



FISHER CENTER *for* REAL ESTATE
& URBAN ECONOMICS

The Case for Preserving Costa-Hawkins: How Rent Control Reduces Property Values, Hurts Small Businesses and Limits State and Local Tax Revenue

Kenneth T. Rosen

Chairman of the Fisher Center for Real Estate & Urban Economics at
The University of California, Berkeley

Chairman and Founder of Rosen Consulting Group

October 2018

Prepared by Rosen Consulting Group

© 2018 Rosen Consulting Group, LLC

The Case for Preserving Costa-Hawkins: How Rent Control Reduces Property Values, Hurts Small Businesses and Limits State and Local Tax Revenue

Unintended Consequences

The shortage of available housing in California has created a widespread housing crisis that is limiting affordability and straining millions of households. While many point to rent control as a solution to limit rent increases and protect households, the reality is that this approach would do nothing to address the root cause of the housing crisis: the ongoing supply-demand mismatch in the state. Quite the opposite, expanded rent control, particularly the highly restrictive types of rent control that are currently precluded by the statewide Costa-Hawkins Rental Housing Act (Costa-Hawkins) will only exacerbate the supply shortage.

The very history of Costa-Hawkins largely illuminates this risk. After rent control was first introduced in California in the 1970s, highly restrictive rules in several cities significantly decreased rental income for apartment owners and reduced apartment property values. In response, many property owners pursued opportunities to convert rental units to condominiums or non-residential uses. At the same time, the pace of new development slowed significantly, limiting the supply of both new and existing rental housing, as described in depth in an earlier paper in this series.¹ In response to this untenable situation, Democratic Senator Jim Costa and Republican Assemblymember Phil Hawkins co-sponsored the Costa-Hawkins legislation, which continued to allow local jurisdictions to adopt rent control, but established a pragmatic framework designed to prevent excessively restrictive forms of rent control.

Proposition 10 on the ballot in November would repeal this bipartisan compromise and allow for unlimited forms of rent control, including the types of highly restrictive rules that brought about the need for Costa-Hawkins more than two decades ago. Beyond the negative supply-side effects of rent control, if Costa-Hawkins is repealed and cities adopt stricter forms of rent control, declines in rental income would result in numerous unintended negative consequences, including: 1) a significant drop in apartment property values; 2) deferred maintenance on existing properties and a deterioration in housing quality; 3) lost revenue that will squeeze thousands of small, mom-and-pop businesses; and 4) a decline in state and local tax revenue that will limit funding for school districts and strain city and county budgets.

How Rent Control Reduces Apartment Property Values

The Link between Property Value and Income

Before illustrating the impact of rent control on property values, it is useful to consider why individuals and businesses buy and invest in real estate to begin with, as well as the costs related to owning and operating real estate. From the family that lives in a duplex and rents out the second unit, to the owner of the largest apartment tower, individuals and businesses own and operate real estate primarily for the net operating income (total rental income less expenses). Indeed, expected rental income directly determines the value of a property and the price that someone is willing to pay.

One of the primary reasons that real estate is valuable as an investment is because it generates steady income that can keep pace with inflation. In particular, the income from real estate can help pay for other pre-existing financial obligations, many of which also increase with inflation. For example, the family that owns a duplex likely uses the extra money to help pay for the mortgage, childcare, any other normal living expenses, or to save for future expenses such as retirement or college tuition. Although on a very different scale, many larger real estate investors rely on the steady income in a similar way to fund current or future financial obligations. For this very reason, public employee and teacher pension funds, non-profit endowments, and insurance companies are among the most common owners of larger apartment properties. In addition, private retirement funds such as a 401k also often hold shares, either directly or through mutual funds, in publically traded real estate investment trusts (REITs) that own and operate real estate for the benefit of shareholders. The rental income in these cases helps pay for retirement benefits, non-profit operations and insurance payouts.

Of course, operating real estate costs money as well, and net income depends on the total rental income received less operating expenses. The costs required to maintain a rental property are often numerous and significant. First, all property owners must insure against a number of risks and are likely assessed annual property taxes on the property. Then there are the monthly costs for utilities, including water, waste disposal, electricity and gas, some of which may be paid by the renters and some of which are usually paid by the owners. Next, there are regular maintenance costs, including gardening, pest control, and a wide range of routine repairs and typical upkeep needed both on an ongoing basis and between tenants. Moreover, these recurring costs do not account for the breakdown of major appliances or the need for significant repairs or replacements. A responsible owner should maintain a large enough reserve fund to be able to pay for major capital expenses like a new roof or HVAC system when needed. If the property is part of a

homeowners' association some exterior costs may be paid for by the HOA, but of course there is the added cost of HOA dues and special assessments. Smaller mom-and-pop owners can save on these costs by managing all aspects of the property themselves, including finding and vetting new tenants when there are move-outs and being available 24/7 for maintenance issues, but depending on the number of units this can be a full time job. If the owners cannot always be available or spend the time necessary to manage their properties, they must employ others, with the corresponding cost of salary and benefits, or hire professional property management services. Finally, most properties have a mortgage that requires payment each month.

Taken all together, operating expenses typically total 35% to 50% of gross rental income, depending in part on the size, location, age and quality of the property. Moreover, the dollar amount of such expenses typically increases over time, primarily due to general inflation and the aging of the property. The costs of insurance premiums, utilities, maintenance services, salaries and benefits, management fees, HOA dues, and major capital improvements tend to increase with time along with the price of all other goods and services. As such, the cost to keep the same property at the same level of quality tends to increase with the age of the building. Owners rely on increasing rents over time to help offset rising costs in order to maintain similar levels of net income and help preserve property values.

As with all types of commercial real estate, the expected rental income and operating expenses of a property directly impact the price that someone is willing to pay for that property in two ways: 1) by determining the net income the owner will receive while the property is owned; and 2) by establishing the expected price that the property could be sold for in the future. A reduction in rent growth and/or an increase in expense growth directly translate to lower net income, and thereby reduce the amount someone is willing to pay for the property. Moreover, in both of these situations, the total reduction in income and the corresponding decline in property value, tends to grow with each year the property is held. Just as important, future buyers will be willing to pay less for the property for precisely the same reason as current buyers: less net income. Overall, if potential rent growth is reduced, a buyer today would receive less income during the years that they own and operate the property, and less money when they decide to sell the asset in the future.

If over an extended period of time expenses grow faster than rental income, the value of the income and value of the property will ultimately deteriorate to zero. At some point, it will cost more money to operate the property than it generates in rental income. The real, inflation-adjusted value of a rental property only holds up if income (not just rents) grows at least on pace with inflation. Overall, small differences in rent growth accumulate over time and lead to large differences in the value of the property, and price that a buyer is willing to pay today.

Any potential buyer of a property today will take both factors (lower expected income and lower expected future price) into account, and will insist on a discount to buy the property. The rate of rent growth relative to expense growth ultimately determines if a property is a viable investment with enduring value, or a depreciating asset similar to a car or other machinery that wears out with time. Beyond the differences in expected income, potential buyers will pay much less for a property that is expected to depreciate in value versus a property that is expected to appreciate.

Rent Control Lowers Property Income and Values

By definition, rent control lowers apartment rents over time, which reduces rental income, and therefore, directly lowers property values. The recent analysis completed by the state Legislative Analyst's Office regarding the possible expansion of rent control through Proposition 10 reaches the same and only conclusion: "The value of rental housing would decline because potential landlords would not want to pay as much for these properties."²

The precise decline in the value of rental properties depends on a number of factors, however, including the anticipated restrictiveness of rent control measures. Not all rent control measures are created equal, and Costa-Hawkins was a compromise specifically struck to prohibit the strictest types of rent control measures that most seriously destroy property values, while recognizing a role for local communities to choose more moderate rent control measures that have less impact on property values. Most importantly, Costa-Hawkins preserves the option for property owners to adjust rents in between tenants when units vacate – a protection known as vacancy decontrol. Without this option, under vacancy control, local governments essentially dictate the maximum possible income that a unit can generate for the rest of time, and therefore set a ceiling on the value of that unit. Vacancy control, in combination with rent controls that require only inflation-indexed or even less-than-inflation indexed rent growth, ultimately destroys the value of properties over time.

Historically, the cost of operating and maintaining rental properties has increased at a faster pace than broader measures of inflation. The National Apartment Association (NAA) reported that operating expenses increased by an annual average of 3.4% during the past 15 years, as compared with broader inflation of 2.4% per year and 2.3% per year in the San Francisco Bay Area and Los Angeles, respectively, as measured by the U.S. Bureau of Labor Statistics (BLS) during the same period.³ A numerical example helps to highlight the relationship between rent growth, expenses and property values.⁴ In particular, a property with expense growth consistent with the historical average and 2.5% mandated rent growth (slightly more than inflation), would be worth approximately 20% less today than a property with rent growth equal to expense growth. Moreover, the real, inflation-adjusted value of the property would actually decline slightly

relative to the initial purchase price. If rent growth were capped at less than inflation, as it has already been by rent boards in some California jurisdictions, then the impact deepens substantially. For example, 1.5% mandated rent growth, or 60% of inflation, would result in a decline in real, inflation-adjusted value of nearly 20% over ten years, and result in a 36% decrease in the price that someone would be willing to pay for the asset today, relative to the baseline scenario where rents increase to keep pace with expenses. The lower the mandated rent growth, and the higher market rent growth expectations, the larger the impact on property values. Moreover, the longer the property is owned, the further mandated rents will diverge from market rents, and the less valuable the property will become.

Ultimately, if rental income does not keep pace with expenses, the operation of the building becomes untenable. Moreover, it is important to consider that the true strain of expenses on operating budgets is even larger than that estimated by the NAA because the measure of operating expenses surveyed does not account for the large and inevitable capital expenditures to replace or fix significant portions of the property, and does not explicitly account for the increased costs of maintaining a property as it ages. In practice, as the expenses required for day-to-day management of properties rise faster than rental income, property owners, particularly mom-and-pop businesses, will have less ability to maintain existing properties. Moreover, owners will have no mechanism to recoup the costs of major repairs and capital expenditures. In practice, many owners will be forced to choose between allowing the quality of the property to decay by deferring maintenance and seeking opportunities to convert apartments to other uses, thereby reducing the existing supply of rental housing.

Academic studies of historical experience with strict rent control demonstrate conclusively that these dynamics play out in real life exactly as expected. The result of strict rent control is lower property values and less rental housing stock. The most restrictive rent control policies enacted prior to Costa-Hawkins used vacancy control to effectively cap all future rental income, and led to a significant deterioration in property values. If cities are permitted and choose to return to the strict rent control measures that are currently prohibited by Costa-Hawkins, such as vacancy control, property owners would again experience significant declines in rental income over time.

A case study of rental housing in Alameda County in the 1970s and 1980s published by the UC Berkeley Fisher Center for Real Estate and Urban Economics in 1990 demonstrates the full deleterious effects of vacancy control and less-than-inflation rent increases on property values and the rental housing stock.⁵ Prior to Costa-Hawkins, apartment properties in the City of Berkeley were subject to vacancy control and rent growth that was limited to a fraction of inflation, whereas properties in the remainder of the county were either not subject to rent control or, at a minimum, not subject to vacancy

control. By preventing property owners from adjusting rents in between tenants even as expenses continue to rise, vacancy control effectively capped future rental income for these properties in Berkeley. As would be expected, the real value of Berkeley rental housing declined during the study period between 1970 and 1988, even as all other types of housing in Alameda County increased in value. In fact, while the real, inflation-adjusted value of rental housing in Berkeley decreased by 15% from 1970 to 1988, the value of rental housing across the rest of Alameda County doubled. As a result, rental properties in Berkeley, which were similarly priced to other properties in the county in 1970, were worth half the value of those same properties by 1988. Overall, the study estimates that strict rent control destroyed hundreds of millions of dollars of value in the Berkeley rental housing stock. Not surprisingly, the significant loss of value motivated many mom-and-pop owners of duplexes, triplexes and four-unit properties to sell to owner-occupiers who would then be exempt from rent control. In fact, this trend became so troubling that in the late-1980s the Planning Commission formed a subcommittee to study the loss of rental units and explore options to regulate or prohibit these kinds of sales. The experience in Berkeley demonstrates the significant costs of strict rent control. The study also demonstrates the real life slippery slope that strict rent control creates, as further restrictive policies are needed to mitigate the unintended negative consequences of these misguided policies – the same policies that Costa-Hawkins was designed to prevent.

Additional studies of strict rent control policies in Cambridge, MA report a similar experience to the situation that was observed in Berkeley. As described in detail in the previous paper in this series, *The Case for Preserving Costa-Hawkins: The Potential Impacts of Rent Control on Single Family Homes*, research from MIT found that strict rent control rules in Cambridge, MA led not only to a drop in property values, but also to deteriorating neighborhoods and increased crime: factors that tend to further accelerate the decline in property values.⁶ In fact, in the period after rent control ended in 1995, assessed properties values surged by 18% to 25% for buildings that were previously under rent control.⁷

Consistent with both economic theory and historical case studies, the precise types of strict rent control that Costa-Hawkins is meant to limit will decay the value of rental housing, incentivize property owners to remove housing from the rental supply and, over the long term, could lead to blighted neighborhoods.

The Expected Impact of Costa-Hawkins Repeal

The repeal of Costa-Hawkins would eliminate any statewide rules to prevent cities from adopting particularly strict forms of rent control. As such, property owners, investors, lenders and developers would face a great deal of uncertainty in terms of which cities would adopt strict rent control rules and how the rules may change at any time in the future,

such as with each new election or as the sentiment of the city council shifts. Considering the widespread risk and future uncertainty that would result, many investors may be less willing to allocate capital to the California apartment market, or at least, would reduce the price they are willing to pay for these properties. Moreover, many mom-and-pop businesses would likely want to sell properties that would no longer be profitable, or to avoid the headaches of complying with new and potentially ever-changing rent control rules. Indeed, the impact of this risk alone could translate to a widespread decline in apartment property values that would not be limited to rent-controlled properties, but would extend to non-controlled properties in communities with rent control, as well as to properties in cities across the state that do not currently have rent control.

While the impact would vary considerably by city, and would be heavily affected by both the presence of existing rent control policies and the nature of any new policies, it is likely that property values in all cities would be impacted. Given the direct impact on net income over time, the reduction in the price buyers would be willing to pay today and in the future, and the risk of excessively restrictive (or ever changing) rent control in the absence of Costa-Hawkins, the potential decline in apartment property values is estimated to be in the 10% to 35% range statewide, with significant variation across different cities. Although the loss in net income will accrue overtime, since commercial property values are determined by the expected income the owner will receive and the price that the property could be sold for in the future, the decline in property values is likely to occur quite rapidly as current and potential property owners fundamentally shift their views regarding the attractiveness of California apartments as a business investment.

In addition to the negative supply impact through property conversions and reduced new development described above, the drop in apartment property values would translate to widespread unintended negative consequences, which would hurt small businesses and significantly limit state and local tax revenues, reducing local government services and school district funding in communities across the state.

How Rent Control Hurts Small Businesses

While many large institutional investors hold sizable investments in California apartments, the reality is that institutional investors account for a small minority of apartment property owners in the state and the negative impacts of declining property values will largely hurt small, mom-and-pop business owners who rely on properties as a source of income and as a source of retirement savings.

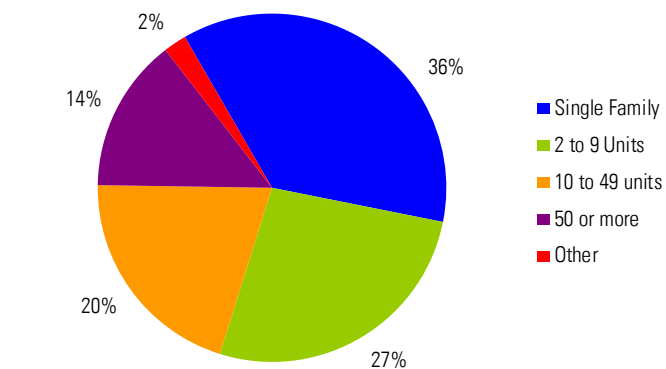
Institutional ownership is highly concentrated among relatively large apartment buildings, particularly those with professional property management: two categories that account for only a small share of the rental market both nationally and in California. Statewide, only 14% of renter households in California lived in buildings with 50 units or more as of 2017, according to the Census.⁸ Moreover, among those living in apartment buildings with two or more units, nearly 61% of renters, or approximately 2.2 million households, lived in buildings with fewer than 20 units, and nearly 1.6 million renter households lived in buildings with fewer than 10 units.⁹

National statistics on property management and ownership further highlight the extent to which mom-and-pop owners account for the vast majority of apartment properties. In fact, as of 2015, only 11% of rental properties nationwide were managed day-to-day by a management company,

according to the most recent Rental Housing Finance Survey released by the U.S. Department of Housing and Urban Development and U.S. Census Bureau.¹⁰ Moreover, while there are numerous tax structures for different types of real estate investors, it is notable that fewer than 900,000 apartment units, or just 1.8% of total rental units in the nation, were owned by Real Estate Investment Trusts (REITs) as of 2015.¹¹

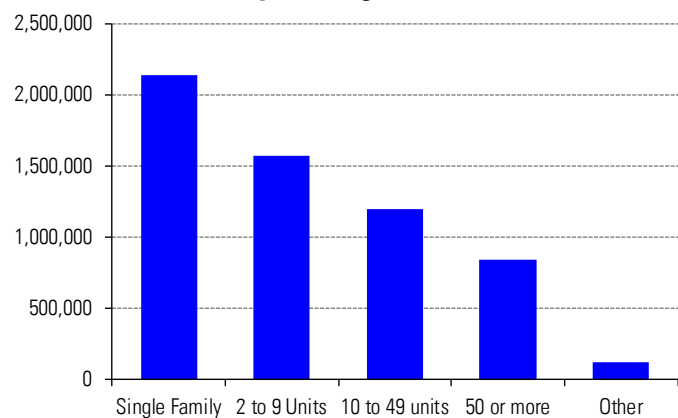
As highlighted in the previous paper in this series, “mom-and-pop businesses represent a critical segment of the rental housing market, and the repeal of Costa-Hawkins would negatively impact these small business owners far more than it would harm institutional investors.”¹² With the current set of statewide protections, it is likely that a number of cities would pursue highly restrictive rent control policies, the kind of untenable measures that brought about the Costa-Hawkins

Share of Renter Households by Building Size



Note: Other includes mobile home, boat, RV, van, etc.
Source: Census

Renter Households by Building Size



Note: Other includes mobile home, boat, RV, van, etc.
Source: Census

comprise in 1995. In particular, limitations on property owners' ability to adjust rents in between tenants will make it extremely difficult for mom-and-pop businesses to afford the expenses needed to maintain and repair apartments units.

The most likely situation, especially for mom-and-pop businesses, is that property owners would dramatically reduce expenses to the bare minimum necessary, deferring maintenance and major capital expenditures since there is no way to recoup these costs. As property owners delay or neglect ongoing maintenance, or at least minimize new investment in buildings, the need for future repairs and renovations will effectively reduce the value of the properties overtime. By analogy, consider trying to sell a home that needs a new roof. The home price would almost certainly be reduced, reflecting the large capital outlay needed to afford the replacement roof. In this way, deferred maintenance in reaction to strict rent control limits would directly lower the value of apartment properties. In effect, owners are left with properties that are less valuable as a source of income or as an asset that could be sold, and smaller owners are likely to consider scaling back operations or selling to larger companies.

Alternatively, recognizing these limits on potential income and the decline in values for the building, many mom-and-pop owners are likely to look for opportunities to repurpose buildings by converting them into other types of uses (ex. condo conversions or redevelopment into other types of commercial properties). As described in detail in the first paper in this series, *The Case for Preserving Costa-Hawkins: Three Ways Rent Control Reduces the Supply of Rental Housing*, this situation would effectively decrease the total supply of rental housing and would exacerbate the statewide housing shortage.¹³

How Rent Control Limits State and Local Tax Revenue

If Costa-Hawkins were repealed, the decline in property values that is likely to result from both widespread uncertainty and the direct drop in rental income would reduce tax collections for state and local governments and school districts in several ways: 1) any reduction in assessed property values will translate to lower property tax payments over time, reducing revenue for county, city and school district budgets; 2) as the margin between rental income and expenses is increasingly squeezed, reduced profitability will decrease the property owner's taxable income and thereby decrease state income tax collections; and 3) as property owners cut back on expenses, the reduction in spending on goods and services to maintain the property will translate to a decrease in sales tax revenue, a reduction in income and income tax payments for vendors and employees, and a broader negative multiplier effect that will reduce economic activity statewide. Partially offsetting these declines, rent control would translate to lower rents for some households and, over

an extended period of time, may allow these households to instead spend more money on other goods and services. This increase in consumer spending would generate increased sales tax revenue. Importantly, however, it is not clear how this sales tax impact would compare with the negative impact of reduced expenditures on property maintenance. Moreover, any impact on sales tax revenue is likely to be very small compared with the potentially large effect on property tax payments.

Indeed, it is this impact on property tax revenue that is particularly concerning. Most city and county budgets, and almost all school districts budgets, rely heavily on property taxes as a source of revenue. In fact, as of the 2014-2015 fiscal year, the most recent data available, California schools were allocated 54 cents for every \$1 of property taxes collected statewide, according to California State Board of Equalization.¹⁴ In absolute terms, California schools were allocated more than \$29.9 billion out of a total of nearly \$55.5 billion in property taxes statewide during the same period.¹⁵ Despite these large sums, California ranked 36th in the nation for current expenditures per student as of 2017, according to the National Education Association, and ranked 44th in the nation for Pre-K through 12th grade education in 2018, according to the U.S. News & World Report.¹⁶ With inflation and rising wages contributing to increasing costs, any negative impact on property tax revenue resulting from expanded rent control would directly hurt much needed resources for local schools, or require increased state government expenditures to compensate schools for the loss in funding.

The scale of the impact on state and local tax revenue is difficult to measure and depends heavily on which cities adopt expanded rent control measures. As such, the state Legislative Analyst's Office concluded that the loss of state and local tax revenue could range from tens of millions to hundreds of millions of dollars per year, depending on the extent to which communities choose to pass strong rent control.¹⁷ Considering the potential risk and uncertainties that businesses would face in an environment of unrestricted rent control, it seems quite likely that property value declines and the resulting loss in tax revenue could easily reach the high end of this range, particularly if mom-and-pop businesses, lenders, developers and larger investors choose to withdraw capital from the California apartment market.

Compounding the loss of revenue, communities may also face increased expenses resulting from rent control. Depending on the nature of current rules in each community, cities may face substantial administrative costs in order to establish a rent board, or increased costs to the extent that the scope of rent control is expanded, potentially in the order of tens of millions of dollars per year, according to the Legislative Analyst's Office.¹⁸ Importantly, however, that would only represent a relatively small segment of the true cost for cities. Instead, the much more significant burdens that cities could face would be the cost of combating the many unintentional negative consequences of rent control, including

the loss of existing rental supply, the deterioration of existing properties and neighborhoods, and the potential for increased crime. Considering the large fiscal impacts resulting from both the direct administrative costs of rent control and the induced additional government spending, a 1988 study of the Ontario, Canada rental market concluded that rent controls, “impose a substantial opportunity cost on society” and are, “an expensive policy both absolutely and relative to alternative housing programs.”¹⁹

Conclusion

The four papers in this series have detailed the many unintended negative consequences of rent control, particularly the most restrictive forms of controls that are currently precluded under Costa-Hawkins. Specifically, rent control reduces the supply of rental housing by incentivizing property owners to convert rental units to other uses, encouraging an inefficient allocation of housing, and discouraging new development activity. Rent control reduces property values, hurts small businesses and limits state and local tax revenue. Moreover, if expanded to include single family homes, rent control would be a threat to millions of homeowners and thousands of low and moderate income families.

At the same time, rent control is a poor mechanism to target assistance that largely fails to ensure that the benefits of lower rents actually help low income households. Instead, rent control creates greater competition and makes it harder for households with limited resources to secure affordable housing. Repealing Costa-Hawkins and expanding the scope for rent control would only exacerbate the problem of housing scarcity and would do nothing to more effectively target rent relief to those most in need.

At a time when California faces a perpetual cycle of housing scarcity, what the state needs most are creative and thoughtful new ways to encourage communities to work with owners and developers to build more housing. Instead of looking forward to new solutions, Proposition 10 would further exacerbate the statewide housing crisis by returning to the failed policies of the past.

End Notes

¹ The Case for Preserving Costa-Hawkins: Three Ways Rent Control Reduces the Supply of Rental Housing, Rosen Consulting Group, The Fisher Center for Real Estate and Urban Economics, UC Berkeley, Ken Rosen. (September 2018). Retrieved from: <https://escholarship.org/uc/item/9dn0n4g7>.

² Proposition 10 Expands Local Governments' Authority to Enact Rent Control on Residential Property. Initiative Statute. Legislative Analyst's Office. (2018). Retrieved from: <https://lao.ca.gov/BallotAnalysis/Proposition?number=10&year=2018>.

³ Survey of Operating Income & Expenses in Rental Apartment Communities, The National Apartment Association. (2018). Retrieved from: <https://www.naahq.org/news-publications/units/september-2018/article/survey-operating-income-expenses-rental-apartment>. Consumer Price Index, Urban Wage Earners and Clerical Workers, U.S. Department of Labor, Bureau of Labor Statistics. (2018). Retrieved from: <https://www.bls.gov/cpi>.

⁴ This analysis is based on standard real estate underwriting practices and assumptions and is used for expository purposes only. The underlying conclusion is not sensitive to reasonable assumptions made regarding the initial operating expense ratio, internal rate of return (IRR) that the investor expects to earn and changes in capitalization rates during the investment period.

⁵ The Impact of Rent Controls on Property Value, The Fisher Center for Real Estate and Urban Economics, UC Berkeley, Michael St. John. (1990). Retrieved from: <https://escholarship.org/uc/item/8c9648s1>.

⁶ Multiple sources: The Case for Preserving Costa-Hawkins: The Potential Impacts of Rent Control on Single Family Homes, Rosen Consulting Group, The Fisher Center for Real Estate and Urban Economics, UC Berkeley, Ken Rosen. (October 2018). Retrieved from: <https://escholarship.org/uc/item/8wt9p088>;

Housing Market Spillovers: Evidence from the End of Rent Control in Cambridge Massachusetts. David Autor, Christopher Palmer, Parag Pathak. (June 2012). Retrieved from: <https://economics.mit.edu/files/9760>;

Gentrification and the Amenity Value of Crime Reductions: Evidence from Rent Deregulation. David Autor, Christopher Palmer, Parag Pathak. (September 2017). Retrieved from: <https://www.semanticscholar.org/paper/Gentrification-and-the-Amenity-Value-of-Crime-%3A-%E2%88%97-Autor-Palmer/25175de7448edfdf43c132cb7ded33d68ec67e52>.

⁷ Housing Market Spillovers: Evidence from the End of Rent Control in Cambridge Massachusetts.

⁸ Tenure by Units in Structure, American Community Survey, U.S. Census Bureau. (2017). Retrieved from: <https://factfinder.census.gov>.

⁹ Ibid.

¹⁰ Rental Housing Finance Survey, U.S. Department of Housing and Urban Development and U.S. Census Bureau. (2015). Retrieved from: <https://www.census.gov/programs-surveys/rhfs/data.html>.

¹¹ Ibid.

¹² The Case for Preserving Costa-Hawkins: The Potential Impacts of Rent Control on Single Family Homes.

¹³ The Case for Preserving Costa-Hawkins: Three Ways Rent Control Reduces the Supply of Rental Housing.

¹⁴ General Property Tax Dollar, by County. California State Board of Equalization. (2014-2015). Retrieved from: <http://www.boe.ca.gov/legislative-research-and-stats/research-and-stats.htm>

¹⁵ General Property Tax Levies as Compiled for Computation of the Average Tax Rate. California State Board of Equalization. (2014-2015). Retrieved from: <http://www.boe.ca.gov/legislative-research-and-stats/research-and-stats.htm>

¹⁶ Multiple sources: D-1. Current Expenditures Per Student in Fall Enrollment, Rankings of the States 2017 and Estimates of School Statistics 2018, National Education Association. (2018). Retrieved from: http://www.nea.org/assets/docs/180413-Rankings_And_Estimates_Report_2018.pdf;

Pre-K - 12 Rankings, Best States 2018: How They Were Ranked, U.S. News & World Report. (2018). Retrieved from: <https://www.usnews.com/news/best-states/rankings/education/prek-12>.

¹⁷ Proposition 10 Expands Local Governments' Authority to Enact Rent Control on Residential Property.

¹⁸ Ibid.

¹⁹ An Economic Assessment of Rent Controls: The Ontario Experience. Lawrence Smith. (1998). Retrieved from: <https://link.springer.com/article/10.1007/BF00658918>.