

## Project Details

For our chosen project, we elected to analyze the Bozeman housing market and how the rental market behaves as an entity. To do this, we found public data on short-term rental listings and how prices have fluctuated based on both features in the house itself (bedrooms, bathrooms, whole house vs spare room, location, etc.) as well as the total number of reviews, review rate, and other personal data. From this data we can gauge relative popularity of rental properties based on their individual characteristics and relate these features to their list price. Additionally, we hope to link the general Bozeman housing market into the project with standard values of mean and median list price to see if rental prices are reflective of these measures in any way. With our data sets being incredibly recent, we will only be able to analyze the market data from this year, however the vast amount of data present in the data sets should provide ample opportunity to implement the cleaning and analysis techniques we have learned thus far. This is a highly relevant topic as the Bozeman housing market has been incredibly busy in recent years and any glimpse into how this market operates on the suppliers side could perhaps aid policymakers in decision-making to limit the purchase of houses for the sole purpose of short-term rental, potentially providing relief to prospective homeowners and long-term renters. While the conclusions we draw from our data could look drastically different than what we currently expect, the chosen datasets provide open-ended options for analysis and are sure to provide meaningful and interesting findings.

## Initial Research Questions

- What features present in rental properties makes properties most appealing?
- How do these properties' popularity impact pricing?
- Do short-term rental properties have any correlation to the overall market trends in Bozeman?
- Are there any other features that contribute to the value of rental properties?

Source:

<http://insideairbnb.com/get-the-data/>

<https://fred.stlouisfed.org/release/tables?rid=462&eid=1097369#snid=1097395>