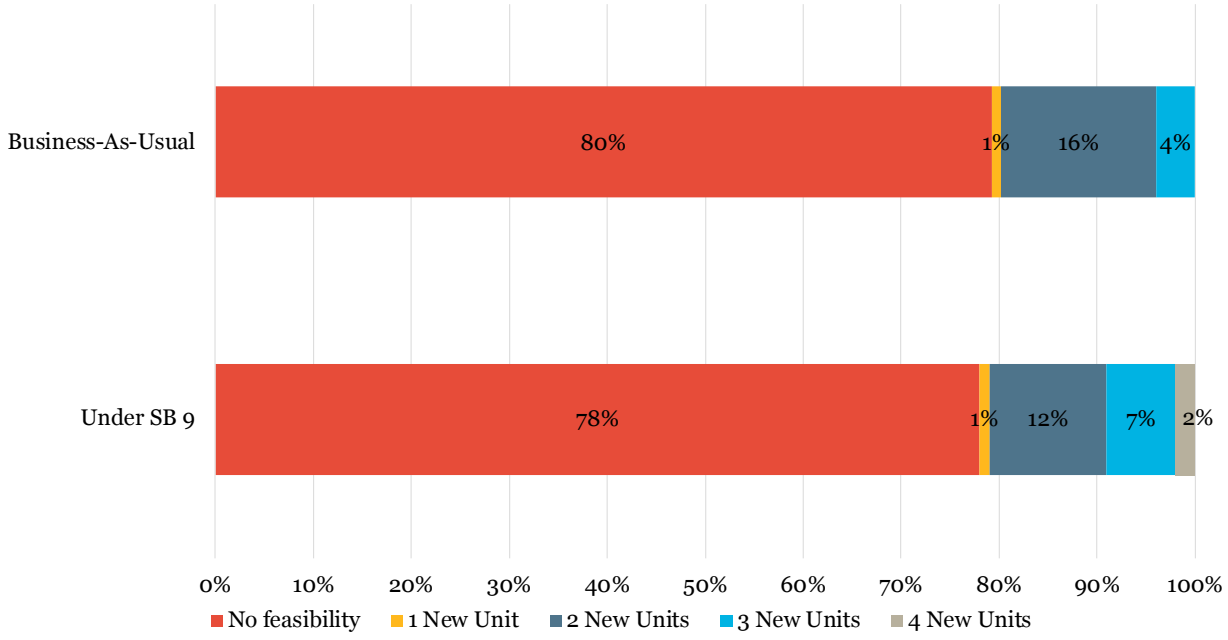
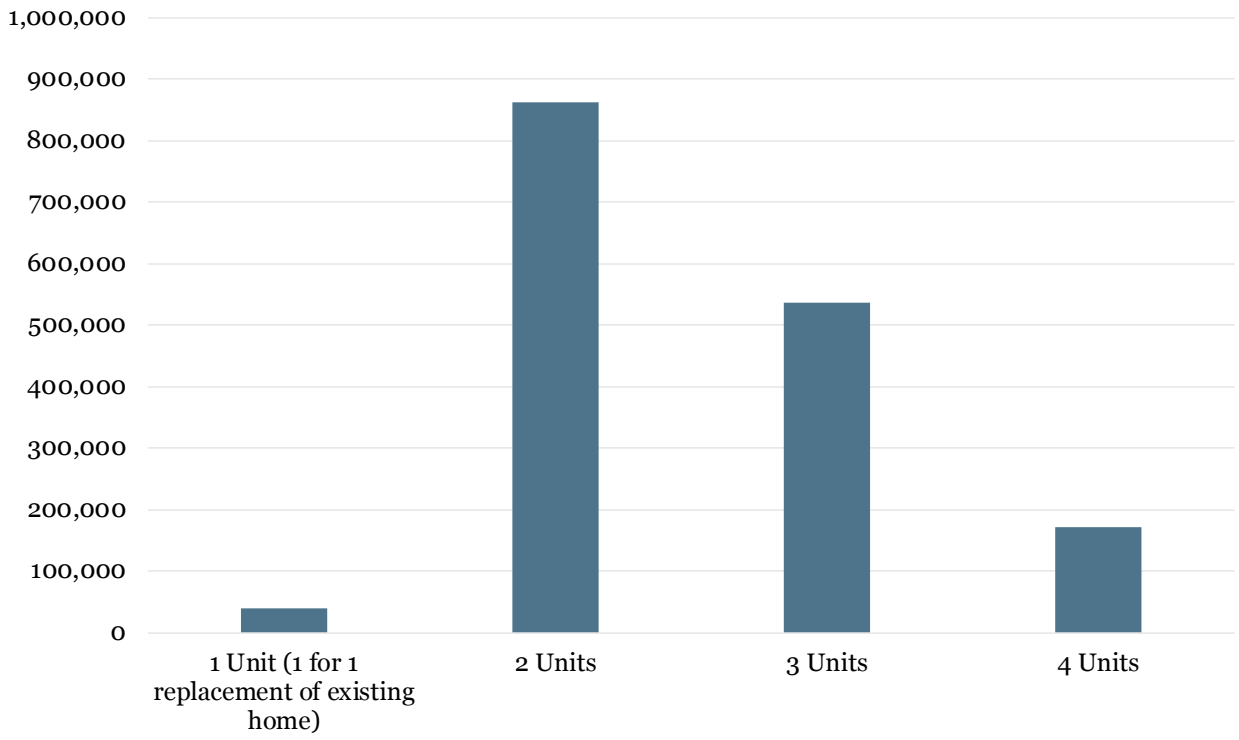


Figure 5. Estimates of Parcels with Feasible Capacity Under SB 9



SB 9 is unlikely to lead to significant demolition of the existing stock.

We found that nearly 97 percent of single-family homes would be retained under SB 9's provisions, either without any modification or with less intensive development (e.g., subdividing the existing structure to enable a duplex conversion). In many places, existing zoning allows homes to be demolished and replaced with larger single-family homes, which we found was the most financially attractive scenario on 1 percent of all single-family parcels under our business-as-usual scenario. Under SB 9, the likelihood of tearing down a single-family home and replacing it with a larger single-family home falls by half to 0.5 percent due to other viable development opportunities.

While SB 9 would provide a boost in three- and four-unit feasibility, duplexes would be the most dominant form of financially-feasible development.

The majority of viable development opportunities should SB 9 be enacted would result in two units per existing lot (Figure 5). Duplexes comprise an important block of this new capacity, accounting for 35 percent of all new units, two thirds of which would be in converted existing single-family homes. SB 9 would also enable a somewhat higher total number of feasible units by allowing greater uptake of three- and four-unit development.

There is wide regional variation in market-feasible units.

The amount of new market-feasible units varies by region. Los Angeles County resulted in the most new market-feasible units under SB 9 with approximately 126,000 new homes. While significant, Los Angeles County also comprises both the most single-family parcels and SB 9 eligible parcels (Table 2). Analyzing new market-feasible units per eligible single-family parcel finds that Yuba, El Dorado, Sutter, and Nevada counties would see the most new market-feasible potential per parcel, although the overall number of new feasible units is relatively low compared to larger counties. Many coastal California counties exhibited higher than average per parcel unit ratios, such as Marin, Santa Cruz, San Luis Obispo, and Santa Barbara counties, signaling that rents and sales prices there could support new homes resulting from SB 9. Meanwhile, most Central Valley counties, such as Fresno, Merced, Kern, and Stanislaus, showed below average potential for new homes per parcel, reflecting lower financial feasibility. For a list of all county results, see Appendix A. At the city level, the state's most populous jurisdictions were all below average for market-feasible units per parcel, as shown in Table 3.

Owner-occupancy requirements would have a limited negative impact on the market feasibility of development pursuant to SB 9, but they could have a much larger impact on actual delivery of units under SB 9.

SB 9, as currently written, allows jurisdictions to impose owner-occupancy requirements for lot split applicants, but not for duplex conversions. Our analysis finds that, if every jurisdiction imposed owner-occupancy requirements, the total financially feasible units enabled by SB 9 would decrease by roughly 6 percent, or approximately 40,000 units. This limited impact reflects the fact that our model indicates only 10 percent of new units under SB 9 would be attributable to lot splits.

While the owner-occupancy requirement would have only a modest impact on the financial viability of new units, it may have a significant effect on the number of owners willing to actually pursue new development on their properties. By preventing owners from splitting a lot unless they plan to live there themselves for at least a year, or from allowing a developer to take on development involving a lot-split pursuant to SB 9, the owner-occupancy requirement may reduce the number of homes that will result from SB 9.

Shifts in construction costs and rental and sales prices could change development feasibility.

In addition to assessing the potential impact of SB 9 using current market conditions, we also ran a sensitivity analysis to examine the potential impact of SB 9 under different market scenarios. Our analysis found that a 10 percent decrease in construction costs could increase the amount of market-feasible units by 5 percent, or roughly 36,000 more units than the 700,000 baseline impact of SB 9. Local and state policymakers should therefore also consider policies that could help reduce the costs of production to enable policies such as SB 9 to work more effectively in more places. In the opposite direction, we found that a 10 percent increase in construction costs lowers development feasibility by 4.5 percent, or by approximately 32,000 units. Our

Table 2. SB 9-Eligible Parcels and Market-Feasible New Units by Largest Counties

County	Total single-family parcels	SB 9-eligible parcels	Parcels where SB 9 would increase the number of market-feasible units	Parcels where SB 9 changes feasible outcome from no net new units to 1+ net new units*	Total market-feasible new units if SB 9 is enacted**	Total market-feasible new units divided by SB 9 eligible lots
Los Angeles	1,441,000	1,210,500	79,500	18,000	127,000	0.10
San Diego	554,500	398,500	28,500	9,000	54,500	0.14
Orange	557,000	486,000	26,500	8,500	47,000	0.10
Riverside	563,000	483,000	36,500	10,000	62,500	0.13
San Bernardino	493,000	385,000	32,000	8,000	56,500	0.15
Santa Clara	331,000	319,500	22,000	8,500	40,000	0.13
Alameda	306,500	277,000	16,000	3,500	25,000	0.09
Sacramento	369,500	360,500	25,000	5,000	40,500	0.11
Contra Costa	263,500	239,000	20,000	7,500	38,000	0.16
Fresno	203,500	186,000	5,500	500	10,500	0.06
Statewide totals (excluding counties with pop. under 45,000)	**7,470,500**	**6,182,500**	**410,000**	**111,500**	**714,000**	**0.12**

*Note: This is a subset of the parcels where SB 9 would increase the number of market-feasible units.
**Note: Market-feasible new units are rounded.

Table 3. SB 9-Eligible Parcels and Market-Feasible New Units by Most Populous California Cities*

City	Total single-family parcels	SB 9-eligible parcels	Parcels where SB 9 would increase the number of market-feasible units	Parcels where SB 9 changes feasible outcome from no net new units to 1+ net new units**	Total market-feasible new units if SB 9 is enacted	Total market feasible new units divided by SB 9 eligible lots
Los Angeles	447,500	355,000	23,000	6,000	37,500	0.11
San Diego	203,500	133,000	7,000	3,000	13,000	0.10
San Jose	168,500	168,000	10,500	2,500	16,000	0.10
San Francisco	94,500	93,500	6,500	500	8,500	0.09
Fresno	104,000	104,000	2,000	100	4,000	0.04
Sacramento	116,500	116,000	6,500	800	9,500	0.08
Long Beach	59,500	58,500	3,000	200	3,500	0.06
Oakland	66,500	51,000	3,000	100	3,500	0.07
Bakersfield	87,500	87,500	5,000	2,000	9,000	0.10
Anaheim	43,000	36,000	2,500	1,000	4,000	0.11

*Note: This is a subset of the parcels where SB 9 would increase the number of market-feasible units.
**Note: Market-feasible new units are rounded.

model also analyzed sensitivity to changes in rental and sales prices. We found that a 10 percent increase in prices resulted in an 8 percent increase in market-feasible units, or roughly 57,000 more units.

Policy Implications

A significant amount of land in California has historically been designated for single-family homes, limiting the development of a greater diversity of urban infill housing options in jurisdictions across the state. Solving California's housing crisis—let alone tackling the challenges of climate change and residential segregation—requires policies that intensify land use in these communities. California's statewide ADU laws were a step in the direction of gently adding more density to simultaneously address the housing, climate, and equity challenges faced by the state. But, in other ways, California lags behind other states in its land use regulations and dogged resistance to changing single-family zoning. For example, the state of Oregon recently required jurisdictions to allow multifamily housing—either two or three units—on all single-family parcels. Some cities have gone even further, such as Portland and Minneapolis, both of which have voted to loosen allowable homebuilding on single-family parcels. While many cities in California—including Los Angeles, San Diego, San Jose, Sacramento, Berkeley, and Oakland—are exploring similar options, SB 9 could play an important role in enabling the construction of a significant amount of new house options that are smaller-scale, more cost-effective, more varied, and inclusive across the urban areas of the state.

Our analysis shows that approximately 700,000 new, market-feasible homes would be enabled under SB 9. But despite the concerns of some of its detractors, SB 9 will not lead to the overnight transformation of residential neighborhoods. Differential owner preferences and limited applicability means that only a share of that potential is likely to be developed, particularly in the near term as awareness and capacity expands. As such, while important, the new units unlocked by SB 9 would represent a fraction of the overall supply needed to fully address the state's housing shortage.

Policymakers should consider complementary strategies to ensure that this legislation is effective. These strategies could include outreach to make sure that homeowners are aware of and understand the opportunities allowed by recent policy changes, either through SB 9 or existing ADU laws, and the expansion of more robust financing options to moderate- and low-income owners who wish to add new units to their parcels. Increasing housing production in single-family zoned areas is also not the only policy shift that is needed. Policymakers should add additional tools to boost supply overall, including by expanding permissible residential development on commercial property and by further reducing local barriers to new housing through expedited approval processes for conforming projects and reform of the local regulatory barriers and fees.

APPENDIX A

Appendix Table 1. County-Level Results

County Name	Existing SFR Lots	SFR Lots Eligible for SB 9	Additional Lots with 1+ Unit Capacity Under SB 9	SB 9 Net Change in Market-Feasible Units*	SB 9 Net Units Per Eligible Lot
Alameda	306,306	276,795	3,633	25,000	0.09
Butte	65,020	32,720	47	3,000	0.09
Contra Costa	263,303	238,957	7,438	38,000	0.16
El Dorado	57,386	19,133	583	4,500	0.24
Fresno	203,474	185,908	564	10,500	0.06
Humboldt	35,672	22,560	93	2,500	0.11
Imperial	33,036	27,002	76	1,500	0.06
Kern	216,321	174,219	2,226	14,500	0.08
Kings	29,045	26,784	87	1,500	0.06
Lake	27,095	10,257	60	1,000	0.10
Los Angeles	1,441,148	1,210,729	18,130	127,000	0.10
Madera	35,785	22,474	1,196	4,500	0.20
Marin	60,998	46,841	2,163	9,500	0.20
Mendocino	19,350	8,949	90	1,500	0.17
Merced	55,676	51,972	106	2,500	0.05
Monterey	75,348	55,097	845	6,000	0.11
Napa	31,248	25,890	1,108	5,000	0.19
Nevada	43,090	5,618	199	1,500	0.27
Orange	557,820	485,756	8,730	47,000	0.10
Placer	125,458	94,273	1,448	13,000	0.14
Riverside	562,935	482,821	10,149	62,500	0.13

APPENDIX A

Appendix Table 1. County-Level Results (Continued)

County Name	Existing SFR Lots	SFR Lots Eligible for SB 9	Additional Lots with 1+ Unit Capacity Under SB 9	SB 9 Net Change in Market-Feasible Units*	SB 9 Net Units Per Eligible Lot
Sacramento	369,605	360,485	5,006	40,500	0.11
San Benito	12,747	9,940	740	2,500	0.25
San Bernardino	492,806	385,243	7,848	56,500	0.15
San Diego	554,502	398,386	9,015	54,500	0.14
San Francisco	94,400	93,514	486	8,500	0.09
San Joaquin	164,796	147,577	2,159	14,000	0.09
San Luis Obispo	75,016	53,068	1,229	8,500	0.16
San Mateo	151,508	134,531	3,112	17,000	0.13
Santa Barbara	91,540	75,399	1,506	10,000	0.13
Santa Clara	331,232	319,319	8,527	40,000	0.13
Santa Cruz	54,817	43,522	1,422	8,000	0.18
Shasta	55,366	25,997	402	3,500	0.13
Solano	110,592	105,962	684	8,500	0.08
Sonoma	124,610	103,452	2,688	16,500	0.16
Stanislaus	123,922	116,754	1,542	9,500	0.08
Sutter	24,707	19,357	1,111	4,000	0.21
Tehama	18,504	7,903	35	500	0.06
Tulare	104,235	86,679	1,096	6,000	0.07
Tuolumne	25,386	995	1	100	0.10
Ventura	184,033	135,836	1,604	14,500	0.11
Yolo	43,761	40,940	550	4,500	0.11
Yuba	16,743	13,064	2,016	4,500	0.34
Statewide Total	**7,470,342**	**6,182,678**	**111,746**	**714,100**	**0.12**

+Note: Parcels that could have feasibly built ADUs or JADUs in a pre-SB 9 scenario are not included in the "New Market-Feasible Lots Under SB 9" category in this table, even if our analysis found that under SB 9, they could now feasibly build three or four units. As a result, per lot averages of new feasible units will yield results higher than four units per lot.
*Note: Market-feasible new units are rounded

APPENDIX B

Specific Modeling Assumptions

The following assumptions were incorporated into MapCraft's analysis of SB 9.

Allowed Prototypes

The prototypes in the following tables were evaluated on each site.

Appendix Table 2. Prototype Options When SB 9's Lot Split Provision Is NOT Used

Keep Existing Structure	Demo Existing Structure
Do nothing	*Build new single-family residence (SFR)*
Add detached ADU (DADU)	*Build new SFR + detached ADU (DADU)*
JADU conversion + DADU	*Build new SFR + DADU + JADU*
Convert to duplex	Build duplex
Convert to duplex + DADU	Build duplex + DADU
Convert to duplex + DADU + JADU	Build duplex + DADU + JADU

Italicized indicates outcomes that are possible in the business-as-usual scenario under current single-family zoning, without SB 9.

Appendix Table 3. Prototype Options When Using SB 9's Lot Split Provision

Keep Existing Structure		Demo Existing Structure and Create Two Lots
Subdivided Lot with Existing Structure	**New Lot**	Build two new SFR
Do nothing	SFR	Build two new SFR + ADU
Add detached ADU (DADU)	SFR	Build two new SFR + JADU + ADU
JADU conversion	SFR	Build two new duplexes
JADU conversion + DADU	SFR	
Duplex conversion	SFR	
Do Nothing	SFR + ADU	
Add detached ADU (DADU)	SFR + ADU	
JADU conversion	SFR + ADU	
JADU conversion + DADU	SFR + ADU	
Duplex conversion	SFR + ADU	
Do nothing	SFR + JADU + ADU	
Add detached ADU (DADU)	SFR + JADU + ADU	
JADU conversion	SFR + JADU + ADU	
JADU conversion + DADU	SFR + JADU + ADU	
Duplex conversion	SFR + JADU + ADU	
Do nothing	Duplex	
Add detached ADU (DADU)	Duplex	
JADU conversion	Duplex	
JADU conversion + DADU	Duplex	
Duplex conversion	Duplex	

For new-built duplex prototypes, MapCraft evaluated both stacked and side-by-side variations at a variety of scales. Also, four scales of single-family prototypes were tested. In total, 652 pro formas were evaluated on each parcel.

Data Inputs

The parcel data for this analysis was provided by UrbanFootprint and includes approximately 7.5 million parcels: all parcels with single-family dwellings in California counties with populations greater than 45,000 people.

For the purposes of this work, all properties with single-family detached land use were assumed to currently have one existing unit (i.e., no ADUs) and single-family zoning that limited development of multiple primary units. To support the assumption, UrbanFootprint scanned zoning in a sample of cities, finding that the vast majority of parcels with single-family homes are zoned for single-family. UrbanFootprint's parcel data included information on each lot and the single-family homes on those lots. In combination with tax assessor data, the value of each existing single-family property was estimated in the second quarter of 2020.

To be realistic about the policy constraints that limit development under current policies and SB9, MapCraft relied on coarse zoning-like limitations interpolated from homes built in each tract between 2005 and 2020. MapCraft assumed that developments on a parcel would need to conform to the 90th percentile of height, FAR, and lot coverage of other recently built homes in the same census tract. In other words, MapCraft assumed that plexes would be held to the same bulk restrictions as newer single-family homes.

MapCraft's financial calculations incorporated data and assumptions about early 2020 rents, sales prices, construction costs, and investors' expected return rates, which were validated by ECONorthwest and Economic & Planning Systems, two West Coast economics consultancies. Early 2020 data was used given the volatility of both the rental and for-sale prices during the COVID-19 pandemic. MapCraft's market demand information relied on multiple sources, including CoStar, Zillow, tax assessors, U.S. Census, and transaction records. MapCraft's construction cost information was based on interviews with cost observations localized based on RS Means. Financial expectations of investors and lending terms were based on MapCraft's conversations with industry professionals. Finally, the modeling relied on assumptions about parking requirements, typical unit sizes, development fees, and other factors that inform development. The Terner Center provided input on parking and fees that were incorporated into the analysis.

Tenancy-Based Eligibility Restrictions

SB 9 prohibits demolition or alteration of renter-occupied housing. To address this, Mapcraft used the percentage of single-family rentals in each tract (per the U.S. Census) to discount results for outcomes that require demolition of the existing structure.

SB 9 also allows jurisdictions to impose certain owner-occupancy requirements. Mapcraft tested the impact of this provision by running bookend scenarios at two extremes: 1) no jurisdictions impose owner-occupancy restrictions, and 2) all jurisdictions impose

owner-occupancy restrictions. To model the owner-occupancy requirement, Mapcraft disallowed all-rental valuation options and prototype options that required demolition of the existing structure. Mapcraft also tested the imposition of a risk premium threshold that eliminates any second split lot prototypes that do not generate residual land values that exceed the reduced value of the original property by 25 percent.

Notably, the results do not estimate the number of owner-occupants that may pursue development given an owner-occupancy requirement.

Lot Splitting Limitations

MapCraft used the following assumptions in modeling the ability of a parcel to split into two lots:

- Lots smaller than 2,400 square feet cannot be split.
- In cases where the existing structure is retained, the lot must have at least 4,000 sq ft of unbuilt area (after deducting the footprint of the existing structure from the lot size).

Parking Provision

MapCraft used Terner Center's California Residential Land Use Survey to help define parking delivery minimums. Even if a jurisdiction's code or SB 9 eliminates parking requirements, demand for parking may still exist, and developers will still provide parking. MapCraft assumed that developers will provide at least the parking ratios shown in Appendix Table 4.

Appendix Table 4. Assumptions of Minimum Demanded Parking for New Construction

	Within ½ Mile of High-Capacity Transit	Not Near High-Capacity Transit
Small Units (2 Bedrooms or Fewer)	0.5 stalls/unit	1 stall/unit
Large Units (3+ Bedrooms)	1 stall/unit	2 stalls/unit

In prototypes where a small unit is added without a lot split or demolition of the existing structure, MapCraft assumed that no new parking spaces will be added.

Relaxed Zoning Restrictions

SB 9 prohibits local jurisdictions from imposing zoning standards on two-unit developments or newly split lots that would physically preclude the construction of up to two units, or that would preclude units from being at least 800 square feet. To reflect this, MapCraft increased the existing zoning restrictions on FAR, lot coverage, and impervious coverage. FAR was relaxed by increasing the allowed FAR by one quarter, lot coverage was relaxed by one quarter up to 75 percent coverage, and impervious coverage was increased one quarter up to 90 percent coverage.

ENDNOTES

1. It is often difficult for a homeowner to finance an ADU. Few loan products exist to finance ADU construction, and those that are available often do not go far enough to cover the costs of development. See https://ternercenter.berkeley.edu/research-and-policy/reaching-californias-adu-potential-progress-to-date-and-the-need-for-adu-finance/.

2. Senate Bill 9: Housing development approvals, April 27, 2021. https://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill_id=202120220SB9

3. Chapple, K., et. al. (2020). "Reaching California's ADU Potential: Progress to Date and the Need for ADU Finance." Retrieved from: https://ternercenter.berkeley.edu/wp-content/uploads/2020/12/ADU-Brief-2020.pdf.

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6. On average, California added roughly 100,000 new homes each year between 2015 and 2019. California Industry Research Board, "Housing Production in California, 2005-2019".

7. The following counties are not included: Calaveras, Siskiyou, Amador, Lassen, Glenn Del Norte, Colusa, Plumas, Inyo, Mariposa, Mono, Trinity, Modoc, Sierra, and Alpine.

8. For more information on the financial dynamics of development decisions, see our 2019 brief "Making it Pencil: The Math Behind Housing Development".

9. Mawhorter, S. & Reid, C. (2018). Terner California Residential Land Use Survey. Berkeley, CA: University of California, Berkeley. Retrieved from: https://californialanduse.org/.

10. Historic areas were determined using National Park Service data, which does not include local or state historic designations.

ABOUT THE TERNER CENTER

The Terner Center formulates bold strategies to house families from all walks of life in vibrant, sustainable, and affordable homes and communities. Our focus is on generating constructive, practical strategies for public policy makers and innovative tools for private sector partners to achieve better results for families and communities.

For more information visit: www.ternercenter.berkeley.edu

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