Modeling the Impacts of Rent Control

With the passage of a statewide cap on rents in Oregon and California, as well as expanded rent regulations in New York and Washington, D.C., rent control policies are gaining traction across the United States.

Although there is no shortage of academic research on the negative effects of rent control, NAA engaged Capital Policy Analytics (CPA) to model its impacts on four metropolitan areas, all of which have had increasing calls for rent control during the past two years: Chicago, Denver, Seattle and Portland.

The rent growth cap in Oregon limits the increase in rent to 7 percent plus inflation as measured by the Consumer Price Index (which varies widely across years and regions of the country). Rent control has many possible forms, but CPA used the Oregon legislation as a likely precedent for other governments and chose to examine the imposition of a similar limit, excluding inflation, on the amount of annual growth in rental prices.

Rent growth caps affect the apartment industry in several ways, each of which is estimated in the model. The most direct effect is on the monthly rent for units that would have experienced a growth above 7 percent in a given year. Limiting rent growth affects the long-term viability of building new units and performing maintenance on existing units as it changes the expected return on investment for each of these activities. By limiting rents, a rent growth cap also will affect new construction as it will change the expected return on this investment. The combined effects of limiting rents and deterring new construction work to reduce owner profitability. A cap on rent increases essentially becomes a de facto cap on the profits of building owners, and that gets negatively capitalized in the value of rental property.

Each of these effects represent inefficient outcomes relative to allowing the market price to adjust according to supply and demand. By not allowing the market for dwellings to function properly, rent control changes the allocation of housing investment across space. Under normal conditions, rising rent levels would be met with increased building in an area, curbing long-term growth in rents. However, rent control blunts the price mechanism, causing a misallocation of housing investment both within and across metropolitan areas.

CPA constructed several models to examine the effect of a rent growth cap on the study markets. First, the change in expected rents was modeled through an examination of historical rent increases. Those data were used to assign a probability that an apartment owner is likely to see a spike in demand that results in a rental price increase that exceeds the 7 percent cap in a given year for each area. That expected rent change was linked to estimates of new supply and maintenance expenditures, and the outputs from those models were combined to estimate the effect of rent caps on total income and, ultimately, property values. All estimates reflect the impact of a 7 percent rent growth cap on rental units in building with 5 or more units.

The analysis of the model outputs concluded:

- The expected change in rental values across metropolitan areas ranged from 2 percent in Chicago and Portland to 5 percent in Denver and 9 percent in Seattle.
- The effect on new apartment construction would also be substantial but it varies significantly across metropolitan areas. Seattle would see a reduction in construction of 1,739 units per year, with 779 fewer units constructed annually in Denver, 320 fewer per year in Chicago and 233 in Portland.
- The models estimate that annual maintenance spending would fall by $5.9 million in Seattle, $5.4 million in Chicago, $4.5 million in Denver and $2.7 million in Portland.
- The total rental income lost for apartment owners would be significant. The model estimated that total annual income loss would be $33 million in Seattle, $24 million in Chicago, $23 million in Denver and $10 million in Portland. These loss estimates include both the income lost due to restricting rents and the income lost from foregone construction.
- The projected income reductions logically translate into declines in the value of apartment properties. The model output estimated an aggregate loss of property value of $213 million in Portland, $462 million in Denver, $487 million in Chicago and $655 million in Seattle.
- If property value losses are realized in the assessment of property, then they would also be realized by lower property tax collections. Taking the property loss estimates from the low-discount rate model and assuming that property assessments follow market value losses, annual property tax revenue losses would be more than $6 million annually in Chicago, with losses of more than $5 million in Seattle and Portland and $3.5 million annually in Denver.

A 7 percent growth cap on rents would have a substantial impact on the apartment rental market in the areas studied. The estimates suggest that a non-trivial percentage of units would be bound by the policy and that this would lead to rent losses for building owners. The fact that rents would not be able to fluctuate to meet market conditions in the metropolitan area and across neighborhoods will have far-reaching implications. A 7 percent cap would substantially reduce the amount of new unit construction and have a negative impact on maintenance expenditures.

Finally, the models show that the 7 percent growth cap would depress annual income for owners and ultimately be capitalized into falling property values. Falling property values could have further implications not explored in the study such as declines in local wealth and public services funded by the local property tax base.

Using the results of a 2017 Report, "U.S. Apartment Demand – A Forward Look," produced by Hoyt Advisory Services for NAA and NMHC, we estimate the long-term effects of rent control and how it could impact vitally needed rental housing units by 2030. These figures are presented in the following charts.

For more information on impact model methodology and assumptions, please contact Paula Munger @ pmunger@naahq.org.

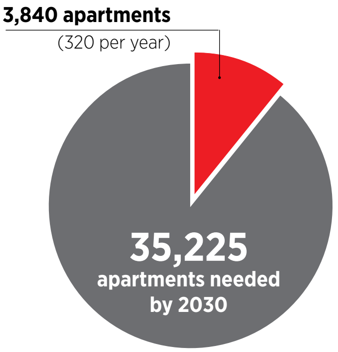
Impacts of Rent Control: Chicago

What happens when a 7 percent annual cap is put on apartment rents?

100% of Chicago's future apartment housing stock needs may be **INFEASIBLE**.

Result of 7% rent cap by 2030

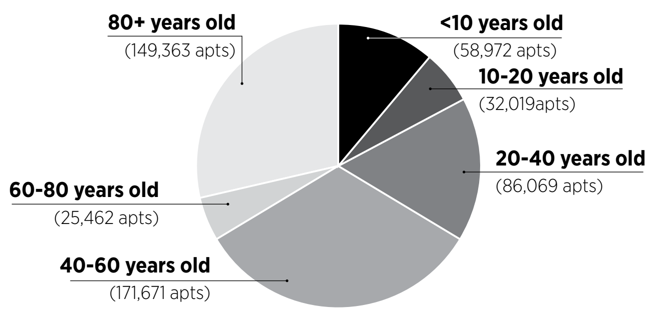
Decreased New Apartment Supply



3,840 units may not be built by 2030.

Result of 7% rent cap by 2030

Decreased Spending on Maintenance & Repairs



42,460 units at risk through 2030 because of decreased maintenance

35,225 units needed through 2030

46,300 units at risk through 2030

Unintended Consequences

- With decreased opportunity to earn a profit on their investment, developers are incentivized to take their dollars to other non-rent controlled communities.
- Over time, the lack of investment speeds up the deterioration of properties and eventually leads to the loss of critically needed rental housing.
- Housing development, rehabilitation and property maintenance generate significant economic benefits in terms of job creation and wage growth, and overall economic value to the State economy. Rent control policies eliminates most of this benefit as development, renovation and rehabilitation of rental housing activity is significantly reduced or eliminated.

Additional Impacts of Rent Contol in Chicago

Result of 7% rent cap

Decreased

Apartment Property Values

$487.8

million loss in values

because of decreased income

Result of 7% rent cap

Decreased

Property Tax Revenue

$6.1

million loss each year

Result of 7% rent cap

Decreased

Apartment Rental Income

$24.6

million loss each year

All of these impacts make Chicago a less desirable place to do business for apartment property investors, developers, owners and operators.

Chicago apartments and their residents **contribute $92.0 billion** to the metro economy every year and **support 443,800 jobs**.

Sources

1. "Modeling the Impact of Rent Growth Caps on Metropolitan Apartment Markets" Capital Policy Analytics for the National Apartment Association, April 2019. A 7% rent cap was chosen by the report author as the basis of this study.
   Sources in this report include Zillow, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, U.S. Census Bureau American Housing Survey and Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017"
2. "U.S. Apartment Demand – A Forward Look," Hoyt Advisory Services for NAA and NMHC, May 2017
3. 2013-2017 American Community Survey 5-Year Estimates
4. CoStar
5. weareapartments.org

Produced by NAA Research

Notes

- Impact model results for estimated rent reduction based on Zillow Rental Listings metropolitan area median, and neighborhood data for 5+ unit apartment buildings.
- Estimated decrease in maintenance spending based on the number of apartment units in buildings with 5 or more units and average 2-year maintenance spending per unit in the 15 largest metropolitan areas from the American Housing Survey 2017.
- Estimated property value decreases utilize the rate of return on a 30-year Treasury Bill.
- Property tax loss estimates based on apartment property tax rates for each city reported in the Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017", Appendix Table 5A . The estimates of revenue loss reflect assessed value fully following market value changes.
- All source, impact and forecast data cover the Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area with the exception of property tax impacts.
- Apartments are defined as located in properties with 5 or more units.

For more information on impact model methodology and assumptions, please contact Paula Munger @ pmunger@naahq.org.

Impacts of Rent Control: Denver

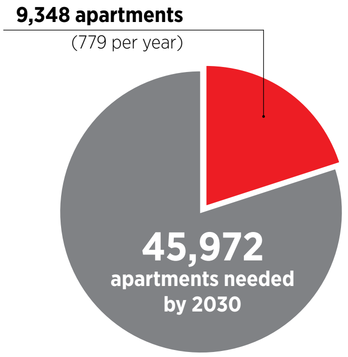
What happens when a 7 percent annual cap is put on apartment rents?

97%

of Denver's future apartment housing stock needs may be INFEASIBLE.

Result of 7% rent cap by 2030

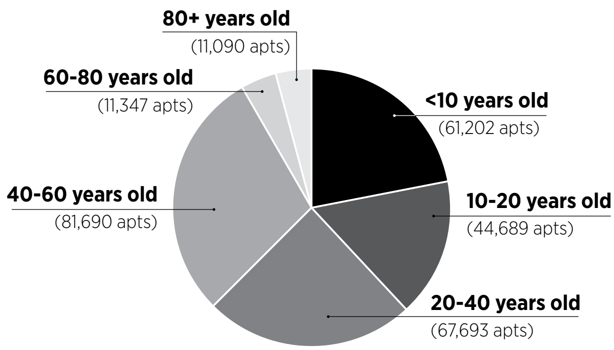
Decreased New Apartment Supply



9,348 units may not be built by 2030.

Result of 7% rent cap by 2030

Decreased Spending on Maintenance & Repairs



35,163 units at risk through 2030 because of decreased maintenance

45,972 units needed through 2030

44,511 units at risk through 2030

Unintended Consequences

- With decreased opportunity to earn a profit on their investment, developers are incentivized to take their dollars to other non-rent controlled communities.
- Over time, the lack of investment speeds up the deterioration of properties and eventually leads to the loss of critically needed rental housing.
- Housing development, rehabilitation and property maintenance generate significant economic benefits in terms of job creation and wage growth, and overall economic value to the State economy. Rent control policies eliminates most of this benefit as development, renovation and rehabilitation of rental housing activity is significantly reduced or eliminated.

Additional Impacts of Rent Contol in Denver

Result of 7% rent cap

Decreased

Apartment Property Values

$462.2

million loss in values

because of decreased income

Result of 7% rent cap

Decreased

Property Tax Revenue

$3.5

million loss each year

Result of 7% rent cap

Decreased

Apartment Rental Income

$23.3

million loss each year

All of these impacts make Denver a less desirable place to do business for apartment property investors, developers, owners and operators.

Denver apartments and their residents **contribute $39 billion** to the metro economy every year and **support 186,400 jobs**.

Sources

1. "Modeling the Impact of Rent Growth Caps on Metropolitan Apartment Markets" Capital Policy Analytics for the National Apartment Association, April 2019. A 7% rent cap was chosen by the report author as the basis of this study.
   Sources in this report include Zillow, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, U.S. Census Bureau American Housing Survey and Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017"
2. "U.S. Apartment Demand – A Forward Look," Hoyt Advisory Services for NAA and NMHC, May 2017
3. 2013-2017 American Community Survey 5-Year Estimates
4. CoStar
5. weareapartments.org

Produced by NAA Research

Notes

- Impact model results for estimated rent reduction based on Zillow Rental Listings metropolitan area median, and neighborhood data for 5+ unit apartment buildings.
- Estimated decrease in maintenance spending based on the number of apartment units in buildings with 5 or more units and average 2-year maintenance spending per unit in the 15 largest metropolitan areas from the American Housing Survey 2017.
- Estimated property value decreases utilize the rate of return on a 30-year Treasury Bill.
- Property tax loss estimates based on apartment property tax rates for each city reported in the Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017", Appendix Table 5A . The estimates of revenue loss reflect assessed value fully following market value changes.
- All source, impact and forecast data cover the Denver-Aurora-Lakewood,CO Metropolitan Statistical Area with the exception of property tax impacts.
- Apartments are defined as located in properties with 5 or more units.

For more information on impact model methodology and assumptions, please contact Paula Munger @ pmunger@naahq.org.

Impacts of Rent Control: Portland

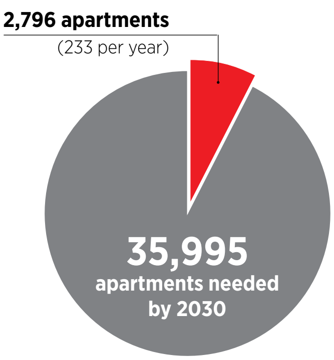
What happens when a 7 percent annual cap is put on apartment rents?

67%

of Portland's future apartment housing stock needs may be INFEASIBLE.

Result of 7% rent cap by 2030

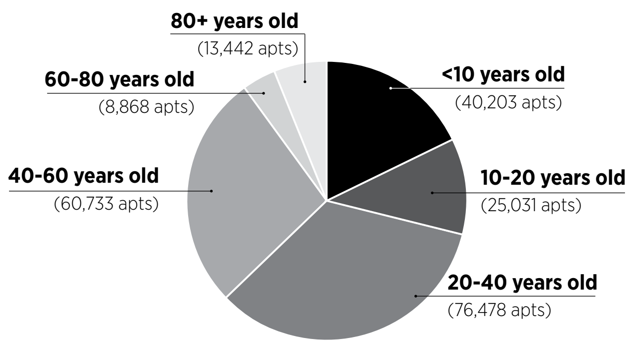
Decreased New Apartment Supply



2,796 units may not be built by 2030.

Result of 7% rent cap by 2030

Decreased Spending on Maintenance & Repairs



21,052 units at risk through 2030 because of decreased maintenance

35,995 units needed through 2030

23,848 units at risk through 2030

Unintended Consequences

- With decreased opportunity to earn a profit on their investment, developers are incentivized to take their dollars to other non-rent controlled communities.
- Over time, the lack of investment speeds up the deterioration of properties and eventually leads to the loss of critically needed rental housing.
- Housing development, rehabilitation and property maintenance generate significant economic benefits in terms of job creation and wage growth, and overall economic value to the State economy. Rent control policies eliminates most of this benefit as development, renovation and rehabilitation of rental housing activity is significantly reduced or eliminated.

Additional Impacts of Rent Contol in Portland

Result of 7% rent cap

Decreased

Apartment Property Values

$213.9

million loss in values

because of decreased income

Result of 7% rent cap

Decreased

Property Tax Revenue

$5.2

million loss each year

Result of 7% rent cap

Decreased

Apartment Rental Income

$10.8

million loss each year

All of these impacts make Portland a less desirable place to do business for apartment property investors, developers, owners and operators.

Portland apartments and their residents
contribute $32.2 billion
to the metro economy every year and
support 160,100 jobs.

Sources

1. "Modeling the Impact of Rent Growth Caps on Metropolitan Apartment Markets" Capital Policy Analytics for the National Apartment Association, April 2019. A 7% rent cap was chosen by the report author as the basis of this study.
   Sources in this report include Zillow, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, U.S. Census Bureau American Housing Survey and Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017"
2. "U.S. Apartment Demand – A Forward Look," Hoyt Advisory Services for NAA and NMHC, May 2017
3. 2013-2017 American Community Survey 5-Year Estimates
4. CoStar
5. weareapartments.org

Produced by NAA Research

Notes

- Impact model results for estimated rent reduction based on Zillow Rental Listings metropolitan area median, and neighborhood data for 5+ unit apartment buildings.
- Estimated decrease in maintenance spending based on the number of apartment units in buildings with 5 or more units and average 2-year maintenance spending per unit in the 15 largest metropolitan areas from the American Housing Survey 2017.
- Estimated property value decreases utilize the rate of return on a 30-year Treasury Bill.
- Property tax loss estimates based on apartment property tax rates for each city reported in the Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017", Appendix Table 5A . The estimates of revenue loss reflect assessed value fully following market value changes.
- All source, impact and forecast data cover the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area with the exception of property tax impacts for the City of Portland.
- Apartments are defined as located in properties with 5 or more units.

For more information on impact model methodology and assumptions, please contact Paula Munger @ pmunger@naahq.org.

Impacts of Rent Control: Seattle

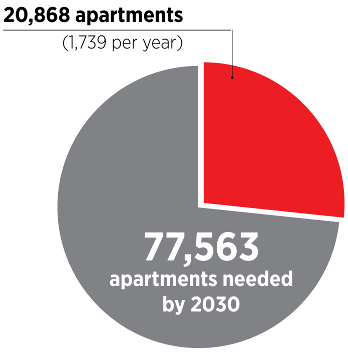
What happens when a 7 percent annual cap is put on apartment rents?

86%

of Seattle's future apartment housing stock needs may be INFEASIBLE.

Result of 7% rent cap by 2030

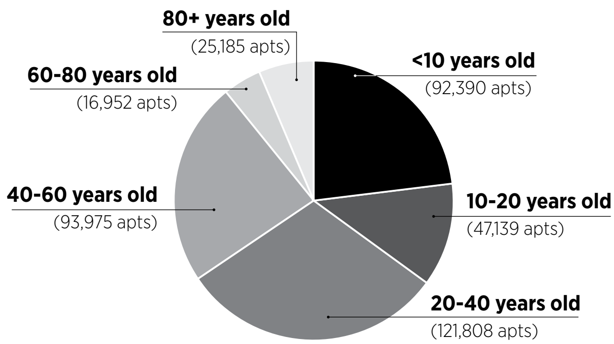
Decreased New Apartment Supply



20,868 units may not be built by 2030.

Result of 7% rent cap by 2030

Decreased Spending on Maintenance & Repairs



46,085 units at risk through 2030 because of decreased maintenance

77,563 units needed through 2030

66,953 units at risk through 2030

Note: Nearly 9 percent of public housing in Kings County failed the most recent HUD inspection, likely impacted by a $3.8M decrease in the KCHA maintenance budget. Like the public sector, deferred maintenance in the private sector due to limited ability to recover operational costs leads to eroding housing conditions.

Unintended Consequences

- With decreased opportunity to earn a profit on their investment, developers are incentivized to take their dollars to other non-rent controlled communities.
- Over time, the lack of investment speeds up the deterioration of properties and eventually leads to the loss of critically needed rental housing.
- Housing development, rehabilitation and property maintenance generate significant economic benefits in terms of job creation and wage growth, and overall economic value to the State economy. Rent control policies eliminates most of this benefit as development, renovation and rehabilitation of rental housing activity is significantly reduced or eliminated.

Additional Impacts of Rent Contol in Seattle

Result of 7% rent cap

Decreased

Apartment Property Values

$655.6

million loss in values

because of decreased income

Result of 7% rent cap

Decreased

Property Tax Revenue

$5.5

million loss each year

Note: A 200-unit apartment development generates $11.5M in new tax revenues over a 10-year period. The 20,868 units that won't be developed between now and 2030 will equate to a $51M loss in sales tax revenue alone.

Result of 7% rent cap

Decreased

Apartment Rental Income

$33.0

million loss each year

All of these impacts make Seattle a less desirable place to do business for apartment property investors, developers, owners and operators.

Seattle apartments and their residents **contribute $34.4 billion** to the metro economy every year and **support 118,600 jobs**.

Sources

1. "Modeling the Impact of Rent Growth Caps on Metropolitan Apartment Markets" Capital Policy Analytics for the National Apartment Association, April 2019. A 7% rent cap was chosen by the report author as the basis of this study.
   Sources in this report include Zillow, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, U.S. Census Bureau American Housing Survey and Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017"
2. "U.S. Apartment Demand – A Forward Look," Hoyt Advisory Services for NAA and NMHC, May 2017
3. 2013-2017 American Community Survey 5-Year Estimates
4. CoStar
5. weareapartments.org
6. King County Housing Authority
7. U.S. Department of Housing and Urban Development
8. Washington Multi-Family Housing Association

Produced by NAA Research

Notes

- Impact model results for estimated rent reduction based on Zillow Rental Listings metropolitan area median, and neighborhood data for 5+ unit apartment buildings.
- Estimated decrease in maintenance spending based on the number of apartment units in buildings with 5 or more units and average 2-year maintenance spending per unit in the 15 largest
  metropolitan areas from the American Housing Survey 2017.
- Estimated property value decreases utilize the rate of return on a 30-year Treasury Bill.
- Property tax loss estimates based on apartment property tax rates for each city reported in the Lincoln Institute of Land Policy "50-State Property Tax Comparison Study for Taxes Paid in 2017", Appendix Table 5A . The estimates of revenue loss reflect assessed value fully following market value changes.
- Tax revenue from development source: Washington Multi-Family Housing Association
- All source, impact and forecast data cover the Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area with the exception of budget figures and property tax impacts.
- Apartments are defined as located in properties with 5 or more units.

For more information on impact model methodology and assumptions, please contact Paula Munger @ pmunger@naahq.org.