

## The Effect of Affordable Housing Legislation

Based on Data from the American Community Survey (ACS)

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### Key Findings

- Rent prices have been steadily increasing across the Mountain West this century
- According to our results, we are unable to define how housing legislation affects overall rent prices in the Mountain West
- Although our empirical model does not display strict causality, a negative trend post-policy is assumed to be more likely than not.



The persistent rise in housing prices across the United States since the turn of the century poses challenges for prospective first-time homeowners aiming to accumulate long-term wealth through real estate ownership. Increases in housing costs have especially hindered the ability of younger generations to enter the real estate market forcing them to rent instead. These spikes in housing prices have also resulted in increased homelessness, exacerbation of the generational wealth gap, and delayed retirement. This research aims to assess the impact of state legislature initiatives focused on housing affordability on rent prices within the Mountain West region. Amidst widespread media coverage highlighting the substantial increases in rental prices in recent years, this study seeks to empirically examine the relationship between legislative interventions and rental market trends.

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## Objectives

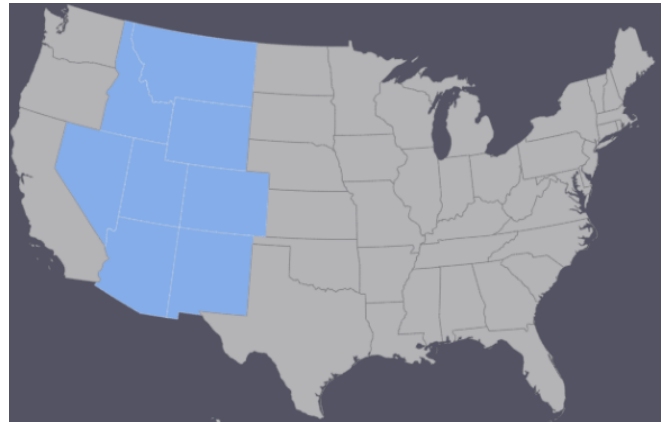
1. Identify the causal effect of Affordable Housing Legislation on rental prices in the Mountain West States.
2. Understand the trend of rental prices throughout the Mountain West States between 2000 and 2021.

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## Analysis Specifications

The data comes from the American Community Survey (ACS) which was created by the Census Bureau to record population and household statistics each year. The ACS data used includes a recent payment statistic that is used as a proxy of housing prices in each state. The analysis requires an event study analysis model to make comparisons across states because each state has

## Mountain West States



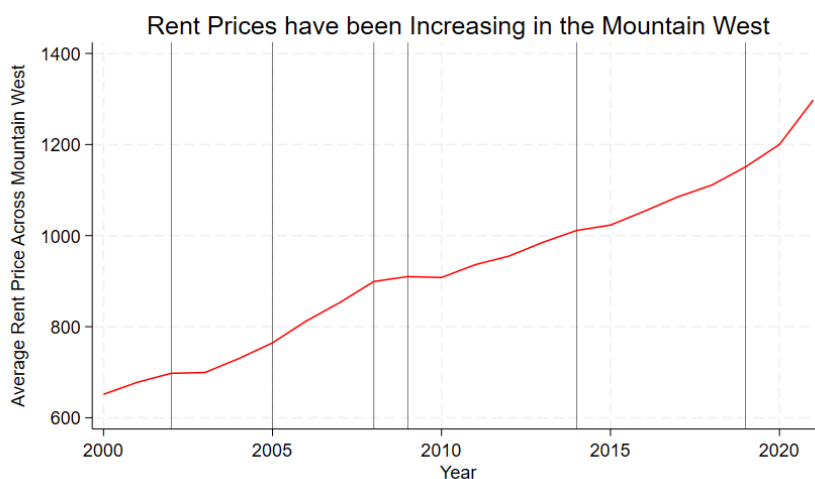
passed a housing affordability act in various years. Because of this, there must be a differentiation between when states received their legislation. This is completed by centering all the states around the year when they received legislation. This allows us to analyze the true impact that all of these policies had on Mountain West rent prices as a whole. Along with the legislation regarding rental prices, our event study also controls for many outside factors that would impact the empirical results of our model. For example, these factors can include state GDP, inflation, or differences in urban and rural rent prices across states.

## Background

State	Year	Treatment/Policy/Bill
Arizona	2002	Arizona Low Income Housing Tax Credit
Montana	2005	Montana Coal Tax Affordable Housing Program
Utah	2008	Utah Housing Preservation Initiative
New Mexico	2009	Affordable Housing Tax Credit
Wyoming	2014	WY State Loan and Investment Board Housing Trust Fund
Nevada	2019	SB 151
Idaho	2019	HB 409
Colorado	2019	House Bill 19-1319

Note: Each state's version of Affordable Housing Legislation

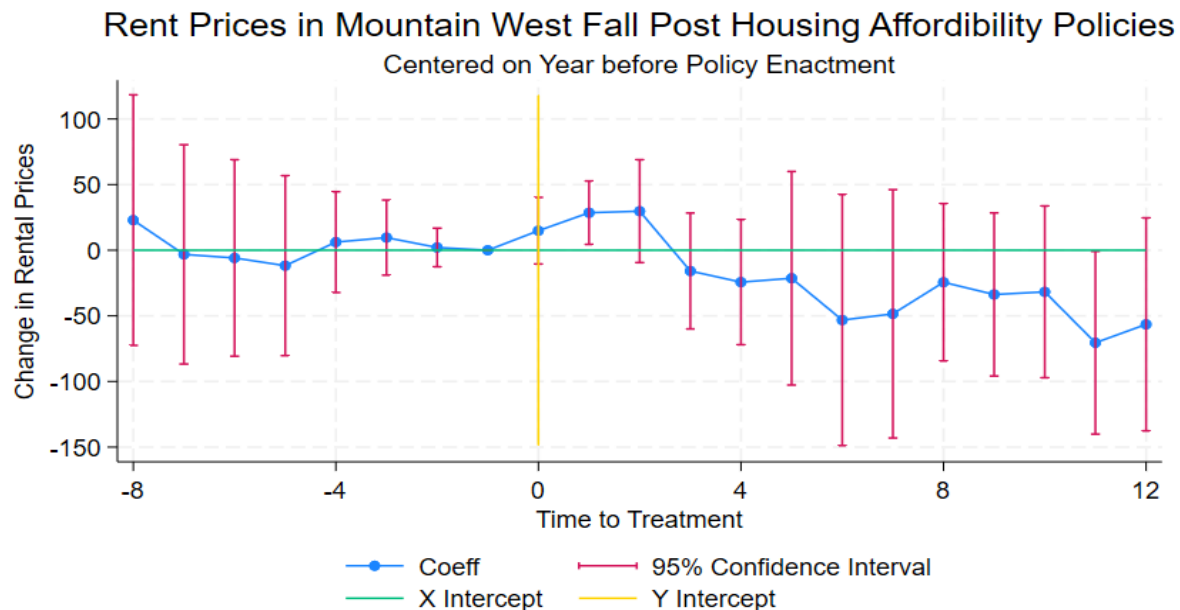
The legislation for each state is focused on the development of affordable housing, rehabilitation of existing housing, and tax credits. Each of these aims to reduce housing costs for the corresponding state, therefore, the dates at which the legislation was passed serves as the time of treatment in our event study model. Our model will attempt to estimate the causal effect of these acts on rent prices, while also attempting to pinpoint the most effective one.



Note: The vertical lines represent years when Affordable Housing Legislation was enacted

On the graph above, it is clear that there has been no extended period of decreasing rental prices in the Mountain West. The slope of the line is the shallowest right around the time of The 2008 Financial Crisis when Utah and New Mexico passed their affordable housing legislation, likely as a result of the housing market crash. From the year 2010 to present, rent prices have nearly doubled despite legislative action, further highlighting the issue at hand.

## Our Empirical Model and Its Findings



The graph above describes our empirical model. We ran an event study where we analyzed the effect of affordable housing legislation on rental prices over time. Event studies work especially well for instances where legislation is enacted at differing times, much like the legislation we are working with. Each period shown on our chart uses at least half of the Mountain West states to determine its value. The y-intercept defines the year when the affordable housing legislation was enacted in a specific state. The data is centered around the year before the policy ( $x = -1$ ) which allows us to truly see how these policies impact rental prices in the Mountain West. In the first and second years after the legislation, the rental prices increased, which is contrary to what we expect to happen. This could occur for a multitude of reasons, such as signed leases that have annual price increases, the true change of the legislation is not felt until some time has passed, economic conditions in a particular state, etc. After these first two years, the rent prices appear to have decreased for the rest of the observed period. The issue with assuming that these policies are truly causal on Mountain West rent prices lies in the charted 95% confidence interval. For almost every observed year, the confidence interval crosses zero, which means that there exists a scenario where the affordable act did not affect rent prices at all. While we are not able to determine full causality because of these confidence intervals crossing zero, the outcome is more likely than not that rent prices will decrease post-legislation.