

The Effect of Rent Control on New Housing Supply: A Bay Kennetk

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• Rent control may limit new construction if there is no exemption for newer properties, or if the exemption provides only a short or a rolling timeline.

#### Spotlight on Rent Control in New York

Given the wide range of control policies over time and across jurisdicqflkp)dfqdfpdebimcridqld\_ofb¬vdefdeifdeqdqebdj^kvdt ^vpdbkqd~lkqolide^pd evolved over time through a spotlight on rent control in New York.

- Following numerous changes in prior decades, currently two types of rent-regulated units exist in New York City: rent controlled and rent stabilized.
- In June 2019, the New York State Legislature in Albany enacted the Housing Stability and Tenant Protection Act (HSTPA), which ^iqbobadpfdkf«`^kq/obkqd` I kqo I idobd ri^qf I kp+
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## The Effect of Rent Control on New Construction: A Bay Area Case Study

### Introduction

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Many tenants choose not to leave their rent-controlled unit because qebd`e^k`bpd'lcdwkafkdd^klqebod^s^fi^\_ibd^kad`lkqoliibad'r kfqdfpdil t +d

The impact of rent control on housing supply varies across markets with different regulation stringencies. However, historically, rent control further exacerbated housing shortages over time. Through a misallocation of housing, the conversion of rental units to other uses, and by impeding new development, rent control reduced housing supply across a number of cities within the United States arofkd@ebdi^pqdwsbdab`^abp+ddd

#### Spotlight on Rent Control in New York

Given the wide range of rent-control policies over time and across jurisdictions, before delving into the case study of Berkeley, it is ebimcridqld\_ofb-vdefdeifdeqdqebd j ^kvd t ^vpdbkqd` lkqolide^pdbslisbad over time, through a spotlight on rent control in New York.

Obkqf<sup>\*</sup> I kqo I id t ^pd<sup>\*</sup>opdbk^`qbadk^qf I k t fab)da rofkdd<sup>\*</sup> T loiad<sup>\*</sup> T ^odFF)d<sup>\*</sup>pd<sup>\*</sup> part of the U.S. Emergency Price Act of 1942, which froze all rents at their March 1943 levels in order to prevent any rent increases during the war.<sup>16</sup> Five years later, the Federal Housing and Rent Act exempted units built after February 1947 from all future rent controls. Then, in 1950, the federal rent control system was gradually lifted but states were given administrative power to preserve rent control. The State of New York kept the rent control system but delegated the administration of rent control for New York City, to the city. Council on Housing, there were more than one million rent-controlled apartments in New York City in the 1970s, and today there are about  $27,000.^{17}$ 

Today, two types of rent-regulated units exist in New York City: rent controlled and rent stabilized. For an apartment to be rent controlled, a tenant or family member must have been living in the unit continuously since July 1971, and the building must have been built before 1947. Families can transfer the unit to another member and preserve the rent-control status. When the unit is vacated, it can become rent stabilized, or removed from regulation altogether if it is in a building with fewer than six units. No new rent-controlled units can be developed. Rent-controlled apartments are still subject to the "maximum base rent" system (referenced above). There is a rent ceiling that landlords are permitted to charge tenants, and the collectible rent can be raised annually until it reaches that maximum level. Under current rent laws, the maximum base rent can increase every two years and the maximum collectible rent is limited to the In addition, before June 2019, landlords and their family members could remove rent-stabilized tenants from multiple units to use as residences. Under the new rules, landlords will only be able to claim "owner use" for one apartment that must be used as their primary residence. The HSTPA also extended any preferential rent (discounted rent below the legally mandated limit) for the duration of the tenancy, whereas previously, landlords who managed rent-stabilized apartments were allowed to raise the rent to the legally mandated limit when a lease was renewed.<sup>23</sup>

Lastly, the law also made co-op or condo conversions harder to achieve, requiring 51% of current residents to agree to the conversion, instead of only 15%. The long-term impact of the Housing Stability and Tenant Protection Act is unknown. However, a report recently released by the National Apartment Association estimated that the properties in New York City affected by the law lost 20% or more of their value immediately following the passage of the bill.<sup>24</sup>

#### Case Study of Rent Control in Berkeley and the Bay Area

#### History of Rent Control in Berkeley

Following the period of national rent controls during World War FF)d"?bohbibvd" t ^pd"gebd"«opqd" `fqvd"fkd"@^ifc l okf^d"g l d'bk^ `qd"obkqd" ` l kgo l i)d" through a charter amendment adopted in 1972. Four years later, the California Supreme Court ruled the Berkeley amendment unconstitutional because it did not allow for rent increases following operating cost increases.<sup>25</sup> However, the ruling also allowed local government to control rents in order to address serious housing problems. In 1978, a statewide, property tax reform ballot initiative, known as Proposition 13, contributed to new rent-control efforts, as municipalities attempted to ensure that tenants would share in the savings from reduced property taxes. <sup>26</sup>In 1979, Berkeley voted to temporarily reduce rents to provide renters with a property tax rebate. Measure I of the proposition required owners to set rents at the level charged in June 1978 and reduce the rents in order to ob¬b`qd'5- "dlcd'qebd'q^ud'p^sfkdpd'qe^qd'obpriqbad'coljd'Molmlpfqflkd'. O+d However, owners who needed to make major property renovations could increase rents, if the renovations cost more than the 20% tax savings they retained. On the tenant protection side, the measure prohibited retaliatory evictions.

After Measure I expired at the end of 1979, the Berkeley City Council enacted a new temporary rent law that extended the provisions of Measure I for a six-month period. The new temporary law limited the maximum rent increase during the six-month period to 5% of the lawful rent and ended rent increases based on increased mortgage costs.

In 1980, Berkeley passed the Rent Stabilization and Eviction for Good Cause Ordinance, making rent control laws permanent.<sup>27</sup> The law required rent registration and called for the establishment of a Rent

economic environment as a key factor driving both demand for housing and the construction environment. For this demand driver, we focus on payroll employment in the entire six-county Bay Area, which captures the vast majority of the commute radius for workers in the area. Payroll employment in the six Bay Area counties (two metro areas: San Jose and San Francisco-Oakland) averaged 1.2% per year from 1980 to 2019 (compound average growth rate). This measure captures the number of jobs on private and public sector payrolls in the region. It is an effective measure of hiring overtime and is therefore a major factor determining new housing demand. Notably, payroll employment data at the place level are not available. Instead, place-level employment data are limited to resident

Antioch   42,150   15,661   112,423     Belmont   24,600   9,953   26,983     Berkeley   103,700   46,334   122,358     Concord   103,300   39,490   130,435     Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Haf Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J lirky*fikisht   13,050   5,636   41,743     Morgan Hill   16,800   5,566   45,745     J l rky*fikisht   58,300   28,576   81,639     Newark	Comp	ound Annual (	Growth Rate
Antioch   42,150   15,661   112,423     Belmont   24,600   9,953   26,983     Berkeley   103,700   46,334   122,358     Concord   103,300   39,490   130,435     Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Haf Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J lirky*fikisht   13,050   5,636   41,743     Morgan Hill   16,800   5,566   45,745     J l rky*fikisht   58,300   28,576   81,639     Newark	Stock Pop	pulation	Housing Stock
Belmont   24,600   9,953   26,983     Berkeley   103,700   46,334   122,358     Concord   103,300   39,490   130,435     Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Half Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454   31     J Ir Kq*fklSfb t   33,000   26,576   81,639   91     Mipitas   37,400   11,659   76,211   91     Morgan Hill   6,800   25,556   41,743   91     Newark   32,100   9,460	32,800	0.4%	0.6%
Berkeley   103,700   46,334   122,358     Concord   103,300   39,490   130,435     Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,6854     Haf Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menio Park   25,800   11,541   35,454     JifitS^iibv   13,050   5,636   14,743     Mipitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   14     Pinole <td>36,238</td> <td>2.2%</td> <td>2.5%</td>	36,238	2.2%	2.5%
Concord   103,300   39,490   130,435     Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Haff Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fiitS^riibv   13,050   5,636   14,743     Milgitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J Irkq*fk/Sfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pi	10,972	0.3%	0.2%
Dublin   14,350   4,133   64,132     Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Half Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J filfS^hilbv   13,050   5,636   14,743     Morgan Hill   16,800   5,566   45,745     J I rkq*fktSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   14     Pieasant Hill   25,500   10,440   34,286 <td< td=""><td>51,005</td><td>0.2%</td><td>0.4%</td></td<>	51,005	0.2%	0.4%
Fremont   131,200   45,486   233,404     Gilroy   21,350   7,218   56,854     Half Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Mento Park   25,800   11,541   35,454     J fil/Srilbv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkq*fktSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   14     Pleasant Hill   25,500   10,443   28   2	47,664	0.5%	0.6%
Gilroy   21,350   7,218   56,854     Half Moon Bay   7,300   2,726   12,480     Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,500   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Mento Park   25,800   11,541   35,454     J litk?hitbv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J l rkq*fkdSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   12     Pieasanton   35,250   11,665   79,392   35     San Carlos   24,800   10,350   29,	23,353	4.5%	4.2%
Half Moon Bay 7,300 2,726 12,480   Hayward 94,000 35,870 160,197   Hercules 5,500 1,843 25,488   Larkspur 11,150 5,590 12,331   Livermore 48,450 16,637 91,436   Los Gatos 26,450 10,971 30,720   Menlo Park 25,800 11,541 35,454   J fit/S^ilibv 13,050 5,636 14,743   Milpitas 37,400 11,659 76,211   Morgan Hill 16,800 5,566 45,745   J I rkq*fkdSfb t 58,300 28,576 81,639   Newark 32,100 9,460 48,164   Oakland 339,300 150,274 430,753 14   Pinole 14,250 5,067 19,563 14   Pinole 14,250 50,07 19,563 14   Pieasant Hill 25,500 10,140 34,286 29,652   San Carlos 24,800 10,350 29,652 35   San Carlos 24,800 10	80,462	1.5%	1.5%
Hayward   94,000   35,870   160,197     Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fit/S*ilibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkg*fklSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   14     Pieasanton   35,250   11,665   79,392   16     Richmond   74,100   29,082   110,793   3     San Carlos   24,800   10,350   29,652   3        San Jose   622,800	18,544	2.4%	2.5%
Hercules   5,500   1,843   25,488     Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fikS^iibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J Irkq^fkkJsfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   14     Pleasant Hill   25,500   10,140   34,286   16     Pleasant Hill   25,500   10,140   34,286   10,793     San Carlos   24,800   10,350   29,652   5     San Francisco   679,400   316,688   891,021   3	4,876	1.5%	1.4%
Larkspur   11,150   5,590   12,331     Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fii/S^iibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkq^fkdSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   24,800   10,350   29,652     San Carlos   24,800   10,350   29,652   3   3   3     San Jose   622,800   216,653   1,047,871   3   3     San Leandro   64,100   28,086   88,296   3   3	50,446	0.9%	1.4%
Livermore   48,450   16,637   91,436     Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fit/S^iibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkq*fk/Sfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19,563     Pleasant Hill   25,500   10,140   34,286   10,793     San Carlos   24,800   10,350   29,652   San Carlos   29,082   110,793     San Leandro   64,100   28,086   88,190   33   33   34,069     San Leandro   64,100   28,086   88,296   35,659   35,659     San Leandro   64,100   28,086   88,296   3	8,693	4.1%	4.0%
Los Gatos   26,450   10,971   30,720     Menlo Park   25,800   11,541   35,454     J fik/S^iibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkq^fk/Sfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   34,286     Pleasant Hill   25,500   10,140   34,286   34,286     Pleasant Hill   25,500   10,140   34,286   34,286   34,286     San Carlos   24,800   10,350   29,652   35   35   36     San Leandro   679,400   316,608   891,021   33   35   35   35,250   11,047,871   33   35   35,450   <	6,312	0.3%	0.3%
Menlo Park   25,800   11,541   35,454     J fik/S^iibv   13,050   5,636   14,743   14     Milpitas   37,400   11,659   76,211   16     Morgan Hill   16,800   5,566   45,745   1     J I rkq^fk/Sfb t   58,300   28,576   81,639   16     Newark   32,100   9,460   48,164   16   16   16   11   16	32,165	1.7%	1.6%
J fiidS^iibv   13,050   5,636   14,743     Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745     J I rkq^fkiSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   10,350   29,652     Richmond   74,100   29,082   110,793   3   3     San Carlos   24,800   10,350   29,652   5     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296   5     San Mateo   77,700   34,268   103,569   5	13,461	0.5%	0.4%
Milpitas   37,400   11,659   76,211     Morgan Hill   16,800   5,566   45,745   5     J I rkq^fklSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   10     Pleasant O   35,250   11,665   79,392   10     Richmond   74,100   29,082   110,793   3     San Carlos   24,800   100,350   29,652   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296   3     San Mateo   77,700   34,268   103,569   3	13,853	0.5%	0.8%
Morgan Hill   16,800   5,566   45,745     J I rkq^fkdSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   10     Pleasanton   35,250   11,665   79,392   10     Richmond   74,100   29,082   110,793   30     San Carlos   24,800   10,350   29,652   33     San Jose   622,800   216,653   1,047,871   33     San Leandro   64,100   28,086   88,296   33     San Mateo   77,700   34,268   103,569   33	6,558	0.4%	0.3%
J I rkq^fkdSfb t   58,300   28,576   81,639     Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   18     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   10     Pleasanton   35,250   11,665   79,392   10     Richmond   74,100   29,082   110,793   30     San Carlos   24,800   10,350   29,652   33     San Jose   622,800   216,653   1,047,871   33     San Leandro   64,100   28,086   88,296   33     San Mateo   77,700   34,268   103,569   33	26,538	2.1%	1.8%
Newark   32,100   9,460   48,164     Oakland   339,300   150,274   430,753   11     Pinole   14,250   5,067   19,563   11     Pleasant Hill   25,500   10,140   34,286   11     Pleasant On   35,250   11,665   79,392   11     Richmond   74,100   29,082   110,793   11     San Carlos   24,800   10,350   29,652   33     San Jose   622,800   216,653   1,047,871   33     San Leandro   64,100   28,086   88,296   33     San Mateo   77,700   34,268   103,569	15,361	2.6%	2.6%
Oakland   339,300   150,274   430,753   18     Pinole   14,250   5,067   19,563   19     Pleasant Hill   25,500   10,140   34,286   10     Pleasant On   35,250   11,665   79,392   10     Richmond   74,100   29,082   110,793   10     San Carlos   24,800   10,350   29,652   10     San Jose   622,800   216,653   1,047,871   33     San Leandro   64,100   28,086   88,296   103,569     San Mateo   77,700   34,268   103,569   103,569	39,855	0.9%	0.9%
Pinole   14,250   5,067   19,563     Pleasant Hill   25,500   10,140   34,286     Pleasanton   35,250   11,665   79,392     Richmond   74,100   29,082   110,793     San Carlos   24,800   10,350   29,652     San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	15,303	1.2%	1.0%
Pleasant Hill   25,500   10,140   34,286     Pleasanton   35,250   11,665   79,392     Richmond   74,100   29,082   110,793     San Carlos   24,800   10,350   29,652     San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	86,085	0.5%	0.6%
Pleasanton   35,250   11,665   79,392     Richmond   74,100   29,082   110,793     San Carlos   24,800   10,350   29,652     San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	6,950	0.8%	0.8%
Richmond   74,100   29,082   110,793     San Carlos   24,800   10,350   29,652     San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	14,045	0.8%	0.8%
San Carlos   24,800   10,350   29,652     San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	30,198	2.5%	2.1%
San Francisco   679,400   316,608   891,021   3     San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	40,389	0.8%	1.0%
San Jose   622,800   216,653   1,047,871   3     San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	12,161	0.4%	0.5%
San Leandro   64,100   28,086   88,296     San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	97,828	0.6%	0.7%
San Mateo   77,700   34,268   103,569     San Rafael   44,900   19,200   60,259	30,915	1.1%	1.3%
San Rafael 44,900 19,200 60,259	32,443	0.4%	0.8%
	41,096	0.5%	0.7%
Santa Clara 86,900 34,858 127,401	24,094	0.6%	0.8%
	53,593	1.1%	1.0%
South San Francisco 49,300 18,020 67,221	22,216	0.5%	0.8%
Sunnyvale 106,400 44,021 155,766	61,224	0.8%	1.0%

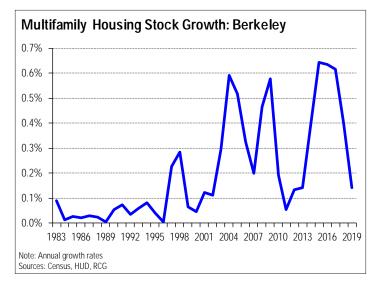
growth is also 1.2% per year, both matching the average employment growth rate in the Bay Area. There is, however, considerable variation in the growth rate of housing stock and population by place. The maximum growth rate for housing stock is 4.5% per year, and for population the maximum is 4.2% per year (both represent Dublin in Alameda County). The minimum housing stock growth rate was 0.2% per year in Berkeley (also in Alameda County); and for population, the minimum growth rate was 0.2% (Belmont in San Mateo County). See the nearby table.

In total, the 34 places in the sample accounted for 4.7 million of the 6.7 million residents in the Bay Area; that is, the sample consists of places with 70% of the regional total population. The places provide a good representation of both slower-growing, more mature places (San Francisco, Oakland, and Berkeley) and faster-growing, newer communities (Dublin, Hercules, and Pleasanton). Although the place pbib`qf1kdt ^pdk1qba1kbd1kd^pqo^qf«badp^ j mifkdd\_\_pfp)dt bd\_bifbsbdte^qd the places in our sample not only cover most of the region in terms of population, but also fully represents the diversity of growth and economic conditions across the Bay Area so that the conclusions of the study are not biased because of our sample selection.

In order to capture the location of residential construction across places in the sample, our analysis incorporated population density as another supply determinant. In any given economic or demand environment, existing density is a factor that contributes to where \_rfiabopd`ellpbdqld\_rfiad^kad t ebobdmblmibd`ellpbdqldifsb+dPmb`f«cally, density data were prepared using the number of square miles in each sample place as of 1990 and then dividing population in the place at each point in time by that area. The calculation gives us a time series of population per square mile by place. This represents ^d j labpqdpf j mif«`^qflkd^pdmi^`bpdaldpl j bqf j bpd^kkbudi^kad^kad become larger entities over time. We did not pursue changes in land area for all of our 34 sample places for the 39 years in the sample period. Instead, we used the 1990 land area as reported by the Census and held that metric constant throughout the entire time interval.

Next, the research considers the cost of housing over time, a factor that is necessarily linked to the demand-supply balance. In this case, collecting the data at the place level resulted in some

both multifamily and total housing permits) before and after these two dates, and, if so, where.



multifamily building was at a virtual standstill in the pre-Costa-Hawkins period.

First, it is informative to examine the growth of housing stock in Berkeley due to multifamily permits (see the nearby chart). Because of the volatility in the series, we calculated the two-period moving average in an effort to smooth out some of this volatility. Still, even the two-period moving average exhibits a great deal of volatility. However, a cursory glance at this chart for Berkeley shows that

Second, for the entire sample of places, housing-stock growth averaged more than twice as fast in non-rent-controlled places as compared with rent-controlled places. Population growth, likewise, was nearly twice as fast in non-rent-controlled places (see the nearby chart). In most cases, rent control was instituted in places that are

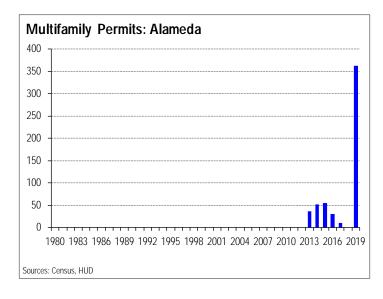
1995 cutoff separating the pre- and post-Costa-Hawkins periods,

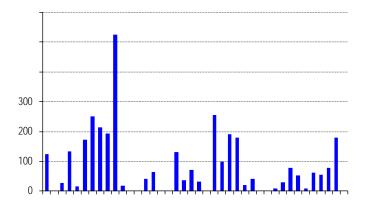
what rent-control actions could and could not be taken at the local level. These factors—stable new construction exemption dates, more certainty and more leniency in rent control with less room for local overrides, and vacancy decontrol—resulted in a positive impact on multifamily construction during the post-Costa-Hawkins period in four out of the six rent-controlled places in the Bay Area.<sup>35</sup>

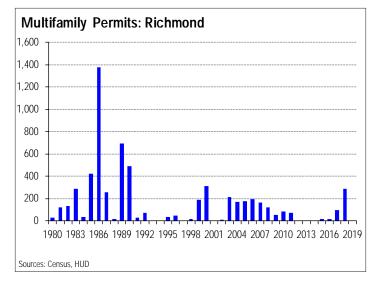
For the other two rent-controlled places—Hayward and Los Gatos—the rent-control dummy variable was not statistically different from zero using either the 1995 or 1999 cutoff dates. However, this result was largely to be expected because these places have relatively weak forms of rent control, which would have been much less impacted by the rule changes resulting from the Costa-Hawkins legislation. Not surprisingly, the other demand and local factors in the model seem to effectively explain much of the trend in multifamily construction growth in these cities, and the remaining variation in `Ikpqor`qfIkddoI t qedafadkIqdafccbodpfdkf«`^kqivdfkdqebdmob\*d^kadmIpq\* Costa Hawkins periods for those two places.

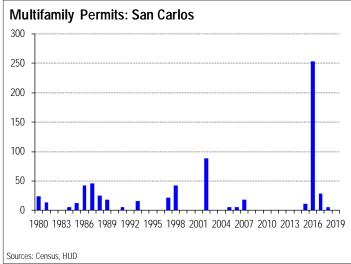
After accounting for the structural and local factors affecting multifamily construction, the magnitude of the impact on multic^j fivd`lkpqor`qflkdtbdabqb`qbadt^pdjlabo^qb)d\_rqdpfdkf«`^kq+dClod example, as a result of this model, we estimate that as of 2019,

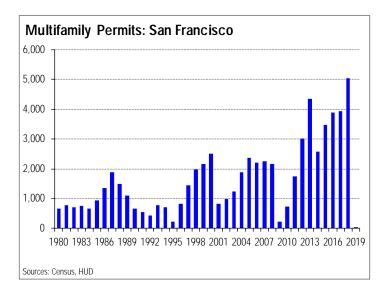
#### Appendix A

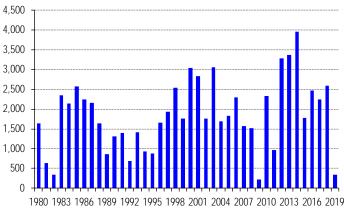


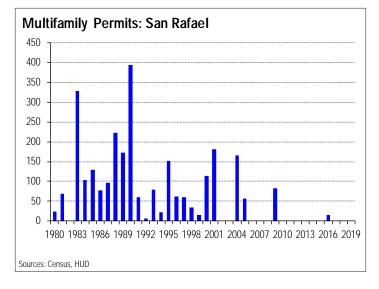


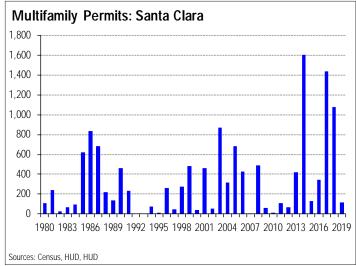












Appendix B

<sup>26</sup> Institute of Governmental Studies Rent Control in California: Responding to the Housing Crisis. 1983. California Agencies Paper 410. Retrieved from: http://digitalcommons.law.ggu.edu/caldocs\_agencies/410

<sup>27</sup> Berkeley Rent Stabilization Board. Rent Stabilization and Eviction for Good Cause Ordinance. Retrieved from: https://www.cityofberkeley.info/ Rent\_Stabilization\_Board/Home/Ordinance\_\_Rent\_Stabilization\_and\_Eviction\_for\_Good\_Cause.aspx

<sup>28</sup> Institute of Governmental Studies Rent Control in California: Responding to the Housing Crisis. 1983. California Agencies. Paper 410. Retrieved from: http://digitalcommons.law.ggu.edu/caldocs\_agencies/410

<sup>29</sup> Planning and Development Department at the City of Berkeley, 1998.

<sup>30</sup> Cost Hawkins Rental Housing Act. Retrieved from: https://www.cityofberkeley.info/Rent\_Stabilization\_Board/Home/California\_Civil\_Code\_\_\_\_ Sec\_1954\_50-1954\_535\_(Costa-Hawkins).aspx

<sup>31</sup> Rosen, 2018.

<sup>32</sup> City of Berkeley. Rent Stabilization Board: Tenants. Retrieved from: https://www.cityofberkeley.info/Rent\_Stabilization\_Board/Home/Tenant\_Page.aspx

<sup>33</sup> K^qflk^id>m^oq j bkqd>ppl`f^qflk+dQbk^kqdMolqb`qflkd>`qdlcd/-.6+dKlsb j\_bod/-.6+dObqofbsbadcol j 7deqqmp7,, t t t+k^^en+lod,pfqbp,abc^riq,«ibp,k^\* documents/naa\_-\_tenant\_protection\_act\_of\_2019\_ab\_1482.pdf

<sup>34</sup> @fqvdlcd?bohbibvdBsf`qflkdMolqb`qflkpdclodObkqbopdPqorddifkddColjd@LSFA\*.6+dObqofbsbadcolj7dhttps://www.cityofberkeley.info/City\_Manager/Press\_Releases/2020/

<sup>35</sup> Note: as previously mentioned, the analysis excluded from the rent-control category those places which instituted rent control in 2016, although these places remain in the sample for the analysis.