

An Analysis on the Real Estate Market of California and Florida

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EXECUTIVE SUMMARY

This report provides a comprehensive analysis of the real estate markets in California and Florida, identifying critical factors that influence property valuation and investment potential. By examining data from Redfin, we compare various aspects of real estate, such as property type characteristics, the impact of location on pricing, and the correlation between property features—like square footage and number of bedrooms—and their market values. Our analysis spans five distinct areas in each city, offering a comparative look that aims to guide investors and stakeholders in making informed decisions. The findings are expected to shed light on market trends and investment opportunities within these dynamic real estate landscapes.

DATA DESCRIPTION

Overview

This section of the real-estate analysis report delineates the characteristics and processing methods of the data utilized in the assessment of real estate markets in select areas of California and Florida. The dataset comprises a comprehensive collection of real estate listings sourced from Redfin. The properties span five distinct areas in both California and Florida, allowing for a comparative market analysis.

Data Collection and Preparation

Data was compiled into Microsoft Excel where it underwent cleaning to remove duplicates, correct errors, and handle missing values, ensuring high data quality for analysis, culminating in 1,682 reliable data points.

Analysis Tools

Upon completion of the data cleaning process, the dataset was imported into Tableau, a powerful visualization tool. In Tableau, we employed data visualization techniques to create a series of interactive dashboards and graphical representations for a clear comparative assessment of market trends across the selected areas.

FINDINGS

I. MARKET OVERVIEW

1. Overview of Different Property Types

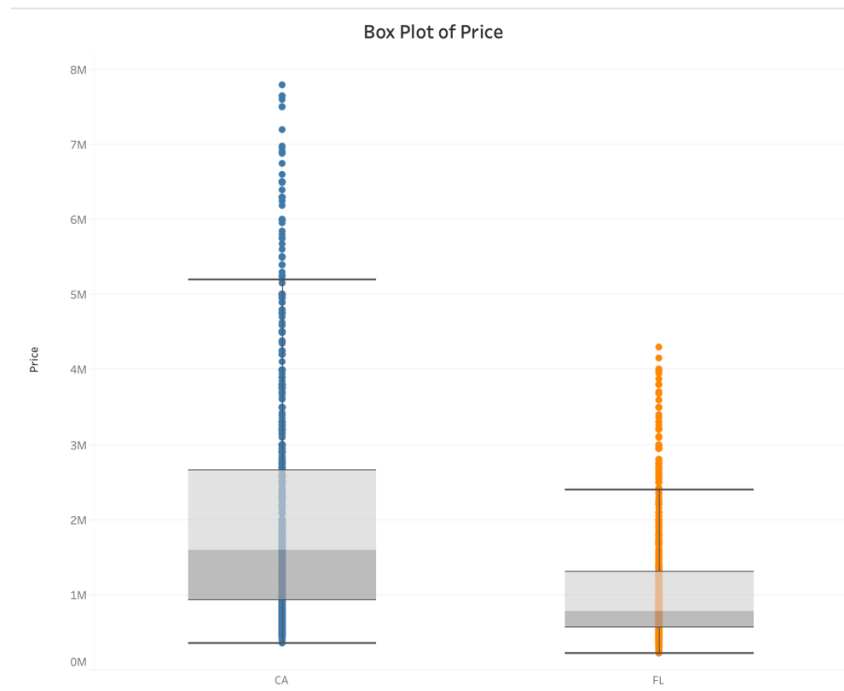


Figure 1: The average price, square feet, number of beds, and number of baths in CA and FL by two property types: single family residential and townhouses. Blue denotes single family homes, and orange denotes townhouses.

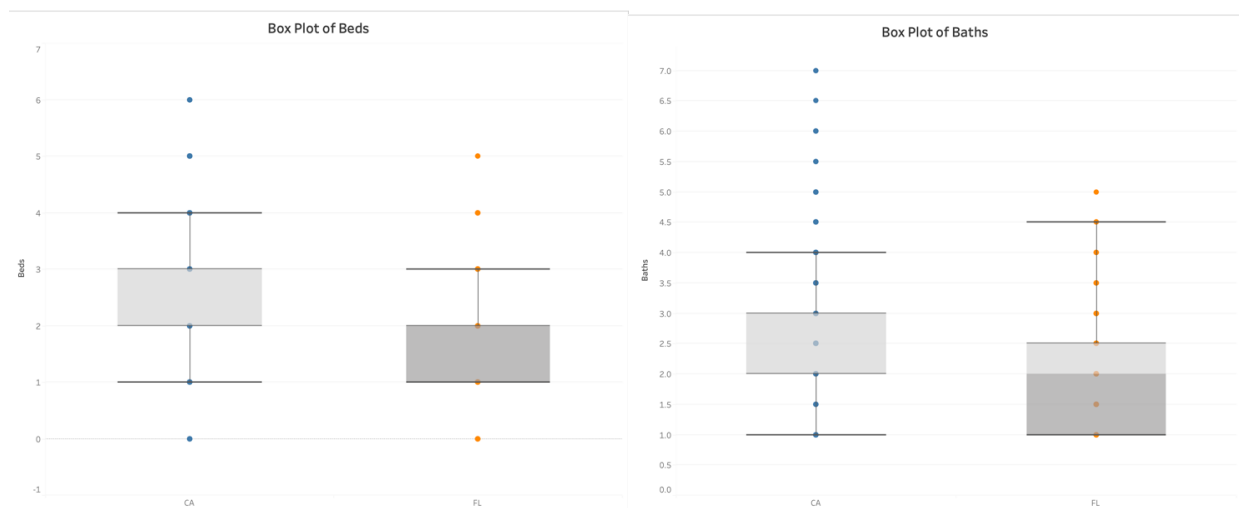
The visualizations compare Single Family Residential properties to Townhouses in CA and FL, revealing that Single Family homes are priced higher on average at approximately \$2.78 million, with larger square footage around 2,444 SQFT, and offer more bathrooms and bedrooms than Townhouses, which have an average price of around \$1.17 million and 1,281 SQFT. This indicates that while **Single Family homes may appeal to those seeking more space and luxury, Townhouses offer a more affordable option.**

2. Overview of Different Areas

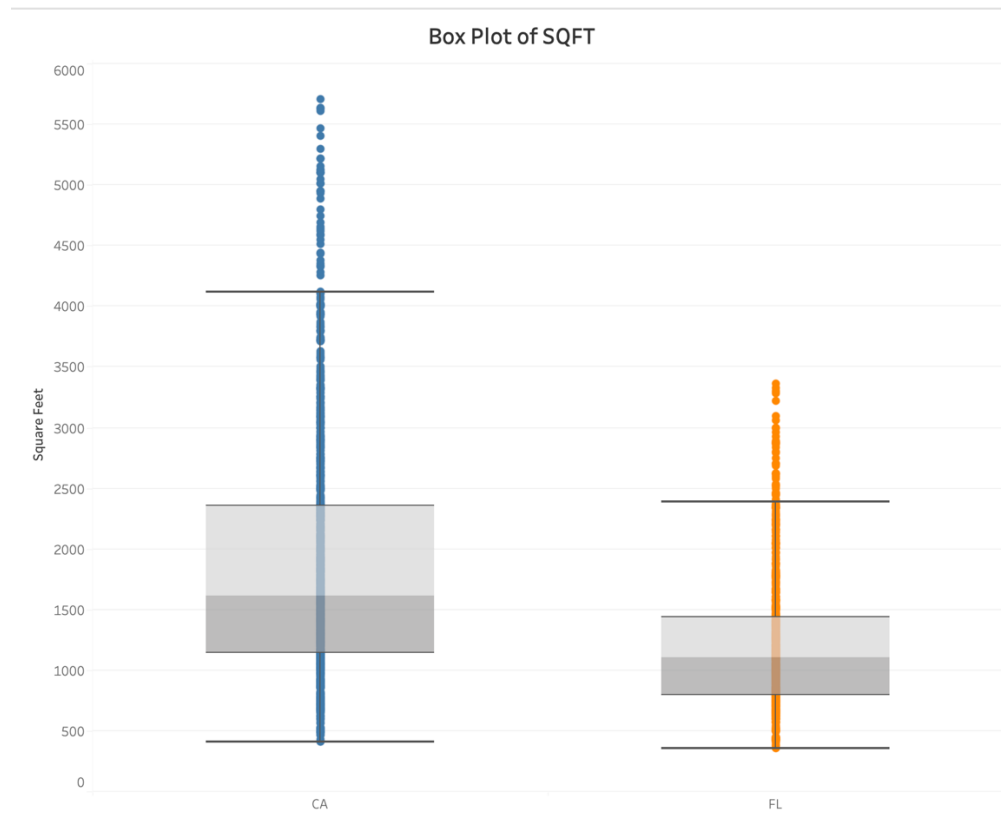
The following box plots the overall picture of the real estate market in the entire state of CA and FL with respect to Price, Beds - Baths, Square Feet and Year Built.



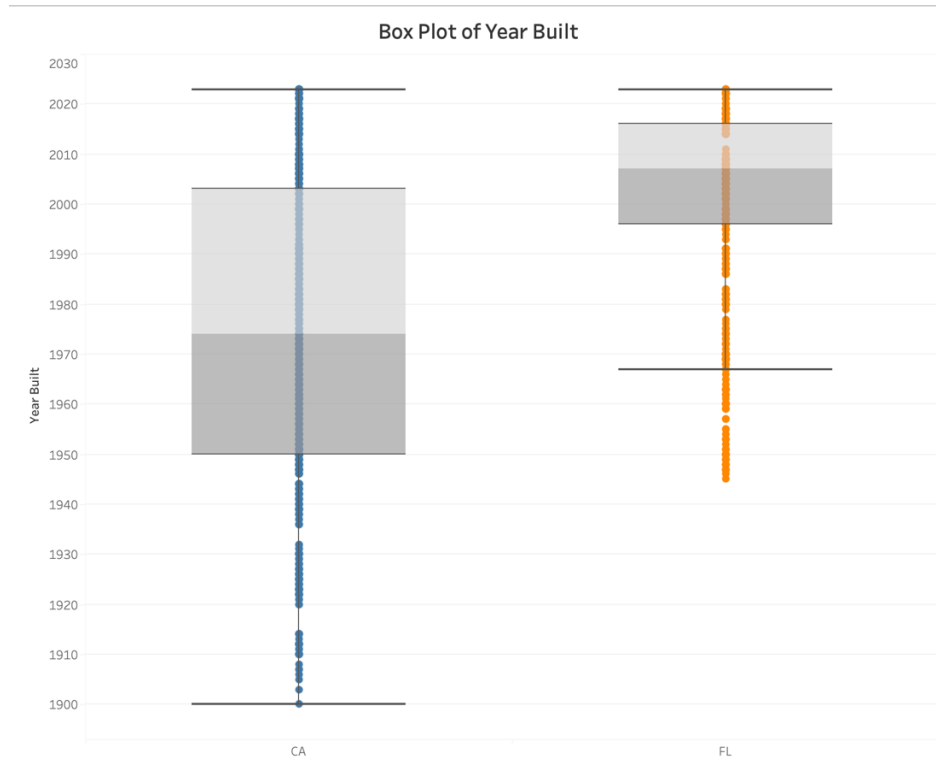
Price: The data points in CA show a widespread, indicating a highly variable market with several outliers suggesting the presence of exceptionally high-priced properties. In contrast, FL displays a more concentrated range of prices, with fewer outliers, indicating a more uniform pricing structure. The median price in CA appears significantly higher than in FL, pointing to a generally **more expensive real estate market in California**. The presence of many data points above the upper quartile in CA suggests that luxury properties are more common there than in Florida.



Beds - Baths: Similarly, the median values for both beds and baths appear slightly higher in CA, suggesting that **on average, properties in CA may be larger**. The majority of properties in CA commonly feature 2-4 bedrooms and bathrooms, while in FL, typical configurations tend to be 1-3 bedrooms and 1.5-3 bathrooms.



Square Feet: CA exhibits a wider interquartile range (IQR), suggesting greater variance in property sizes compared to FL. The presence of several outliers indicates that there are **properties in California with significantly more square footage than the typical property**. While the median square footage in California seems to be higher than in Florida, indicating that the average property size is larger, both states show properties that extend well beyond their respective medians. The compactness of Florida's box plot implies a more uniform property size distribution with fewer extreme variations.



Year Built: Florida's median is slightly higher, suggesting that **properties in Florida tend to be newer on average than those in California.**

II. DETAILED MARKET ANALYSIS

1. Trends in Housing Prices

Trends in Average Prices

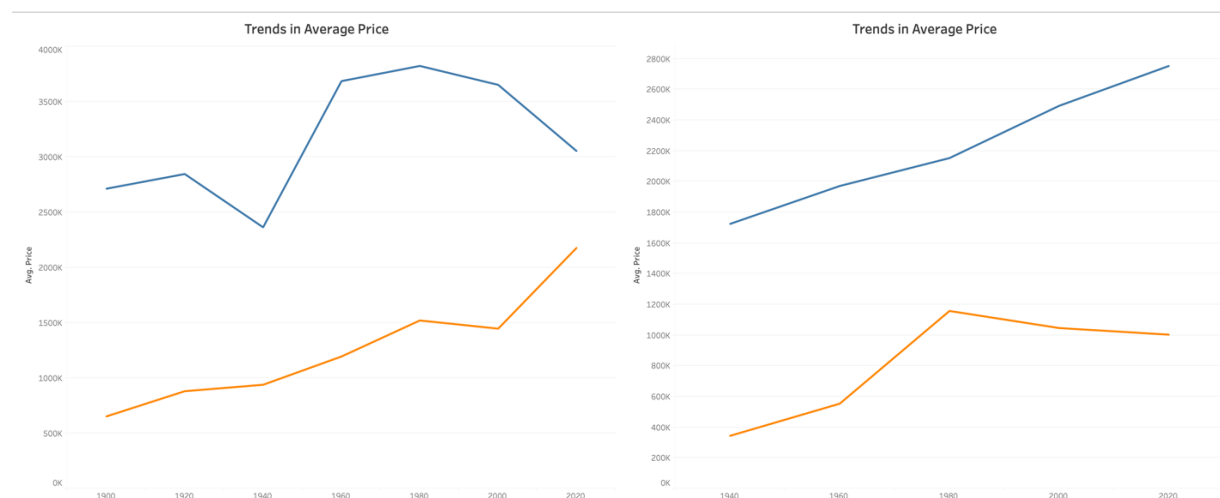


Figure 3: Changes in price over the years from 1900 to after 2020 of houses in CA (left) and FL (right). Blue denotes single family houses and orange denotes townhouses.

The line graphs present the average price trends over the years for properties in California (CA) and Florida (FL), segmented by property type: single-family residences and townhouses.

In California, the average prices for both property types show significant increases over time. Single-family residences exhibit a steep climb, particularly noticeable after 1940, reaching a peak before 2000 and then displaying a slight decline. Townhouses show a more gradual increase, with less volatility and a more consistent upward trend.

Contrastingly, **in Florida**, the trend for single-family residences indicates a steady and robust rise in prices, without the volatility seen in California. The townhouse average prices, while also increasing, do so at a much slower pace.

Trends in average price per square foot

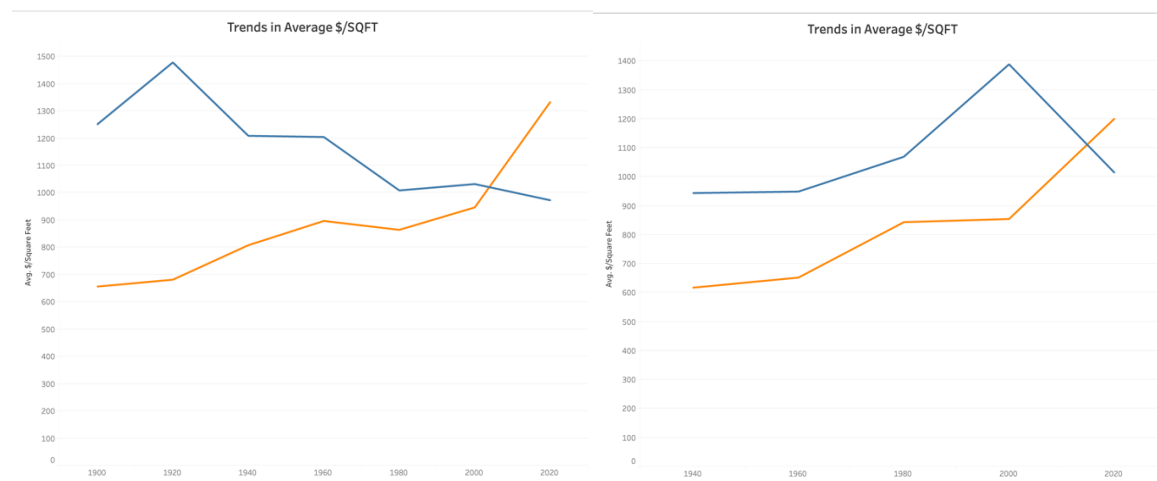


Figure 4: Changes in price per square foot (unit price) over the years from 1900 to after 2020 of houses in CA (left) and FL (right). Blue denotes single family houses and orange denotes townhouses.

The above line graphs illustrate the average price per square foot over the years for townhouses and single-family residences in California (CA) and Florida (FL).

In California, historical data shows that single-family homes have seen a higher price per square foot than townhouses, reaching a peak between 1920 and 1940. Following that period, there has been a steady decrease in their price per square foot. In contrast, the cost per square foot for townhouses has been on a consistent upward trajectory, eventually surpassing the price of single-family homes after 2020.

In the Florida real estate landscape, the trend has been somewhat different, with both townhouses and single-family homes experiencing a uniform rise in their price per

square foot over time. Post-2020, single-family homes have experienced a notable decline in price per square foot, falling below the cost per square foot of townhouses.

Suggestions:

The trends observed in these graphs suggest that in California, **investing in townhouses may be a stable and safe choice**, since the steady rise in both price and price per square foot has indicated a growing market for this property type. **Single-family houses, on the other hand, may offer a more risky but potentially rewarding investment opportunity**, since the prices are going downhill, but history suggests it can rise again.

Similarly, to CA, **townhouses in FL have become increasingly valuable, indicating a more robust market to invest in** compared to single family houses. While the price and price per square foot of single-family homes in FL have also mostly witnessed increasing trends, **investors should be aware of the recent dip in the unit price, which may continue to fall in the near future.**

2. Geographical Insights

Average listing duration heatmap (CA)

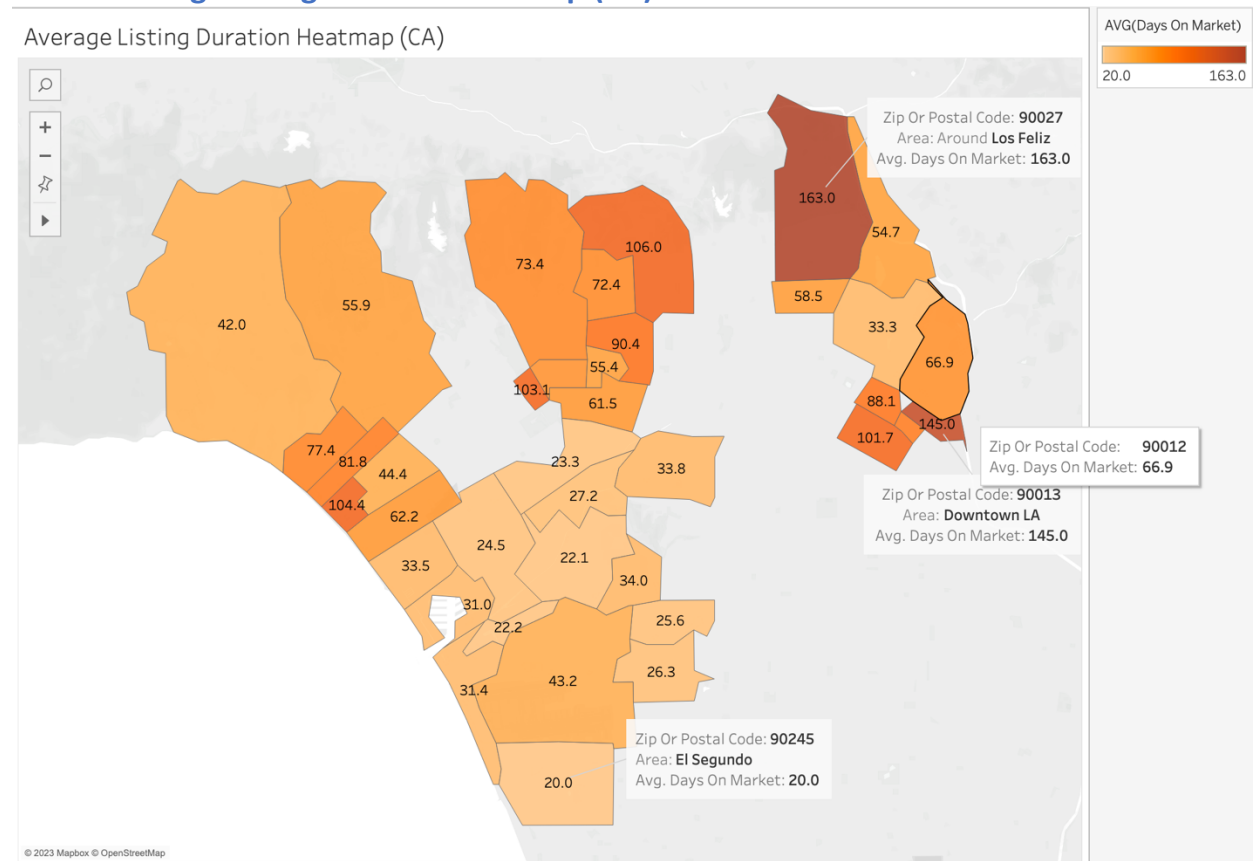


Figure 5: The heat map illustrates the average days houses stay on the market for different zip codes in CA. Lighter shades indicate fewer days on the market.

The provided heat map illustrates the average number of days on the market for real estate listings in various areas of California, with the color gradient representing the speed at which properties are selling. **Lighter shades indicate fewer days on the market (e.g., 90230 which is around Culver City, and 90245 which is around El Segundo), suggesting a higher turnover rate and potentially a stronger demand for properties in those zip code areas.** Such areas could be attractive for real estate investors looking for properties that are likely to be sold quickly, possibly due to favorable locations, economic factors, or higher buyer demand.

Specifically, areas with zip codes such as 90027 and 90013 are shaded much darker, indicating a higher number of days on the market. This suggests a slower sale process which could be due to various factors.

- For 90027, which encompasses parts of Los Angeles including Los Feliz, this slowdown could be due to the higher-end market in this area (as there are many huge celebrities choose to live here such as Angelina Jolie and Katy Perry), where luxury properties typically take longer to sell due to a smaller pool of potential buyers and the more significant financial commitment required.
- In contrast, 90013 covers parts of Downtown Los Angeles, where the slower sales may be due to the urban environment's specific challenges, such as limited parking, noise, or higher crime rates which can be less attractive to potential buyers.

Suggestions:

Investors should invest in properties in areas with lighter shades as they are likely to be sold quickly. It may be prudent for investors to be cautious about investing in areas with darker shades as it could mean a potentially higher risk of longer holding periods for properties and the associated costs.

Average listing duration heatmap (FL)

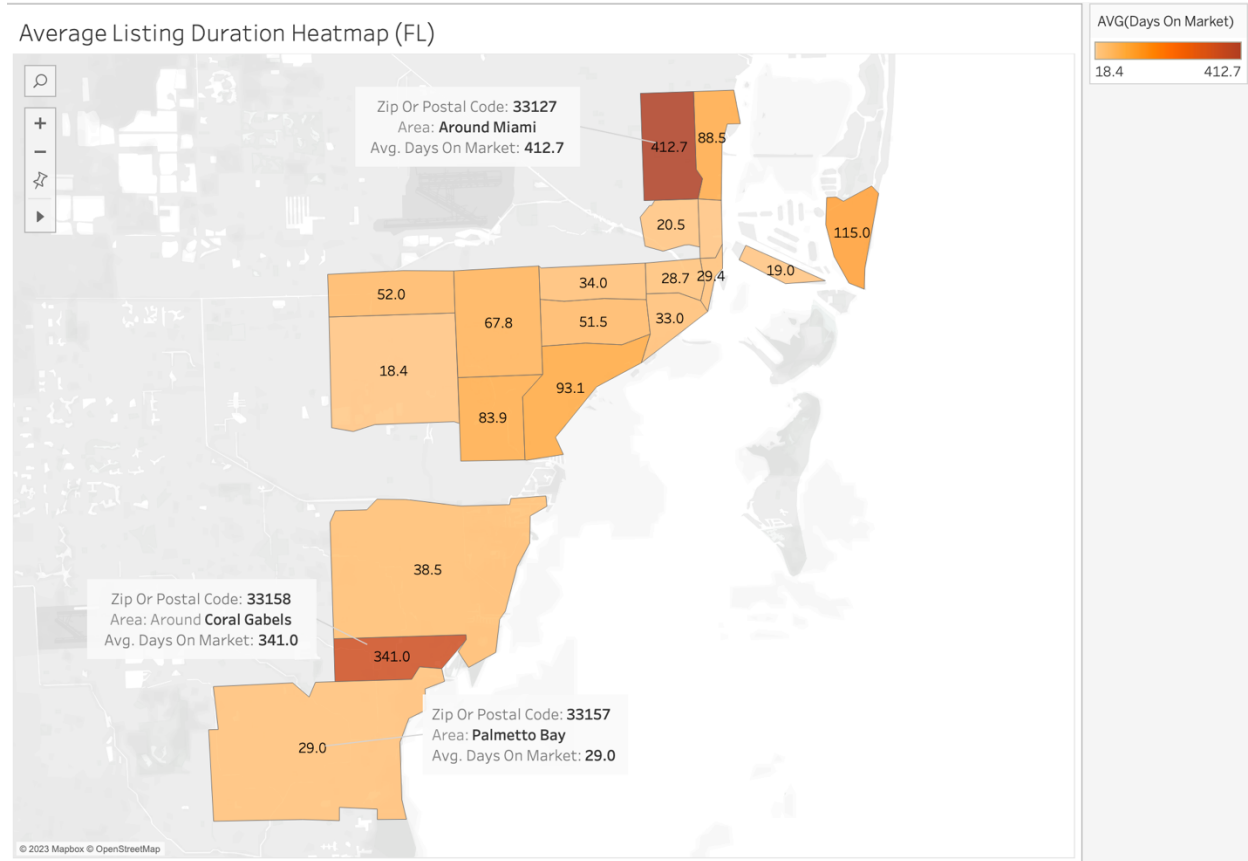


Figure 6: The heat map illustrates the average number of days houses stay on the market for different zip codes in FL. Lighter shades indicate fewer days on the market.

Similarly, Figure 6 shows the average length of real estate listings that stay on the market before being purchased in different zip codes in Florida. The darker the color, the slower the speed of selling.

Suggestions:

For investors, ZIP code areas with the lightest shades should be considered for investment as properties in these locations are selling more quickly, indicating robust demand and potentially quicker returns on investment.

Conversely, the areas shaded darkly, such as 33127 and 33158, show significantly higher average days on the market, which implies a slower selling process. This could be indicative of less demand, potential overpricing, or other local factors that are not immediately apparent. To ensure a prudent investment, detailed research and an understanding of these specific ZIP code markets would be necessary to identify and mitigate the factors leading to slower sales processes.

Average price map (CA)

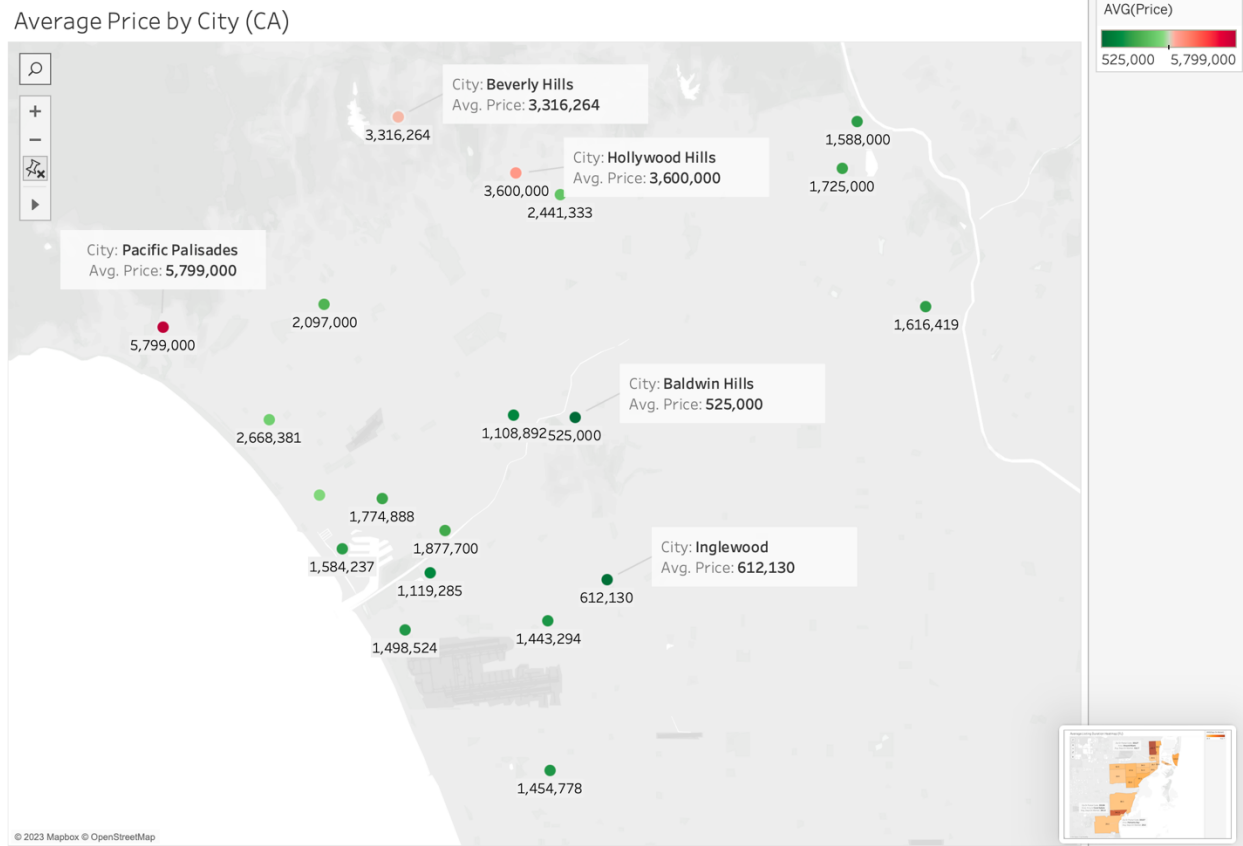


Figure 7: The map shows the average price for houses in different cities in CA. Dark green indicates cheaper prices while dark red indicates more expensive prices.

This map illustrates the average price of properties in various regions of California. **Pacific Palisades** stands out with the highest average property price at \$5,799,000, attributed to its prime location near the beach and its status as a residential area for many celebrities. Following are Beverly Hills and Hollywood Hills, where the average prices are around 3.5 million due to their prime locations, high scarcity and demand, and celebrity influence. In contrast, the average prices in other areas are either low (below 1 million) to medium (1 to 2 million), suggesting a more moderate real estate market.

Suggestions:

For real estate investors, Pacific Palisades presents a high-end, luxury market opportunity with potential for long-term value retention, given its unique location and prestigious status. However, the high entry price point and potentially limited buyer pool must be considered.

In comparison, areas with lower average prices may offer more opportunities for investment diversity and accessibility to a broader market of buyers. These regions might

appeal to investors looking for properties that could be more liquid or have a higher turnover rate.

Average price map (FL)

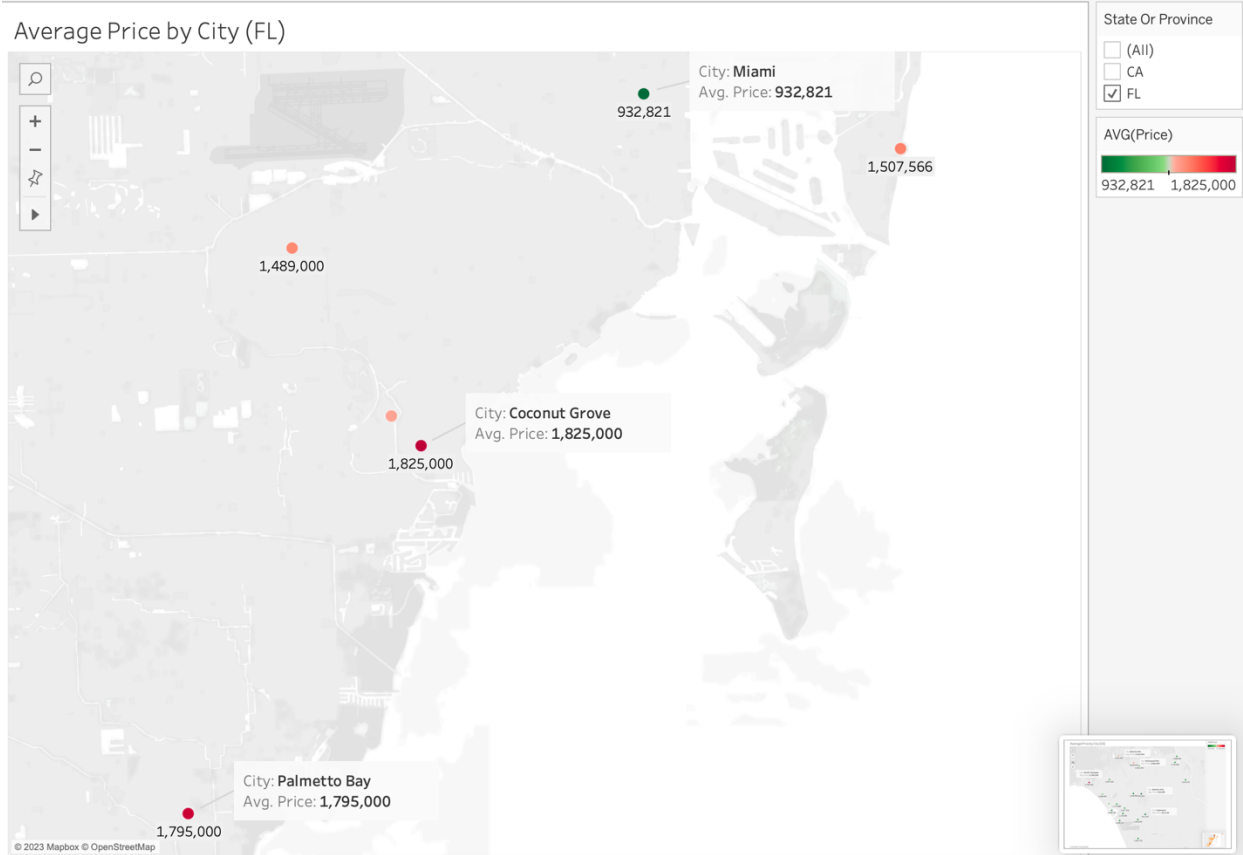


Figure 8: The map shows the average price for houses in different cities in FL. Dark green indicates cheaper prices while dark red indicates more expensive prices.

Figure 8 shows the average housing price for different cities in Florida. **Coconut Grove** and **Palmetto Bay** are the two most expensive areas in the state, with the average price being around 1.8 million. The higher price is attributed to many factors, including their upscale amenities, including access to waterways, exclusive communities, and a higher standard of living. On the other hand, Miami is the cheapest city in terms of housing, with an average price below 1 million. This could be due to higher-density living, more diverse housing options, and in some parts, higher crime rates or less desirable school districts.

Suggestions:

High-value areas like **Coconut Grove** and **Palmetto Bay** offer the potential for stable long-term appreciation and attract high-income tenants. However, the higher acquisition cost means a higher barrier to entry.

In contrast, Miami's market with a lower average price may offer more opportunities for investment growth, particularly in neighborhoods that are on the path of development or gentrification. Investors here could capitalize on both short-term renovations and flips, or long-term holds as the neighborhood improves. Diversifying across different markets and property types could help mitigate risk.

III. ADVANCED INSIGHTS

Correlation between Price and Square Feet

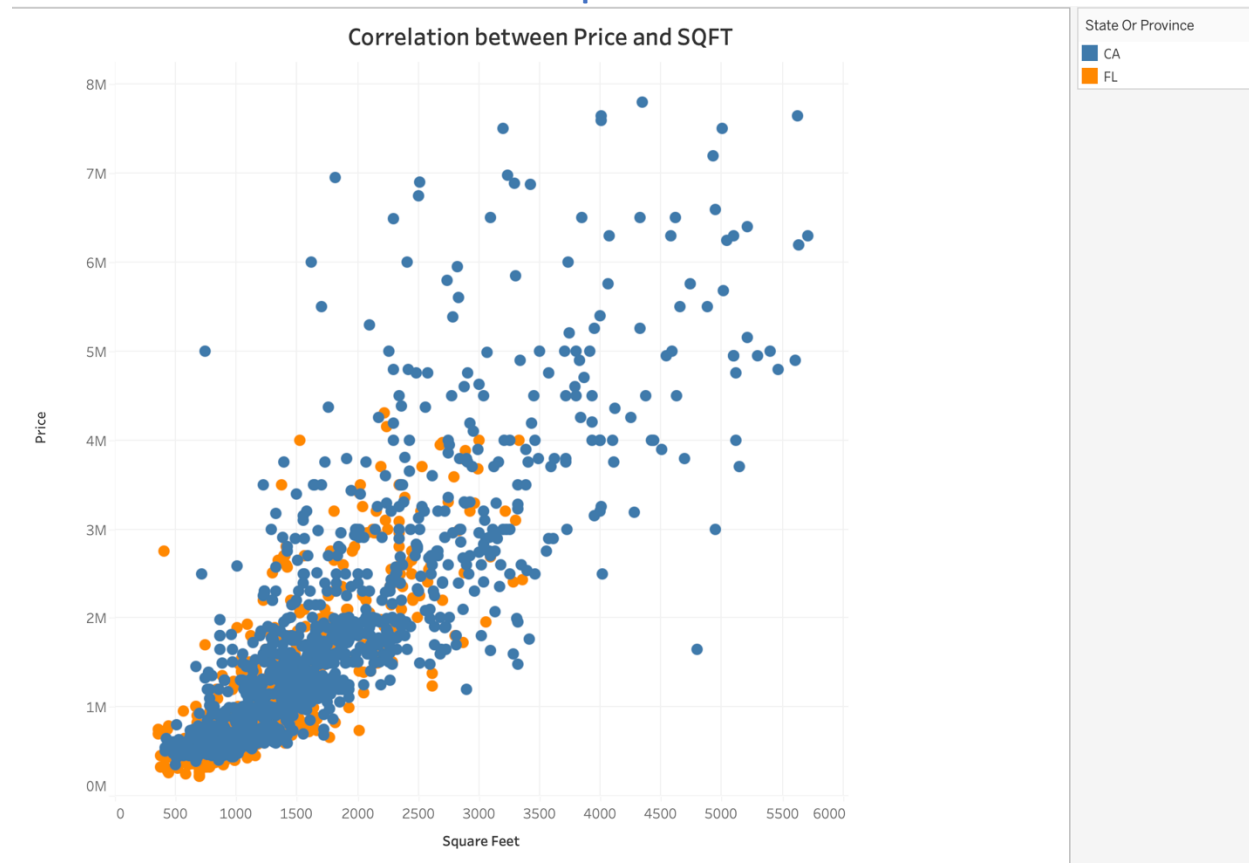


Figure 9: The scatter plot shows the relationship between Square Feet (x-axis) and Prices (y-axis) of houses in CA (blue) and FL (orange).

The scatter plot visualizes the relationship between the square footage of properties and their price, with distinct color codings for two states: California (CA) and Florida (FL). There's a clear upward trend indicating that as the square footage of a property increases, the price tends to rise as well, suggesting a **strong positive correlation between the size of a property and its market value**. This trend is more pronounced and diverse in the California market, where larger properties exhibit a broader range of prices compared to Florida.

Suggestions:

For real estate investors, this data suggests that investing in larger properties in California may come with a greater variance in price and potentially higher rewards, but also more risk. Investors who are new to investing or want less risk should focus their investment on smaller properties.

In Florida, the narrower spread of prices across property sizes may imply a more stable but possibly less dynamic market. Thus, investors might find opportunities in mid-size properties that could offer a balance of risk and potential growth. It is crucial for investors also to consider other factors such as location desirability, market trends, and future growth potential when making investment decisions.

Correlation between Price and Distance from the Ocean

Previously, we mentioned one of the reasons why Pacific Palisades in CA was super expensive was its close proximity to the beach. We analyzed the relationship between the distance from the ocean and the price.

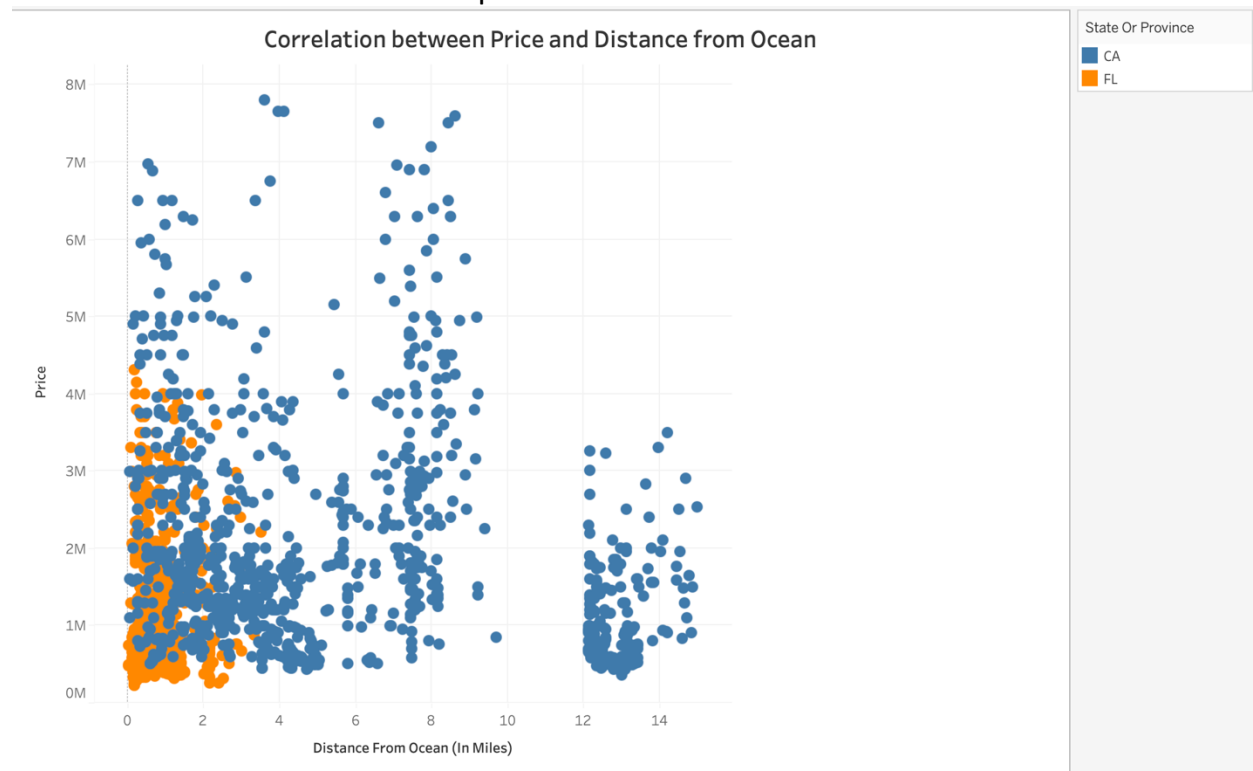


Figure 10: The scatter plot shows the relationship between the Distance from Ocean (x-axis) and Price (y-axis) of houses in CA (blue) and FL (orange).

The scatter plot shown displays the relationship between property prices and their distance from the ocean for properties in California (CA) and Florida (FL), color-coded by state. It reveals that while some of the most expensive properties are indeed close to the ocean, there is a wide distribution of prices at various distances, indicating that proximity

to the ocean is not the sole determinant of price. Notably, there is a cluster of high-priced properties within one mile of the ocean, yet similar or even higher prices can be found further inland, suggesting other factors are also at play.

Suggestions:

For real estate investors, this data underscores the importance of not relying solely on ocean proximity when assessing property value. While coastal properties may be appealing and command high prices, investors should perform comprehensive evaluations considering other value-adding features such as community amenities, property conditions, local market trends, and potential for economic growth in the area.

Correlation between Price and HOA/month

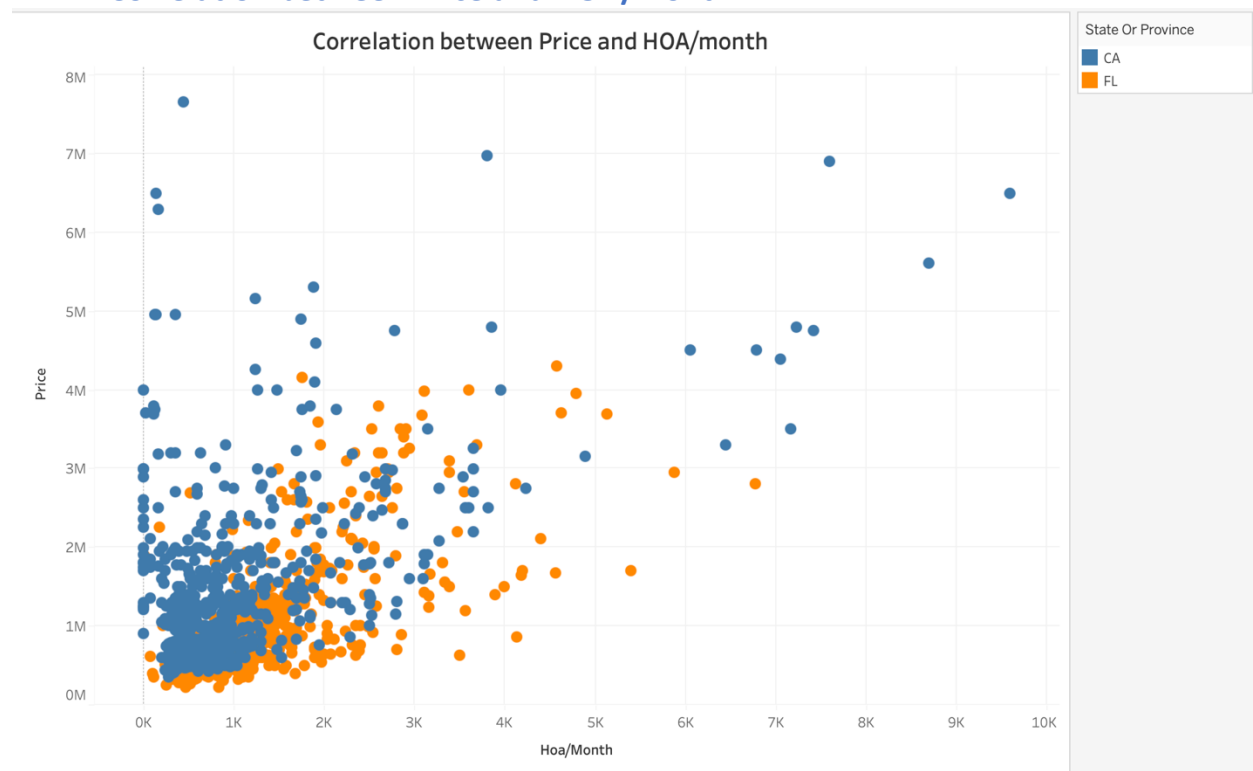


Figure 11: The scatter plot shows the relationship between HOA/Month (x-axis) and Price (y-axis) of houses in CA (blue) and FL (orange).

This scatter plot illustrates the relationship between the monthly homeowners' association (HOA) fees and property prices, with a color distinction between California (CA) and Florida (FL). There is an observable trend where properties with higher HOA fees, particularly those over \$4K per month, are often associated with higher property prices. This suggests that luxury properties with more amenities—and hence higher HOA fees—tend to be priced higher.

Suggestions:

For real estate investors, it's critical to evaluate the balance between HOA fees and the added value they represent. High HOA fees can impact the affordability and desirability of a property to potential buyers or renters. It's crucial to assess whether the amenities and services provided by the HOA justify the fees and if these are sustainable in the long term without negatively impacting the property's profitability. Investors should analyze the HOA's financial health and the tangible benefits it offers, ensuring they align with market expectations and can enhance property value.

IV. SUPPLEMENTARY DATA

While our current analysis has yielded valuable insights into the real estate market in CA and FL, it is important to recognize that numerous external factors can significantly impact property values. Incorporating such variables can enhance the depth and accuracy of our analysis. Considerations for additional variables include:

Demographics Data:

- **Population Density:** The density of an area's population can influence demand for housing. High population density areas may experience higher property prices due to increased competition.
- **Age Distribution:** The age composition of a population can affect housing preferences. Areas with a higher percentage of young adults may have different property demands than areas with an aging population.

Economic Factors:

- **Median Income:** The median income of a region can directly correlate with the affordability of real estate. Higher incomes often drive up property prices.
- **Employment Rates:** Areas with stable or growing employment opportunities may attract more homebuyers, influencing property prices.

Local Amenities and Infrastructure:

- **Proximity to Schools:** The quality and proximity of schools can impact property values. Areas with highly-rated schools may have higher property prices.
- **Public Transportation Access:** Accessibility to public transportation can influence property values, especially in urban areas.

Crime Rates: Low crime rates often lead to higher property values as safety is a critical consideration for homebuyers.

RECOMMENDATIONS

	High-Yield Investors <i>(individuals who are willing to take on more risk for the possibility of higher returns)</i>	Conservative Investors <i>(these investors prioritize the preservation of capital and steady, reliable returns)</i>
CA	<ul style="list-style-type: none"> - Single-family houses in CA could be a more risky but potentially more rewarding investment as prices are currently going downhill. This volatility might suit high-yield investors looking for opportunities where prices may rise again significantly. - High-yield investors should prioritize properties with shorter market listing durations (e.g., Culver City, El Segundo). If considering areas where properties linger longer on the market, it is crucial to investigate the factors contributing to the prolonged sales cycle. - High-value areas like Pacific Palisades, Beverley Hills, and Hollywood Hills offer the potential for stable long-term appreciation and attract high-income tenants. However, investors should keep in mind that the higher acquisition cost means a higher barrier to entry. - Investing in larger properties in California may come with greater variance in price, which could suit high-yield investors looking for potentially higher rewards, accepting the associated risks. 	<ul style="list-style-type: none"> - Townhouses in CA may offer conservative investors a stable and safe choice, with a steady rise in both price and price per square foot indicating a growing market. - Properties that have fewer days on the market (e.g., Culver City, El Segundo), which are likely to be sold quickly, could be attractive to conservative investors looking for more liquid investments and shorter holding periods. - Areas with low (e.g., Inglewood) or medium average prices (e.g., Culver City) may offer conservative investors more opportunities for diversification and access to a broader market of buyers, which aligns with their preference for investments that are more liquid or have a higher turnover rate. - Conservative investors who are new to investing or prefer less risk should consider smaller properties, which this data suggests may have less price variance and thus lower risk.
FL	<ul style="list-style-type: none"> - Single-family residential types in FL could be of interest to high-yield investors due to the recent dip in unit price, which suggests a potential for a high return if the market rebounds. - High-yield investors should prioritize properties with shorter market listing 	<ul style="list-style-type: none"> - Townhouses in FL present a robust market, showing signs of stability and consistent growth, making them a suitable investment for conservative investors. - Properties with fewer days on the market (e.g., Palmetto Bay) represent safer investments for conservative investors

	<p>durations (e.g., Palmetto Bay). If considering areas where properties linger longer on the market, it is crucial to investigate the factors contributing to the prolonged sales cycle.</p> <ul style="list-style-type: none"> - Areas of high value, such as Coconut Grove and Palmetto Bay, hold the promise of consistent long-term growth and attract tenants with higher earnings. Nonetheless, investors must consider that the elevated initial purchase costs represent a significant entry threshold. - It is suggested to explore the larger properties that offer a wider price range, as this could align with a strategy that embraces potentially higher returns in exchange for accepting greater risk. 	<p>since these areas are indicative of quicker sales and potentially shorter holding periods, reducing the risk and associated costs.</p> <ul style="list-style-type: none"> - Areas with lower average prices (Miami's market) offer investment diversity and accessibility to a wider market of buyers. Conservative investors might find these options appealing due to the increased liquidity and higher turnover rate. - Conservative investors, particularly those new to the market or those who favor a risk-averse approach, may want to target smaller properties. The data indicates that these properties tend to exhibit less fluctuation in pricing, offering a more predictable and potentially lower-risk investment option.
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NOTE:

- **Consider a wide range of factors** beyond ocean proximity, such as community amenities, property conditions, and economic trends, to accurately assess the value of real estate investments.
- **Weigh the benefits of HOA amenities against their fees** to ensure they are justified and sustainable, enhancing the property's desirability and long-term profitability.

REFERENCES

[1] Woods, A. (no date) *Los Angeles Homes: Real Estate Trends in Los Feliz*. Available at: <https://www.movoto.com/guide/los-angeles-ca/los-angeles-homes-real-estate-trends-in-los-feliz/>.

[2] Dailymail.Com, A.B.F. (2023) *Shocking scenes in Los Angeles as homeless smoke drugs on the streets, tents litter the downtown area and hawkers sell stolen goods*, *Daily Mail Online*. Available at: <https://www.dailymail.co.uk/news/article-12389877/Shocking-scenes-Los-Angeles-homeless-smoke-drugs.html> (Accessed: 04 November 2023).

[3] *List of people from Pacific Palisades* (2023) *Wikipedia*. Available at: https://en.wikipedia.org/wiki/List_of_people_from_Pacific_Palisades (Accessed: 04 November 2023).